

May 11, 2023

**SENT VIA EMAIL** ([EAO.Notifications@gov.bc.ca](mailto:EAO.Notifications@gov.bc.ca))

British Columbia Environmental Assessment Office (EAO)  
PO Box 9426 STN PROV GOVT  
Victoria, BC V8W 9V1

**RE: RRIMM – EAO Notification Requirement**

On behalf of West High Yield (W.H.Y) Resources Ltd., please find below the Project Notification for the Record Ridge Industrial Mineral Mine Project (the Project). The Project Notification has been created following the “Project Notification Policy (EAO 2021), pursuant to Section 10(2)(b) of the Environmental Assessment Act (2018).

Regards,

A handwritten signature in black ink, appearing to read 'Shane Uren', is positioned below the 'Regards,' text.

Shane Uren, MAsc., RPBio.  
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**WEST HIGH YIELD (W.H.Y.)  
RESOURCES LTD.**

**2023**

**RECORD RIDGE INDUSTRIAL MINERAL MINE PROJECT  
PROJECT NOTIFICATION**



**PREPARED FOR:**

WEST HIGH YIELD (W.H.Y.) RESOURCES LTD.  
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**PREPARED BY:**

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**May 2023**

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WEST HIGH YIELD (W.H.Y.) RESOURCES LTD.

**RECORD RIDGE  
INDUSTRIAL MINERAL MINE PROJECT**

**PROJECT NOTIFICATION**

**SUBMITTED TO:**

**ENVIRONMENTAL ASSESSMENT OFFICE**

**UNDER SECTION 10 OF THE ENVIRONMENTAL  
ASSESSMENT ACT (2018)**

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## INFORMATION REQUIREMENTS FOR PROJECT NOTIFICATION

### Proponent Information and Contacts

Proponent name

**West High Yield (W.H.Y) Resources Ltd.**

Mailing address, phone number, email and website URL

**PO Box 68121 Calgary, Alberta Canada T3G 3N8**

Primary contact for the notification including name, phone number, and email

**Frank Marasco Jr. Director, President and Chief Executive Officer**

**Phone: (403) 283-5555 Cell (403) 660-3488**

**Email: [frank@whyresources.com](mailto:frank@whyresources.com)**

Primary Consultant Contact

**Shane Uren, MASC., RPBio.**

**Greenwood Environmental Inc.**

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**Email: [shaneu@greenwoodenvironmental.ca](mailto:shaneu@greenwoodenvironmental.ca)**

### Project Information

Project Name

**Record Ridge Industrial Mineral Mine (RRIMM) Project**

Project Industrial Type and Sub-type

**Industrial mineral mine**

Project location within the province and region

- Provide a one-sentence description of the location of project being proposed.

**Located 7.5 km west-southwest of the city of Rossland, BC, Canada, 5.5 km north of the Canada-US International Border, and approximately 400 km east of Vancouver, BC.**

Latitude and longitude

**Project area is centered at approximately 49°02'29" N Latitude and 117°53'44" W Longitude (UTM coordinates 434,550 E and 5,432,430 N; NAD 83, Zone 11).**

A description of the proposed project's location in a local and regional context, including proximity to communities or locations of interest to the public, government, or Indigenous nations, and designated or protected areas such as parks or wildlife habitat areas.

**The RRIMM Project's property is located on Canadian National Topographic System (NTS) Mapsheet 082F/04, or British Columbia Geographic System Terrain and Resource Inventory Management (TRIM) Mapsheet 82F001. Rossland lies approximately 22.5 km north of the US-Canada border via Highway 22. Trail, on the Columbia River, is approximately 9 km downhill from Rossland and is serviced by the Canadian Pacific (CP) Railway. This rail system routes directly to Calgary, Alberta or Vancouver, BC, and ties southward into the Burlington Northern Santa Fe (BNSF) Railway system near Cranbrook, BC, approximately 150 km to the east. The BNSF railway services the north and northwestern United States.**

**The area is readily accessible by 2WD vehicles during summer months with SUV or truck recommended during spring, fall, and winter months. Access from Rossland, BC, follows Provincial Highway 3B 1.5 km west, then proceeds along Highway 22 west for 0.4 km, and then turns right onto the Old Rossland-Cascade Highway. Follow this provincially maintained gravel road for 10.5 km to W.H.Y. Resource's drill road access on the north side of the highway. The drill road climbs a 10% grade for about 200 m to the area of the southernmost drill sites. A network of four-wheel drive drill roads in good condition access the remainder of the exploration area. Drive time from Rossland is approximately 20 minutes to complete the 10.5 km route.**

**The proposed Project lies within the traditional territories of the Syilx Okanagan Nation, Sinixt Nation, and Secwepemc communities is located within the Regional District of Kootenay Boundary and within the western portion of the Kootenay Region and the Arrow Boundary Forest District. The area in, and around, the proposed RRIMM Project has been, and continues to be, used by the Syilx/Okanagan, Sinixt, and Secwepemc/Shuswap people. These uses entail a range of past and current activities, such as fishing, hunting, trapping, and plant harvesting, important for consumption, construction, and cultural purposes.**

**Most of the area in, and in the vicinity of, the RRIMM Project is comprised of lower elevation forested land of the Interior Cedar – Hemlock (ICH) biogeoclimatic ecosystem classification (BEC) zone. Upper elevations are primarily drier Engelmann Spruce Subalpine Fir (ESSF) forests with bedrock outcrops. ICH has an interior, continental climate dominated by easterly moving air masses that produce cool wet winters and warm dry summers (Ketcheson et.al 2018). This is one of the wettest zones in the BC interior. High snow melt in the ICH contributes to the hydrologic regime, minimizing summer soil moisture deficits. ICH is the most productive forest zone in the BC interior, and second in all of Canada. Upland coniferous forests dominate the landscape and the ICH has the highest diversity of tree species of any zone in BC. Western redcedar and**

western hemlock dominate mature forests, but several other species are included in the mix.

Majority of the area in the vicinity of the RRIMM Project is comprised of mature conifer forests, with some areas having been previously harvested and are now young regenerating forests. Tree species primarily include western redcedar, Douglas fir, western hemlock, lodgepole pine, grand fir, western white pine, western larch, ponderosa pine, paper birch, and trembling aspen. Subalpine fir and hybrid white spruce are found in the upper elevations, with outcrops of bedrock exposure.

Physiography of the property is gentle to moderately steep and controlled by the underlying geology. The RRIMM Project is located along the southeast facing slopes of the northeast trending Record Ridge. Record Ridge separates Big Sheep valley and creek on the west from the Little Sheep valley and creek to the east.

Topography of the regional area is characterized by steep hills and broad valleys, with elevations ranging from 1,023 m in Rosslund to 1,720 m at the mountain summits within the RRIMM Project. Hills and ridges are drained by gentle to deeply incised creeks and valleys. The ground surface of elevated areas is covered by residual soil and bedrock outcrops are relatively plentiful. In the valley areas, glacial and alluvial gravel fill is relatively deep and bedrock outcrop is limited to stream banks.

Vegetation is typical of the northern Rocky Mountains; locally varying between dense forest and open grass covered areas. Coniferous trees include fir, spruce and tamarack on north and east facing slopes; whereas ponderosa and lodgepole pine grow more in the open south and west facing slopes. Various brush species and poplar (deciduous trees) are common along streams and riverbanks.

Proposed on- and off-site facilities.

**Proposed on- and off-site facilities as part of the RRIMM Project include:**

- **Open Pit (on-site)**
- **Waste Rock Storage Facility (on-site)**
- **Site Water Management Facilities (on-site)**
- **Ore and Low-Grade Ore Stockpiles (on-site)**
- **Overburden and Soil Stockpiles (on-site)**
- **Access and Mine Site Roads (on-, off-site)**
- **Power Supply and Distribution (on-site)**
- **Explosive Facilities (on-site)**
- **Ancillary Buildings and Other Infrastructure (on-site)**

A brief description of proposed associated activities including those activities related to processing, transportation and/or shipping of materials to/from the site.

### **Mine Development & Operations**

The mine design provides two years of plant feed Mg-rich product material at a rate no greater than 249,000 tonnes per year. The mine development sequence includes a three-month construction period, which includes construction of site access haul roads and pads, as well as stockpiling topsoil from the project disturbed areas and mobilization of the required project equipment. The production phase of the project includes two years of mining no greater than 249,000 tonnes per year of mineralized material, which will be delivered to the crusher pad before being hauled off-site. During the two years of production, operations will be conducted for six months (Apr/May to Oct/Nov). Throughout operations, water in contact with the mine will be collected in a sump. This water will be transferred to the site sedimentation pond for analysis to ensure it is protective of the environment prior to release to the receiving environment.

#### **Open Pit**

The two-year open pit is designed targeting near-surface magnesium bearing material known as serpentinite. The open pit area consists of undeveloped, bare land with no previous development, mining or milling history. Pit walls are designed to have low heights for long term geotechnical stability, with 6 m benches which will be double benched.

A mobile rock crushing unit will be mobilized to and used on-site. Run of mine feed will be crushed and screened to an appropriate size for haulage to an off-site processing plant. Crushed rock will be hauled to a process facility in the US for magnesium extraction and recovery testing.

#### **Waste Rock Storage Facility**

It is expected that the mine will generate approximately 100,000 tonnes (15% of the total rock quarried) of waste rock over the life of the project. The waste rock storage facility will be located north of the crusher pad. It will be a level dump head, developing the dump as a side-hill fill, down topography which has an existing slope of approximately 15°. The dump is designed to a maximum height of 35 m and has a face angle of 37° which is the anticipated angle of repose. When production is completed, waste rock will be back-filled into the open pit.

#### **Site Water Management Facilities**

Water management infrastructure is designed to maximize diversion of clean water around the components of the RRIMM Project, while ensuring capture of contact water throughout the site. This will be accomplished with diversion ditches and one site sedimentation pond.

A local sump will be constructed into the hillside near the toe of the waste rock storage facility. Toe seepage and runoff will be directed to the site sedimentation pond via diversion channels constructed along the toe. Seepage from the ore stockpile will be collected in a local sump and pumped or flow by gravity in a pipe to the site sedimentation pond.

Runoff from the open pit, haul roads, and other developed areas will be collected in channels and directed to the site sedimentation pond where suspended sediment will be removed.

#### **Ore and Low-Grade Ore Stockpiles**

It will be necessary to create an ore stockpile pad large enough to allow for a run of mine stockpile, a crushing plant, and a crushed product ore stockpile. Ore from the crushed stockpile will be loaded on to highway trucks for transport off site. All topsoil stripped during the construction of this pad will be stockpiled for future site reclamation.

There will be no low-grade ore stockpile.

#### **Overburden and Soil Stockpiles**

The open pit, waste rock storage facility, and the footprint of the haul road and pads will be cleared of vegetation and topsoil stripped and stockpiled for future site reclamation activities. The soil stockpile will be located between the crusher pad and the sedimentation pond.

#### **Access and Mine Site Roads**

An access haul road will be constructed to connect the Old Rossland-Cascade Highway with the main haul road leaving the Project site. The same road will connect to the open pit, crusher pad, waste rock storage facility, and the site office pad. The main haul road is designed with a maximum grade of 10% and a width of 25 m, which includes vehicle running width, a safety berm and drainage ditch that complies with the Health, Safety and Reclamation Code for Mines in British Columbia haul road design guidelines (Ministry of Energy and Mines 2022).

#### **Power Supply and Distribution**

The RRIMM Project area is traversed by electrical transmission lines leading from Rossland westward. These lines would not, however, need to be moved to accommodate the proposed Project. Power requirements for this proposed Project will be supplied by portable generator(s).

#### **Explosive Facilities**

An explosive magazine will be located on-site which will have capacity for a limited amount of explosives and detonators. Explosive storage will be located and designed in compliance with the Code (Ministry of Energy, and Mines 2017) and Natural Resources Canada explosives regulations. Storage volume of the magazine will be limited and regularly re-stocked from a licensed explosive supplier.

#### **Ancillary Buildings and Other Infrastructure**



**Additional on-site infrastructure will include a crusher pad and a number of temporary buildings. A pad will be cleared adjacent to the site entrance, near the office building facilities, which will include mobile office and dry buildings as well as the equipment maintenance pad and equipment parking area. The site entrance will have an access gate and security building.**

A description of any other project(s) that are needed for the proposed project to proceed and be feasible (e.g., a pipeline would be needed for an oil and gas facility to proceed).

**No other projects are required for the Proposed RRIMM Project to proceed, if granted approval.**

A description of the work that has been conducted to arrive at the proposed project.

**Multiple environmental baseline programs have been scoped and executed to help inform the permitting process and understand potential interactions between important receptors and the Project. The programs have included:**

- **Meteorology & Climate (including Air Quality & dispersion modelling)**
- **Geology**
- **Geochemical Characterization & Source Terms**
- **Topography, Surface Drainage Features and Natural Hazards**
- **Water Quantity**
- **Groundwater & Surface Water Quality**
- **Sediment Quality**
- **Fisheries & Aquatic Resources**
- **Vegetation & Wildlife**
- **Land Status & Use**
- **Land Capabilities**
- **Archaeology**
- **Cultural Use**

**A Mine Plan has been developed and was included in the MA/EMA permit application.**

**The Mine Plan consists of the following:**

- **Mine Plan Overview**
- **Development Sequence & Schedule**
- **Existing Development**
- **Detailed Five-Year Mine Plan**
- **Conceptual Life of Mine Plan**
- **Mine Facility Designs & Development**

**A Reclamation and Closure Plan has also been developed. The Reclamation and Closure Plan consists of the following:**

- **End Land Use & Capability Objectives**
- **Reclamation Approaches**
- **Trace Element Uptake in Soils & Vegetation**
- **Contaminated Sites Requirements**

- **Disposal of Chemicals, Reagents, Hazardous Materials, Contaminated Materials**
- **Groundwater Well Decommissioning**
- **Reclamation and Closure Prescriptions**
- **Detailed Five-Year Reclamation Plan**
- **Reclamation Cost Estimate**

Duration of project – length of each phase (e.g., construction, operation, decommissioning and closure).

**The Project duration consists of the following:**

- **Construction: approximately 3 months**
- **Operation: 2 years**
- **Decommissioning & Closure: approximately 2 months**

### Authorizations

List any existing permits or tenure in place.

#### **MX-5-460**

List required permits, licenses, tenures or other authorizations and their status if they've been applied for.

**A provincial Mines Act (MA) and Environmental Management Act (EMA) effluent discharge permit are required for construction and operations of the project. A joint MA/EMA Application was submitted to the Province in April 2023.**

**A provincial Highway Use Permit is required to create access from the Project site to the Old Rossland Cascade Highway.**

### Notification Threshold Information

**The RRIMM Project is an industrial mineral mine with production capacity no greater than 249,000 tonnes per year; therefore, it does not trigger the provincial and federal environmental assessment process and will not require an Environmental Assessment Certificate. The thresholds were considered against the following sections from the Reviewable Projects Regulation (RPR):**

- **Section 5(1)(a): Federally Reviewable**
- **Section 5(1)(b): Design Thresholds**
- **Section 5(1)(c): Workforce**
- **Sections 5(1)(d) & 5(3): Greenhouse Gases**
- **Section 5(1)(e): Transmission Line**
- **Section 5(1)(f)(i): Linear Clearance**
- **Section 5(1)(f)(ii): Land Clearance**

### Maps and Shapefiles

The following information must be included on maps:

- o On- and off-site project components;

- Indigenous traditional territories and/or consultation areas, Treaty and/or Title lands, and Reserve lands;
- Local and Indigenous communities;
- international, provincial, and territorial boundaries, where applicable;
- Parks and protected areas; and
- Legally protected wildlife habitat.

**See attached files.**

The following shapefiles and .kmz for the project must be provided:

- Project footprint;
- Known or proposed project components; and
- Project access route.

**See shapefiles included with Notification package.**