

# Research Report Pre-submission Engagement – Executive Committee Screening Research



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**Prepared for:**

**Yukon Environmental and  
Socio-economic Assessment Board**  
Suite 200 – 309 Strickland Avenue  
Whitehorse, Yukon Y1A 0K7

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**Prepared by:**

**Hemmera Envirochem Inc.**  
2237 2nd Avenue, Suite 230  
Whitehorse, YT Y1A 0K7  
T: 867.456.4865  
F: 604.669.0430  
hemmera.com

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## 1.0 INTRODUCTION

The Yukon Environmental and Socio-economic Assessment Board (YESAB) is in the process of developing a Pre-submission Engagement (PSE) process for Executive Committee screenings. The purpose of PSE is to bring interested and affected parties together to review project requirements well in advance of a detailed proposal being submitted for assessment. This process will help identify gaps and issues of concern, define values and baseline information requirements and ensure a timely and certain screening process.

The PSE framework was developed and circulated to key stakeholders in December of 2018 (YESAB 2018). Between January and April 2019, YESAB discussed practical aspects of implementing the PSE process with a broad cross-section of stakeholders. Input received during this time showed mixed response ranging from conceptual support, subject to further details, to serious concerns with the process as currently structured (YESAB 2019). In continuing to develop the PSE process, YESAB intends to engage further with key participants.

## 2.0 OBJECTIVES

In order to support further development of the PSE framework, YESAB retained Hemmera to conduct research on the five completed screenings listed in Table 2.1-1. The primary objective of the research was to provide a high-level comparison of how or whether the proposed PSE Framework – at a conceptual level – could have resolved or managed the issues encountered during adequacy review and seeking views and information stages. For example, if the PSE process were in place, are there issues or information requests that may have been addressed prior to the project proposals being submitted

The five projects were selected by YESAB based on several factors including:

- Represent two sectors (i.e., quartz mining and power generation) and varying scales
- Each project was issued multiple information requests at various stages of the Screening process
- Provided a reasonable amount of data for analysis
- The projects were no longer in the Executive Committee Screening process (four were issued a recommendation and decision document, one was withdrawn by the proponent)

**Table 2.1-1 Executive Committee Screenings Reviewed**

Project Name	YESAB Project Number	Proponent
Carmacks Copper Project	2006-0050	Copper North
Mactung Mine	2008-0304	North American Tungsten Corp.
Mayo Hydro Enhancement Project (Mayo B)	2009-0040	Yukon Energy Corporation
Eagle Gold Mine	2010-0267	Victoria Gold Corp.
Ketza River Mine	2011-0218	Ketza River Holdings Ltd.

### 2.1 Current Executive Committee Screening Process

Section 50(2) of the *Yukon Environmental and Socio-economic Assessment Act (YESAA)* species the matters, found in Section 42 of *YESAA*, which must be considered by proponents in preparing a project proposal. Section 50(3) directs proponents to consult with First Nations and residents of communities prior to submission of a project proposal to the Executive Committee. Additional requirements for proposals can be found in the *Rules for Screenings Conducted by the Executive Committee* (e.g., Schedule A – Project Proposal Requirements).

Outside of *YESAA* and the Screening Rules, YESAB does not currently have a formalized process for proponents to follow while preparing a project proposal. The formal process for Executive Committee screenings begins when a proponent submits a project proposal as per section 50(1) or 56(4) of the *YESAA*.

YESAB has published several policies and guidance documents which help guide proponents in developing their project proposals. The following formal proponent’s guidance documents are available in relation to Executive Committee Screenings:

- Consultation Guidance for Proponents
- Dam Guide: Design Expectations and Required Information
- Geohazards and Risk: Linear Infrastructure

- Model Documentation Report
- Water Information Requirements for Quartz Mining Project Proposals
- Consideration of Aboriginal Rights and Interests Information Bulletin
- Considering Cumulative Effects Information Bulletin

In addition, proponents may engage with the Executive Committee and other stakeholders to understand information requirements. This engagement can vary widely from infrequent meetings to regularly scheduled working groups. However, there is no formalized process whereby the Executive Committee or other key stakeholders provide guidance and input on information requirements prior to project proposal submission.

Once a proposal is submitted, the Executive Committee begins their adequacy review stage where they determine whether the proposal is adequate or whether they require supplementary information. In making this determination, it has been the Executive Committee's practice to invite input from First Nations, Decision Bodies, and regulators with an interest in the project. Supplementary information requirements are specified by issuing formal information requests to the proponent.

## **2.2 Proposed PSE Process**

The main objectives of the PSE framework as listed in the PSE Backgrounder (YESAB, 2018) are to:

- Provide an effective, proactive opportunity for early identification of issues and information requirements with the Executive Committee, proponent, government decision bodies and regulators, First Nations, communities and the public.
- Provide project-specific guidance to proponents on information requirements.
- Ensure issues and information gaps are identified prior to project proposal submission.
- Minimize the likelihood of new issues arising during the screening.

The PSE framework will formalize a process where the Executive Committee and multiple participants (i.e., proponents, First Nations, Government Decision Bodies and Regulators, and the Public) can articulate their interests in relation to a project and identify information requirements prior to submission of a project proposal.

## **2.3 Key Research Objectives**

Numerous information requests were issued for each of the five projects listed in Table 2.1-1 after the project proposals were submitted. This research paper reviewed information requests, documents related to valued environmental and socio-economic components (VESEC) and other relevant information in order to:

1. Review and categorize information requests issued by the Executive Committee
2. Identify information requests that could have been resolved or managed prior to submission of a proposal if the PSE framework were in place
3. Provide a conceptual level qualitative analysis of the results.

## 3.0 METHODS

### 3.1 Information Gathering

Hemmera gathered records on the five projects listed in Table 3.2-1 from the YESAB Online Registry (YOR). Records were selected which identified information required from the proponent. These included formal Information Requests (IR) issued by the Executive Committee and letters sent to the proponent. All documents were downloaded from the publicly available records on the YOR onto Hemmera servers for review and analysis.

### 3.2 Review and Qualitative Analysis

Prior to reviewing IRs, Hemmera listed and defined potential PSE topics and Screening topics in order to categorize IRs. PSE topics were adapted from the draft Project Description Requirements, version updated on June 3, 2019 with participant input edits. Screening topics were developed based on recurring topics observed in the IRs. PSE topics were considered issues or information requirements that could possibly have been identified during a PSE process. Screening Topics were considered detailed information requirements that would be identified during the Screening process after a proposal was submitted. These topics and their definitions are listed below in Table 3.2-1.

Once the topics were defined, Hemmera categorized each IR for all five projects using Microsoft Excel. One file was developed for each project with each record making up a separate sheet within the document. Each question was listed, reviewed, and categorized as a potential PSE Topic or Screening Topic to analyze whether that particular request could have been asked or addressed prior to submission under a PSE framework. Clarification emails and letters as well as draft responses/YESAB review (e.g., Mayo B) were not included in this analysis.

This analysis was qualitative in nature and in many cases, a determination was required in categorizing questions within topic areas. It was determined that certain questions may have been asked in a similar format during a PSE process. These questions tended to be more general in nature or explicitly related to topics such as project activities or location. Other questions may not have been requested as written if addressed in a PSE process but were still categorized as PSE topics. These questions tended to be much more detailed with specific lines of questioning. It is unlikely that a Project Description in the PSE process would be comprehensive enough to result in these detailed questions. However, the questions were related to topic areas that would likely be identified during the PSE process. For example, through a PSE process, key stakeholders may identify and provide necessary direction on baseline data requirements which would avoid future detailed and specific questions related to baseline. In these cases, questions were categorized in PSE topic areas. As such, while these questions may not have been requested if a PSE process were in place, they relate to issues and interest that could have been more fully described and understood during a PSE process.



**Table 3.2-1 Definition of PSE and Screening Topics Selected**

Topic	Definition
<b>PSE Topics</b>	
General Information and Contacts	<ul style="list-style-type: none"> <li>Name of proposed project, Proponent contact information, name of primary contact person and agent.</li> </ul>
Project Overview	<ul style="list-style-type: none"> <li>General project overview</li> </ul>
Project Activities and Components	<ul style="list-style-type: none"> <li>A description of the project, including rationale, history, and current status.</li> <li>The type and size of the project, with specific reference to the activities set out in Schedule 1 and 3 of the Assessable Activities, Exceptions, and Executive Committee Projects Regulations.</li> <li>A description of all major components and ancillary activities associated with all phases of the proposed project. The purpose of each component and options, if the final option has not yet been selected.</li> <li>Indication of the current stage of project design.</li> <li>A description of activities related to transportation and shipping of materials to or from the site, in the construction, operation and decommissioning phases of the project. Include loading, the use of existing or new transportation corridors and frequency and timing of shipping.</li> <li>Number of construction jobs and operating jobs (in person years or full time equivalents), and a description of any proposed workforce accommodation.</li> <li>Estimated cost for construction and decommissioning of the project, as well as projected annual operating costs.</li> <li>Number of construction jobs and operating jobs (in person years or full time equivalents), and a description of any proposed workforce accommodation.</li> <li>A description of resource requirements for the project such as power, source and use of water, etc.</li> <li>A general description of expected emissions, effluents, discharges, wastes and other disturbances associated with all phases of the project, including potential accidents and malfunctions, their sources and locations.</li> </ul>
Project Location	<ul style="list-style-type: none"> <li>The project location including latitude and longitude and maps at appropriate scale showing the project's location in relation to valued features.</li> <li>Proximity to First Nations' interests</li> <li>The identification of land use planning regions, Special Management Areas, parks, protected areas</li> <li>A map of the project site with locations of all project components</li> <li>A description of the land required for the project</li> <li>A description of past uses of the project site including whether the site has been previously developed</li> </ul>
Project Phases and Schedule	<ul style="list-style-type: none"> <li>A general description of the project schedule</li> <li>A description of proposed phases, if applicable</li> </ul>
Regulatory Context	<ul style="list-style-type: none"> <li>Required authorizations</li> <li>Any activities undertaken by a third party</li> </ul>
Initial Engagement and Consultation	<ul style="list-style-type: none"> <li>Identification of First Nations and communities who may be affected by the project and its component activities</li> <li>A description of initial efforts to engage with or consult potentially affected First Nations and residents of communities.</li> <li>An overview of planned engagement and consultation activities</li> </ul>

Topic	Definition
<b>PSE Topics</b>	
Preliminary VCs	<ul style="list-style-type: none"> <li>• Preliminary identification of potential issues, VESECs, how they were identified, and how they may be developed further</li> <li>• Identification of trans-Yukon boundary effects</li> </ul>
Baseline Data Collection Program	<ul style="list-style-type: none"> <li>• Description of baseline data collection programs</li> </ul>
<b>Screening Topics</b>	
Baseline Data Collected	<ul style="list-style-type: none"> <li>• Specific details and clarifications on baseline data collected.</li> </ul>
Project Effects	<ul style="list-style-type: none"> <li>• Consideration or characterization of project effects.</li> </ul>
Mitigation Measures	<ul style="list-style-type: none"> <li>• Specific mitigations measures to address concerns identified.</li> </ul>
Monitoring/Management Plans	<ul style="list-style-type: none"> <li>• Additional details or clarifications on monitoring and management plans developed for the project.</li> <li>• Details on monitoring required to address issues or concerns.</li> </ul>
Engagement	<ul style="list-style-type: none"> <li>• Details on engagement with various stakeholders</li> </ul>
Other	<ul style="list-style-type: none"> <li>• Details or clarifications on project activities and components</li> <li>• Design examples and details.</li> <li>• Details and clarifications on models</li> <li>• Additional modeling and analysis.</li> </ul>

### 3.3 Summary and Quantitative Analysis

Results for each of the five projects are presented in Sections 4.1 through 4.5 below. Results for each IR were presented in table to show how many questions could have been addressed through, or are related to issues and interests that could have been more fully described and understood in, the PSE process and the Screening. All questions were further categorized by primary topic addressed. Totals were provided for each IR and a combined total was presented for all IRs for that project. Results are then presented as a percentage of questions which could have been addressed through the PSE process.

Additional analysis is presented to show the duration of YESAB’s review and the proponent’s response time for each IR. The table also shows the percentage of questions from each IR that could have been addressed through PSE.

Finally, results are amalgamated and presented for all five projects in Section 4.6. Results show totals for each project and a combined total for all projects. Total review and response time as well as the percentage of questions from each IR that could have been addressed through PSE are also presented.



## 4.0 OBSERVATIONS

### 4.1 Carmacks Copper Project (YESAB Project Number 2006-0050)

The Carmacks Copper Project entered the process in February 2006 and a recommendation was issued in July 2008. A total of four IRs were issued:

- IR1, YOR Document Number 2006-0050-073-1
- IR2, YOR Document Number 2006-0050-074-1
- IR3, YOR Document Number 2006-0050-097-1
- IR4, YOR Document Number 2006-0050-160-1

**Table 4.1-1** shows by IR, how many questions could have been addressed through, or are related to issues and interests that could have been more fully described and understood in, the PSE process. All questions are further categorized by primary topic addressed.

**Table 4.1-1 Frequency of Carmacks Copper Project IR Questions by Topic**

Topic	Number of Items				
	IR1	IR2	IR3	IR4	TOTAL
<b>PSE</b>					
General Information and Contacts	-	-	-	-	-
Project Overview	1	-	-	-	1
Project Activities and Components	9	3	9	2	23
Project Location	3	2		-	5
Project Phases and Schedule	3	1	2	-	6
Regulatory Context	-	-	-	-	-
Initial Engagement and Consultation	1	-	-	-	1
Preliminary VCs	-	-	-	-	-
Baseline Data Collection Program	19	-	-	-	19
<b>TOTAL</b>	<b>36</b>	<b>6</b>	<b>11</b>	<b>2</b>	<b>55</b>
<b>Screening</b>					
Baseline Data Collected	6	-	-	-	6
Project Effects	12	2	3	-	17
Mitigation Measures	9	1	1	1	12
Monitoring/Management Plans	9	-	2	1	12
Engagement	1	-	-	-	1
Other	5	8	2	5	20
<b>TOTAL</b>	<b>42</b>	<b>11</b>	<b>8</b>	<b>1</b>	<b>68</b>

Of the 123 total questions received, 55 (45%) could have been addressed through the PSE process. These questions were primarily related to project activities and components (23 of 55 questions) and baseline data collection programs (19 of 55 questions).

**Table 4.1-2** summarizes the duration of YESAB’s review and the proponent’s response time for each IR. The table also shows the percentage of questions from each IR that could have been addressed through PSE (calculated using the totals in **Table 4.1-1**).

**Table 4.1-2 Duration of Review and Response Time by IR**

IR# and topic(s)	% PSE questions	YESAB Review Time	Proponent Response Time	Total
IR1 (2006-0050-073-1) Project Activities and Components, Project Location, Project Phases and Schedule, Baseline Data, Project Effects, Mitigation Measures, Environmental Monitoring, Engagement	46%	60 days (February 27, 2006 - April 28, 2006)	No Response Posted	<b>60 days</b>
IR2 (2006-0050-074-1) Project Activities and Components, Project Location, Project Phases and Schedule, Project Effects, Mitigation Measures	35%	57 days (November 16, 2006 - January 12, 2007)	26 days (January 12, 2007 – February 7, 2007)	<b>83 days</b>
IR3 2006-0050-097-1) Project Activities and Components, Project Phases and Schedule, Project Effects, Mitigation Measures, Environmental Monitoring,	58%	67 days (February 16, 2007 - April 24, 2007)	Part 1: 21 days (April 24, 2007 – May 15, 2007)	<b>242 days</b>
			Part 2: 98 days (April 24, 2007 – July 31, 2007)	
			Part 3: 128 days (April 24, 2007 - August 30, 2007)	
			Part 4: 175 days (April 24, 2007 - October 16, 2007)	
IR4 (2006-0050-160-1) Project Activities and Components, Mitigation Measures, Environmental Monitoring	0%	21 days (February 6, 2008 - February 27, 2008)	33 days (February 27, 2008 – March 31, 2008)	<b>54 days</b>
<b>TOTAL</b>	<b>45%*</b>	<b>205 days</b>	<b>234 days</b>	<b>439 days</b>

\*Overall average from Table 4.1-1

Of the four IRs issued for the project, IR3 had the longest review and response time. IR3 also had the highest percentage of questions that could have been addressed through the PSE process. Of the IR3 questions that could have been addressed through the PSE process, 9 out of 11 of them were related to project activities and components.

The Carmacks Copper Mine was the first project to go through the Executive Committee Screening process. It does not appear that the Executive Committee invited input from other stakeholders during the adequacy review stage. As such, other stakeholder input was not considered in the first two information requests.

#### 4.2 Mactung Mine (YESAB Project Number 2008-0304)

The Mactung Mine Project entered the process in December 2008 and a recommendation was issued in June 2014. A total of nine IRs were issued:

- IR1, YOR Document Number 2008-0304-077-1
- IR2, YOR Document Number 2008-0304-096-1
- IR3, YOR Document Number 2008-0304-154-1
- IR4, YOR Document Number 2008-0304-166-1
- IR5, YOR Document Number 2008-0304-179-1
- IR6, YOR Document Number 2008-0304-223-2
- IR7, YOR Document Number 2008-0304-289-1
- IR8, YOR Document Number 2008-0304-321-1
- IR9, YOR Document Number 2008-0304-376-1

**Table 4.2-1** shows by IR, how many questions could have been addressed through, or are related to issues and interests that could have been more fully described and understood in, the PSE process. All questions are further categorized by primary topic addressed.

**Table 4.2-1 Frequency of Mactung Mine IR Questions by Topic**

Topic	Number of Items									
	IR1	IR2	IR3	IR4	IR5	IR6	IR7	IR8	IR9	TOTAL
<b>PSE</b>										
General Information and Contacts	-	-	-	-	-	-	-	-	-	-
Project Overview	-	-	-	-	-	-	-	-	-	-
Project Activities and Components	51	4	-	-	-	3	4	-	-	<b>62</b>
Project Location	4	-	-	-	-	-	-	-	-	<b>4</b>
Project Phases and Schedule	-	-	-	-	-	-	-	-	-	-
Regulatory Context	-	-	-	-	-	-	-	-	-	-
Initial Engagement and Consultation	-	-	-	-	-	-	-	-	-	-
Preliminary VCs	-	-	-	-	-	-	-	-	-	-
Baseline Data Collection Program	8	-	4	-	-	-	7	-	-	<b>19</b>
<b>TOTAL</b>	<b>63</b>	<b>4</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>3</b>	<b>11</b>	<b>-</b>	<b>-</b>	<b>85</b>

Topic	Number of Items									
	IR1	IR2	IR3	IR4	IR5	IR6	IR7	IR8	IR9	TOTAL
<b>Screening</b>										
Baseline Data Collected	26	-	3	-	4	-	4	1	-	<b>38</b>
Project Effects	10	-	4	-	-	-	2	5	-	<b>21</b>
Mitigation Measures	23	-		-	-	2	-	1	-	<b>26</b>
Monitoring/Management Plans	8	-	1	-	-	1	2	-	1	<b>13</b>
Engagement	-	-	-	-	-	-	-	-	-	-
Other	23	-	5	4	10	-	8	1	-	<b>51</b>
<b>TOTAL</b>	<b>90</b>	<b>-</b>	<b>13</b>	<b>4</b>	<b>14</b>	<b>3</b>	<b>16</b>	<b>8</b>	<b>1</b>	<b>149</b>

Of the 234 total questions received, 85 (36%) could have been addressed through the PSE process. These questions were primarily related to project activities and components (62 of 85 questions) and baseline data collection programs (19 of 85 questions).

**Table 4.2-2** summarizes the duration of YESAB’s review and the proponent’s response time for each IR. The table also shows the percentage of questions from each IR that could have been addressed through PSE (calculated using the totals in **Table 4.2-2**).

**Table 4.2-2 Duration of Review and Response Time by Information Request**

IR# and topic(s)	% PSE questions	YESAB Review Time	Proponent Response Time	Total
IR1 (2008-0304-077-1) Project Activities and Components, Project Location, Project Phases and Schedule, Baseline Data, Project Effects, Mitigation Measures, Environmental Monitoring	41%	69 days (January 20, 2009 – March 30, 2009)	123 days (March 30, 2009 – July 31, 2009)	<b>192 days</b>
IR2 (2008-0304-096-1) Project Effects	100%	32 days July 31, 2009 – September 1, 2009	21 days September 1, 2009 – September 22, 2009	<b>53 days</b>
IR3 (2008-0304-154-1) Baseline Data, Project Effects, Environmental Monitoring	24%	89 days (October 16, 2009 – January 13, 2010)	181 days (January 13, 2010 – July 14, 2010)	<b>270 days</b>
IR4 (2008-0304-166-1) Project Activities and Components	0%	21 days (July 14, 2010 – August 4, 2010)	345 days (August 4, 2010 – July 15, 2011)	<b>366 days</b>
IR5 (2008-0304-179-1) Project Activities and Components, Baseline Data	0%	20 days (July 15, 2011 – August 5, 2011)	81 days (August 5, 2011 – October 25, 2011)	<b>101 days</b>
IR6 (2008-0304-223-2)	50%	162 days (November 28, 2011 – May 8, 2012)	15 days (May 8, 2012 – May 23, 2012)	<b>177 days</b>

IR# and topic(s)	% PSE questions	YESAB Review Time	Proponent Response Time	Total
IR7 (2008-0304-289-1) Baseline Data, Project Effects, Environmental Monitoring	41%	81 days (October 15, 2012 – January 4, 2013)	284 days (January 4, 2013 – October 15, 2013)	<b>365 days</b>
IR8 (2008-0304-321-1) Baseline Data, Project Effects, Mitigation Measures	0%	48 days (October 15, 2013 – December 2, 2013)	4 days (December 2, 2013 – December 6, 2013)	<b>52 days</b>
IR9 (2008-0304-376-1) Project Effects, Environmental Monitoring	0%	11 days (June 5, 2014 – June 16, 2014)	4 days (June 16, 2014 – June 20, 2014)	<b>15 days</b>
<b>TOTAL</b>	<b>36%*</b>	<b>533 days</b>	<b>1,058 days</b>	<b>1,591 days</b>

\*Overall average from Table 4.2-1

Of the nine IRs issued for the project, two of (IR4 and IR7) them had a review and response time of one year. IR4 did not include any questions that could have been addressed through the PSE process. A total of 41% of the questions included in IR7 could have been addressed through the PSE process. IR3 also had the highest percentage of questions that would be addressed through the PSE process.

The Mactung Mine Screening included several key issues which resulted in numerous information requests during the assessment process, both during the adequacy review and the screening stages. The following key issues may have been identified as areas of potential concern and addressed through a PSE process:

- **Meteorological and climate data:** At the time of submission, there was no on-site climate and weather station installed. The Proponent had developed predictions for onsite meteorological and climate data based on representative sites within Yukon. This resulted in numerous information requests from the Executive Committee on installation of a climate station on-site, clarification of predictions/reference sites, and additional predictions and analysis.
- **Use of existing access road:** In order to keep the entire project footprint within Yukon, the proponent had initially submitted the project proposal with the construction of a new access road to the mine site when there was an existing access road which went through the Northwest Territories. This resulted in numerous information requests on the proposed road and existing road and a site visit and assessment of the existing access by consultants retained by the Executive Committee. Through this process, the proponent committed to using the existing access road.
- **Characterization of acid rock drainage and metal leaching potential:** There were many questions throughout all phases of the assessment surrounding the proponent’s characterization and prediction of acid rock drainage and metal leaching potential site. This type of information can take a relatively long time to acquire (e.g., humidity cell testing). Had these requirements been identified prior to development of the proposal, the proponent may have had sufficient time to collect the required information.

### 4.3 Mayo B Hydro Enhancement Project (YESAB Project Number 2009-0040)

The Mayo Hydro Enhancement Project (Mayo B) entered the process in March 2009 and a recommendation was issued in May 2010. A total of four IRs were issued:

- IR 1, YOR Reference Number 2009-0040-073-1
- IR2, YOR Reference Number 2009-0040-124-1
- IR3, YOR Reference Number 2009-0040-154-1
- IR4, YOR Reference Number 2009-0040-159-1

**Table 4.3-1** shows by IR, how many questions could have been addressed through, or are related to issues and interests that could have been more fully described and understood in, the PSE process. All questions are further categorized by primary topic addressed.

**Table 4.3-1 Frequency of Mayo B IR Questions by Topic**

Topic	Number of questions per Information Request				
	IR1	IR2	IR3	IR4	TOTAL
<b>PSE</b>					
General Information and Contacts	-	-	-	-	-
Project Overview	-	-	-	-	-
Project Activities and Components	4	1	-	1	<b>6</b>
Project Location	1	-	-	3	<b>4</b>
Project Phases and Schedule	-	-	-	-	-
Regulatory Context	-	-	-	-	-
Initial Engagement and Consultation	-	-	-	-	-
Preliminary VCs	-	-	-	-	-
Baseline Data Collection Program	3	7	-	-	<b>10</b>
<b>TOTAL</b>	<b>8</b>	<b>8</b>	<b>-</b>	<b>4</b>	<b>20</b>
<b>Screening</b>					
Baseline Data Collected	2	-	-	-	<b>2</b>
Project Effects	7	4	4	-	<b>15</b>
Mitigation Measures	2	-	-	1	<b>3</b>
Monitoring/Management Plans	1	-	1	-	<b>2</b>
Engagement	-	-	-	-	-
Other	4	-	-	2	<b>6</b>
<b>TOTAL</b>	<b>16</b>	<b>4</b>	<b>5</b>	<b>3</b>	<b>28</b>

Of the 48 total questions received, 20 (42%) could have been addressed through the PSE process. These questions were primarily related to baseline data collection programs (10 of 20 questions) and project activities and components (6 of 20 questions).

**Table 4.3-2** summarizes the duration of YESAB's review and the proponent's response time for each IR. The table also shows the percentage of questions from each IR that could have been addressed through PSE (calculated using the totals in **Table 4.3-1**).

**Table 4.3-2 Duration of Review and Response Time by Information Request**

IR# and topic(s)	% PSE Questions <sup>1</sup>	YESAB Review Time	Proponent Response Time	Total
IR1 (2009-0040-073-1) Project Location, Project Activities and Components, Baseline Data, Project Effects, Mitigation Measures, Environmental Monitoring, Engagement	33%	57 days (March 4, 2009 - April 30, 2009)	6 days (Draft Responses: April 30, 2009 - May 6, 2009)	<b>103 days</b>
		34 days (Questions on Draft Responses: May 6, 2009 - June 11, 2009)	6 days (Final Responses: June 11, 2009 - June 17, 2009)	
IR2 (2009-0040-124-1) Baseline Data, Project Effects	67%	36 days (June 17, 2009 - July 23, 2009)	8 days July 23, 2009 - July 31, 2009	<b>44 days</b>
IR3 (2009-0040-154-1) Project Effects, Environmental Monitoring	0%	83 days (July 31, 2009 - October 22, 2009)	22 days (October 22, 2009 - November 13, 2009)	<b>105 days</b>
IR4 (2009-0040-159-1) Project Activities and Components, Project Location	57%	32 days (November 13, 2009 - December 15, 2009)	7 days December 15, 2009 - December 22, 2009	<b>39 days</b>
<b>TOTAL</b>	<b>42%*</b>	<b>242 days</b>	<b>49 days</b>	<b>291 days</b>

\*Overall average from Table 4.3-1

Of the four IRs issued for the project, those with the highest percentage of questions that could have been addressed through PSE (IR2 and IR4) had the shortest review and response time (44 and 39 days, respectively).

The project proposal for the Mayo B Project included the drawdown of lake levels in Mayo Lake. During the adequacy review, the Executive Committee identified deficiencies in baseline information, modeling, and effects predictions related to this drawdown. The proponent removed the drawdown of Mayo Lake as it was not required for the project and because they would not be able to get the information in a timely manner. Had these requirements been identified prior to development of the proposal, the proponent may have had sufficient time to collect the required information.

#### 4.4 Eagle Gold Mine (YESAB Project Number 2010-0267)

The Eagle Gold Mine Project entered the process in December 2010 and a recommendation was issued in February 2013. A total of five IRs were issued:

- IR1, YOR Reference Number 2010-0267-071-1
- IR2, YOR Reference Number 2010-0267-205-1
- IR3, YOR Reference Number 2010-0267-296-1
- IR4, YOR Reference Number 2010-0267-349-1
- IR5, YOR Reference Number 2010-0267-353-1



**Table 4.4-1** shows by IR how many questions could have been addressed through, or are related to issues and interests that could have been more fully described and understood in, the PSE process. All questions are further categorized by primary topic addressed.

**Table 4.4-1 Frequency of Eagle Gold Mine IR Questions by Topic**

Topic	Number of Items					
	IR1	IR2	IR3	IR4	IR5	TOTAL
<b>PSE</b>						
General Information and Contacts	-	-	-	-	-	-
Project Overview	-	-	-	-	-	-
Project Activities and Components	28	7	3	1	-	<b>39</b>
Project Location	1	-	-	-	-	<b>1</b>
Project Phases and Schedule	2	-	-	-	-	<b>2</b>
Regulatory Context	-	-	-	-	-	-
Initial Engagement and Consultation	-	-	-	-	-	-
Preliminary VCs	-	-	-	-	-	-
Baseline Data Collection Program	17	-	-	-	-	<b>17</b>
<b>TOTAL</b>	<b>48</b>	<b>7</b>	<b>3</b>	<b>1</b>	<b>-</b>	<b>59</b>
<b>Screening</b>						
Baseline Data Collected	15	6	1	-	-	<b>22</b>
Project Effects	3	-	-	-	-	<b>3</b>
Mitigation Measures	1	2	-	1	-	<b>4</b>
Monitoring/Management Plans	6	3	-	-	-	<b>9</b>
Engagement	-	1	-	-	-	<b>1</b>
Other	23	12	4	3	3	<b>45</b>
<b>TOTAL</b>	<b>48</b>	<b>24</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>84</b>

Of the 143 total questions received, 59 (41%) could have been addressed through the PSE process. These questions were primarily related to project activities and components (39 of 59 questions).

**Table 4.4-2** summarizes the duration of YESAB's review and the proponent's response time for each IR. The table also shows the percentage of questions from each IR that could have been addressed through PSE (calculated using the totals in **Table 4.4-1**).

**Table 4.4-2 Duration of Review and Response Time by Information Request**

IR# and topic(s)	% PSE Questions <sup>1</sup>	YESAB Review Time	Proponent Response Time	Total
IR1 (2010-0267-071-1) Project Activities and Components, Project Location, Project Phases and Schedule, Baseline Data, Project Effects, Mitigation Measures, Environmental Monitoring	50%	60 days (January 21, 2011 – March 29, 2011)	56 days (March 29, 2011 – May 24, 2011)	<b>116 days</b>
IR2 (2010-0267-205-1) Project Activities and Components, Baseline Data, Mitigation Measures, Environmental Monitoring, Engagement,	22%	56 days (July 22, 2011 – September 16, 2011)	30 days (September 16, 2011 – December 5, 2011)	<b>86 days</b>
IR3 (2010-0267-296-1) Project Activities and Components, Baseline Data	37%	37 days (May 14, 2012 - June 20, 2012)	37 days (June 20, 2012 – July 27, 2012)	<b>37 days</b>
IR4 (2010-0267-349-1) Project Activities and Components, Mitigation Measures	20%	20 days (October 4, 2012 – October 24, 2012)	30 days (October 24, 2012 – November 23, 2012)	<b>50 days</b>
IR5 (2010-0267-353-1) Other	0%	24 days (November 23, 2012 - December 17, 2012)	39 days (December 17, 2012 – January 25, 2013)	<b>63 days</b>
<b>TOTAL</b>	<b>41%*</b>	<b>204</b>	<b>242</b>	<b>446</b>

\*Overall average from Table 4.4-1

Of the five IRs issued for the project, IR1 had the longest review and response time. IR1 also had the highest percentage of questions that would be addressed through the PSE process. Of the IR1 questions that could have been addressed through the PSE process, 28 out of 48 of them were related to project activities and components.

During the screening, after the first public comment period on the project proposal, the proponent introduced changes to the project. The changes included increasing the ore production, the footprint of the open pit, volume of the heap leach facility and total waste rock as well as increased the timeline of the overall project. This change in project resulted in IR3. While these questions have been included in the analysis above, the PSE process may not account for a change to a project during the screening process such as this.

#### 4.5 Ketz River Mine (YESAB Project Number 2011-0218)

The Ketz River Mine Project entered the process in September 2011. A total of four IRs were issued:

- IR1, YOR Reference Number 2011-0218-072-1
- IR2, YOR Reference Number 2011-0218-084-1
- IR3, YOR Reference Number 2011-0218-105-1
- IR4, YOR Reference Number 2011-0218-155-2

The Ketz River Mine Project proposal was withdrawn in April 2014 following the release of IR4. The proposal was withdrawn due to baseline data deficiencies, the proponent’s inability to meet the supplementary information deadline for IR4, and a change in the company’s financials.

**Table 4.5-1** shows by IR, how many questions could have been addressed through, or are related to issues and interests that could have been more fully described and understood in, the PSE process. All questions are further categorized by primary topic addressed.

**Table 4.5-1 Frequency of Ketz River Mine IR Questions by Topic**

Topic	Number of questions per Information Request				
	IR1	IR2	IR3	IR4	TOTAL
<b>PSE</b>					
General Information and Contacts	-	-	-	-	-
Project Overview	-	-	1	-	1
Project Activities and Components	-	-	12	17	29
Project Location	-	-	-	3	3
Project Phases and Schedule	-	-	-	1	1
Regulatory Context	-	-	-	-	-
Initial Engagement and Consultation	2	-	-	-	2
Preliminary VCs	-	-	-	-	-
Baseline Data Collection Program	-	1	22	16	39
<b>TOTAL</b>	<b>2</b>	<b>1</b>	<b>35</b>	<b>37</b>	<b>75</b>
<b>Screening</b>					
Baseline Data Collected	-	-	6	3	9
Project Effects	-	-	4	4	8
Mitigation Measures	-	-	-	-	-
Monitoring/Management Plans	-	-	-	-	-
Engagement	-	-	-	-	-
Other	-	-	1	6	7
<b>TOTAL</b>	<b>-</b>	<b>-</b>	<b>11</b>	<b>13</b>	<b>24</b>

Of the 99 total questions received, 75 (76%) could have been addressed through the PSE process. These questions were primarily related to baseline data collection programs (39 of 75 questions) and project activities and components (29 of 75 questions).

**Table 4.5-2** summarizes the duration of YESAB’s review and the proponent’s response time for each IR. The table also shows the percentage of questions from each IR that could have been addressed through PSE (calculated using the totals in **Table 4.5-1**).

**Table 4.5-2 Duration of Review and Response Time by Information Request**

IR# and topic(s)	% PSE Questions	YESAB Review Time	Proponent Response Time	Total
IR1 (2011-0218-072-1) Initial Engagement and Consultation	100%	18 days (September 23, 2011- October 11, 2011)	16 days (October 11, 2011 – October 27, 2011)	<b>34</b>
IR2 (2011-0218-084-1) Baseline Data Collection Program	100%	8 days (December 1, 2011 - December 9, 2011)	No Response Posted, incorporated into February 18, 2013 Response	<b>8</b>
IR3 (2011-0218-105-1) Project Overview, Project Activities and Components, Baseline Data, Project Effects,	76%	33 days (January 26, 2012 - February 28, 2012)	181 days (Part A: February 28, 2012 – August 27, 2012)	<b>389</b>
			175 days (Part B: August 27, 2012 - February 18, 2013)	
IR4 (2011-0218-155-2) Project Location, Project Activities and Components, Project Location, Project Phases and Activities, Baseline Data, Project Effects	74%	60 days (February 28, 2013 - April 29, 2013)	361 days (April 29, 2013 – April 25, 2014)	<b>421</b>
<b>TOTAL</b>	<b>76%*</b>	119	733	<b>852</b>

\*Overall average from Table 4.5-1

Of the four IRs issued for the project, IR4 had the longest review and response time. IR1 and IR2 had the highest percentage of questions that would be addressed through the PSE process; however, they had the fewest questions and the shortest review and response time. Of the IR4 questions that could have been addressed through the PSE process, 22 out of 35 of them were related to baseline data collection programs.

The Executive Committee determined that the Ketz River Mine project proposal was deficient in many areas. It is likely that this proposal would have benefited from the PSE process. For example, IR2 contained only one question, however, this IR was identifying a lack of baseline hydrological information for streams in the immediate vicinity of the project. IR3 and IR4 also included numerous questions on baseline information required to continue with the screening. These types of information requirements would likely be outlined and identified during the PSE process.

#### 4.6 All Projects Reviewed

This section presents an amalgamation of the data collected on all five projects. **Table 4.6-1** summarizes the questions received through all IRs for each project.

**Table 4.6-1 Frequency of All Project IR Questions by Topic**

Topic	Number of Items					
	Carmacks Copper	Mactung Mine	Mayo B	Eagle Gold	Ketza River	TOTAL
<b>PSE</b>						
General Information and Contacts	-	-	-	-	-	-
Project Overview	1	-	-	-	1	2
Project Activities and Components	23	62	6	39	29	159
Project Location	5	4	4	1	3	17
Project Phases and Schedule	6	-	-	2	1	9
Regulatory Context	-	-	-	-	-	-
Initial Engagement and Consultation	1	-	-	-	2	3
Preliminary VCs	-	-	-	-	-	-
Baseline Data Collection Program	19	19	10	17	39	104
<b>TOTAL</b>	<b>55</b>	<b>85</b>	<b>20</b>	<b>59</b>	<b>75</b>	<b>294</b>
<b>Screening</b>						
Baseline Data Collected	6	38	2	22	9	77
Project Effects	17	21	15	3	8	64
Mitigation Measures	12	26	3	4	-	45
Monitoring/Management Plans	12	13	2	9	-	36
Engagement	1	-	-	1	-	2
Other	20	51	6	45	7	129
<b>TOTAL</b>	<b>68</b>	<b>149</b>	<b>28</b>	<b>84</b>	<b>24</b>	<b>353</b>

Of a combined total of 647 questions received, 294 (45%) could have been addressed through, or are related to issues and interests that could have been more fully described and understood in, the PSE process. These questions were primarily related to project activities and components and baseline data collection programs. More questions were received on project activities and components (159 questions) and baseline data collection programs (104 questions) than on any other individual topic through the Executive Committee process. Very few questions were related to project overview, project phases and schedule, and initial engagement and consultation. No questions were related to general information and contacts, regulatory context, and preliminary VCs.

**Table 4.6-2** summarizes the total review and response time for each project, as well as the combined percentage of questions that could have been addressed through the PSE process for each project.

**Table 4.6-2 Total Duration of Review and Response Time by Project**

Project	Total Review and Response Time	% PSE Questions
Carmacks Copper Project	439 days	45%
Mactung Mine	1,591 days	36%
Mayo	291 days	42%
Eagle Gold	446 days	41%
Ketza Mine	852	76%

## 5.0 CONCLUSIONS AND OPPORTUNITIES

More questions were received on project activities and components and baseline data collection programs than on any other individual topic through the Executive Committee process. Very few questions were related to project overview, project phases and schedule, and initial engagement and consultation. No questions were related to general information and contacts, regulatory context, and preliminary VCs.

There was a relatively large volume of questions related to baseline data collection. PSE may be able to play an important role in identifying these information requirements early on the process. Given that baseline data collection programs can be time-sensitive (e.g., field season dependant or long-term collection) PSE may provide necessary direction on baseline data requirements and could allow proponents sufficient time to prepare the information.

A number of the questions in the various IRs were very detailed in nature and could have fallen in various topic areas in either PSE or Screening. Many of the detailed questions may have been identified in more general questions or information requirements during a PSE process. While there may be clarification questions or detailed specific questions during the screening, the overall issue would likely have been more fully described and understood during a PSE process. Additionally, based on our methods, some information requests have fallen in the Adequacy/SV&I column. However, if PSE were in place, a number of these may have been addressed or discussed so that a proponent would have included the information in the project proposal.

There were no preliminary VC topic questions identified in the research of the five Projects. This may be a result of several factors such as general acceptance of valued components for major mine projects or a willingness to work with proponent identified valued components. However, having a project proposal to review may also lead to more detailed questions on information requirements rather than identifying broader topic areas such as valued component identification. It may be that, through PSE, the Executive Committee, proponent and key stakeholders are able to identify project specific valued components which would lead to a better identification of information requirements.

## 6.0 CLOSURE

We sincerely appreciate the opportunity to have assisted you with this project and if there are any questions, please do not hesitate to contact the undersigned by phone at 867.456.4865.

Report prepared by:  
**Hemmera Envirochem Inc.**



Nathan Aasman, B.Sc.  
Senior Environmental Specialist

Report prepared by:  
**Hemmera Envirochem Inc.**



Kimberly Milligan, M.Env.  
Project Manager



## 7.0 REFERENCES

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