

### **9.3 Summary of Assessment of Potential Health Effects**

Potential health effects of the Proposed Project and associated key mitigation measures are presented in Table 9.3-1. A summary of predicted residual health effects and residual cumulative health effects are presented in Table 9.3-2.

**Table 9.3-1: Summary of Potential Health Effects and Associated Key Mitigation Measures**

Valued Component	Phase	Potential Effect	Key Mitigation Measures	
			No.	Description
<b>Public Health</b>				
People	Construction Operations Reclamation and Closure	Human Health - Air Quality Human Health - Particulate Matter Human Health - Multimedia	M-5.7-01 to M-5.7-08	Measures outlined in Air Quality section.
People	Construction Operations Reclamation and Closure	Human Health - Air Quality Human Health - Particulate Matter Human Health - Multimedia	M-9.1-01	Confirmation that a Health and Safety Plan for workers covers the mitigation of exposure of workers to dust and particulate matter.
<b>Noise</b>				
Noise Levels	Construction Operations Reclamation and Closure	Increase in noise levels	M-9.2-01	Limit construction activity to daytime hours.
Noise Levels	Construction Reclamation and Closure	Increase in noise levels	M-9.2-02	Schedule significant noise-causing activities to reduce disruption to nearby residents.
Noise Levels	Construction Reclamation and Closure	Increase in noise levels	M-9.2-03	Position heavy equipment muster points at least 500 m from any receptor.
Noise Levels	Construction Reclamation and Closure	Increase in noise levels	M-9.2-04	Fit equipment with standard mufflers or silencers and keep in good working order.
Noise Levels	Construction Reclamation and Closure	Increase in noise levels	M-9.2-05	Use acoustical screening from existing on-site barriers.
Noise Levels	Operations	Increase in noise levels	M-9.2-06	Construct a McNab Creek Flood Protection Dyke, approximately 830 m long and 5 m high on the north side of the aggregate pit.
Noise Levels	Operations	Increase in noise levels	M-9.2-07	Construct a Pit Lake Containment Berm, approximately 800 m long and 9 m high on the south side of the aggregate pit.
Noise Levels	Operations	Increase in noise levels	M-9.2-08	Construct a Processing Area Dirt Berm, approximately 230 m and 9 m high on the east side of the processing plant.
Noise Levels	Operations	Increase in noise levels	M-9.2-09	Dry screens and crusher in the processing plant will be housed in fabric enclosures.

**Table 9.3-2: Summary of Assessment of Potential Residual and Cumulative Residual Health Effects**

Valued Component	Phase	Residual Effect Assessment		Cumulative Residual Effect Assessment	
		Potential Effect	Significance	Potential Effect	Significance
<b>Public Health</b>					
People	Construction	Human Health - Air Quality	Negligible to Not Significant	Human Health - Air Quality	Negligible
		Human Health - Particulate Matter		Human Health - Particulate Matter	
		Human Health - Multimedia			
People	Operations	Human Health - Air Quality	Negligible to Not Significant	Human Health - Air Quality	Negligible
		Human Health - Particulate Matter		Human Health - Particulate Matter	
		Human Health - Multimedia			
People	Reclamation and Closure	Human Health - Air Quality	Negligible to Not Significant	Human Health - Air Quality	Negligible
		Human Health - Particulate Matter		Human Health - Particulate Matter	
		Human Health - Multimedia			
<b>Noise</b>					
Noise Levels	Construction	Increase in noise levels.	Negligible	n/a	n/a
Noise Levels	Operations	Increase in noise levels.	Negligible	n/a	n/a
Noise Levels	Reclamation and Closure	Increase in noise levels.	Negligible	n/a	n/a