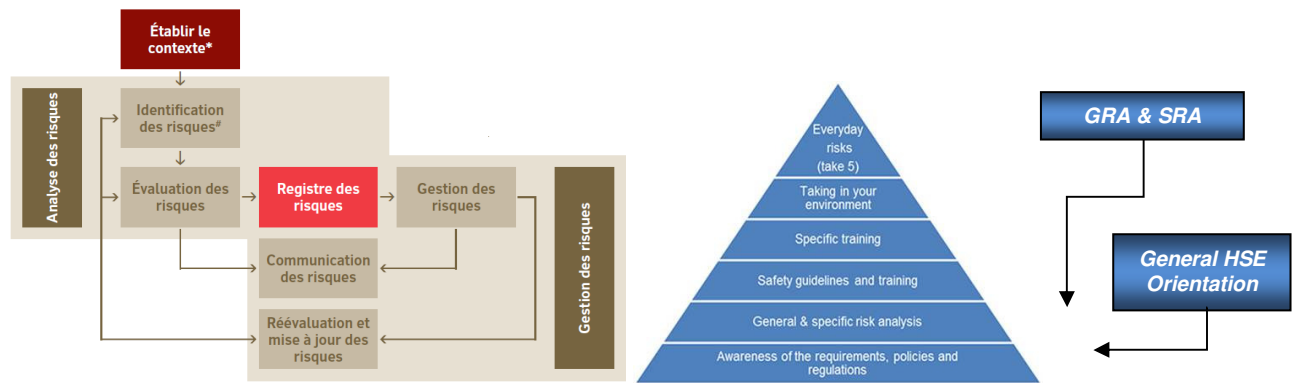


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## 1. INTRODUCTION

The documents *General Risk Analysis (GRA)* and *HSE Guidelines* are part of Rio Tinto's HSE Risk Management system. The analysis, from the **Risk Register**, is used to identify and quantify the presence of risks and to manage those risks (priority and urgency based on magnitude). Risk Management will communicate the necessary control methods, as well as any required training.

Consequently, this document is incorporated into Risk Management and complementary to Regional HSE Orientation and Specific Risk Analysis (SRA) in the facilities.



Risk Analysis	Determine the context			Risk Management
	Identify the risks			
	Assess the risks	Risk register	Control the risks	
		Communicate the risks		
		Re-assess and update the risks		

Finally, this per-family GRA (General Risk Analysis), including safety guidelines, is in force for a three-year period, and is coupled with your RT Saguenay—Lac-Saint-Jean HSE Orientation. Should modifications prove necessary, and in line with their importance, they will be forwarded to you, generally, when a job commences or through any other appropriate change management action, including TAKE 5s.

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## 2. GENERAL GUIDELINES

### Emergency Response Plan (ERP)

The contractor shall be responsible for knowing:

- The various alarm types and the location of collection points and emergency exits;
- The attendance-taking methods for each day's work teams;
- The location of the nearest emergency showers and eyewash stations;
- The jobsite emergency response attendants.

### SCAFFOLDING

Read and comply with label specifications.

- **GREEN – Ready for use:** Safe, compliant scaffolding.
- **YELLOW – Caution:** Scaffolding should be labelled "CAUTION: Potential or unusual risk", or similar label if deemed hazardous to worker health & safety.
- **RED – Do not use:** Unsafe scaffolding. Can only be accessed by designated scaffolding setup and teardown personnel.
- **No LABEL – Do not use:** Scaffolding must be considered unsafe. Mark off the scaffolding and contact the contractor for remedial action.

### HEAVY EQUIPMENT

Logbooks must be available at all times.

### WASTE

"The waste management company must check with the plant's waste management department for processing instructions (disposal, recovery/recycling)."

### HAND PROTECTION

- PPE – Wear appropriate gloves for the job, and in good condition.
- Share the work and/or handling method.
- Special precautions (cutting tools) – Safely and correctly use the appropriate tool for the job. Keep hands out of the line of fire to prevent the following risks: Crushing, abrasions, cuts, and/or jamming/pinching. Be mindful of burn hazards (chemical products or hot metal).

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**PARKING**

Make sure all parked vehicles are stationary and secured, even if the transmission is in neutral and the brakes are off.

**3. REQUIREMENTS**

**JOBSITE**

- All employees shall perform a TAKE 5 at the start of their shifts and whenever conditions change to identify any hazards and implement the necessary corrective actions.
- Check with employees to make sure they have identified the potential risks associated with the job and have implemented the required controls.
- HSE team meetings and efficient communications are essential parts of HSE continuous improvement and allow developing a culture of **interdependence/mutual help**. Good communications before, during and after these meetings reinforce the value and usefulness of these meetings for everyone.
- Submit work methods for approval when any given job involves hazards.

**TRAINING**

3GX043	Regional orientation	Mandatory for everyone	Reference: <b>Mandatory Contractor Training Grid</b>
	GRA - Confirmation of understanding		
3R2010	WHMIS		
3R5377	TAKE 5	On a per-job basis	
3R5257	Fall prevention/protection (harness)		

At all times, every contractor shall be able to demonstrate that their workers are properly trained for the jobs (Cognibox) and shall provide a list upon request.

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**PRODUCTS USED BY THE CONTRACTOR**

The contractor shall provide a list of all products, with their respective safety data sheets, used at the site for approval.

**PERMITS**

The contractor shall get access clearance prior to starting any job.

**TOOLS/EQUIPMENT**

All tools and equipment shall be inspected. Appropriate tools for the job must be used as intended. Use of defective equipment shall not be permitted.

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#### 4. RISK ANALYSIS

WORK LOCATION	CATEGORY	HAZARD FAMILY - RT	HAZARD TYPE	REF. STAND.	DESCRIPTION OF RISKS	MEANS OF CONTROL	CONSEQUENCES	PROBABILITY	MRO
Regional	Environment	<b>2. Waste</b>	Oil	E5	Pollution. Environmental damage (spill).	Anti-spill kit. <b>EMP</b> (mandatory disclosure to security and jobsite manager, contain spill, investigation).	2- Medium	D-Unlikely	Low
Regional	Safety	<b>3. Lighting</b>	Glare		Backlighting in the unloading station. Tunnel effect. Collision. Being struck. Striking against.	Enter the area facing forward (truck facing eastward). Drive slowly. Use emergency flashers. Mandatory stops when entering and exiting. Sound horn. Obey road signs.	2- Medium	D-Unlikely	Low
Regional	Safety	<b>3. Lighting</b>	Low lighting		Collision. Being struck. Striking against. Tunnel effect.	Emergency flashers. Mandatory stops when entering and exiting. Sound horn. Obey road signs, <b>RT signalman</b> .	2- Medium	D-Unlikely	Low
Regional	Safety	<b>5. Work environment</b>	Wet / slippery / smooth surfaces		Same-level fall. Slipping.	PPE. TAKE 5. Safety interaction. Demarcation panels. Snow removal	3- Serious	D-Unlikely	Moderate
Regional	Safety	<b>5. Work environment</b>	Fixed object		Striking against.	PPE. TAKE 5.	1- Minor	D-Unlikely	Low
Regional	Safety	<b>5. Work environment</b>	Pedestrians	C3	Being struck by a vehicle.	Use crosswalks to cross streets. Wear PPE. Obey signs. See and be seen. Speed limit, in a contingency area, use cones to demarcate a safe area around the truck and where the hose crosses the sidewalk.	3- Serious	D-Unlikely	Moderate
Regional	Safety	<b>5. Work environment</b>	Coactivity		Being struck. Striking against.	Work area demarcation (tape, cones). TAKE 5. Work permit/work authorisation to be picked up at <b>UTLE</b> control room. Refer to sector procedures for pedestrian/vehicle coactivity in loading and unloading areas.	3- Serious	E- Rare	Moderate
Regional	Health	<b>6. Ergonomics</b>	Repetitive movements	B3	repetitive movements.	Regular breaks. Rotation work. Training. Work postures and ergonomics.	2- Medium	D-Unlikely	Low
Regional	Health	<b>6. Ergonomics</b>	Flexing/twisting	B3	awkward posture.	PPE. Standard work. TAKE 5. Manual tools, e.g. use the proper tool to lift a cover.	2- Medium	D-Unlikely	Low

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WORK LOCATION	CATEGORY	HAZARD FAMILY - RT	HAZARD TYPE	REF. STAND.	DESCRIPTION OF RISKS	MEANS OF CONTROL	CONSEQUENCES	PROBABILITY	MRO
Regional	Health	<b>6. Ergonomics</b>	Load handling	B3	from lifting a load.	Load limit (50 lbs). PPE. Inspection prior to use. TAKE 5. Proper work method for moving loads (do not put hands on moving loads). Push the load. Standard work.	2- Medium	D-Unlikely	Low
Regional	Health	<b>6. Ergonomics</b>	Push and pull	B3	Slipping. Striking against. Hitting the ground	Standard work. Sufficient demarcated space for the job.	2- Medium	D-Unlikely	Low
Regional	Safety	<b>6. Ergonomics</b>	Hand tools	B3	Being crushed, cut or suffering abrasions	TAKE 5. Line of fire. Standard work.	1- Minor	C- Possible	Low
Regional	Safety	<b>7. Inclement weather and associated conditions</b>	Ice		Same-level fall. Injury (pedestrian). Being struck or striking against (vehicle).	Abrasive. De-icing. PPE in good condition (spikes). Obey road regulations (signs, speed limits, seatbelts, see and be seen).	3- Serious	C- Possible	High
Regional	Safety	<b>7. Inclement weather and associated conditions</b>	Snow		Same-level fall. Injury (pedestrian). Being struck or striking against (vehicle).	TAKE 5. Ensure snow removal. Contact control room.	3- Serious	D-Unlikely	Moderate
Regional	Safety	<b>7. Inclement weather and associated conditions</b>	Storm		Same-level fall. Injury (pedestrian). Being struck or striking against (vehicle).	TAKE 5. Ensure snow removal. Contact control room. Demarcate unloading station in contingency area. Turn on emergency flashers.	2- Medium	D-Unlikely	Low
Regional	Safety	<b>7. Inclement weather and associated conditions</b>	Wind		Projectiles or dust particles in the eyes.	Wear safety goggles at all times during unloading.	1- Minor	D-Unlikely	Low
Regional	Safety	<b>8. Gravity</b>	Same-level fall	C4	Slipping or tripping caused by an uneven floor or an opening.	Identify risk areas. Demarcate (cones). Clean floors and proper lighting.	2- Medium	D-Unlikely	Low
Regional	Safety	<b>8. Gravity</b>	Fall from height	C4	Multi-level fall.	Using a ladder on a truck, three support points. Fall prevention devices. Working at height training.	3- Serious	D-Unlikely	Moderate

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WORK LOCATION	CATEGORY	HAZARD FAMILY - RT	HAZARD TYPE	REF. STAND.	DESCRIPTION OF RISKS	MEANS OF CONTROL	CONSEQUENCES	PROBABILITY	MRO
Regional	Safety	<b>8. Gravity</b>	Slope stability	C6	Moving truck.	Safe parking (hand brake, wheel chocks) when unloading or with traffic around the truck.	3- Serious	E- Rare	<b>Moderate</b>
Regional	Safety	<b>9. Mechanical</b>	Stored energy		Residual matter in the discharge line (lime or pressurized air). Perforated hose and projected material.	Clear hoses before disconnecting. Standard Work. Application audit. Visual inspection of hoses prior to use.	2- Medium	C- Possible	<b>Moderate</b>
Regional	Health	<b>9. Mechanical</b>	Mobile equipment		Being struck. Striking against. Falling over	PPE. Use pedestrian zones. Wear reflective strips or high-visibility vest.	2- Medium	D-Unlikely	<b>Low</b>
Regional	Safety	<b>9. Mechanical</b>	Pinch points		Jammed fingers. Fracture. Sprain. Crushing. Amputation.	TAKE 5. Line of fire. PPE. Applicable protocol. Standard work. Demarcate traffic areas with tape. Work area cleanness.	2- Medium	D-Unlikely	<b>Low</b>
Regional	Safety	<b>11. Personnel / Behaviour</b>	Alcohol/drug abuse	B7	Loss of alertness.	Regulations. TAKE 5. Audit. <b>Interdependence (mutual help).</b>	2- Medium	E- Rare	<b>Low</b>
Regional	Safety	<b>11. Personnel / Behaviour</b>	Fatigue		Loss of alertness.	Regulations. TAKE 5. Audit. <b>Interdependence (mutual care).</b>	2- Medium	E- Rare	<b>Low</b>
Regional	Safety	<b>12. Pressure</b>	Air (e.g. tyres)		Tyre failure	VPU (Verification prior to use). PPE (visor and earmuffs). Do not inflate tires in unloading station.	2- Medium	D-Unlikely	<b>Low</b>
Regional	Safety	<b>12. Pressure</b>	Hydrostatic		Air hose failure (15 lbs). Pressure surge.	VPU (Verification prior to use). PPE. Do not strike hoses. Do not harness to hoses.	2- Medium	D-Unlikely	<b>Low</b>
Regional	Safety	<b>15. Noise / Vibration</b>	Noise (constant)	E6	Deafness.	PPE (double protection earmuffs: cups and plugs) during unloading and inside the plant.	1- Minor	C- Possible	<b>Low</b>
Regional	Environment	<b>16. Real substances</b>	Diesel fuel	B4	Pollution.	Have a recovery kit inside the vehicle.	3- Serious	D-Unlikely	<b>Moderate</b>

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WORK LOCATION	CATEGORY	HAZARD FAMILY - RT	HAZARD TYPE	REF. STAND.	DESCRIPTION OF RISKS	MEANS OF CONTROL	CONSEQUENCES	PROBABILITY	MRO
Regional	Environment	<b>16. Real substances</b>	Oils	B4	Pollution.	Have a recovery kit inside the vehicle.	2- Medium	C- Possible	<b>Moderate</b>
Regional	Safety	<b>19. Vehicles / Transportation</b>	Heavy equipment (trucks, loaders, graders, shovels, etc.).	C3	Striking against. Being struck.	Obey traffic regulations. See and be seen. Reflective strips. Training. Driver's license. VPU (Verification prior to use). Stable parking test (vehicle in neutral and brakes released – see if the truck moves).	3- Serious	D-Unlikely	<b>Moderate</b>
Regional	Safety	<b>19. Vehicles / Transportation</b>	Trains	C3	Striking against. Being struck.	Obey traffic regulations. See and be seen. Reflective strips. Training. Obey signs. RS permit if required.	3- Serious	D-Unlikely	<b>Moderate</b>
Regional	Safety	<b>20. Other</b>	Struck by falling ice.		Ice falling in traffic areas.	TAKE 5. Compliance with demarcations and pedestrian walkways. Third-party inspection routes.	3- Serious	D-Unlikely	<b>Moderate</b>





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**5. APPROVAL**

Sylvain St-Gelais, HSE Coordinator  
 Regional Contractor Management – Element 7

\_\_\_\_\_  
**Title / Name**

\_\_\_\_\_  
**Date**

**6. REVISION**

Version No.	Description of modification	HSE [Q] Impact		Revised by	Date
		Yes	No		
R00F	Initial Document – Change Management. GRA-SRA (August 2015).doc/Document initial - Gestion de changement. ARG-ARS (août 2015).doc	x		Work Committee / SSTG	2015-09-09