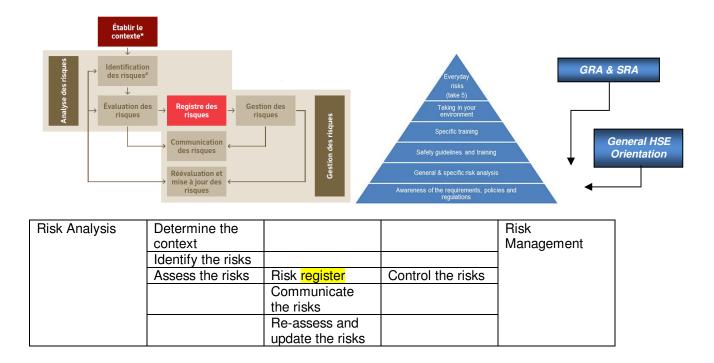
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#### 1. INTRODUCTION

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.



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

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	CONSE- QUENCES	PROBABI- LITY	MRO
Regional	Environment	2. Waste	Oil	E5	Pollution. Environmental damage (spill).	Anti-spill kit. EMP (mandatory disclosure to security and jobsite manager, contain spill, investigation).	2- Medium	D-Unlikely	Low
Regional	Safety	3. Lighting	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	3. Lighting	Low lighting		Collision. Being struck. Striking against. Tunnel effect.	Emergency flashers. Mandatory stops when entering and exiting. Sound horn. Obey road signs, RT signalman.	2- Medium	D-Unlikely	Low
Regional	Safety	5. Work environment	Wet / slippery / smooth surfaces		Same-level fall. Slipping.	PPE. TAKE 5. Safety interaction. Demarcation panels. Snow removal	3- Serious	D-Unlikely	Moderate
Regional	Safety	5. Work environment	Fixed object		Striking against.	PPE. TAKE 5.	1- Minor	D-Unlikely	Low
Regional	Safety	5. Work environment	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	5. Work environment	Coactivity		Being struck. Striking against.	Work area demarcation (tape, cones). TAKE 5. Work permit/work authorisation to be picked up at UTLE control room. Refer to sector procedures for pedestrian/vehicle coactivity in loading and unloading areas.	3- Serious	E- Rare	Moderate
Regional	Health	6. Ergonomics	Repetitive movements	В3	repetitive movements.	Regular breaks. Rotation work. Training. Work postures and ergonomics.	2- Medium	D-Unlikely	Low
Regional	Health	6. Ergonomics	Flexing/twisting	В3	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	CONSE- QUENCES	PROBABI- LITY	MRO
Regional	Health	6. Ergonomics	Load handling	ВЗ	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	6. Ergonomics	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	6. Ergonomics	Hand tools	B3	Being crushed, cut or suffering abrasions	TAKE 5. Line of fire. Standard work.	1- Minor	C- Possible	Low
Regional	Safety	7. Inclement weather and associated conditions	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	7. Inclement weather and associated conditions	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	7. Inclement weather and associated conditions	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	7. Inclement weather and associated conditions	Wind		Projectiles or dust particles in the eyes.	Wear safety goggles at all times during unloading.	1- Minor	D-Unlikely	Low
Regional	Safety	8. Gravity	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	8. Gravity	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	CONSE- QUENCES	PROBABI- LITY	MRO
Regional	Safety	8. Gravity	Slope stability	C6	Moving truck.	Safe parking (hand brake, wheel chocks) when unloading or with traffic around the truck.	3- Serious	E- Rare	Moderate
Regional	Safety	9. Mechanical	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	Moderate
Regional	Health	9. Mechanical	Mobile equipment		Being struck. Striking against. Falling over	PPE. Use pedestrian zones. Wear reflective strips or high-visibility vest.	2- Medium	D-Unlikely	Low
Regional	Safety	9. Mechanical	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	Low
Regional	Safety	11. Personnel / Behaviour	Alcohol/drug abuse	В7	Loss of alertness.	Regulations. TAKE 5. Audit. Interdependence (mutual help).	2- Medium	E- Rare	Low
Regional	Safety	11. Personnel / Behaviour	Fatigue		Loss of alertness.	Regulations. TAKE 5. Audit. Interdependence (mutual care).	2- Medium	E- Rare	Low
Regional	Safety	12. Pressure	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	Low
Regional	Safety	12. Pressure	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	Low
Regional	Safety	15. Noise / Vibration	Noise (constant)	E6	Deafness.	PPE (double protection earmuffs: cups and plugs) during unloading and inside the plant.	1- Minor	C- Possible	Low
Regional	Environment	16. Real substances	Diesel fuel	B4	Pollution.	Have a recovery kit inside the vehicle.	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	CONSE- QUENCES	PROBABI- LITY	MRO
Regional	I-nvironment	16. Real substances	Oils	B4	Pollution.	Have a recovery kit inside the vehicle.	2- Medium	C- Possible	Moderate
Regional	Safety		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	Moderate
Regional	Satety	19. Vehicles / Transportation	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	Moderate
Regional	Safety	20. Other	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	Moderate



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## CONFIRMATION OF LINDERSTANDING - RIO TINTO GENERAL RISK ANALYSIS

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Name (block letters)	Signature	Company name	Date	
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# 5. APPROVAL

Sylvain St-Gelais, HSE Coordinator Regional Contractor Management – Element 7	
Title / Name	Date

# 6. REVISION

.,	Description of modification	HSE [Q] Impact		5	_	
Version No.		Yes	No	Revised by	Date	
R00F	Initial Document – Change  Management. GRA-SRA (August 2015).doc/Document initial - Gestion de changement. ARG-ARS (août 2015).doc	Х		Work Committee / SSTG	2015-09-09	