INSPECTION REPORTWorker and Employer Services Division



6951 Westminster Highway, Richmond, BC Mailing Address: PO Box 5350, Vancouver BC, V6B 5L5 Telephone 604 276-3100 Toll Free 1-888-621-7233 Fax 604 276-3247

The Workers Compensation Act requires that the employer must post a copy of this report in a conspicuous place at or near the workplace inspected for at least seven days, or until compliance has been achieved, whichever is the longer period. A copy of this report must also be given to the joint committee or worker health and safety representative, as applicable.

Inspection Report #201916067023A		
Employer Name	Jobsite Inspected	Scope of Inspection
RIO TINTO ALCAN INC. (KITIMAT PLANT, DIVISION OF)	4450 Lakelse Avenue Terrace BC V8G 1P2	KKOHSE discussion

Date of Initiating Inspection	Date of This Inspection	Delivery Date of This Report	Delivery Method
May 24, 2019	May 24, 2019	May 29, 2019	Email

THERE ARE FIVE (5) ORDERS OR OTHER ITEMS OUTSTANDING

ACTION REQUIRED

Summary of Orders or other Items		
See "Orders/Items – Full Details" section of this Inspection Report for orders/items cited		
Order/Item No.1	Status: Outstanding	Cited: WCA115(1)(a)
Order/Item No.2	Status: Outstanding	Cited: OHS4.75
Order/Item No.3	Status: Outstanding	Cited: WCA173(1)(b)
Order/Item No.4	Status: Outstanding	Cited: WCA176(2)(b)
Order/Item No.5	Status: Outstanding	Cited: OHS3.26(2)

ORDER STATUS LEGEND		
Order Status	Description	
Outstanding	Order Outstanding - Action Required to Achieve Compliance	
Complied	Compliance Achieved - No Further Action Required	
Closed	Order is Closed	
Rescinded	Order has been cancelled – No Further Action Required	

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INSPECTION NOTES

This report is generated to record a meeting conducted at the WorkSafeBC Terrace office to assist in resolving a disagreement on three topics in front of the Kitimat Kemano Occupational Health, Safety & Environment (KKOHSE) Committee (see the KKOHSE minutes) under section 132 of the Worker's Compensation Act.

Attendees were:

Rio Tinto: Jonathon Bouchard - Marc Young - Marie-josee Bonin - Cliff Matson - Inness McKenzie WorkSafeBC: Prevention Field Services Supervisor Earl Houlden - Prevention Field Services Manager Patrick Olsen.

In determining whether to investigate matters in order to resolve disagreements under Division 4 section 132, the Board will consider:

- •the Board's statutory authority to investigate in the particular situation;
- •whether there is an immediate hazard that needs to be resolved:
- •whether the issue is significant in terms of preventing injuries and illnesses:
- •whether there is an alternative method for resolving the issue; and
- •whether the Board is likely to be able to resolve the issue.

Where the Board does investigate, the extent and nature of investigations will depend on the circumstances. Not all investigations will involve a visit to the workplace.

With regard to sections 132, the investigating officer will, where applicable, make relevant determinations as to whether the Act and regulations are being complied with or whether an unsafe situation exists. If the disagreement involves matters going beyond what is specifically required to comply with the regulations, the officer may discuss the issue with the parties and suggest options but will not decide the disagreement.

Brief description of disagreements:

- 1. Item 3.1 Electrical Hazard in Reduction. The hazard is potential conductors such as moisture or conductive materials bridging the air gap creating a potential for electrical shock. The max potential voltage can be as much as 1650 Volts DC. According to Part 19 of the Regulation: "high voltage" means a potential difference (voltage) of more than 750 volts between conductors or between a conductor and ground;
- **a.** At present administrative controls provide protection to workers. An engineering solution; project to cover hot metal route and control of moisture via redirection is underway. This combined with the administrative controls in place should provide reliable protection from the electrical hazard if the hazard control system is maintained stringently.

Some administrative controls include; cleaning, maintenance, boot inspections, rubber mat use and placement at air gaps. These controls also include; Start of shift voltage measurement by Tapping crew at blue zones; Measurement crew is to take voltage readings at all 24 Blue zones twice per shift.

It was found through documentation provided by worker members that the system noted above may present gaps. The document illustrated the Voltmeter availability has been limited at times due to damage and that monitoring sheets were not being completed and submitted. This illustrates the system is prone to failure. As a result an action plan was instituted by the Reduction Superintendent on May 17 that requires voltage checks are documented and submitted at each shift end.

- **b.** An Escalation matrix, another administrative control indicates a hierarchy based on risk; presence of moisture, debris in the air gap.
- **c.** See order 1 on the following pages. WorkSafeBC finds the issue has been in front of the KKOHSE committee starting in <u>January of 2017</u>, this is excessive and the order indicates the employer must address and present an effective hazard control plan to be instituted without undue delay. The item appears to have lagged due to discord over coordination of the administrative and engineered controls. The engineered controls being absent for 3 three years indicates the importance of the remaining controls.



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- 2. Item 3.3 Building 7460 Ventilation. Poor airflow has affected indoor air quality in a negative manner.
- a. Preventive Maintenance (PM) plan information provided to this office on May 23 indicates:
- 1 week, 3 and 12 month PM is to be performed on all air handling units by Rio Tinto workers following manufacturer recommendations and ASHRAE standards..
- The information provided indicates PM was completed on February 25, 2019 with the next due (3 month) on May 13, 2019 (does not show as completed), this PM appeared to be overdue. I contacted the mechanical engineer in charge of this work and confirmed the work was completed May 22 with a lag on entry to the PM log.
- The last 12 month PM is listed as completed on September 5, 2018. See regulation references 4.78 on the following pages.
- -Weekly check of filters and operation are now required as a result of deficiencies found on the air handling units (broken belts).
- **b.** This item has been in front of the KKOHSE since June 2017, this is excessive. KKOHSE May 2019 minutes provided to this office indicate balancing of the ventilation system is overdue. See order 2 on the following pages.
- 3. Item 3.7 Incident Investigations and worker reps. At issue is how worker representative (OHS Reps) participation for incident investigations is instituted. I can only address investigations that are required under section 173 of the Act. Rio Tinto often exceeds this requirement and conducts investigations that may be required under internal policy or the collective Agreement.
- **a.** I do find that upon review of the regulations referenced; WCA 174(1), 174(1.1), OHS3.28, and WCA140 that the applicable hierarchy of OHS Chief, Rep, Unifor Plant OHSE rep if reasonably available must be used prior to defaulting to any worker rep. This hierarchy was established and vetted through the KKOHSE and the referenced regulations lend credence to this process. I caution this hierarchy must not interfere with the timeliness of the investigations.
- **b.** This item indicates a symptom of a larger issue regarding compliance with sections 172 177 of the Act. Research indicates deficiencies in:
- timely submission of investigations to the Board
- time loss and health care only claim records do not align with investigation submission records.
- See inspection report 201916067013A where an order was penned for violation of Section 175 of the Act.

These factors indicate the firm must conduct a thorough review to ensure a system is put in place to ensure compliance with sections 172 - 177. See orders 3 and 4.

KKOHSE effectiveness. See order 5. This and the other organizational safety committees in the plant are faced with challenges of long standing issues. I was advised some committees have had the required annual evaluation while the KKOHSE evaluation is outstanding. The issues addressed in this report are but a small representation of issues in front of the KKOHSE and discussion points of this meeting. I advise Corporate and Union management work together to address occupational health and safety issues in a more timely manner starting with the Internal Responsibility System, Safety Program, and subsequent Safety Management System.

If you have any questions regarding this report, please contact Earl Houlden Supervisor, Prevention Field Services at 250.615.6632, or by email at earl.houlden@worksafebc.com.

WorkSafeBC has a wide range of health and safety information. For questions regarding workplace health and safety, call toll-free within BC 1-888-621-SAFE (7233) or visit our website at www.worksafebc.com

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ORDERS/ITEMS

An employer who fails to comply with Part 3 of the *Workers Compensation Act*, the Occupational Health & Safety Regulation, or WorkSafeBC orders may be subject to monetary or other sanctions as prescribed by the *Workers Compensation Act*.

Orders/Items - Full Details			
Order/Item No.1	Status: Outstanding	Cited: WCA115(1)(a)	
Regarding the electrical hazard in Reduction this employer has failed to ensure the health and safety of all workers present at the workplace at which this employer's work is being carried out. Specifically: - The administrative controls used to assess the electrical hazard in reduction have significant gaps including testing equipment availability/condition, availability of documentation for confirmation/assessment of controls, lack of consistent voltage checks, and inspection/maintenance of air gaps. - Barriers to completion of hot metal route winterized road project have also hindered an integral part of the hazard management plan increasing the likelihood of the hazard of moisture presence.			
This is in contravent	ion of the Workers Compensation Act Section 115 (1)(a).		
Every employer must ensure the health and safety of all workers working for that employer, and any other workers present at a workplace at which that employer's work is being carried out.			
are effective. The synapser hazard are fulfilled.	e Compliance: demonstrate to this officer the controls used to protect workers free ystem gaps noted on the previous pages illustrate a need to track to used Plan, Do, Check, Act process that allows a safety man	k and confirm the measures to address this	
Order/Item No.2	Status: Outstanding	Cited: OHS4.75	
The ventilation system is not balanced to ensure that each space within the building 7460 receives an adequate allotment of outdoor air and accommodate the actual or the normally anticipated occupancy of each space.			
This is in contravention of the Occupational Health and Safety Regulation Section 4.75.			
(a) ensure that each	em must be balanced to: a space within the building receives an adequate allotment of outone actual or the normally anticipated occupancy of each space.	door air, and	
Measures to Ensure Compliance: The employer must without undue delay ensure compliance is achieved.			



Orders/Items - Full Details		
Order/Item No.3	Status: Outstanding	Cited: WCA173(1)(b)
Employer Incident Investigation Report (EIIR) submissions do not align with total claim submissions. Claim submissions indicate medical treatment was required. For the period January 2016 to May 28, 2019 Total EIIR submissions for this period = 46 Total Claims submissions for this period = 144		
This is in contravent	tion of the Workers Compensation Act Section 173(1)(b).	
	conduct a preliminary investigation under section 175 and a full in acident that resulted in injury to a worker requiring medical treatm	• • • • • • • • • • • • • • • • • • • •
Measures to Ensure The employer must Reporting and Inves	without undue delay ensure compliance with this section and all	sections (172 - 177) of Division 10 Accident
Order/Item No.4	Status: Outstanding	Cited: WCA176(2)(b)
The employer is not submitting EIIRs in a timely manner as demonstrated by the following; Average timeliness of employer incident investigation report (EIIR) submissions within 30 days - January 2016 to May 28, 2019 = 17.4% of 46 submissions were within the 30 day period. This is in contravention of the Workers Compensation Act Section 176(2)(b).		
The employer must ensure that a report of the full investigation is submitted to the Board within 30 days of the occurrence of the incident.		
Measures to Ensure The employer must Reporting and Inves	without undue delay ensure compliance with this section and all	sections (172 - 177) of Division 10 Accident
Order/Item No.5	Status: Outstanding	Cited: OHS3.26(2)
The employer did not ensure that, with respect to Kitimat Kemano Occupational Health Safety & Environment (KKOHSE) joint committee, a written evaluation was conducted annually by (a) the co-chairs of the joint committee or, with respect to each co-chair, the member or members of the joint committee designated by the co-chair, or (b) the employer or a person retained by the employer.		
This is in contravention of the Occupational Health and Safety Regulation Section 3.26(2).		
An employer must ensure that, with respect to each of the employer's joint committees, a written evaluation is conducted annually by (a) the co-chairs of the joint committee or, with respect to each co-chair, the member or members of the joint committee designated by the co-chair, or (b) the employer or a person retained by the employer.		
Measures to Ensure Compliance: The employer must without undue delay ensure annual evaluations are conducted as required.		



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REFERENCES

In addition to any orders, or other items, and the information provided in the Inspection Notes section in this Inspection Report, the officer may discuss other health and safety issues with the employer arising out of the inspection. The information below sets out the health and safety requirements discussed with the employer, and unless otherwise noted, violations of these requirements were not observed.

Reference	Details Discussed	
A joint committee has a duty to advise the employer on proposed changes to the workplace or the work processes that may affect the health or safety of workers.	The KKOHSE committee worker co-chair made a request for assistance on three items of which worker and management have a disagreement. "Attempt to resolve" can include inspections; education and consultation, and potentially, orders or administrative sanction (warning letter and/or financial penalty).	
WCA132(2)	Upon review and investigation of the disagreements this report will provide guidance.	
If the Board considers that a joint committee is unable to reach agreement on a matter relating to the health or safety of workers at the workplace, the Board, on its own initiative, may investigate the matter and attempt to resolve the matter.		
OHS19.8(1)	Regarding Voltmeter use.	
Electrical testing equipment may be used if it meets the requirements of (a) CSA Standard C22.2 No. 160-M1985 (Reaffirmed 1992), Voltage and Polarity Testers, or (b) CSA Standard CAN/CSA-C22.2 No. 231 Series-M89, CSA Safety Requirements for Electrical and Electronic Measuring and Test Equipment.	Other Acceptable standards In addition to the standards specified in section 19.8(1), electrical testing equipment may also be used if it meets one of the following standards that are acceptable to WorkSafeBC, where applicable: Standard Standard Title CAN/ULC-D61243-1-2010 Live Working - Voltage Detectors - Part 1: Capacitive Type to Be Used for Voltages Exceeding 1 kV a.c. CAN/ULC-D61243-2-2009 Live Working - Voltage Detectors - Part 2: Resistive Type to Be Used for Voltages of 1 kV to 36 kV a.c. [Amended March 2000] CAN/ULC-D61243-3-2010 Live Working - Voltage Detectors - Part 3: Two-Pole Low-Voltage	
	Type CAN/CSA-C22.2 No. 61010-1 – 2012 (Reaffirmed 2017) Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use CSA C22.2 No. 160-15 Voltage and Polarity Testers CSA/CAN-C22.2 No.231.0-M89 (Reaffirmed 2001) Safety Requirements for Electrical and Electronic Measuring and Test Equipment	



Reference	Details Discussed
OHS19.8(2)(a)	Regarding Voltmeter use.
Electrical testing equipment not meeting a standard specified in Subsection 19.8(1) may be used if it has fusing or circuitry designed to protect the operator in the event of a fault resulting from inadvertent misuse of the meter, or a fault on the circuit being tested.	
OHS19.8(2)(b)	Regarding Voltmeter use.
Electrical testing equipment not meeting a standard specified in Subsection 19.8(1) may be used if it has clearly and unambiguously marked measurement ranges.	
OHS19.8(2)(c)	Regarding Voltmeter use.
Electrical testing equipment not meeting a standard specified in Subsection 19.8(1) may be used if it has lead wire insulation rated to the maximum voltage reading of the meter.	
OHS19.8(2)(d)	Regarding Voltmeter use.
Electrical testing equipment not meeting a standard specified in Subsection 19.8(1) may be used if it has lead wires that are not cracked or broken, and having a current carrying capacity (ampacity) that meets or exceeds the maximum current measurement of the meter.	
OHS19.8(2)(e)	Regarding Voltmeter use.
Electrical testing equipment not meeting a standard specified in Subsection 19.8(1) may be used if it has a minimum exposure of metal on lead wire probes.	
OHS19.8(3)	Regarding Voltmeter use.
Appropriate safe work procedures must be established and followed for testing electrical equipment and circuits.	
OHS4.78(1)	PM program follows manufacturer recommendations and
To maintain acceptable air quality, the employer, or if the employer is not responsible for maintenance of the ventilation system, the owner of the ventilation system must establish an effective preventive maintenance program for the ventilation system.	ASHRAE standards.
OHS4.78(2)(a)(i)	For information purposes.
Preventive maintenance must include regular inspections of all critical components of the ventilation system, such as dampers, fans, belts, baffles, ductwork, diffusers and control systems.	



Reference	Details Discussed
OHS4.78(2)(a)(ii)	For information purposes.
Preventive maintenance must include regular inspections for conditions which would promote the growth of micro-organisms, such as water leaks or stagnant water pools.	
OHS4.78(2)(b)	For information purposes.
Preventive maintenance must include correction of any deficiencies found during the regular inspections carried out under 4.78(2)(a).	
OHS4.78(2)(c)	For information purposes.
To maintain acceptable air quality, the employer, or if the employer is not responsible for maintenance of the ventilation system, the owner of the ventilation system must establish an effective preventive maintenance program for the ventilation system, which includes the repair or replacement of malfunctioning and consumable components, such as filters and belts, and the cleaning of air distribution systems, ducts and dampers when necessary to correct an indoor air quality deficiency.	
OHS4.78(2)(e)	For information purposes.
Preventive maintenance must include maintenance of combustion sources, such as furnaces, space heaters and water heaters to assure proper burning and exhausting of waste gases so that recirculation of gases to the workplace will not occur.	
OHS4.78(2)(d)	For information purposes.
Preventive maintenance must include adequate treatment of open water systems associated with ventilation equipment such as cooling towers and humidifiers, to control biological growth.	
WCA175(1)(a)	Review of the revised fact gathering form indicates compliance with this section can be achieved if the form is filled out with the following in mind: An employer's preliminary investigation report of the section 173 incident must contain the following elements, as far as possible: (a) the place, date and time of the incident; (b) the names and job titles of persons injured or killed in the incident; (c) the names and job titles of witnesses; (d) the names and job titles of any other persons whose presence might be necessary for a proper investigation of the incident; (e) a statement of the sequence of events that preceded the



Reference	Details Discussed
An employer must, immediately after the occurrence of an incident described in section 173, undertake a preliminary investigation to, as far as possible, identify any unsafe conditions, acts or procedures that significantly contributed to the incident.	incident; (f) identification of any unsafe conditions, acts or procedures that significantly contributed to the incident; (g) employer identification and contact information; (h) a brief description of the incident; (i) the names and job titles of all persons set out in section 174(1) of the Act, who carried out or participated in the preliminary investigation of the incident; (j) interim corrective actions the employer has determined to prevent the recurrence of similar incidents, for the interim period between the occurrence of the incident and the submission of the full investigation report; (k) information about what interim corrective action has been taken and when any corrective actions not yet implemented will be taken; and (l) the circumstances of the accident or incident that preclude the employer from addressing a particular element of the above-listed elements during the preliminary investigation period.
MCA174(1) An investigation required under Workers Compensation Act Part 3 Division 10 must be carried out by persons knowledgeable about the type of work involved and, if they are reasonably available, with the participation of the employer or a representative of the employer and a worker representative.	"worker representative" means (a) in relation to a workplace for which there is a joint committee, a worker representative on the committee Section 174 of the Act specifies that these investigations must be carried out by persons knowledgeable about the type of work involved. It also requires the participation of the employer or employer representative, and a worker representative, if they are reasonably available. "Reasonably available" Whether a worker representative is reasonably available to participate in an employer incident investigation is a question that needs to be determined on a case-by-case basis after taking into account all relevant factors. In workplaces where there is a joint health and safety committee, the committee should consider establishing rules of procedure around contacting worker representatives to participate in incident investigations. If no worker representative is reasonably available, another worker who was designated as an alternate by a worker representative may participate in the investigation (refer to section 140 of the Act).



Reference	Details Discussed
WCA174(1.1)	See section 3.28
For the purposes of subsection (1), the participation of the employer or a representative of the employer and a worker representative includes, but is not limited to, the following activities: (a) viewing the scene of the incident with the persons carrying out the investigation; (b) providing advice to the persons carrying out the investigation respecting the methods used to carry out the investigation, the scope of the investigation, or any other aspect of the investigation; (c) other activities, as prescribed by the Board.	
OHS3.28	I will attempt to clarify the requirement for participation in
For the purposes of section 174 (1.1) (c) of the Workers Compensation Act, the following activities are prescribed: (a) assisting the persons carrying out the investigation with gathering information relating to the investigation; (b) assisting the persons carrying out the investigation with analyzing the information gathered during the investigation; (c) assisting the persons carrying out the investigation with identifying any corrective actions necessary to prevent recurrence of similar incidents.	employer incident investigations using excerpts from OHS Guideline G3.28 Participation in employer incident investigations - Section 174 of the Act specifies that these investigations must be carried out by persons knowledgeable about the type of work involved. It also requires the participation of the employer or employer representative, and a worker representative, if they are reasonably available. - Pursuant to section 174(1.1) of the Act and section 3.28 of the Regulation, the participation of a worker representative includes, but is not limited to, the following: •Viewing the scene of the incident with the persons carrying out the investigation •Providing advice respecting the methods used to carry out the investigation, the scope of the investigation, or any other aspect of the investigation with: —46Gathering information relating to the investigation with: —46Gathering information gathered during the investigation —46Identifying any corrective actions necessary to prevent recurrence of similar incidents Ensuring participation Employers are expected to ensure the participation of worker representatives in incident investigations as this plays an important part in maintaining healthy and safe workplaces. For more information on how this may be achieved, and concerns about inadequate participation, please refer to OHS Guideline G-D10-174-1 Participation by worker representatives in incident investigations.



Reference	Details Discussed
If (a) this Part or the regulations give a worker representative the right to be present for an inspection, investigation or inquiry at a workplace, and (b) no worker representative is reasonably available, the right may be exercised by another worker who has previously been designated as an alternate by the worker representative.	This section aligns with the section 20.3 CLA wording designating a trained and knowledgeable worker rep to participate in incident investigations. Barriers may include operational requirements, shift availability, and time constraints early on in an investigation. A hierarchal approach to assigning worker reps is in place and must be respected. of note an email illustrating this was sent by the OHSE manager on February 25, 2019.



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Employer #	Mailing Address	Classification Unit #	Operating Location
54363	ATTN PAYROLL DEPT UNITE 400 1190 AV DES CANADIENS-DE- MONTREAL QC H3B 0E3	712035	002

Lab Samples Taken	Direct Readings	Results Presented	Sampling Inspection(s)
N	N	N	

Workers onsite during	Notice of Project	
Inspection	Number	
5		

Inspection Report Delivered To	Employer Representative Present During Inspection	Worker Representative Present During Inspection	Labour Organization & Local
Melissa Winks	Marie-josee Bonin	Marc Young	

WorkSafeBC Officer Conducting Inspection	
Earl Houlden	

*Inspection Time	*Travel Time	
9.75 hrs	0.00 hrs	

^{*}The time recorded above reflects the inspection time and travel time associated with this inspection report and includes time spent on pre and post-inspection activities. Additional time may be added for subsequent activity.

Right to Review

Any employer, worker, owner, supplier, union, or a member of a deceased worker's family directly affected may, within 45 calendar days of the delivery date of this report, in writing, request the Review Division of WorkSafeBC to conduct a review of an order, or the non-issuance of an order, by contacting the Review Division. Employers requiring assistance may contact the Employers' Advisers at 1-800-925-2233.

WorkSafeBC values your feedback. To obtain that feedback, an external market research provider may be contacting you to complete a survey.