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Approver's Title: Env Supt	0	Original date:	27/04/2023
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EMERGENCY PREPAREDNESS - POLLUTION INCIDENT RESPONSE PROGRAM: Dross storage Loxford

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1. PURPOSE

Tomago Aluminium (TAC) holds an Environment Protection Licence (Number 21770) for the storage of aluminium dross with the NSW Environment Protection Authority (EPA). As per the *Protection of the Environment Operations Act 1997* (the POEO Act), the holder of an Environment Protection Licence must prepare, keep, test and implement a pollution incident response management plan (PIRMP) that complies with Part 5.7A of the POEO Act in relation to the activity to which the licence relates.

If a pollution incident occurs in the course of an activity so that material harm to the environment (within the meaning of section 147 of the POEO Act) is caused or threatened, the person carrying out the activity must **immediately** implement this plan in relation to the activity required by Part 5.7A of the POEO Act.

A copy of this plan must be kept at the premises, and be made available on request by an authorised EPA officer and to any person who is responsible for implementing this plan.

Parts of the plan must also be available on the website (www.tomago.com.au/health-safety/emergency-response).

As such this program defines Tomago Aluminium's approach to emergency preparedness and response to HSE incidents at the Loxford Dross Storage Facility. The objective of the program is to ensure:

- Emergency situations that may occur at the facility are managed to reduce the severity of incident and impact on site personnel and neighbouring premises.
- Ensure comprehensive and timely communication to applicable staff, relevant authorities, property owners and people outside the facility that may be impacted.
- Ensure that key personnel responsible for the implementation and maintenance of the plan are identified and staff are trained and experienced to deal with emergency situations.
- Compliance with statutory requirements such as *Protection of the Environment Legislation Amendment Act 2011*



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2. SCOPE

This program applies to all activities at the Loxford Dross Storage Facility at the Hydro Aluminium Kurri Site, Hart Road Loxford New South Wales.

Name of licensee: (including ABN)	Tomago Aluminium (ABN 68 001 862 228		
EPL number:	21770		
	21770		
Premises name and address:		THIN THE HYDRO ALUMINIUM KURRI (see map Appendix 3)	
Company contact / PIRMP	Name: Robyn Parke		
activation details	Position or title: Environment Superintendent		
	Business hours contact number/s: 0249669329 or 0409913473		
	After hours contact number/s: 0409913473		
	Email: robyn.parker	@tomago.com.au	
	Name: Danny Oakley		
	Position or title: Se	nior Environment & Sustainability Advisor	
	Business hours con	ntact number/s: 0400 482663	
	After hours contact	number/s: 0400 482663	
	Email: danny.oakley	@tomago.com.au	
Website address:	www.tomago.com.au	I	
Scheduled activity/fee-based activity on EPL	Waste Storage	Waste storage – hazardous, restricted solid, liquid, clinical and related waste and asbestos waste	

3. REFERENCES

OHS.MP.011 Records & Record Management 110000000176

Notification of EHS Incidents 110000000298



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4. RESPONSIBILITIES

Task/Details	HSE Manager	Safety Services	Superintendent Environment
Development and Maintenance of Pollution Incident, Emergency Preparedness and Response Programs	X		х
Development and Facilitation of Emergency Simulations if required		х	
Notification of statutory authorities of a pollution emergency	Х		х
Liaison representative with External Services and Development and Facilitation of Emergency Simulations if required		x	

5. BACKGROUND TO LOXFORD STORAGE FACILITY

The dross storage facility is an area of the Hydro Aluminium Kurri Kurri premises that is leased to Tomago Aluminium for the purpose of the temporary storage of aluminium dross. The site currently operates in accordance with a licence issued under the Protection of the Environment Operations Act (Licence # 21770).

6. WASTE DESCRIPTION

Aluminium production at TAC creates a solid by-product called dross during the casting stage of the smelting process. The dross is separated from the aluminium by scraping the material off the top of the casting furnace prior to the casting of the metal. Dross contains a significant proportion of aluminium, the bulk of which is screened out before the remainder is managed as a waste product.

7. HEALTH AND SAFETY RISKS

Aluminium dross is classified as a hazardous waste under the NSW EPA Waste Classification Guidelines. It holds dangerous goods class 4.3 and emits flammable gases in contact with water. The SDS is attached as APPENDIX 2 – DROSS SDS.



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8. MONITORING AND ONGOING MANAGEMENT

Access to the site is closely managed to prevent unauthorised access to the waste and sheds are maintained appropriately to prevent any hazard and the escape of waste and/or leachate. Loading and unloading operations are all carried out inside the sheds.

The movement of dross to and from the storage area is tracked via the NSW EPA online waste tracking system.

9. IDENTIFICATION OF POTENTIAL EMERGENCY SITUATIONS AND PREVENTATIVE CONTROLS

Due to the scale and operational status of the facility potential emergency scenarios are identified to include:

Fire

- External to storage buildings. A 200mm branch main off the Hunter Water supply main to Kurri Kurri brings water to the site in the form of a hydrant located adjacent to Building 55C.
- Within storage buildings. DO NOT USE WATER as aluminium dross emits flammable gases when wet. Consult specialist advice and refer to SDS in APPENDIX 2 – DROSS SDS.

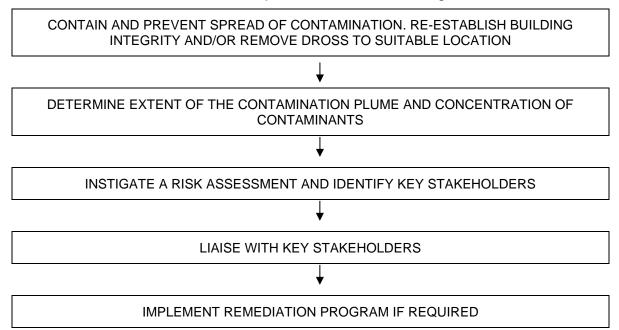


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Major ingress of water to the sheds

The following approach would be followed in the event that either a major ingress of water has occurred and/or a catastrophic failure of the building has occurred



10. COMMUNICATIONS OF EMERGENCY SITUATIONS

The Security gatehouse at the Tomago Aluminium Smelter is the Site's Communication and Fire Control Centre. In the event of an emergency, injury or pollution incident the Environment Superintendent will be notified and is responsible for notification of authorities in accordance with TAC procedure:

Notification of EHS Incidents

110000000298

The security gatehouse is manned on a 7 day/24-hour basis and all external calls should be directed to security on (02) 49669669

In the event that the emergency or pollution incident occurs that has potential to impact on neighbouring properties and/or local communities communication mechanisms are detailed in the Hydro Aluminium Kurri Kurri Pty Ltd Pollution Incident and Emergency Response Management Plan

https://regrowthkurrikurri.com.au/files/2021/02/2021-HYDRO-PIREMP-1.pdf



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11. TESTING

This plan is to be tested / reviewed within every 12 months or within one month following its activation. Records of the activation / testing / review of this plan are to be logged in APPENDIX 1 - RECORDS OF TESTING / REVIEW / ACTIVATION OF THIS PLAN of this document.



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APPENDIX 1 - RECORDS OF TESTING / REVIEW / ACTIVATION OF THIS PLAN

Date of review/test/activation	Reason	Reviewers	New version number
08/11/23	Desktop review/test	R Parker	3
10/12/24	Desktop review/test	R Parker	4



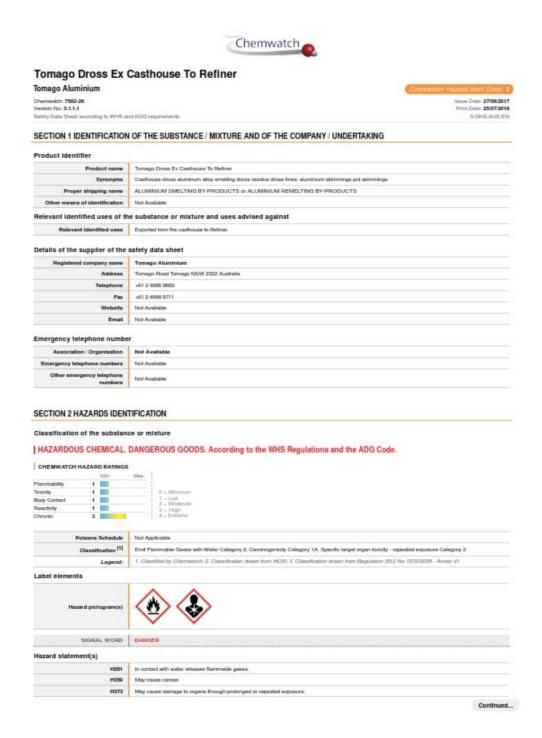
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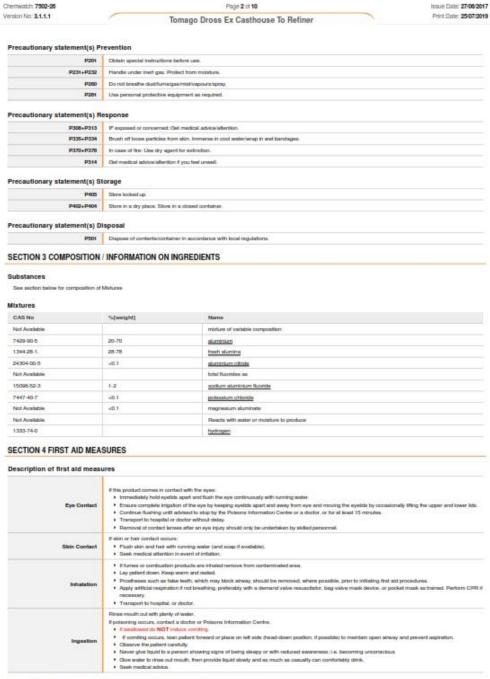


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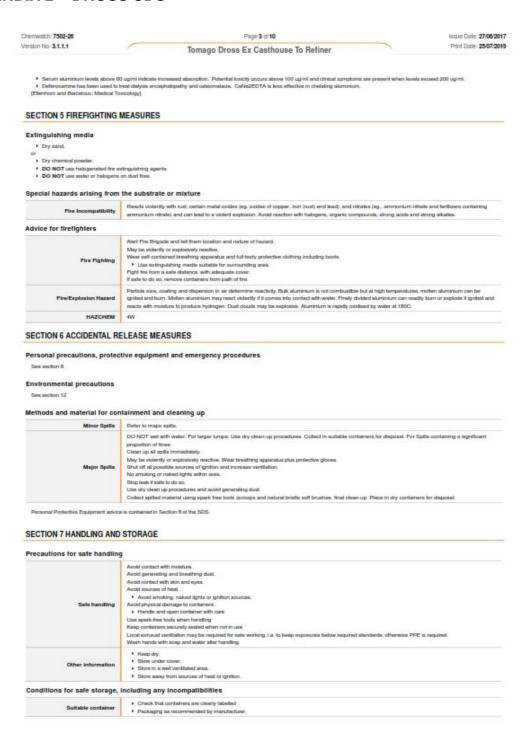
Indication of any immediate medical attention and special treatment needed

- Mareflestation of sluminium toxicity include hypercalicemisis, ansemia. Vitamin D retractory ordeodystrophy and a progressive encephalopath termulaumens, myocionus, deimenta, focal setumes). Bone pain, pathological fractures and proximal impopathy can occur.
 Symptoms usually develop includously over morbin to years (in Amories must faisher patients) since deletey aluminism loads are excession.



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Required Minimum Protection Factor	Half-Pace Respirator	Pull-Pace Respirator	Powered Air Respirator
up to 10 x ES	DY Azr-line*		PAPR-P1
up to 50 x ES	Air-line**	PS	PAPR-P2

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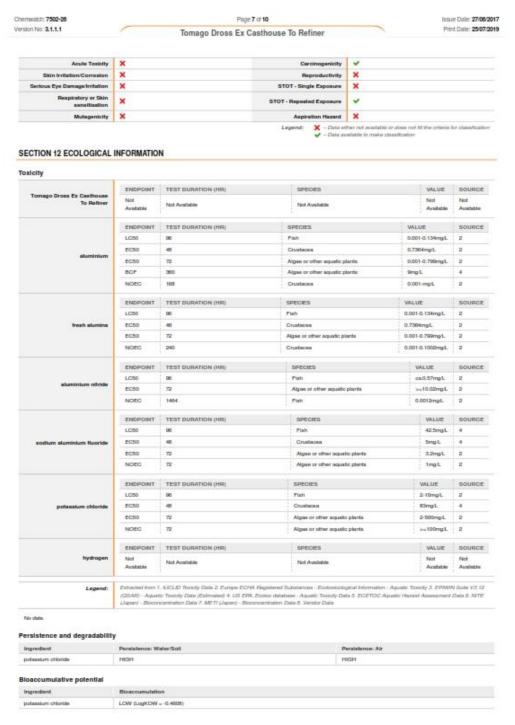
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n No: 3.1.1.1	Tomago Dross Ex Cast	thouse To Refiner	Print Date: 25/07/
		nd throat, coughing and cheat discomfort. A single scule over-ex-	posure may even cause nose
	bleed. Aluminum dust is poorly absorbed through the lungs.		
		al environments The material is highly discomforting to the guat	o-infestinal tract
	and is harmful		
Ingestion	if smallowed and may be		
	toxic		
	if awaifowed in large quantity ingestion may result in necess	, abdominal initiation, pain and vomiting	
	The material may be mildly discomforting and		
Skin Contact	atmates to the akin		
	and may cause drying of the skin, which may lead to dermall	ta .	
	The dust may produce eye discorrifor causing smarting, pet and is	n and redness.	
tye			
	capable of causing a mild, temporary redness of the conjune ulconstion	five (similar to wind-burn), temporary impairment of vision and/o	r other transient aye damage/
	Principal routes of exposure are usually by inhalation of gen	enalled dust	
	and skin contact with the material		
	As with any chemical product, contact with unprotected been	akin, inhalation of vapour, mist or dust in work place atmosphere	or impedion in any form.
Chronic	should be avoided by observing good occupational work pro Long term exposure to high dust concentrations may cause	dica. changes in lung function i.e. presumoconicsis, caused by particle	es less than 0.5 micron
	penetrating and remaining in the lung.		
		which includes signs of joint pain and stiffness, tooth discolinately weakness and general unwellness. There may also be frequent	
	Name of the Control o		
Tomago Dross Ex Casthouse To Refiner	TOXICITY	IRRITATION	
10 Menther	Not Austrable	Not Available	
	токюту	IRRITATION	
aluminium	Onal (rat) LD50: >2000 mg/kg ^[1]	Eye: no adverse effect observed (not imitating	at [1]
		Skin: no adverse effect observed (not initials	
	-	1/-	
fresh alumina	TOXIOTY Onl (rel) LD50: >2500 mg/kg ^[1]	IRRITATION Eye: no adverse effect observed (not initiatin	JH
treat atumna	Creat (last) EDOG: SCROOL HIGHING.	Skin: no adverse effect observed (not initiate Skin: no adverse effect observed (not initiate	
		SAST. THE BOYERSE STREET DESIGNATION (FIGURE	gir.
	TOXICITY	IRRITATION	
aluminium nitride	Not Austable	Eye: no adverse effect observed (not initiating	g(^[1]
		Skin: no adverse effect observed (not initialize	ng) ^[1]
	PERSONA	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
	TOXICITY	IRRITATION Not Available	
sodium sluminium fluoride	Dermal (rabbit) LD50: >2100 mg/kg ^[1]	Not Availbe	
	Onal (ml) LD50: >5000 mg/kg ^[2]		
	токісіту	IRRITATION	
polassium chloride	Oral (ral) LD50: 2500 mg/kg ^[2]	Eye (rabbit): 500 mg/24h - mild	
	The authors with the same	- It manages	
hydrogen	TOXICITY Not Available	IRRITATION Not Available	
	Constitution of the Consti	To the second	
Legend:		es - Acute losoty 2 ° Value obtained from manufacturer's SDS.	Linkess otherwise specified
.0.5004.000	state extracted from RTECS - Register of Toxic Effect of chi	rmical Substances	
		rs after exposure to the material ends. This may be due to a non- occur after exposure to high levels of highly inflating compound.	
ALUMINIUM NITRIDE	RADS include the absence of previous airways disease in a	non-alopic individual, with sudden onset of persistent authmo-like	aymploma within minutes to
		s for diagnosis of RADS include a reversible siniose patiern on iu sating, and the tack of minimal lymphocytic inflammation, without	
POTASSIUM CHLORIDE		tact causing inflammation. Repeated or prolonged exposure to it	ntants may produce
ALUMNIUM A FRESH	conjunctivita.		
	A STATE OF THE STA		
ALUMINA & ALUMINIUM NITRIDE & SODIUM	No significant scule toxicological data identified in literature		



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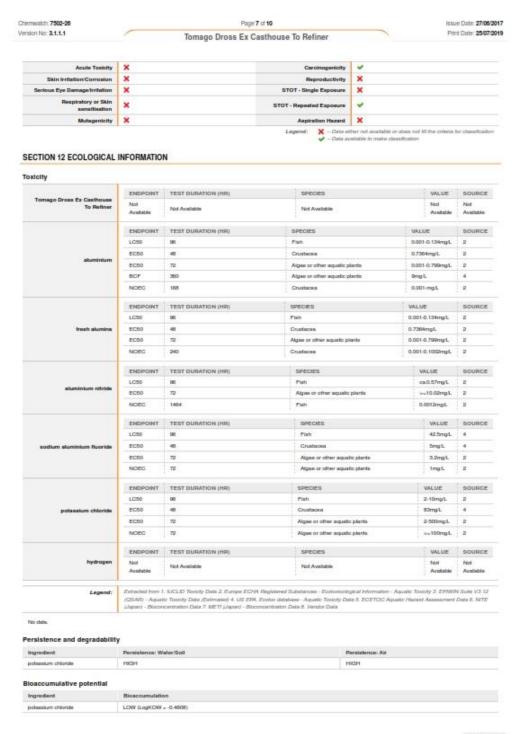
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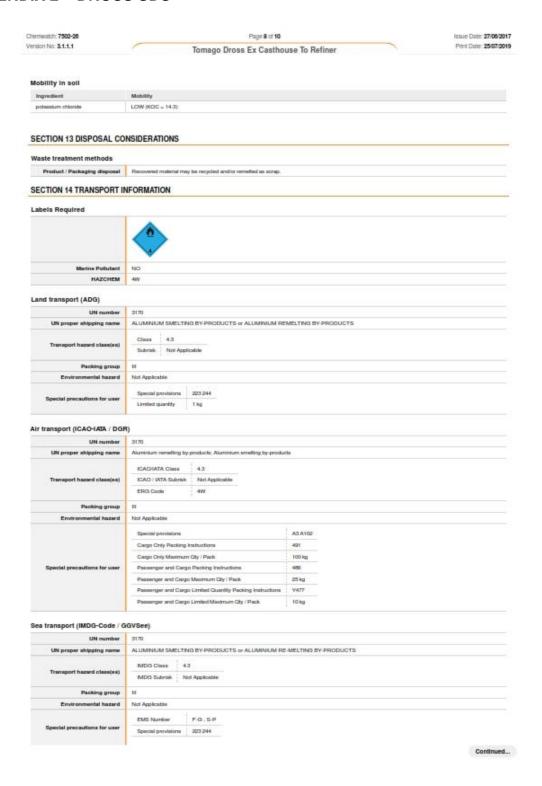
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APPENDIX 3 – MAP OF THE SITE

