Tomago Aluminium
SPL Processing Facility Capacity Increase

Construction Environmental Management Plan

Contents

Overview

This Construction Environmental Management Plan (CEMP) has been prepared to support construction of the process plant required for increased processing capacity of the Regain Spent Potlining Recycling Facility located at the Tomago Smelter in the NSW Hunter Valley region (the Project). The current facility operates under NSW Department of Planning, Industry and Environment Development Approval MP06_0050 dated 7th August, 2009 (the 2009 Approval). The Project is the subject of NSW Department of Planning, Industry and Environment (DPI&E) Development Approval MP06_0050 MOD 2 (the 2019 Approval).

Background

Introduction

Aluminium metal is produced in electrolytic cells known as pots. During the production process, the lining of the pots become contaminated with materials such as alumina, aluminium, calcium, fluoride compounds and sodium. The contaminated potlining, known as spent potlining (SPL) is regularly replaced as part of the periodic individual rebuilding of the pots. SPL is classified as a Dangerous Good and an Environmentally Hazardous Waste. It requires careful handling and disposal in accordance with regulatory requirements.

Regain has worked with a number of smelters in Australia to process SPL to make it safe to handle and use and to manufacture products using the materials from SPL. The products are used in cement manufacture to reduce the energy input and greenhouse gas emission. Regain has recycled more than 350,000 tonnes of waste material from aluminium smelters and has been operating at the Tomago Aluminium Smelter since 2001.The Regain SPL Facility at Tomago currently processes 20,000 tonnes of SLP per year.

There is a backlog of SPL stored in stockpiles in Australia and there is a demand for increased SPL recycling capacity.

Project Description

The Project involves increasing the handling capacity of the SPL Processing facility at Tomago from 20,000 tonnes per year to 60,000 tonnes per year using improvements to the existing proven technology, in order to respond to market demand. The scope includes an additional 40,000 tonne per year thermal treatment plant along with blending/product plant.

The project is located on the site of the Tomago Aluminium Smelter operated by Tomago Aluminium Company Pty Ltd (TAC) and is located on Tomago Road approximately 25 kilometres by road north west of Newcastle, NSW.

Figure 1

A plan of the site showing plant locations and buildings is shown on the drawing number 116TD156 in Appendix A. **Figure 2** shows the site with the existing SPL Treatment Plant and the new SPL Treatment Plant.

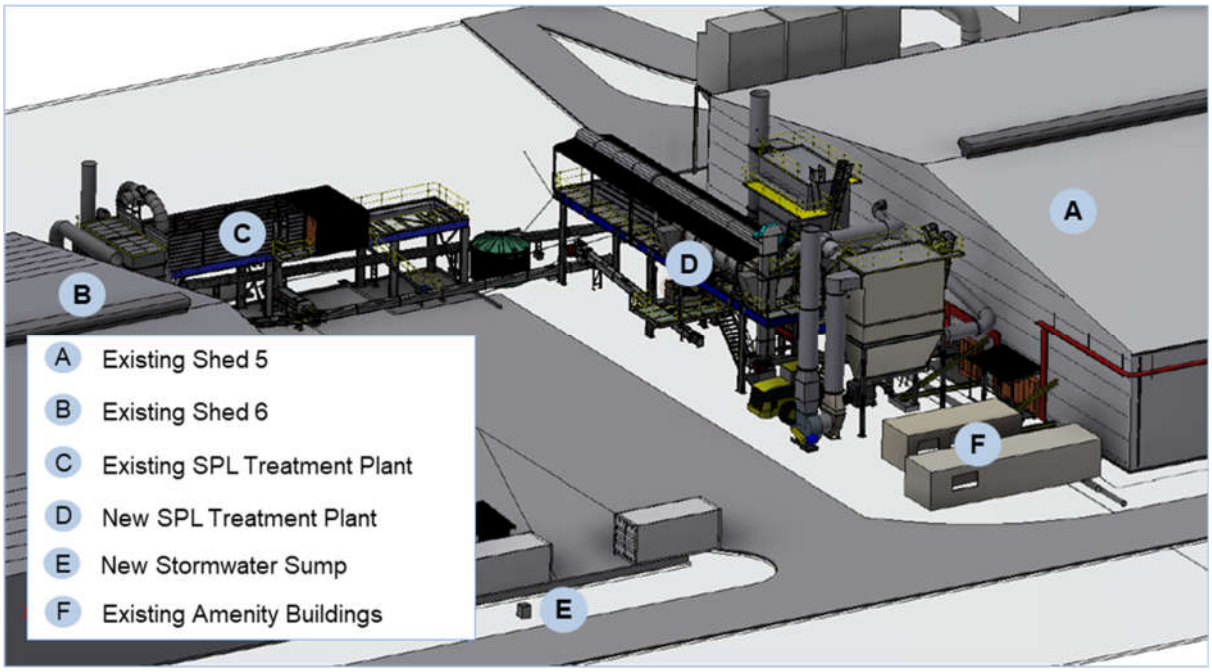


Figure 2 Existing SPL Plant and New SPL Treatment Plant

The construction footprint is located between Shed 5 and Shed 6 Run-off water from the construction zone is captured in the existing stormwater system with first flush water diverted to a storage tank and then used as process water for the SPL processing plant.

Construction Activities

Construction activities involve the erection of steel structures on concrete foundations and the installation of process equipment on the steel structures. To minimize on site activities and associated personnel levels the process equipment will arrive on site as pre-assembled plant modules. The erection of the plant modules will be done with mobile hydraulic cranes.

For the purpose of this CEMP preliminary works are identified as all activities required to enable construction of:

- The concrete slabs, foundations and footings required to support the proposed configuration of new SPL plant.
- The proposed stormwater controls including stormwater collection points, rainwater tanks, pumps and piping to allow for the capture of stormwater and reuse in the treatment of SPL.

Preliminary works will involve excavation and earthworks required to enable construction of concrete slabs and foundations. Where practical, material excavated for foundations will be reused as fill to achieve design grades for stormwater flow. Stockpiles of excavated material will be placed such that they are appropriately clear of drains.

All construction waste would be classified in accordance with the Waste Classification Guidelines (EPA, 2014) prior to disposal and transported to an appropriately licensed waste disposal facility. Management of the risk of erosion and sediment control is described in Appendix C – SPL Facility Construction Erosion and Sediment Control Plan.

Water run-off from the construction footprint will be intercepted by the existing stormwater first flush catchment system. Trucks and excavation equipment will be washed down on the existing apron areas and any water and solids will be intercepted by the existing stormwater first flush catchment system.

Construction work including delivery of plant modules and construction materials will be generally performed during day-shift hours between 7:00am and 6:00pm Monday – Friday and 8:00am to 1:00pm on Saturdays.

Wastes generated by the construction activities would be minimised as a result of the proposed construction method which involves process equipment components arriving on site as pre-assembled plant modules. Ancillary wastes may include minor quantities of metals which will be recycled and a small quantity of packaging wastes similar to other materials handled in the day to day operations and which are incorporated into the existing waste management system at the Tomago smelter. All construction waste would be classified in accordance with the Waste Classification Guidelines (EPA, 2014) prior to disposal and transported to an appropriately licensed waste disposal facility.

Average construction field personnel level will be five people with an estimated maximum number of up to ten people for short periods such as during plant module lifts. There are existing lunch rooms and personnel amenities on the site. Typical construction personnel skills required are:

- Carpenters
- Riggers
- Fitters
- Electricians
- Trades Assistants
- Labourers.

The largest expected crane size will be a crane with 250 tonnes lifting capacity. Installation of interconnecting conveyor systems, ducting and steel work will be typically done using 20 tonne capacity mobile hydraulic cranes. Access for construction for work at height will be either from elevated work platforms (EWPs) or from permanent plant access platforms.

A plan showing construction zones, location of amenities and site laydown area is set out on drawing number 116TD999 in Appendix A.

Timing and Scheduling

Construction is to be undertaken on a campaign basis to allow for individual plant elements to be integrated with existing operations whilst minimising disruption. The construction work will take place in two stages:

- Stage 1 – Construction, commissioning and integration of thermal treatment plant elements, stormwater controls and ancillary components required to facilitate an increase in production to 60,000 tonnes per year.
- Stage 2 – Bulk product plant handling elements including the drying plant, fine grinding feed bin, fine grinding plant and bulk product bin.

The first stage is schedule to take place between December, 2019 and April, 2020. The main plant module lifts for the first phase are expected to occur during January 2020. Installation is scheduled for completion by the end of February followed by a commissioning period.

The second phase involves the Find Grinding feed Bin, Fine Grinding Plant and Bulk Product Bin. The requirement for Stage 2 equipment is subject to market development. The Stage 2 construction has been considered during preparation of this CEMP. However the schedule and period for installation and commissioning will be finalised at a later time.

CEMP Context

Key planning approval and environmental study documents that set the context for the CEMP are set out in **Table 1**.

Table 1 CEMP Context Documents – Approval and Studies

Document	Date	Implication for CEMP
Development Approval MP06_0050 for Spent Potlining Facility at Tomago	7 Aug 2009	Sets hours of work and noise limits
Development Approval MP06_0050 MOD 2 for Spent Potlining Facility at Tomago	22 Aug 2019	Condition 26A Requirement for CEMP Reporting requirements
Environmental Assessment: Capacity Increase at the Regain Spent Potlining Facility, Tomago	13 Nov 2019	Section 8 Statement of Commitments: • Prepare CEMP • Management of soils • Dust mitigation • Site access • Noise mitigation • Water quality management

The context for the CEMP is also shaped by the fact that the site for the Project is an operating facility with and existing environmental management system that addresses the requirements for environmental management of:

- Tomago Aluminium for an operation that is located on the Tomago Aluminum site and
- Regain as operator of the SPL Facility.

Relevant plan-level documents from the currently operating environmental management system that are relevant for the CEMP are shown in **Table 2**.

Table 2 CEMP Context Documents – Environmental Management System

Document	Date	Implication for CEMP
Tomago Aluminium SPL Processing Facility Environmental Management Plan	12 Apr 2018	Provides regulatory and environmental management system context
SPL Facility Pollution Incident Response Management Plan	12 Apr 2018	Appropriate as a sub-plan to the CEMP
SPL Facility Stormwater Management Plan		Appropriate as a sub-plan to the CEMP
SPL Facility Construction Erosion and Sediment Control Plan		Appropriate as a sub-plan to the CEMP

CEMP Objectives

The primary objective of implementing this Construction Environmental Management Plan is to ensure that no pollution or other environmental harm occurs as a result of construction of construction of the Stage 2 SPL Processing Plant at the Tomago Aluminium Smelter. Other specific objectives with this CEMP are:

- Compliance with specific environmental management related requirements of the Planning Approval for the Project.
- Implement the relevant environmental management commitments of the Environmental Assessment document.
- Construction activities that are in Tomago Aluminium Company requirements for environmental management on the Tomago Smelter site.
- Construction environmental management activities that fit with the existing Environmental Management Plan for the SPL Processing Facility at Tomago.

Regain Environmental Policy

A copy of the Regain Environmental Management Policy is included for reference in Appendix B

Environmental Management

Environmental Management Structure and Responsibility

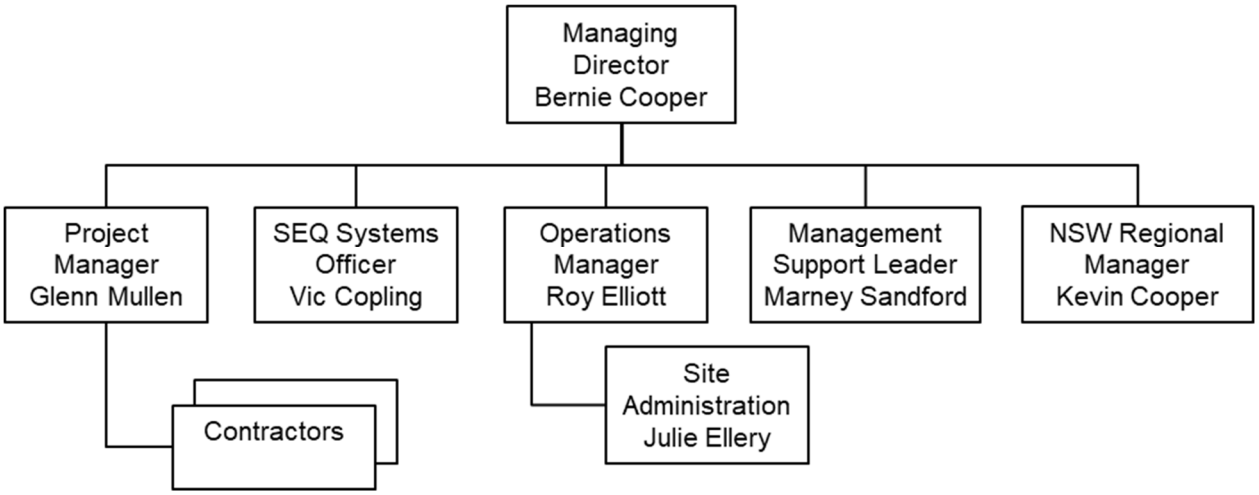


Figure 3 Regain Organisation Structure

The key roles and people in the Regain organisation with responsibilities in relation to this CEMP are shown in **Figure 3**.

The Project Manager is responsible for:

- implementing and maintaining this CEMP
- ensuring the requirements of this CEMP are incorporated into site construction procedures
- ongoing liaison with Regain Operations at Tomago
- ensuring that the people working on or visiting the construction site are properly inducted and competent in the activities in which they are involved
- ensuring that any environmental incidents are reported
- proper investigation and documentation of environmental incidents
- continual reinforcement of environmental awareness for project personnel.

The Regain Operations Manager is responsible for:

- establishing the Tomago site-wide environmental management system
- periodic communication with Tomago Aluminium staff to verify that this CEMP is up to date and in compliance with the requirements agreed between Tomago Aluminium and Regain
- ongoing liaison with Tomago Aluminium environmental personnel
- continual reinforcement of environmental awareness for Regain Operations personnel.

Each contractor will have a Team Leader who is responsible for ensuring site work is conducted in accordance with the environmental requirements in procedures and work scope documents provided by Regain.

The Site Administration Officer is responsible for collating reports and maintaining records.

The Safety, Environmental and Quality (SEQ) Systems Officer is responsible for:

- review of site construction procedures to ensure the requirements of this CEMP are adequately covered
- audit of Project work for compliance with this CEMP.

The Regain Managing Director is responsible for conducting periodic management reviews of this CEMP to ensure its ongoing relevance and effectiveness.

Approval and Licensing Requirements

Legislation and standards that inform this CEMP are:

- Environmental Planning and Assessment Act 1979
- Protection of the Environment Operations Act 1997
- Environmentally Hazardous Chemicals Act 1985
- Australian New Zealand Standard AS/NZ ISO 14001 Environmental Management Systems.

Construction work for the Project is enabled by the 2009 Project Approval (MP 06_0050) and the 2019 Modification of Ministers Approval (MP 06_0050 MOD 2) . The existing SPL Processing Facility operates under two licences:

- Environment Protection Licence (EPL) Number 13269
- Environmentally Hazardous Chemicals Act Licence Number 88.

Other documents that inform this CEMP are:

- Environmental Assessment - Capacity Increase at the Regain Spent Potlining Facility, Tomago (EA)
- Department of Planning of Industry and Environment (DPIE) Guideline for the preparation of environmental Management Plans
- NSW Government Landcom (2004) Managing Urban Stormwater: Soils and Construction Manual
- Regain Tomago Aluminium SPL Processing Facility Stormwater Management Plan.
- Tomago Aluminium Water Management Program.
- Waste Classification Guidelines (EPA, 2014)

The current operations environmental management system includes the following plans and procedure:

- Stormwater Management Plan
- Pollution Incident Response Management Plan
- Notifiable Incident Procedure

The above plans and procedure have been adapted to integrate the requirements of the 2009 Approval and/or the 2019 Approval with the requirements of the existing Environmental Licences, the EA and Tomago Aluminium requirements. Copies of these documents are included in the Appendices.

Table 3 sets out specific requirements along with the approach to meeting each requirement.

Table 3 Approval Requirements relevant to the CEMP

Condition to MP06_0050	Requirement	Approach to Meeting Requirement
7	With the approval of the Director-General, the Proponent may submit any management plan required by this approval on a progressive basis.	Progressive approval of this CEMP by DPIE is outlined reporting.
8	The Proponent shall ensure that all new buildings and structures on the site are constructed in accordance with the relevant requirements of the BCA.	'For construction' drawings prepared with consideration of BCA, where relevant.
	Prior to the construction of any utility works, the Proponent shall obtain the relevant approvals from service providers, including Hunter Water.	Consultation undertaken during exhibition of the EA. Facility employs water reuse practices. Services are provided by Tomago Aluminium under the commercial arrangements between Tomago Aluminium and Regain
13	All chemicals, fuels and oils shall be stored in appropriately bunded areas, with impervious flooring sufficient capacity to contain 110% of the largest container stored within the bund. The bund(s) shall be designed and installed in accordance with: • the requirements of all relevant Australian Standards; and • the DECC's Storing and Handling Liquids: Environmental Protection, Participants Manual.	Controls nominated in **Table 6**.

Condition to MP06_0050	Requirement	Approach to Meeting Requirement
14	Erosion and Sediment Control at the site during construction shall be consistent with the requirements of *Landcom's (2004) Managing urban Stormwater: Soils and Construction* manual [2009 Approval 14]	SPL Facility Construction Erosion and Sediment Control Plan (see Appendix C)
15	The Proponent shall prepare and implement a Stormwater Management Plan for the project to the satisfaction of the Director-General. This plan must: (a) be submitted to the Director-General for approval prior to construction; (b) be prepared by a suitably qualified and experienced person in consultation with Council; and: • include details of erosion and sediment control during construction; • include detailed plans of the stormwater management system for the project; • ensure the SPL facility is constructed so that the truck loading areas are bunded to prevent potential contamination of nearby stormwater drains; • describe the storage areas for SPL including details of how SPL will be kept dry and secure (to ensure protection of the groundwater); and • describe the procedures for the installation, inspection and maintenance of the stormwater system; • describe the monitoring that occurs at the site which would detect any discharges that may affect water quality.	This CEMP and SPL Facility Stormwater Management Plan
16	At least one month prior to the commencement of Stage 1 construction of the Project as modified by MOD 2 (except for construction of those preliminary works that are outside the scope of the hazard studies), or within such further period as the Planning Secretary may agree, the Proponent must prepare and submit for the approval of the Planning Secretary the studies set out under subsections 16(a) to 16(c) below (the pre-construction studies). Construction, other than the preliminary works that are outside the scope of the hazards studies must not commence until approval has been given by the Planning Secretary. a) A Hazard and Operability Study for the Project inclusive of MOD 2, chaired by a qualified person, independent of the Project, approved by the Planning Secretary prior to the commencement of the study. The study shall be carried out in accordance with the Department's Hazardous Industry Planning Advisory Paper No. 8,'HAZOP Guidelines'. The study report must be accompanied by a program for the implementation of all recommendations made in the report. If the Proponent intends to defer the implementation of a recommendation, reasons must be documented. The study must include and not be limited to concurrent operation of the new and existing thermal treatment plants. b) Construction Safety Study prepared in accordance with the Department's Hazardous Industry Planning Advisory Paper No. 7'Construction Safety'.	Pre-construction studies and commencement of works are described in **Table 6**.
17	The Proponent shall carry out all reasonable and feasible measures to minimise dust generated by the project [2009 Approval 17]. See also EA Statement of Commitments – Air Quality 3.	Risk Control Register and Check sheet to include: • Stabilisation of disturbed surfaces • Cleaning of excessive soil from construction vehicle tyres • Water spraying to suppress dust
20	The Proponent shall comply with the restrictions in Table 1 [Hours of construction]. unless otherwise agreed by the Director-General.	Noise measures including adherence to hours of construction are described in **Table 6**.

Condition to MP06_0050	Requirement	Approach to Meeting Requirement
22	At all times the Proponent shall ensure that: • all trucks entering or leaving the site with loads have their loads covered; • trucks associated with the project do not track dirt onto the public road network; and • the public roads used by these trucks are kept clean of any Regain products or materials.	Traffic management measures are described in **Table 6**.
23	The Proponent shall ensure that: • all parking generated by the project is accommodated on site, and that no vehicles associated with the project shall park on the public road system at any stage; • that the project does not result in any vehicles queuing on the public road network; • vehicles associated with the project are operated at low speed or power within the TAC site and are turned off when not being used; and • vehicles are not to be left idling for prolonged periods.	Traffic management measures are described in **Table 6**.
24	The Proponent shall ensure that waste would be reused, recycled. and if necessary. appropriately treated and disposed of in accordance with the DECC's Waste Classification Guidelines.	Waste management measures are described in **Table 6**.
25	The Proponent shall ensure that the lighting associated with the project: a) complies with the latest version of Australian Standard AS 4282(INT)-Control of Obtrusive Effects of Outdoor Lighting; and b) is mounted screened and directed in such a manner that it does not create a nuisance to surrounding properties or the public. road network.	Lighting controls are described in **Table 6**.
26	Management plans required under this approval must be prepared in accordance with relevant guidelines, and include: a) details of: i. the relevant statutory requirements (including any relevant approval, licence or lease conditions); ii. any relevant limits or performance measures and criteria; and iii. the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures; b) a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria; c) a program to monitor and report on the: i. impacts and environmental performance of the development; and ii. effectiveness of the management measures set out pursuant to paragraph (b) above; d) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible; e) a program to investigate and implement ways to improve the environmental performance of the development over time; f) a protocol for managing and reporting any: i. incident and any non-compliance (specifically including any exceedance of the impact assessment criteria and performance criteria); ii. complaint; iii. failure to comply with statutory requirements; and g) a protocol for periodic review of the plan. *Note: the Planning Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.*	This CEMP. Refer to **Table 6** for a summary of management, monitoring and reporting measures which are to be implemented in accordance with this CEMP. Statutory requirements are described within Table 3 and associated sections. Mitigation measures are outlined in Table 6. Monitoring measures are outlined in Table 6. Emergency response and pollution incident drills form part of Regain's contingency measures to address unpredicted impacts or consequences during construction. A bi-monthly auditing process is outlined to support continued environmental improvement. The Regain Notifiable Incident procedure is attached as Appendix F Periodic review of this plan is identified under 'Monitoring and Review'.

Condition to MP06_0050	Requirement	Approach to Meeting Requirement
26A	The Proponent must prepare a Construction Environmental Management Plan (CEMP) in accordance with the requirements of Condition 26 and to the satisfaction of the Planning Secretary.	Preparation of this CEMP.
26B	The Proponent must: a) not commence construction of the development until the CEMP is approved by the Planning Secretary; and b) carry out the construction of the Project in accordance with the CEMP approved by the Planning Secretary and as revised and approved by the Planning Secretary from time to time.	Refer **Table 6**.
26G	The strategies, plans and programs required under this approval must be reviewed, and the Department must be notified in writing that a review is being carried out.	Refer Monitoring and Review process identified within this CEMP
27	The Department must be notified in writing to compliance@olanning.nsw.qov.au immediately after the Proponent becomes aware of an incident. The notification must identify the Project (including the Project application number and the name of the Project if it has one) and set out the location and nature of the incident. Subsequent notification requirements must be given, and reports submitted in accordance with the requirements set out in Appendix B	Refer to **Table 6**. Regain Notifiable Incident procedure (see Appendix F)
28	The Department must be notified in writing to compliance@planning.nsw.gov.au within seven days after the Proponent becomes aware of any non-compliance.	Refer to **Table 6**. Regain Notifiable Incident procedure (see Appendix F)
32	Any condition of this approval that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident notification, reporting and response, non-compliance notification, compliance reporting and independent auditing. *Note: For the purposes of this condition, as set out in the EP&A Act, "monitoring" is monitoring of the Project to provide data on compliance with the approval or on the environmental impact of the Project, and an "environmental audit" is a periodic or particular documented evaluation of the Project to provide information on compliance with the approval or the environmental management or impact of the Project.*	Record keeping requirements are described in **Table 6**.
33	At least 48 hours before the commencement of construction until the completion of all works under this approval, the Proponent must: a) make the following information and documents (as they are obtained or approved) publicly available on its website: i. the documents referred to in Schedule 2 Condition 2 of this approval; ii. all current statutory approvals for the Project; iii. all approved strategies, plans and programs required under the conditions of this approval; iv. the proposed staging plans for the Project if the construction, operation or decommissioning of the Project is to be staged; v. regular reporting on the environmental performance of the Project in accordance with the reporting requirements in any plans or programs approved under the conditions of this approval; vi. a comprehensive summary of the monitoring results of the Project, reported in accordance with the specifications in any conditions of this approval, or any approved plans and programs; vii. a summary of the current stage and progress of the Project; viii. contact details to enquire about the Project or to make a complaint; ix. a complaints register, updated monthly; x. the Compliance Report of the Project; xi. audit reports prepared as part of any Independent Audit of the Project and the Proponent's response to the recommendations in any audit report; xii. any other matter required by the Planning Secretary; and b) keep such information up to date, to the satisfaction of the Planning Secretary.	Refer Monitoring and Review process identified within this CEMP

Condition to MP06_0050	Requirement	Approach to Meeting Requirement
	The Proponent shall implement ground and surface water management strategies	Regain Tomago Aluminium SPL Processing Facility Stormwater Management Plan (see Appendix D)
	The Proponent shall ensure that the noise from the operation of the project does not exceed the noise limits presented in **Table 2** [2009 Approval 21]	Use construction equipment with effective mufflers Monitor noise levels during construction
	Incident and non-compliance reporting [2019 Approval 27,28]	Regain Notifiable Incident procedure (see Appendix F)
	Provide access to information [2019 Approval 33]	Regain website – http://www.regainmaterials.com/

Reporting

Project reporting requirements are set out in **Table 4**. Project reporting will be integrated into the existing on-site reporting and the Regain central document control which is administered using the electronic Regain Lifecycle Management System (LMS) which is part of the Regain Management System (RMS). The Regain Management Support Leader is responsible for administering controlled documents and loading reports to the LMS.

Table 4 Project Reporting

Reporting Requirement	Person Responsible	Timing	Distribution
Construction monitoring report of site construction activities and progress. Report to include of any non-compliances or complaints received during the period and status of any outstanding investigations and/or corrective actions.	Project Manager	Monthly	Regain Management
Environmental non-compliances reported using Regain Incident Report form and Regain Notifiable Incident procedure (see Appendices E and F)	Operations Manager	As required	See note 1
Complaints reported using Regain Incident Report form and Regain Notifiable Incident procedure (see Appendix E)	Operations Manager	As required	See note 1
Corrective actions reported using Regain Investigation report form (see Appendix E)	Operations Manager	As required	See note 1
Pre-construction and pre-operational compliance reports using checklists tailored for the project (see Appendix E)	Operations Manager	As required	Regain Management
Reports from audits of the CEMP	SEQ Systems Officer	Bi-monthly	Regain Management
Record incidents and complaints in accordance with the Regain Notifiable Incident procedure.	Operations Manager	In accordance with procedure	See note 1
Notify DPIE in writing (compliance@planning.nsw.gov.au) of any environmental incident. Implement PIRMP.	Operations Manager	Immediately	
Notify DPIE in writing (compliance@planning.nsw.gov.au) of any non-compliance against this CEMP, relevant sub-plans or project approval.	Operations Manager	With 7 days of an observed non-compliance	See note 1
Maintain website in accordance with Condition 33 to MP06_0050 (refer **Table 3**) including the current stage and progress of the Project.	Operations Manager	Prior to commencement of construction and monthly thereafter.	Website
Update complaints register and publish on Regain website.	Operations Manager	Monthly	Website

Reporting Requirement	Person Responsible	Timing	Distribution
Publish a copy of this CEMP on the Regain website.	Operations Manager	On approval or revision.	Website
Maintain records of all monitoring data and audit documentation (e.g. Risk Control Register and Check sheet) for a minimum period of 5 years.	Operations Manager	Ongoing	NA

Note 1 – Reporting for non-compliances, complaints and corrective actions may require reporting to DPE&I, EPA and/or TAC in accordance with the Notifiable Incident procedure (see Appendix F).

Environmental Training

Requirements of this CEMP will be included in environment sections of site induction training modules which must be provided for each person working on the site. Separate training in environmental incident response will be provided in accordance with the Pollution Incident Response Management Plan.

This training and nurturing of general awareness will be included in:

- Inductions
- Toolbox meetings
- Evacuation, emergency response and pollution incident drills.

Training records will be maintained using the existing training records management in the Regain Management System.

Emergency Contacts and Response

The names and contact details of contact persons for emergencies and each of whom has authority to direct works are listed in **Table 5**. These names and contact details are also shown on the Regain website and in the Pollution Incident Response Management Plan.

Table 5 Emergency Contacts

Title	Name	Telephone Number	Email Address
Operations Manager	Roy Elliot	0409 460 227	roy.elliott@regainmaterials.com
NSW Regional Manager	Kevin Cooper	0417 556 831	kevin.cooper@regainmaterials.com
Operations Support Manager	John Cooper	0418 341 756	john.cooper@regainmaterials.com

The procedures to be followed in the event of an environmental emergency are set out in the Pollution Incident Response Management Plan (see Appendix G).

Implementation

Risk Assessment

The project presents a low level of environmental risk as a result of the following characteristics

1. The construction work will take place in an existing zone that drains into an existing stormwater management system including an interception sump and pump to transfer first flush water to a holding tank. The water is then used as process water for the existing SPL processing plant. Additional temporary bunding implemented around any earth works will ensure runoff water is contained and directed to existing stormwater management system.
2. Preliminary works involve site minor excavation and earthworks and construction of concrete slabs and foundations. Material excavated for foundations will be used as fill in an area that must be raised with fill material prior to placing a concrete slab.
3. Plant erection involves installing pre-assembled equipment modules to which minimises site construction activities.

The environmental hazards associated with construction of the project and along with required risk controls have been included in the Hazard and Loss Prevention (HAZLEP) Chart for General Site Construction. This is included in Appendix H.

Implementation

On the basis that the project is small in size the structure of the implementation section has been developed using the issues-based format shown in **Table 6**.

Table 6 Implementation Issues, Actions and Controls

Issue	Mitigation Measures	Person Responsible	Timing / Frequency
Staging	Prior to commencing construction activities (including preliminary works) cite approval of this CEMP by DPIE (granted in accordance with Condition 26B to MP06_0050). Prior to commencing works (other than preliminary works outside the scope of the hazards studies) cite approval from DPIE (granted in accordance with Condition 16 to MP06_0050) addressing pre-construction studies.	Operations Manager	Ongoing
Safety	Construct all new structures on the site in accordance with the relevant design, construction plan or construction methodology.	Operations Manager	Ongoing
Management and communication of environmental construction risks	Minimise construction environmental risks by using pre-assembled plant modules delivered to site, where practical. General Site Construction HAZLEP Chart (Appendix H) is posted on site noticeboards Ensure site induction training includes construction environmental hazards and risk controls from HAZLEP Chart Include construction environmental awareness in site toolbox talks Daily job safety and environmental risk analysis relevant to the work for the day using Regain Work Planning Form or contractor JSEA form Conduct housekeeping checks of construction site.	Operations Manager	Ongoing
Air Quality	Implement dust mitigation strategies as part of the CEMP including: • Stabilisation of disturbed surfaces during construction; • Removal of excessive soil on construction vehicle tyres; and • Spraying of stockpiled earths / fine construction material during high winds to reduce potential for dust Refence and implement HAZLEP Chart (Appendix H)	Operations Manager	Ongoing
Stormwater Controls	Implement the SPL Facility Construction Erosion and Sediment Control Plan Ensure bund to contain water wall is in place on south side of construction zone. Implement additional temporary bunding around earth works to ensure runoff water is contained and directed to existing stormwater management system. Refence HAZLEP Chart (Appendix H) During construction, store all chemicals, fuels and oils in appropriately bunded areas, with impervious flooring providing sufficient capacity to contain 110% of the largest container stored within the bund. *Note: The area between Shed 5 and Shed 6 is bunded with a first flush stormwater system.* Provide appropriate personal protective equipment, clean-up material and equipment to deal with any spill.	Operations Manager	Ongoing
Noise and Vibration	Construction noise will be managed and minimised by implementing work practices with consideration of the Interim Construction Noise Guideline (DECC 2009) including but not limited to: • Ensure the use of construction equipment with effective mufflers. • Operating construction equipment in a proper and efficient manner. • Include awareness of potential noise impacts to sensitive receivers in site toolbox talks. Site working hours are 7:00am to 6:00pm Monday to Friday and 8:00am to 1:00pm on Saturday- (NSW EPA Recommended standard hours). Work outside these periods will only be conducted provided that the activities are not audible at any residence beyond the boundary of the site. Record noise complaints using the Regain Incident Report form and implement appropriate corrective action where necessary. Refence and implement HAZLEP Chart (Appendix H).	Operations Manager	Ongoing

Issue	Mitigation Measures	Person Responsible	Timing / Frequency
Traffic and Transport	Construction traffic would only traverse those public roads which are public roads that are suitable for heavy vehicles. Any vehicles carrying loose materials are covered before leaving site. Construction vehicles checked and if required to avoid tracking of dirt, cleaned prior to leaving site. Maintain adequate on-site parking on site (no construction vehicles would be parked on the surrounding public road network). Operate vehicles at safe speeds (e.g. in accordance with site signage) within the TAC site and turn off when not in use for prolonged periods. Do not leave vehicles idling for prolonged periods when not in use. Refence and implement HAZLEP Chart (Appendix H)	Operations Manager	As Required
Lighting	Implement lighting in accordance with AS 4282-1997 Control of the obtrusive effects of outdoor lighting. Direct all lighting downward, towards the ground, where practical. Screen lighting appropriately where necessary to avoid causing a nuisance to surrounding properties or the public road network.		
Waste	Minimise construction wasted on site, pre-assembled plant modules delivered to site. Ancillary wastes construction waste sorted and managed vis the site waste management system Reference the Waste Classification Guidelines (EPA, 2014) where required prior to disposal.	Operations Manager	As Required
Compliance with this CEMP	Conduct audits of construction work against this CEMP	SEQ Systems Officer	Bi-monthly
Staging	Prior to commencing works (other than preliminary works outside the scope of the hazards studies) cite approval from DPIE (granted in accordance with Condition 16 to MP06_0050) addressing pre-construction studies.	Operations Manager	Ongoing
Safety	Construct all new structures on the site in accordance with the relevant design, construction plan or construction methodology.	Operations Manager	Ongoing
Management and communication of environmental construction risks	Minimise construction environmental risks by using pre-assembled plant modules delivered to site, where practical. General Site Construction HAZLEP Chart (Appendix H) is posted on site noticeboards Ensure site induction training includes construction environmental hazards and risk controls from HAZLEP Chart Include construction environmental awareness in site toolbox talks Daily job safety and environmental risk analysis relevant to the work for the day using Regain Work Planning Form or contractor JSEA form Conduct housekeeping checks of construction site.	Operations Manager	Ongoing
Air Quality	Implement dust mitigation strategies as part of the CEMP including: • Stabilisation of disturbed surfaces during construction; • Removal of excessive soil on construction vehicle tyres; and • Spraying of stockpiled earths / fine construction material during high winds to reduce potential for dust Refence and implement HAZLEP Chart (Appendix H)	Operations Manager	Ongoing
Stormwater Controls	Implement the SPL Facility Construction Erosion and Sediment Control Plan Ensure bund to contain water wall is in place on south side of construction zone. Implement additional temporary bunding around earth works to ensure runoff water is contained and directed to existing stormwater management system. Refence HAZLEP Chart (Appendix H) During construction, store all chemicals, fuels and oils in appropriately bunded areas, with impervious flooring providing sufficient capacity to contain 110% of the largest container stored within the bund. *Note: The area between Shed 5 and Shed 6 is bunded with a first flush stormwater system.* Provide appropriate personal protective equipment, clean-up material and equipment to deal with any spill.	Operations Manager	Ongoing

Issue	Mitigation Measures	Person Responsible	Timing / Frequency
Noise and Vibration	Construction noise will be managed and minimised by implementing work practices with consideration of the Interim Construction Noise Guideline (DECC 2009) including but not limited to: • Ensure the use of construction equipment with effective mufflers. • Operating construction equipment in a proper and efficient manner. • Include awareness of potential noise impacts to sensitive receivers in site toolbox talks. Site working hours are 7:00am to 6:00pm Monday to Friday and 8:00am to 1:00pm on Saturday- (NSW EPA Recommended standard hours). Work outside these periods will only be conducted provided that the activities are not audible at any residence beyond the boundary of the site. Record noise complaints using the Regain Incident Report form and implement appropriate corrective action where necessary. Refence and implement HAZLEP Chart (Appendix H).	Operations Manager	Ongoing
Traffic and Transport	Construction traffic would only traverse those public roads which are public roads that are suitable for heavy vehicles. Any vehicles carrying loose materials are covered before leaving site. Construction vehicles checked and if required to avoid tracking of dirt, cleaned prior to leaving site. Maintain adequate on-site parking on site (no construction vehicles would be parked on the surrounding public road network). Operate vehicles at safe speeds (e.g. in accordance with site signage) within the TAC site and turn off when not in use for prolonged periods. Do not leave vehicles idling for prolonged periods when not in use. Refence and implement HAZLEP Chart (Appendix H)	Operations Manager	As Required
Lighting	Implement lighting in accordance with AS 4282-1997 Control of the obtrusive effects of outdoor lighting. Direct all lighting downward, towards the ground, where practical. Screen lighting appropriately where necessary to avoid causing a nuisance to surrounding properties or the public road network.		
Waste	Minimise construction wasted on site, pre-assembled plant modules delivered to site. Ancillary wastes construction waste sorted and managed vis the site waste management system Reference the Waste Classification Guidelines (EPA, 2014) where required prior to disposal.	Operations Manager	As Required
Compliance with this CEMP	Conduct audits of construction work against this CEMP	SEQ Systems Officer	Bi-monthly
Contingency Plan	If unintended environmental impacts (e.g. beyond those predicted in the EA) occur during construction works the Project Manager, Operations Manager and SEQ Systems Officer would all be notified immediately. An investigation is to be undertaken to identify appropriate environmental controls to address the issue. The Regain Notifiable Incident Procedure (Attachment F) and PIRMP (Attachment G) would be implemented where relevant.	Project Manager, Operations Manager and SEQ Systems Officer	As Required

Monitoring and Review

Audit

Bi-monthly audits will be conducted during the construction period to evaluate compliance with this CEMP, assess environmental performance and support a process of continual improvement.

Management Review

Management reviews of this CEMP including its appropriateness and effectiveness will be conducted within three months of:

- Submission of a Compliance Report under Condition 28C (MP06_0050 MOD 2)
- Submission of an incident report under Condition 27 (MP06_0050 MOD 2)
- Submission of an Independent Audit under Condition 29 (MP06_0050 MOD 2)
- The approval of any modification of the conditions of approval (MP06_0050 MOD 2)
- In response to a direction from the Planning Secretary under Condition 26I requiring review (MP06_0050 MOD 2); and
- otherwise as required to support a process of continual improvement (e.g. based on site observations or audits).

Where a review is undertaken DPIE will be notified in writing and where revision of the CEMP is required, a copy of the revised document will be provided to DPIE for approval within six weeks of the review being completed.

Document Control

The versions of this CEMP issued are listed in the following table. The controlled copy of this document is maintained in the Regain Management System

CEMP Plan – Version Issue History

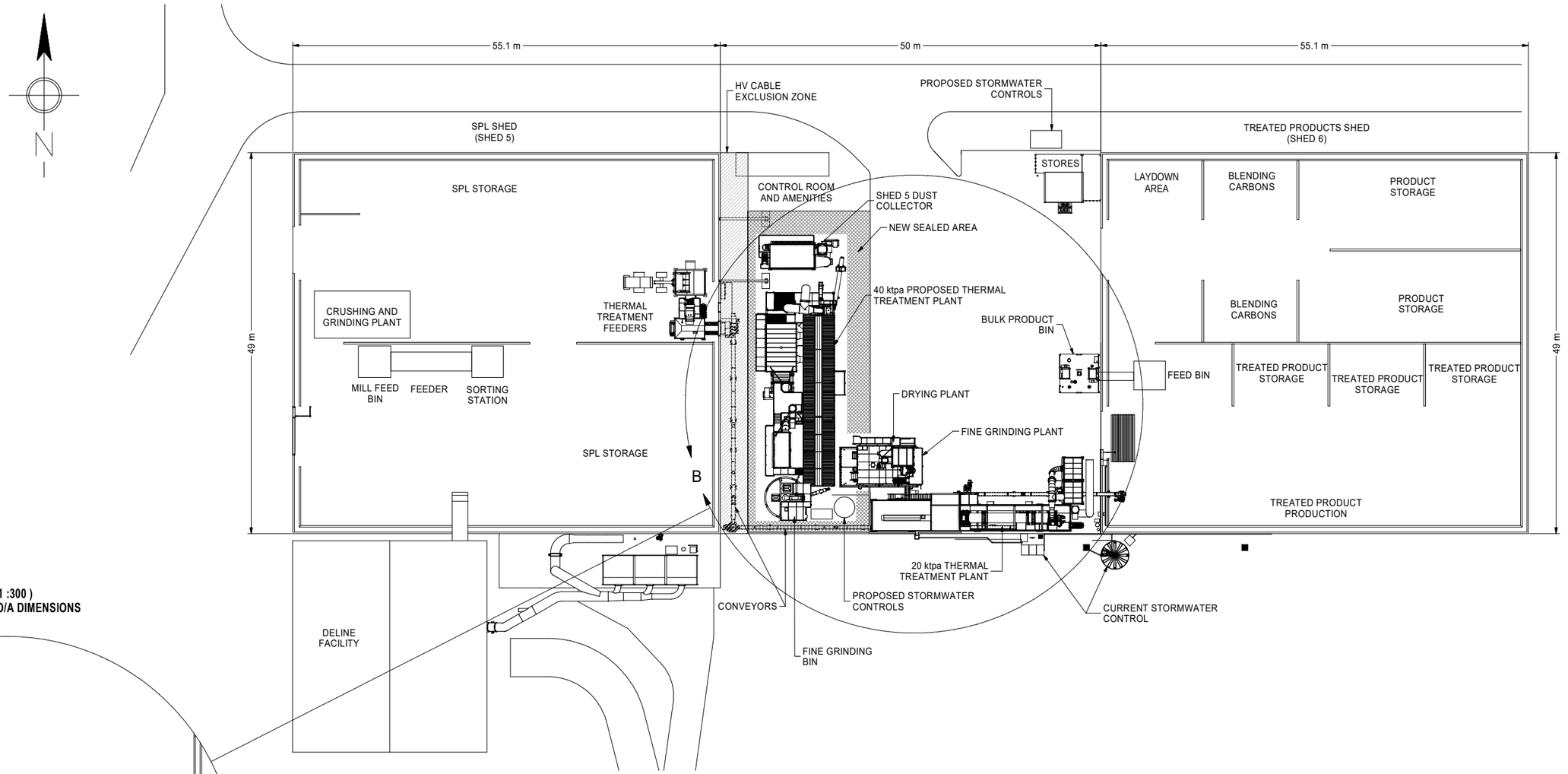
Version	Date	Purpose
A.1	16 Oct 2019	Initial issue for comment
A.2	26 Oct 2019	Revised and re-issued
A.3	28 Oct 2019	Edited and re-issued
A.4	28 Oct 2019	Issued for review
A.5	1 Nov 2019	Review comments included and re-issued
1.1	11 Nov 2019	Reissued for final review
1.2	13 Nov 2019	Final issue
1.3	10 Nov 2019	Revised and reissued

Note: Versions shown in table above are development iterations and will be replaced with formal revisions when the formal version of the CEMP is issued.

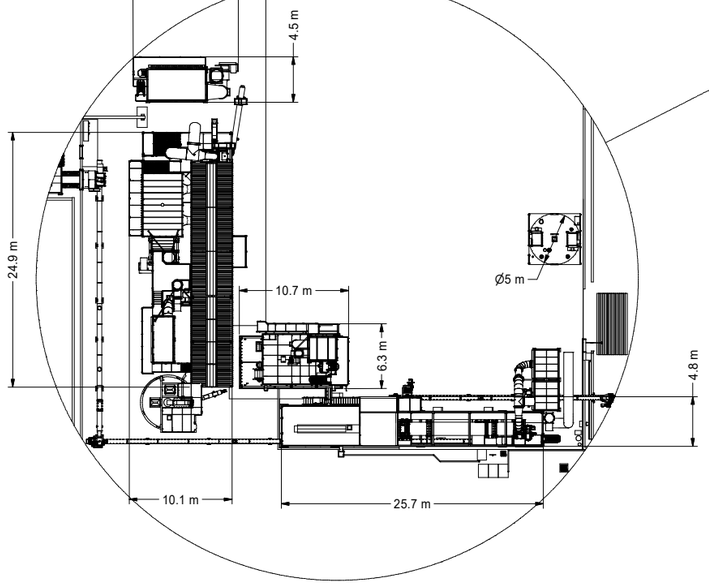
Appendix A – Drawings

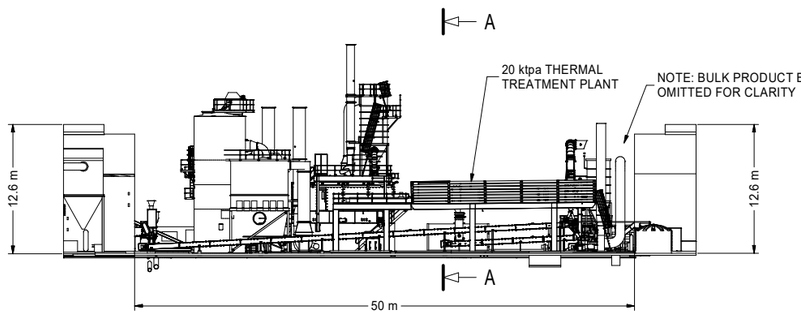
Conceptual Layout – Stage 2 Site Plant (116TD156)

APPENDIX A

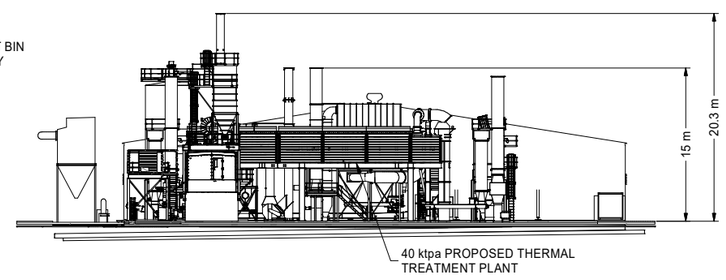


B (1 :300)
EQUIPMENT O/A DIMENSIONS





SOUTH ELEVATION (1 : 300)



A-A (1 : 300)
EAST ELEVATION

DWG NOS	REFERENCE DRAWINGS	DWG NOS	REFERENCE DRAWINGS	REV	DATE	BY	APPROVED	DESCRIPTION
				C	16/10/18	Htc	K Cooper	UPDATED AS PER LAYOUT AND MARK UP 14.10.18
				B	20/09/18	Htc	K Cooper	VIEW ROTATED 180 DEG
				A	27.06.18	Htc	K Cooper	ISSUED FOR APPROVAL

Inventor File: D:\Clients\Regain\00-Workspace\116 (TAC Site)\116 (Gen Arrgts)\116000-00 (Stage 2 Concept June 2018).iam

Regain

DESIGNED Regain
DRAWN Htc
CHECKED K Cooper
APPROVED K Cooper
DATE 27/06/18

TOMAGO SMELTER SPL PROCESSING FACILITY
CONCEPTUAL LAYOUT - STAGE 2 - SITE PLAN

SCALE AS STATED | DRAWING NO 116TD156 | REVISION C | A3

Appendix B – Regain Environmental Management Policy

Environmental Policy

It is Regain's objective to operate in harmony with the surrounding environment, environmental regulation and environmental management expectations of our Clients and our Customers.

The environment, in which we live and work, sustains us and it is our duty to protect it and enhance it.

Regain operates with continual improvement framework for setting and reviewing environmental objectives and targets that underpin the objective of this Policy.

It is Regain policy to operate environmental management systems that comply with the requirements of the International Standards Organisation IS014001 Environmental Management Systems Standard. Regain has a systematic, documented approach to environmental management that describes the Environmental Management System, management responsibility and the requirements for organizational coordination. Key elements of the Environmental Management System are:

- Policy approved by senior management that provides the guiding principles for management of the Regain organization
- Environmental Management Standards that define the minimum set of requirements that support a coherent approach to quality across the Regain organisation
- A set of complementary Plans that set out Client and Customer requirements, particular objectives, how those objectives will be achieved and organisational responsibilities
- Regular audit to verify conformance with policy, standards and the plans.

Regain environmental management systems operate within the Regain Management System.

Each person working with Regain is to learn about the environmental aspects of the work in which they are involved. They are expected to take responsibility for their area of work and to ensure that environmental risks are managed as called for by the systems of work.

Regain environmental management systems are reviewed periodically by Regain management to ensure their continued relevance and effectiveness in meeting regulatory, Client and Customer needs.

For and on behalf of Regain
B. J. Cooper, Director

Appendix C –SPL Facility Construction Erosion & Sediment Control Plan

Tomago Aluminium
SPL Processing Facility

Erosion and Sediment Control Plan

Contents

Attachments

Objectives

The objective of implementing this Erosion and Sediment Control Plan is to ensure that no pollution occurs to downstream areas and/or land degradation as a result of construction of the capacity increase for the spent potlining (SPL) Processing Plant at the Tomago Aluminium Smelter.

Context and Scope

This Erosion and Sediment Control Plan (ESCP) covers the requirements for environmental management associated with Regain SPL Processing Facility at the Tomago Aluminium smelter. It is intended to meet the requirements of NSW Department of Planning and Environment Project Approvals 06_0050 and 06_0050 MOD 2 along with the requirements set out in the Landcom (2004) Managing Urban Stormwater: Soils and Construction Manual.

This ESCP has been prepared in accordance with Regain practice of providing a distinct plan to cover a specific area of the enterprise that is, at the same time, both significant in respect of its objectives and focused – coherently addressing a defined group of people with related requirements and a necessity to coordinate their respective activities. It is part of the Construction Environmental Management Plan for the Tomago Aluminium SPL Processing Facility and should be interpreted and used in that context.

This ESCP applies to people involved in civil earthworks and concrete construction for the capacity increase projects for SPL Processing Plant including Regain employees, service providers, subcontractors and visitors that Regain may bring to the Tomago site.

Background

Regain operates the SPL Processing Facility on the site of the Tomago Aluminium smelter at Tomago Road, Tomago, NSW. The facility was established as a demonstration plant in 2002 and is planned for increased under planning Project Approval 06_0050.

For simplicity of expression and to maintain the currency of this document as its development and as the design and construction of the upgraded plant evolves, this document is written in the present tense describing a state of affairs that may exist now or is desired to exist in the future.

Reference Documents:

- NSW Department Planning & Environment Development Approvals (06_0050, and 06_0050 MOD 2)) for the Tomago Aluminium SPL Processing Facility
- NSW Government Landcom (2004) Managing Urban Stormwater: Soils and Construction Manual
- Regain Tomago Aluminium SPL Processing Facility Stormwater Management Plan.

Organisational Responsibility

The Regain Operations Manager is responsible for implementing this ESCP on site at Tomago.

The Regain NSW Regional manager is responsible for advising service providers such as engineering consultants and construction contractors of the existence of this plan and of its requirements.

Service providers are responsible for ensuring that the requirements of this ESCP are appropriately taken into consideration and reflected in their work.

The Regain Managing Director is responsible for conducting periodic management reviews of this ESCP to ensure its continued relevance and effectiveness.

People involved in civil earthworks and concrete construction for the upgraded SPL Processing Facility who have been familiarised with this Plan are responsible for complying with its requirements.

Description of Facility

The SPL Recycling Facility is comprised of two buildings, a courtyard between the buildings and SPL processing plant. The buildings and courtyard with key aspects of stormwater runoff control are set out on figure 1.

Regain drawing number 116TD149 shows a layout of the SPL Processing Facility with orientation and key dimensions. Regain drawing number 116TD128 shows ground levels indicating slopes. The ground is relatively flat. There is no significant natural vegetation in the courtyard.

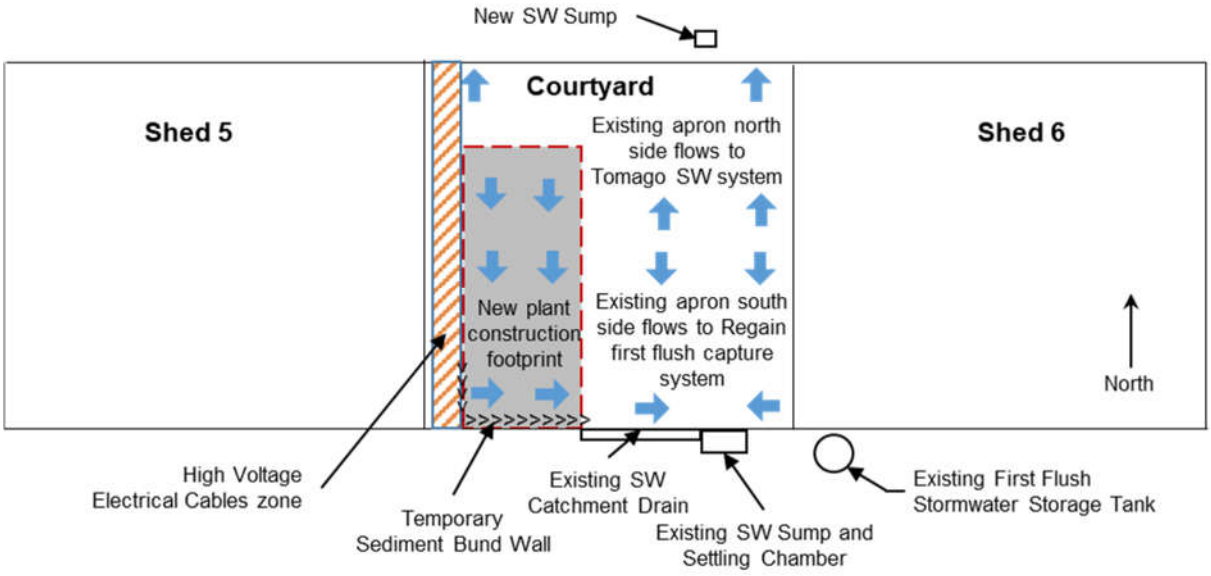


Figure 1 – SPL Facility Capacity Increase Construction Zone and Run-off Water Flow

Erosion and Sediment Control

Construction activities for upgraded plant take mostly place on the western side of the courtyard area with a new storm water sump and inlet drain to be constructed near the northern boundary of the courtyard area. Given the flat site and the fact that most excavation will be below the lowest ground level, it is expected that sediment that suspends in stormwater is contained within the construction zone.

Run-off water with any suspended sediment is contained by a temporary bund wall on the southern edge of the construction zone with overflow diverted into the first flush stormwater catchment system. Solids are retrieved from the settling chamber periodically. The solid collected material is incorporated into the products of the facility. These products are subsequently consumed in the high temperatures of cement clinker manufacture.

Stockpiles of excavated material are minimised and any temporary stockpiles of excavated material which are required for more than a day or if there is immediate threat of rain are covered using tarpaulins to prevent erosion.

Dry solid material from construction activities that leaves the construction zone is either collected dry by sweeping the apron area or washed over the apron area and collected in the existing stormwater capture system settling chamber located on the south-eastern boundary of the courtyard.

Audit and Review

Audit

Bi-monthly audits are conducted for compliance of this ESCP as part of operational compliance with the Stormwater Management Plant and the Construction Environmental Management Plan (CEMP).

Management Review

Management reviews of this ESCP including its appropriateness and effectiveness are conducted if and when required.

Document Control

The versions of this ESCP issued are listed in the following table.

Erosion and Sediment Control Plan – Version Issue History

Version	Date	Purpose
1.0	18 Apr 2017	Originally issued as 116C022
2.1	18 Oct 2019	Re-issued for Capacity Increase Project CEMP and Review
2.2	1 Nov 2019	Reissued after review

Appendix D –SPL Processing Facility Stormwater Management Plan

Tomago Aluminium SPL Processing Facility

Stormwater Management Plan

Contents

List of Figures

Objectives

The objectives of implementing this Stormwater Management Plan are:

- Appropriate management of stormwater to prevent environmental damage
- Compliance with planning approval and Environmental Protection Licence requirements.

Context and Scope

This Stormwater Management Plan (SMP) covers the requirements for stormwater at the Spent Potlining (SPL) Processing Facility at the Tomago Aluminium Smelter. It is intended to meet the requirements of NSW Department of Planning and Environment Project Approval 06_0050 and the stormwater management requirements of Environment Protection Licence No 13269.

This SMP operates within the context of the Tomago Aluminium Water Management Program and the Regain SPL Processing Facility Environmental Management Plan. It is part of the overall Environmental Management System for the Tomago Aluminium Site. This SMP applies to Regain and contractor personnel working for Regain at the SPL Reprocessing Facility.

Background

Regain operates the SPL Recycling Facility on the site of the Tomago Aluminium smelter at Tomago Road, Tomago, NSW. The facility was established as a demonstration plant in 2002 and is planned for upgrade under planning Project Approval 06_0050.

Under the Tomago Aluminium Stormwater Management Program, stormwater runoff is directed to a separate collection pond, which accepts the first flush of a 1 in 10-year storm event. Subsequent stormwater runoff that contains lower fluoride content is discharged directly to the Hunter River. The first flush collection is later discharged at a controlled rate after the quality of the water has been verified. This ensures that fluoride levels entering the river are within EPA approved limits. The process of stormwater discharge is controlled by the terms of the EPL 6163 for the smelter. Under the licence, TAC monitors daily, conductivity, fluoride total suspended solids and pH during discharge. The overall stormwater management system for the Tomago aluminium site is depicted in figure 1.

Figure 1 – Tomago Aluminium Site

For simplicity of expression and to maintain the currency of this document as the development of the Coarse Grinding Plant design evolves, this document is written in the present tense describing a state of affairs that may exist now or is desired to exist in the future.

Reference Documents

- Department of Planning and Environment Project Approval 06_0050
- Environment Protection Licence No 13269
- Environmental Acts and Regulations of NSW
- Tomago Aluminium Water Management Program (TA Document ES.EMS.0016)
- Regain Environmental Policy (Regain Document 100B007)
- Regain Tomago SPL Processing Facility Environmental Management Plan (Regain Document 116C004)
- ISO 14001 Environmental Management Systems Standard

Organisational Responsibility

The Regain Operations Manager is responsible for:

- establishing the environmental management systems
- ensuring the systems required under this Storm Water Management Plan (SMP) are in place at the Tomago Aluminium SPL Recycling Facility and any non-compliances with the systems are corrected
- arranging management review of this EMP
- proper investigation and documentation of environmental incidents, hazards and improvement suggestions
- ensuring that the people working on the or visiting the site are properly inducted, trained and competent in the activities in which they are involved
- ongoing liaison with Tomago Aluminium environmental personnel
- continual reinforcement of environmental awareness.

Each Regain Operator is responsible for complying with the environmental requirements in which he or she has been trained.

The Site Administration Officer is responsible for maintaining records and preparing reports

The external occupational health and safety audit service provider is responsible for:

- audit of this Plan for compliance with statutory and regulatory requirements
- audit of Regain operations on the Site for compliance with this SMP.

The Regain Managing Director is responsible for conducting periodic management reviews of this EMP to ensure its continued relevance and effectiveness.

Description of Facility

The SPL Recycling Facility is comprised of two buildings, a courtyard between the buildings and SPL processing plant. The buildings and courtyard with key aspects of stormwater flow are set out on figure 3.

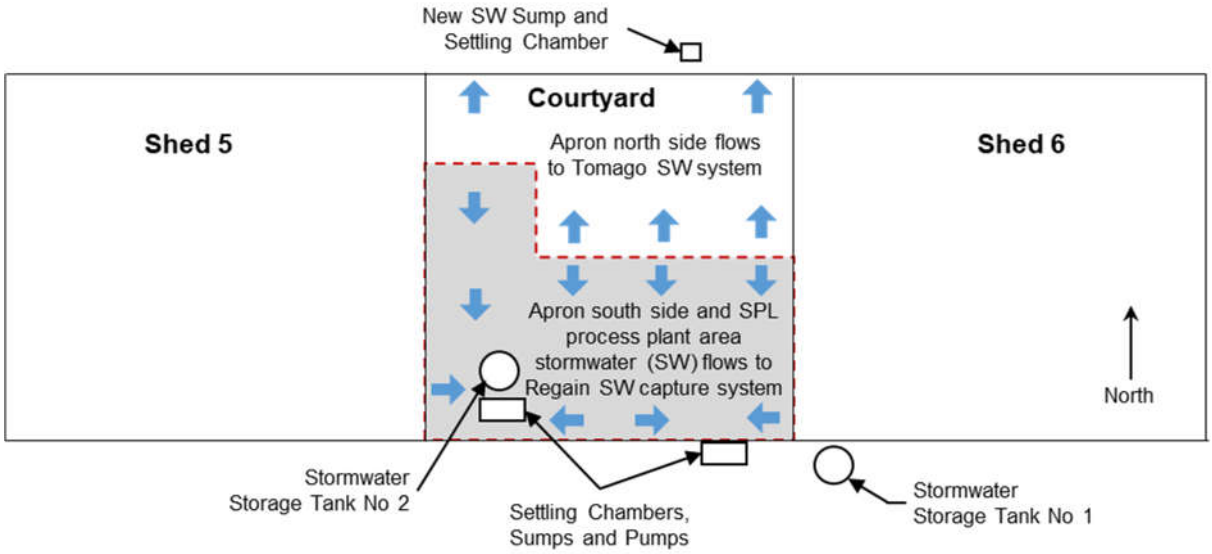


Figure 2 – SPL Recycling Facility Layout

Stormwater Management Processes

Erosion and Sediment Control

Construction activities for upgraded plant take place within the courtyard area or inside Shed 5 or Shed 6. The water storage tank is located on an existing pad to the south of Shed 6. Sediment from construction activities is either collected dry by sweeping the apron area or washed over the apron area and collected in the stormwater capture system settling chamber. The solid collected material is incorporated into the products of the facility.

Stormwater Management System

Surface pits provide the entry points for stormwater into the Tomago stormwater (SW) system. Rainwater from the building roof areas of Shed 5 and Shed 6 fall to sealed ground surrounds and then enter the surface pits. Stormwater from the norther side of the courtyard also drains to the Tomago SW system.

A first flush capture system collects potentially contaminated water from the south side of the courtyard including the SPL process plant and truck loading areas. A bund on the south side the area ensures that the water is contained. The water is captured in two concrete pits, each comprised of a settling chamber and a sump and then transferred to storage tanks by sump pumps. The water is then used as process water for the SPL processing plant. The process water is consumed in three ways:

(a) consumed in a chemical reaction in the process;
(b) emitted as water vapour; or
(c) contained within the products of the SPL Recycling Facility.

Solid material collected in the sump is recovered and incorporated into the products from the SPL Recycling Facility.

Stormwater that follows after the first flush has been captured enters the Tomago stormwater drainage system at an entry pit near the south west corner of Shed 6.

SPL Storage

SPL is stored in Shed 5 and Shed 6. These buildings are enclosed buildings that enable the undercover and contained storage of SPL and the products manufactured using the SPL Processing Facility. The building doorways are fitted with “rumble” grids at doorways of Shed 6 to shake dust from vehicles. The areas immediately outside the doorways are swept regularly to pick up material outside the doorways.

Installation, Inspection and Maintenance of the Stormwater Management System

Information and technical details of the stormwater management system are set out in Regain documents 232TA003 Plant Requirements - Stormwater Recovery Plant and 232TA005 Plant requirements – Stage 2 Stormwater Recovery Plant.

Site Monitoring

The process of stormwater discharge is controlled by the terms of the EPL 6163 for the smelter. Tomago Aluminium monitors conductivity, fluoride total, suspended solids and pH during discharge of stormwater.

Audit and Review

Audit

Audits are conducted for compliance of this Plan with regulatory requirements and overall operational compliance with this SMP

Management Review

Management reviews of this SMP including its appropriateness and effectiveness are conducted on not less than a two-year cycle.

Document Control

The major updates of this SMP are listed in the following table.

Stormwater Management Plan – Issue History

Revision	Date	Purpose
0	3 Mar 2015	Issued with commissioning of stormwater recvoery plant for demonstration SPL Processing Plant
B.1	28 Oct 2015	Revised & reissued for upgraded facility for internal Regain review
B.2	30 Aug 2016	Revised to include an additional collection sump for the Stage 2 plant upgrade and issued for internal Regain review
B.3	10 Feb 2017	Updated and re-issued with reference to the Stage 2 Stormwater Recovery Plant Plant Requirements document
2.0	18 July 2017	Updated and re-issued
2.1	12 April 2018	Updated and re-issued after review of Environmental Management Plan
2.2	20 Oct 2019	Updated and re-issued after review of Construction Environmental Management Plan

Appendix E – Checklist and Report Forms

Incident Report Form
Investigation Report Form

Incident Report

Incident Details

Date ___/____/_____Time ___: ___ am/pm

Site _____

Location _____

Person Reporting Incident

Name _____

Telephone No._____

People Involved (attach list if more than four people involved)

Name _____ Telephone No. _____

Name _____ Telephone No. _____

Name _____ Telephone No. _____

Name _____ Telephone No. _____

Description of Incident

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Diagram of Incident (include measurements, attach a photograph if possible)

Signed _____ Date _____

Office use only

☐Safety ☐Environmental

Manager Comments/Corrective Actions

Investigation Required? Yes ☐ No ☐

Signature	Date:

Incident Classification

Safety	**Environment**
☐Lost Time Injury	☐Complaint
☐Medical Treatment	☐Spill/Release
☐First Aid	
☐Near Miss/Hit	

Incident Number (from Windchill)

Investigation Report

Investigation Details

Date ___/____/_____Time ___:___ am/pm
Site _____
Location _____
Trigger Report Date ___/____/_____

Investigation Leader

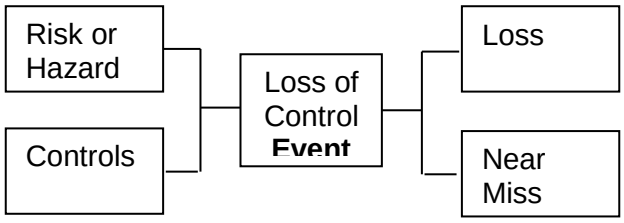
Name _____
Address _____
_____
Telephone No._____

☐Safety ☐Environmental ☐ Quality

Investigation Team

Name _____ Telephone No. _____
Name _____ Telephone No. _____

Cause Consequence Model



The **Objective of Investigation** is to identify problems and opportunities and to modify systems – NOT to attribute BLAME

Attach Additional information if Required

Description of Event

Risks, Hazards & Controls (Contributing factors)

Description of Actual or Potential Loss and Near Miss

Preventative / Corrective Actions

Action	Responsibility	Target Date

Appendix F – Notifiable Incident Procedure

Tomago Aluminium
SPL Processing Facility

Notifiable Incident Procedure

Contents

Objective

The appropriate organisations are notified in a timely manner in the event of a notifiable incident in relation to Regain's operations at the Tomago Aluminium Spent Potlining (SPL) Processing Facility.

Scope

This procedure identifies the stakeholders such as regulatory authorities and Clients that are notified in the event of a notifiable incident on the Tomago Aluminium SPL Processing Facility site or in transporting SPL to the Tomago site. It also documents the reports required by regulatory authorities and Clients as part of the notification.

Definitions

Environment Protection Licence 13269 (EPL 132689)	The Environment Protection Licence under which Regain operates the SPL Reprocessing Facility at Tomago
Environment Protection Licence 20976 (EPL 20976)	The Environment Protection Licence under which Regain transports hazardous waste such as SPL to the Tomago SPL Reprocessing Facility
Environmentally Hazardous Chemicals Act Licence No. 88 (EHC Licence 88)	Environmentally Hazardous Chemicals Act Licence – No 88 that permits the processing of SPL on the Tomago Aluminium site and the transformation of SPL into valuable products
Notifiable Incident	An incident that triggers statutory or Client reporting requirements.
Planning Approvals	Project Approvasl under Section 75J of the NSW Environmental Planning and Assessment Act 1979 which provides planning approval for construction of the SPL Processing Facility at Tomago.
Recognised Stakeholder	Government regulatory authorities, Clients and other entities whose identity has been acknowledged and recorded in Regain Management System (RMS) documents.
Requirement	A requirement is a functional need that a particular design, product, process or system must be able to perform. A requirement may be considered as a condition or capability needed by a stakeholder to solve a problem or achieve an objective.
RMS	Regain Management System

Reference Documents

- Hazard and Incident Reporting and Management Standard
- Tomago SPL Processing Facility Safety Plan
- Tomago SPL Processing Facility Environmental Management Plan
- Tomago SPL Processing Facility Pollution Incident Response Management Plan
- Environment Protection Licence 13269
- Environment Protection Licence 20976
- Environmentally Hazardous Chemicals Act Licence 88
- Planning Approval - 06_0050
- Planning Approval MP06_0050 MOD 2.

Organisational Responsibility

The Regain Operations Manager is responsible for implanting this procedure.

Each Regain Operator is responsible for bringing any potential incident to the notice of the Regain Operations Manager.

Regain and contractor construction personnel are each responsible for bringing any potential incident to the notice of the Regain Operations Manager.

The Safety, Environmental and Quality (SEQ) Systems Officer is responsible for audit of Regain operations on the Site for compliance with this procedure.

Procedure

The following sections set out each of the requirements for compliance with various licences and the Planning Approvals if there is a notifiable incident.

In the event that a potentially notifiable incident or other incident of a potentially serious nature occurs Regain Operations Managers and corporate managers are advised as soon as is practical and a Regain Manager then notifies the relevant regulatory authority as appropriate. The response to the incident including formulation of reports notifying recognised stakeholders involves preparation, review and approval by at least two Regain managers.

Serious Safety Incident

A notifiable incident under the NSW work health and safety legislation relates to:

- the death of a person
- a serious injury or illness of a person
- a potentially dangerous incident.

If a notifiable incident occurs, a Regain manager must notify SafeWork NSW by telephone on 13 10 50 and Tomago Aluminium Safety personnel. The incident site must be preserved in anticipation of a SafeWork NSW Inspector attending (or until the inspector or regulator directs otherwise).

Environmental Incident and/or Non-conformance

In the event of a serious environmental incident with contamination or pollution that has caused or is likely to cause environmental harm there are reporting requirements associated with the EPLs, the EHC Licence and the Planning Approvals as follows.

Environment Protection Licences 13269 and 20976

R2 Notification of Environmental Harm

A Regain Manager must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.

R2.1 Notification must be made by a Regain Manager by telephoning the Environment Line service on 131 555.

R2.2 Regain must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred

EHC Licence 88:

6.1 A Regain Manager must advise or notify the EPA immediately of becoming aware of:

a) Any contamination or pollution of the Premises, or any adjoining premises or waters caused by keeping, conveying or processing aluminium smelter wastes or products manufactured from aluminium smelter wastes.

b) Any spill or incident, involving aluminium smelter wastes or products manufactured from aluminium smelter wastes causing or being likely to cause environmental harm

6.2 All incidents, described in condition 6.1 above, must be reported by a Regain Manager to the EPA by telephoning the EPA's Environment Line on 131 555.

Planning Approvals

27. Incident Notification

The Department must be notified in writing to compliance@planning.nsw.gov.au immediately after the Proponent becomes aware of an incident. The notification must identify the Project (including the Project application number and the name of the Project if it has one) and set out the location and nature of the incident. Subsequent notification requirements must be given, and reports submitted in accordance with the requirements set out in Appendix B of Approval MP06_0050 MOD 2.

Appendix B Incident Notification Requirements

A written incident notification addressing the requirements set out below must be emailed to the Department at the following address: compliance@planning.nsw.gov.au within seven days after

the Applicant becomes aware of an incident. Notification is required to be given under this condition even if the Applicant fails to give the notification required under condition 27 or, having given such notification, subsequently forms the view that an incident has not occurred.

Written notification of an incident must:

a) identify the development and application number;
b) provide details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident);
c) identify how the incident was detected;
d) identify when the applicant became aware of the incident;
e) identify any actual or potential non-compliance with conditions of consent;
f) describe what immediate steps were taken in relation to the incident;
g) identify further action(s) that will be taken in relation to the incident; and
h) identify a project contact for further communication regarding the incident.

Appendix B Incident Reporting Requirements

Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, the Applicant must provide the Planning Secretary and any relevant public authorities (as determined by the Planning Secretary) with a detailed report on the incident addressing all requirements below, and such further reports as may be requested.

The Incident Report must include:

a) a summary of the incident;
b) outcomes of an incident investigation, including identification of the cause of the incident;
c) details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and
d) details of any communication with other stakeholders regarding the incident.

28. Non-conformance Notification

The Department must be notified in writing to compliance@planning.nsw.gov.au within seven days after he Proponent becomes aware of any non-compliance.

A non-compliance notification must identify the Project and the application number for it, set out the condition of approval that the Project is non-compliant with, the way in which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.

Pollution Complaint Incident

There are reporting requirements under the EPLs where a complaint has been received relating to pollution from the Tomago SPL Processing Facility or in relation transport of materials to the facility. There required actions are as follows.

M5 Recording of pollution complaints

M5.1 The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.

M5.2 The record must include details of the following:

a) The date and time of the complaint
b) The method by which the complaint was made
c) Any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect
d) The nature of the complaint
e) The action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
f) If no action was taken by the licensee, the reasons why no action was taken.

M5.3 The record of a complaint must be kept for at least 4 years after the complaint was made.

M5.4 The record must be produced to any authorised officer of the EPA who asks to see them.

Incident Identified by EPA Officer

There are reporting requirements associated with the EPLs if an authorised officer of the EPA suspects that an event and occurred as follows.

R3.1 Where an authorised officer of the EPA suspects on reasonable grounds that:

a) where this licence applies to premises, an event has occurred at the premises; or

b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.

R3.2 The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.

R3.3 The request may require a report which includes any or all of the following information:

a) the cause, time and duration of the event;

b) the type, volume and concentration of every pollutant discharged as a result of the event;

c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event;

d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;

e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;

f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and

g) any other relevant matters.

Verification

Compliance with this procedure is verified by internal audit and by external audits as required by licences and approvals.

Review

Management reviews of this procedure including its appropriateness and effectiveness are conducted on not less than a three-year cycle.

Appendix G – Pollution Incident Response Management Plan

Tomago Aluminium SPL Processing Facility

Pollution Incident Response Management Plan

Contents

Objectives

The objectives of implementing this Plan are:

- Comprehensive and timely communication about a pollution incident to all recognised stakeholders
- Identification and control of risk of a pollution incident
- Implementation of this plan and verification of its effectiveness.

Background

This Pollution Incident Response Management Plan (PIRMP) has been prepared to achieve the objectives set out above and to demonstrate compliance with the requirements of the *Protection of the Environment Legislation Amendment Act 2011* (POELA Act).

Regain operates an aluminium smelter spent potliner reprocessing plant on the site of the Tomago Aluminium smelter at Tomago Road, Tomago, NSW.

A Pollution Incident is defined under the POEO Act as follows:

'pollution incident means an incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving only the emission of any noise.'

A pollution incident is required to be notified if there is a risk of 'material harm to the environment', which is defined in section 147 of the POEO Act as:

(a) harm to the environment is material if:

  (i) it involves actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial, or

  (ii) it results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding $10,000 (or such other amount as is prescribed by the regulations), and

(b) loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment.

Scope

This PIRMP applies to the Regain aluminium smelter spent potliner reprocessing plant on the site of the Tomago Aluminium smelter at Tomago Road, Tomago, NSW.

Other Related Plans

This PIRMP is implemented and operated as part of the Regain Management System (RMS). Other RMS documents and plans that should be read in conjunction with this PIRMP are:

- Regain Environmental Policy
- Environmental Management Plan – Tomago Smelter SPL Reprocessing Facility
- Emergency Response Plan – Tomago Smelter SPL Reprocessing Facility.

Contact Details

Contact details, including names, position titles and 24 hour contact details of key individuals responsible for activating this PIRMP, managing the response are listed in a document, a copy of which is posted on the 'Site Notice Board' -a standard and key information reference point on the Regain site.

The document also lists the contact details for the relevant authorities required under the section 148 of the POEO Act.

Coordination of response and notification of Authorities is coordinated with Tomago Aluminium Company emergency response protocols.

In the event of a pollution incident the Regain operator places a first call to Tomago smelter plant emergency number 9999 who then coordinate local response and urgent contact with Fire and Rescue NSW, the NSW Police and NSW Ambulance Service.

Regain management contacts are:

- John Cooper, Regain Plant Development Manager ph: 0418 341 756
- Kevin Cooper, Regain Development Manager ph: 0417 556 831
- Roy Elliott, Operations Manager ph: 0409 460 227

Regain Manager to notify authorities in the following order:

1. EPA – Environment Line ph:131 555
2. Ministry of Health via local Public Health Unit – John Hunter Hospital ph: (02) 4924 6477
3. WorkCover – ph: 13 10 50
4. Port Stephens Council – ph: (02) 4980 0255
5. Fire and Rescue NSW – ph: 000

Communicating with Neighbours and Local Community

The Tomago Aluminium plan for communicating with neighbours and local community provides the processes, list of contacts and contact protocols (Tomago Aluminium Company Document PW.EMS.0011 – Notification of Neighbours Regarding Offsite Impact). A Regain manager will work with Tomago Aluminium officers to communicate with neighbours and the local community to inform people about the incident and to provide specific information that can minimise the risk of harm.

Information about any incident will be accessible from the Regain website and updated progressively. In the event of a pollution incident, Regain's communications consultant based in Newcastle will prepare media releases providing Regain contact details to respond to any questions from any neighbour, member of the local community and other stakeholders such as employee trade unions and representatives of the media.

Minimising Harm to Persons on the Premises

Regain Emergency Procedures describe actions to be taken during or immediately after a pollution incident. These procedures cover evacuation and muster points. Training in evacuation and muster points is included with induction and refresher training for Regain employees and contractors.

Map

A map of the premises showing the surrounding area and including the location of potential pollutants and storm water drains is kept at the Regain site office. The image below provides an overview of the premises.

Staff Training

A formal training program is in place at the Regain Tomago Site. This program sets the objectives of each training module, the schedule for training each person including frequency, training documentation and record retention.

Environmental and emergency response training for Regain employees will include responsibilities under this PIMRP, the POEO Act and POELA Act. This training and nurturing of general awareness will be included in:

- Inductions
- Toolbox meetings
- Formal training courses (including refresher training courses)
- Evacuation, emergency response and pollution incident drills.

Making This Plan Available

A copy of this PIRMP is kept with the Regain Management System documents at the Regain Site office and available for management and authorised officers. A further copy is kept in a folder near the Site Notice Board for ready access by first line employees.

A version of this PIRMP is available online in the Safety and Environment section of the Regain website *http://www.regainmaterials.com/about/regain-operations/tomago/tomago-incident-response-management-plan*. Members of the public may download this version. The web page displays information on how to contact Regain.

Audit and Review

Audit

A pollution incident drill is performed at least annually. The effectiveness of this PIRMP is reviewed after each drill. A written record is prepared of the manner of the drill, the date and the names of the people involved. A pollution incident drill follows within one month of a pollution incident.

Management Review

Management reviews of this PIRMP including its appropriateness and effectiveness are conducted on not less than a two-year cycle.

Document Control

The major updates of this SMP are listed in the following table.

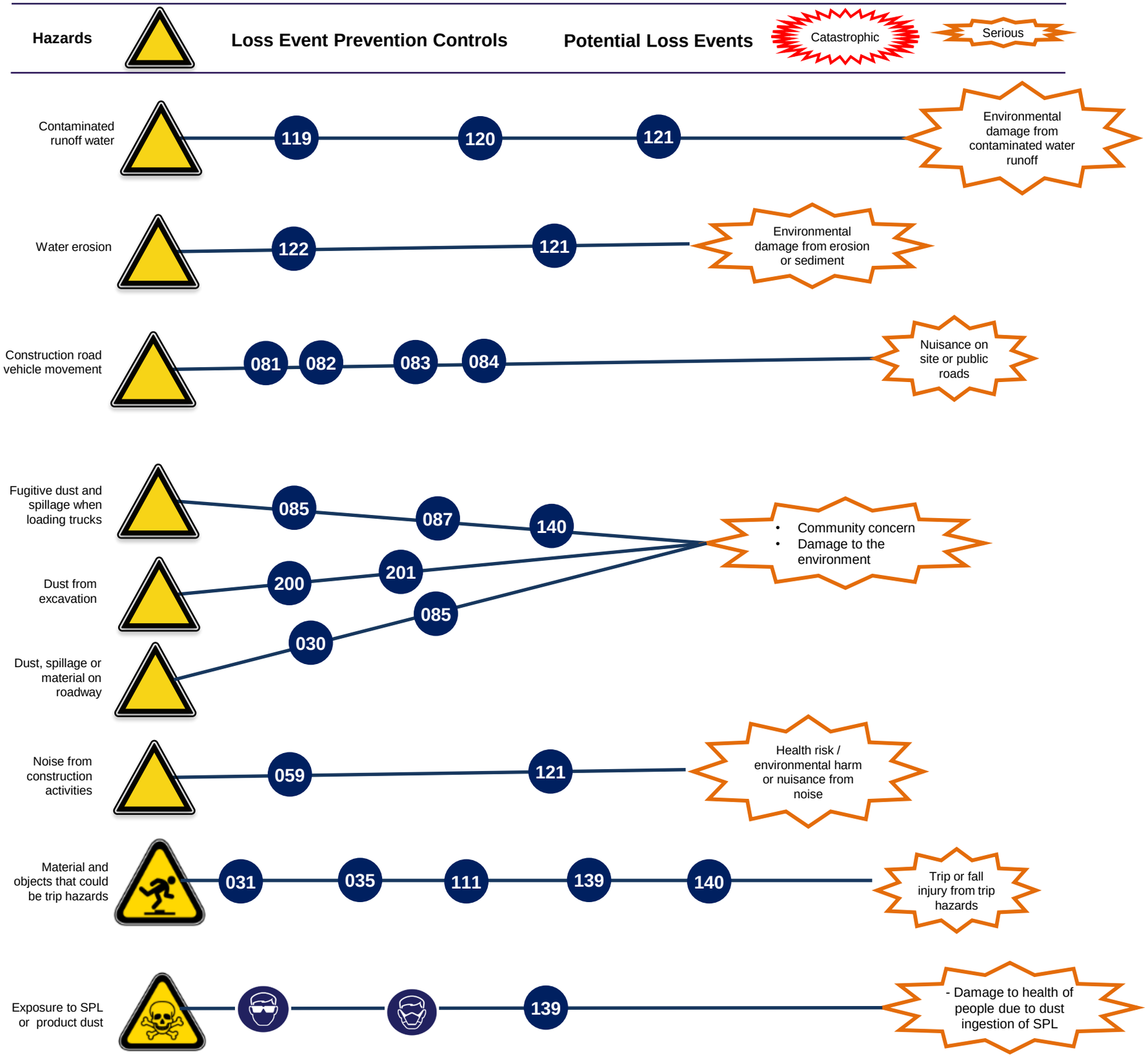
Stormwater Management Plan – Issue History

Revision	Date	Purpose
0	18 Sep 2015	Initial issue
1	18 Jul 2017	Revised & reissued after review and revision of Environmental Management Plan
2	27 Jul 2017	Updated and reissued after updating Regain Manager contact details
2.1	12 April 2018	Updated and re-issued after review of Environmental Management Plan

Appendix H – Construction Hazard and Loss Prevention Chart

Aluminium SPL Reprocessing Facility
Hazards and Loss Event Prevention

General Site Construction (see also Critical Safety)



Control Codes and Descriptions

30	Trucks transporting bulk materials / products fitted with retractable covers
31	Housekeeping check - floor openings, guard rail openings
35	Housekeeping check – objects at height that may fall
59	Periodic monitoring of noise levels and verification of PPE
81	Road vehicles to park in designated zones
82	Road vehicles must not queue on public or smelter roads
83	Vehicles driven slower than site speed limits
84	Vehicle motors to be turned off when parked for prolonged periods
85	Visual inspection of the truck and trailer after loading
87	Regular cleaning of loading and unloading area – minimise product contact with truck wheels
97	Pedestrians establish eye contact with mobile equipment operator before entering work zone
111	Bobcat or sweeper cleaning any spillage
119	Contain run-off water that may contain hazardous leachate with product
120	Conduct operations within smelter first flush drainage control
121	Inspect first flush sumps after storms and monitor solids level
122	Contain run-off water that may contain sediment with bunds or similar
139	Mobile equipment travel paths scraped clear regularly
140	Housekeeping check - material on mobile equipment pathways
200	Spray water to suppress dust
201	Stabilise surfaces disturbed by excavation