

Procedure

Title: Personal Protective Equipment

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1.0 PURPOSE

To prescribe the minimum standard for use of Personal Protective Equipment by all persons on site.

2.0 SCOPE

To define the minimum standards for personal protective equipment for employees, contractors and visitors on site.

3.0 RESPONSIBILITIES

All persons on site have an obligation to:

- Comply with the minimum Personal Protective Equipment standards set out in this procedure
- Ensure their own Personal Protective Equipment is correctly maintained and used.

Specific responsibilities are defined within the procedure.

4.0 ACTIONS

4.1 Approval of Safety Equipment

All Personal Protective Equipment (PPE) used on site by employees shall be approved by the Safety and Plant Protection Superintendent or the Specialist-Occupational Health & Hygiene. New product trials and approval / non-approvals shall be done via a Management of Change and follow flowchart attachment 5.1.

All Personal Protective Equipment used on site shall meet the minimum specifications as outlined in this procedure.

Contractors who supply their own personal protective equipment may purchase any make/model of PPE that meets the minimum standards outlined in this procedure.

The list of approved Personal Protective Equipment available for use and minimum standards can be found on Qnet.

4.2 Minimum Personal Protective Equipment Required on Site

The following personal protective equipment shall be worn or carried by all persons on site unless otherwise provided for by this procedure:

1. Safety Helmet
2. Monogoggles and/or Safety Spectacles
3. Hearing Protectors
4. Protective Clothing – with reflective strips
5. Safety Footwear
6. Gloves
7. Diphoterine
8. Face Shield

4.3 Safety Helmet

4.3.1 Standards and Use

Safety helmets shall be worn on site and shall comply with the following standards:

- AS/NZS 1801 Occupational protective helmets
- AS/NZS 1800 Occupational protective helmets – Selection, care and use
- Helmets shall not have open vents through the upper shell

4.3.2 Exemptions for Safety Helmets

Safety helmets are not required to be worn:

- within the exempted area of Attachment 5.3
- inside offices, control rooms, crib rooms, rest rooms, hard topped vehicle cabs, electrical sub-stations and approved cool rooms
- within asbestos enclosures with protective cover overhead (e.g. scaffolding planks)
- within workshops unless a specific task requires safety helmets with the exception of the main workshop and the mobile workshop where safety helmets are required at all times. Head protection in the main workshop and the mobile workshop may be in the form of a safety helmet or approved bump cap.
- buffer zones and surrounds
- Surroundings of Raw Materials Operations building, including carpark and surrounding demountables.
- Within the penthouse for the FFE baghouse
- When persons access the Laboratory Chemical Storage area or gain access to or from the Laboratory vehicle parked under the awning at the rear entrance to the Laboratory
- Within the Contractor and Maintenance facilities compound and adjacent toilet facilities (CRS 39439)
- South East Operations Office facilities (CRS 39439)
- On top of the Calcination filter tables for the purpose of re-clothing (CRS 36195)
- From Main and East gate through the Thermal Scanner

4.3.3 Specific Requirements for Use

- Safety Helmets shall be inspected for damage every three years or replaced
- Safety Helmet harnesses shall be inspected every two years for damage or replaced
- Sweatbands should be replaced regularly from a hygiene perspective
- The “crumple” space between the harness and the helmet shell shall not be used to store any items
- Where welding work is being performed in designated safety helmet areas, an approved helmet mounted welding shield shall be worn
- Motorcycle helmets and bicycle helmets shall not be worn as substitutes for safety helmets on site

4.4 Eye Protection Monogoggles

4.4.1 Standards and Use

Monogoggles shall be worn on site including the Neutralising Facility at the Red Mud Dam and shall comply with the following standards:

- AS/NZS 1337 Personal eye protection – Eye and face protectors for occupational applications
- If fitted with venting, the vents shall be indirect
- If fitted with comfort foam binding, the foam shall be of a closed cell (non-absorbent) design
- Have a minimum impact rating of medium. Some tasks will require upgrading to high impact rated face shields (see 6.12)
- Have a splashproof rating of ‘C’ or ‘3’
- Areas requiring clear monogoggles must have a category ‘0’ rating
- All other categories for lenses are classed as tinted at QAL

4.4.2 Exemptions for Monogoggles

Monogoggles need not be worn, but shall be available: -

- Within the exempted areas of the plant defined in the Plant Layout Plan Attachment 5.4
- Inside offices, control rooms, crib rooms and approved external crib areas, rest rooms, training rooms, closed lifts, electrical sub-stations, termination rooms, enclosed vehicle cabs, approved electrical/instrument workshops and approved cool rooms
- At the Red Mud Dam, Ash Dam and Recreation Grounds and buffer zones
- Within the penthouse for the FFE baghouse. Clear safety glasses are still required as a minimum
- When using designated optical equipment
- Within a vehicle with windows closed
- Within all site workshops except the Redside Maintenance and Mobile Equipment Workshops where clear monogoggles are required.
 - Safety glasses are acceptable within the main workshop unless a specific task requires a PPE upgrade such as machining on the lathe / horizontal borer (requires a face shield).
 - All welding, grinding, cutting, buffing, work on air operated equipment require the use of monogoggles or an air fed helmet.
 - Any work on contaminated equipment requires the use of monogoggles
- Within McMahon contractor compound rest area (CRS 36095)
- Areas of laboratory where there is no handling of hazardous chemicals. In these cases, acceptable eye protection is indicated by signage
- From Main and East gate through the Thermal Scanner

4.4.3 Specific Requirements for Use

- Monogoggles shall be worn independent of the safety helmet.
- Monogoggles should only be removed for cleaning within a safe location.
- Monogoggles may be temporarily lifted away from the face to help clear fogging when safe to do so.
- Monogoggle style shall be chosen to suit individual facial characteristics, e.g. To eliminate gaps around the nose or strap zone at the temple.
- Where prescription lenses are required either the standard prescription spectacles or a prescription lens carrier fitted inside the monogoggle frame shall be used in conjunction with the monogoggle.
- Monogoggles shall be replaced when contaminated or damaged.
- Where respiratory protection is required, ensure a satisfactory fit is obtained when the respirator is correctly fitted as per procedure P315.104 Respiratory Protection
- Specific hazardous activities in monogoggle exempt areas are still mandatory monogoggle tasks e.g. grinding, cutting, buffing, welding, using or working in close proximity to air operated equipment and hosing. Each section with monogoggle exempt areas shall list the monogoggle specific tasks and communicate this information to all persons including Contractors working in their area
- A large area in Raw Materials is monogoggles exempt. However, in the following areas, monogoggles shall be worn, unless an exemption is granted by either the Operations Superintendent or the Maintenance Superintendent
 - Both the mainland and island alumina sheds,
 - The caustic line that travels from the island to mainland,
 - The coal screening facility including the coal silos,
 - Inside the fenced coal stock pile area,
 - Inside the bunded areas for both the caustic and fuel oil tank farms,
- Inside the Coogee Chemicals caustic shed,
- The caustic transfer pumps and the eastern end of the wharf whilst a caustic or fuel oil ship is being unloaded,
- Working in proximity to the hypochlorite facility.
- Monogoggles shall be worn at the Mineral Waste Disposal Facility (MWDF) Leachate collection pit
- Boiler House Maintenance Workshop is monogoggle exempt unless determined by pre-task hazard assessment

- Tinted monogoggle lenses shall not be worn during the hours of darkness or in low light situations. Clear lenses only shall be worn in the Utilities Plant and the Main Workshop. Section 4.4.1 states the categories classed as clear and tinted.

4.5 Eye Protection Safety Spectacles

4.5.1 Standards and Use

Safety Spectacles shall be the minimum level of eye protection worn in monogoggle exempt areas within site boundaries and shall comply with the following standards:

- AS/NZS 1337.1 Personal eye protection – Eye and face protectors for occupational applications
- Safety Spectacles shall be fitted with side shields of wraparound design

4.5.2 Exemptions for Safety Spectacles

Safety spectacles are exempted:

- When inside offices, control rooms, crib rooms, rest rooms, training rooms and enclosed vehicles
- When using designated optical equipment

4.5.3 Specific Requirements for Use

- Tinted safety spectacle lenses shall not be worn during the hours of darkness or in low light situations. Clear lenses only shall be worn in the Utilities Plant and the Main Workshop
- Persons performing electrical work shall wear non-conductive safety spectacles (prescription or other)

4.6 Prescription Glasses and Contact Lenses

- Prescription safety glasses fitted with side shields may be worn in monogoggle exempt areas.
- Contact lenses may be worn in all areas of the plant with safety spectacles or monogoggles depending on the standard required for the area
- Refer to Policy P001.015 for situations in which QAL may fund provision of prescription safety glasses

4.7 Hearing Protectors

4.7.1 Standards and Use

Hearing protectors shall be worn on site and shall comply with the following standards:

- AS/NZS 1270 Acoustics – Hearing protectors
- AS/NZS 1269.3 Occupational noise management – Hearing protector program

4.7.2 Exemptions for Hearing Protectors

Hearing protection is exempted:

- Within the exempted area of Plant Layout Plan Attachment 5.6
- Within areas outlined in Plant Layout Plan Attachment 5.8, however these areas are only exempt from hearing protection when local plant and equipment are shut down and where no other noise producing activities are being undertaken
- When inside offices, control rooms, crib rooms, rest rooms, laboratory, warehouse and training rooms, demountables
- When driving or riding inside a fully enclosed cab of light vehicles with the windows closed
- When persons access the Laboratory Chemical Storage area or gain access to or from the Laboratory vehicle parked under the awning at the rear entrance to the Laboratory
- Inside the store or in the area surrounding the Raw Materials Maintenance Building (within the area between the racking and the building)
- To and from the South Trees Offices and the Wharf car parks
- Immediate vicinity between the Raw Materials Operations Building and the car park, including the dongas

- To and from the East Car Park and Contractor compounds

Where noise producing activities are undertaken in an area where workers are usually exempt from wearing hearing protection, the workgroup responsible for the activity must take all reasonable steps to ensure those coming into the area are aware that they are required to wear hearing protection and have hearing protection available to them. Examples of controls include:

- Signage at entries to area advising the temporary suspension of the hearing protection exemption in the area
- Disposable ear plugs available at entry to the area (e.g. container mounted on sign notifying of noise)
- Site Notice advising of temporary change to hearing protection exemption in affected areas

4.7.3 Specific Requirements for Use

Hearing protection:

- Shall have either a minimum SLC rating of 25 dB or Class 4
- Shall be available in either earplugs or earmuffs

Electrical workers shall not wear conductive hearing protection.

Select plant areas may require higher levels of protection as required by signage in the specific area, for example, the Lurgi Blower Room or specific task for example testing boiler relief valves.

Earplugs are considered a single use item and should be disposed of appropriately after use.

Earmuffs shall be inspected regularly and the cushions and foam lining cleaned or replaced when damaged or contaminated. The complete set of ear muffs should be replaced if damaged or contaminated.

All new employees will be tested for correct fitness of earplugs where required and periodic retests will be undertaken by the Occupational Health Centre as part of the Periodic Health Review.

4.8 Protective Clothing

4.8.1 Standards and Use

Protective clothing shall be worn on site and shall comply with the following standards:

- Long trousers and collared long sleeve button front shirt or overalls, gussets shall be fitted to the shirt and overalls sleeves
- Protective clothing shall be made from flame-retardant material (example – double weave cotton drill) and fitted with high visibility reflectors so as to be visible from all aspects.
- Jackets with open style fronts
- All protective clothing shall comply with AS 4602 High Visibility Safety Garments

4.8.2 Exemptions for Protective Clothing

Wearing of protective clothing is exempted when entering or leaving site and within:

- The highlighted area on the Plant Layout Plan Attachment 5.5
 - The area from South Trees Wharf Carpark to the Wharf crib room and
 - The area from the Raw Materials Maintenance Building to the adjacent car park

4.8.3 Specific Requirements for Use

- Protective clothing needs to be maintained in good serviceable condition
- Tee shirts or pullover type clothing and those that do not meet the site's high visibility / reflective standard are not acceptable as an outer garment in operational areas
- Protective clothing shall be replaced if damaged beyond reasonable repair or if excessive wear and tear is evident
- Persons performing electrical tasks where there is potential for electric shock or arc flash injuries shall comply with all specific procedures and requirement pertaining to the work being performed

To ensure the clothing provides the maximum protection the following site standard applies in process areas, workshops and the laboratory:

- Sleeves are to be rolled down and buttoned up at the cuffs to prevent ingress of substances onto the forearms or entanglement of sleeves in rotating parts
- Shirts are to be buttoned up to the button prior to the collar button to prevent ingress of substances onto the upper chest
- Shirts are to be tucked into trousers to prevent ingress of substances onto the torso or entanglement of shirt in rotating parts
- Boots are to be laced up all the way to the top of the eyelets provided to prevent ingress of substances into the boot
- Trousers are to be outside of boots to prevent ingress via the top of the boot

4.9 Safety Footwear

4.9.1 Standards

Safety footwear shall be worn in process areas, workshops and the laboratory and shall comply with the following standards:

- AS/NZS 2210.1 Safety, protective and occupational footwear – Guide to selection, care and use
- AS/NZS 2210.3 Personal Protective Equipment - Safety footwear
- The QAL SAP Portal, PPE Catalogue, shows approved safety footwear.

All approved safety footwear is:

- Caustic, acid, and water resistant
- Non-conductive
- Oil and slip resistant
- Heat resistant to 300 degrees Celsius
- Impact resistant - steel toe with impact rating of 200 Joules
- Minimum height of 150 mm
- Use of gumboots on site is restricted. Gumboot use for concreting may be approved by the relevant QAL Construction Supervisor. QAL Department Manager approval is required for any other use of gumboots. All authorisations must in writing using S-189 - Gumboot Authorisation Form.

4.9.2 Exemptions for Safety Footwear

Wearing of safety footwear is exempted when entering or leaving site within:

- The highlighted area on Attachment 5.5 – Exempted areas map for protective clothing
- The area from South Trees Wharf Carpark to the Wharf Cribroom
- The area from the Raw Materials Maintenance Building and the adjacent car park
- Safety footwear is exempted within Office buildings
- Footwear outside the current approved range for employees can only be purchased with the appropriate medical certification from the Occupational Health Centre
- ***The highlighted area on Attachment 5.2, 5.6, 5.7, and 5.8 – General Plant PPE exemption areas (Map).***
 - ***Access from main gate along designated walk path to contract partner offices, adjacent to East West Road.***

Note – In these areas enclosed footwear is the minimum requirement.

4.9.3 Specific Requirements for Use

- Safety footwear needs to be inspected before use to identify any holes, rips, abrasions or chemical damage that may require them to be removed from service
- The modification (cutting down) of a gumboot is prohibited

4.9.4 Working in Pools of Liquid or Slurry

Safety footwear of any type does not make working in, or walking through, pools of liquid or slurry acceptable. Access to equipment should be via properly designed access ways or other temporary controls.

4.10 Gloves

Gloves must be carried at all times by people entering process areas. Guidance on the relevant standards for mechanical protection, chemical resistance, specific purpose and application of each glove style is described in the approved glove matrix on Portal under Qnet. Gloves are rated for their resistance to heat, chemicals and handling substances, and mechanical protection.

Gloves rated for mechanical protection are required where there is a risk of hand injuries such as cuts, abrasions, punctures, crushing or other similar injuries as a result of the use of either powered or manual tools, equipment, machinery or plant.

For “dry tasks” the gloves worn must have mechanical protection of a minimum:

- EN 388:2016 – Coupe Test - Cut Level 5
- EN ISO 13997:1999 – TDM Test - Cut Level C
- ANSI / ISEA 105:2016 Cut Level A6

For “wet tasks” the glove worn must have an appropriate formal rating for chemical resistance for the task. Where “wet tasks” are assessed as requiring mechanical protection, appropriately rated gloves must be worn gloves and should have mechanical protection of a minimum:

- EN 388: Coupe Test - Cut Level 3
- EN ISO 13997: TDM Test - Cut Level B
- ANSI / ISEA 105:2016 Cut Level A3

Specialist gloves such as welding gloves, electrical gloves, and medical gloves are not subject to these standards, but are to be risk assessed on a task by task basis by the user.

4.11 Diphoterine

4.11.1 Personal issue Diphoterine

Any person entering a banded area of the plant or where work is to be performed with potential chemical exposure is required to have on their person, 1 x 100mL personal spray and 1 x 50mL personal eye wash unit of Diphoterine.

These items are a personal issue and personnel are responsible to ensure they are in good condition. Any defective/damaged/out of date items shall be reported to the workgroups direct Supervisor for replacement.

4.11.2 Exemptions for carrying personal issue Diphoterine

Persons are exempt from carrying Diphoterine when not in areas described in 4.11.1.

When a risk assessment identifies that having the Diphoterine attached to the belt in the provided pouch causes an additional risk during a task, the Diphoterine may be placed in the immediate vicinity, provided it is within easy reach.

4.11.3 Chemical Splash Kits

It is mandatory for a Chemical Splash Kit to be present with the workgroup when breaking into pipework under P314.270 Imperfect Isolation Procedure. Provision of a Chemical Splash Kit at the job site should also be considered where a risk assessment identifies an elevated risk of exposure to a chemical.

4.11.4 Use of Diphoterine

If exposed to a chemical, the whole unit of Diphoterine should be used on the affected area. Once the unit is used, the person shall report to the Occupational Health Centre (or Plant Protection after hours) to determine if any additional medical treatment is required. An incident

shall be raised in SAP for all Diphoterine usages. Refer to PM316.001.63 Safe Use – Diphoterine for further details.

4.12 Face Shields

4.12.1 Standards

Face shields shall be worn as specified in 4.12.2 below and comply with the following standards:

- AS/NZS 1337.1 Personal eye protection – Eye protection for occupational applications
- Refer to 4.4 Eye Protection Monogoggles for markings for impact ratings
- Uvex Ultravision Monogoggle attachment face shield (flip up) is a medium impact rated shield and is only suitable as face protection for splash/spray exposure
- Upgrade to high impact rated face protection when performing grinding, cutting or activities that have the potential to generate projectiles

4.12.2 Specific requirements for use

It is mandatory to wear face protection (Monogoggles worn under a helmet mounted face shield or with the Uvex Ultravision Face Shield fitted) for the following tasks where the system contains a corrosive (caustic, acid etc) substance:

- Opening or closing a valve or a drain valve – includes sampling, density calibrations, rodding out etc;
- Breaking into a process stream with imperfect isolation as per P314.270 Imperfect Isolation Procedure;
- Energising or de-energising a flexible hose;
- Hosing in a corrosive environment; or
- When a person is present within 3 metres of any tasks listed above
- It is mandatory that whilst in Redside or Whiteside Areas that all personnel are to either be carrying or have fitted to their helmet a personal Face Shield or Uvex flip up. This includes walking on access roads or travelling in a vehicle or buggy through Redside or Whiteside with the windows open
- Unloading caustic ships or transferring caustic between tanks on Island to Mainland
- Within the Mineral Waste Disposal Facility Leachate Collection Pit

4.12.3 Exemptions for face shields

It is not mandatory to wear face protection when you are operating a system that does not contain a caustic or acidic substance, for example:

- Washing a vehicle with a water hose;
- Turning on a potable water line valve;
- Turning a valve to isolate the fire system etc
- When working in areas outlined in Attachment 5.7

In Digestion it is not mandatory to wear a face shield in the following additional situations only:

- ***Using a hammer to lock of a locking nut***
- ***Shutting a drained down drain valve (no pressure or process behind it)***
- ***Adjusting the packing on an offline piece of equipment (valve or pump)***
- ***Grinding a cold valve***

Refer to task specific PPM's or JHA for details relating to face protection upgrade requirements where there is an increased risk of projectile exposure.

4.13 Respirators

Where respiratory protection is required, personnel have access to a variety of respiratory protective devices including disposable dust masks and reusable devices such as the Sundstrom or 3M half-face respirators.

Personnel who are required to wear negative pressure respirators must have a face fit to ensure the respirator provides a satisfactory seal on the face when the respirator is correctly fitted. All personnel required to wear respiratory protection shall be clean-shaven, where the respirator seals with the face, at the commencement of the work shift, as per P315.104 Respiratory Protection.

4.13.1 Specific requirements for use

Mandatory respiratory protection areas/tasks include:

- Inside either of the alumina sheds or tunnels located in Raw Materials
- In the coal screening facility and unloading tunnels when operational
- Inside 1649 conveyor gallery, 1646 & 1649 transfer tower or 1646 tail valve chamber and control room
- Working on, in or around Cooling towers
- Bag change outs in Baghouses
- Hosing of the Kelly filter presses
- Asbestos removal
- Within coal stockpile area
- It is a requirement that if excessive dust/mist is present for any reason, regardless if it is a mandatory respirator area or not, the person's PPE is required to be upgraded with the correct respiratory protection

4.14 Life Jackets

Life jackets are required as per P314.320 Working On, Over or Adjacent to Water including the following situations:

- past the blue line demarcated on the wharf, unless directly accessing the Ship's gangway once it has been secured
- when working on the mooring dolphins
- when operating the Environment or Red Mud Dam boats when risk assessment deems necessary

4.15 Lights

A light must be carried at all times during the hours of darkness. This can be in the form of a flashlight, cat's eyes or the like.

4.16 Signage

Suitable signage to AS1319 Safety Signs for the occupational environment shall be posted in conspicuous locations in the workplace reminding people of the minimum standards of personal protective equipment required in that location. Signage shall be maintained in a clean and legible condition.

4.17 Jewellery, Hair and Personal Adornment

4.17.1 Not permitted

The following are not permitted to be worn in any Process, Maintenance (including Workshops) or Stores (including laydown) areas, substations and transformer yards:

- Finger rings (including wedding rings)
- Bracelets/bangles
- Dangly earrings
- Necklaces or neckties

No exposed conductive jewellery or adornments including, watches, metal frame spectacles, neck chains, rings/studs, metal zips that are in contact with the skin shall be worn by electrical workers while performing electrical work.

Long hair is to be tied back in any Process, Maintenance or Stores areas.

4.17.2 Permissible / Exceptions

Necklaces/chains are permitted provided they are of the type which give way or break under light strain if caught. They are to be retained inside the shirt at all times.

Watches are permitted provided they are close fitting and have a band which will give way or break under strain if caught.

Medic Alert bracelets are permitted provided they do not have trailing ends. Medic Alert neck chains are preferred.

Therapeutic copper cuff bracelets are permitted.

4.18 Special Variations

Variations to this procedure may be used when the wearing of designated personal protective equipment creates an additional hazard. Variations, both task specific and generic shall be supported by a Management of Change (P202.011 Change Authorisations) involving the Section Superintendent, Crew Safety Representative and the people performing the task, with the Safety and Plant Protection Superintendent or Specialist-Occupational Health & Hygiene included as the subject matter expert.

4.19 Red Mud Dam PPE Requirements

When working or visiting the Red Mud Dam, the following PPE is required:

- Safety helmets are required when working in construction areas
- Monogoggles and face shields are required in the process area of the neutralisation facility. Safety glasses are required as a minimum elsewhere
- Hearing protection is required in the process area of the neutralisation facility and when a risk assessment deems necessary

Protective clothing is required in all areas of the Red Mud Dam.

5.0 ATTACHMENTS

5.1 PPE Trial and Approval Flowchart

5.2 Exempted areas map for all PPE

5.3 Exempted areas map for safety helmets

5.4 Exempted areas map for monogoggles

5.5 Exempted areas map for protective clothing

5.6 Exempted areas map for hearing protection

5.7 Exempted areas map for face shields

5.8 Exempted areas map for hearing protection – during shutdown only

6.0 REFERENCES

6.1 QAL Documents

P001.001 - QAL Health, Safety, Environment and Communities Policy

P001.015 - QAL Safety Glasses Purchase and Authorisation

P202.011 - **Management of Change**

P314.270 - Imperfect Isolation Procedure

P314.320 - Working On, Over or Adjacent to Water

P315.104 - Respiratory Protection Program

PM316.001.63 - Safe Use – Diphoterine

S-252 - Monogoggle Fit Testing Checksheet

SAP drawing 256838 - General Plant PPE Exemption Areas

SM123 - Safe Use of Diphoterine

SMIND - **Plant Orientation for New Employees**

6.2 Associated ARCHER Risk Scenarios

Nil

6.3 External References

AS 1319 Safety signs for the occupational environment

AS/NZS 1269.3 Occupational noise management – Hearing protector program

AS/NZS 1270 Acoustics – Hearing protectors

AS/NZS 1337.1 Personal eye protection – Eye and face protectors for occupational applications

AS/NZS 1800 Occupational protective helmets – Selection, care and use

AS/NZS 1801 Occupational protective helmets

AS/NZS 2161.3 Occupational Protective Gloves - Part 3: Protection against Mechanical Risks

AS/NZS 2210.1 Safety, protective and occupational footwear – Guide to selection, care and use

AS 2210.3 - Personal Protective Equipment – Safety Footwear

AS 4602.1 High visibility safety garments – Garments for high risk applications

AS/NZS 4836 Safe working on or near low-voltage electrical installations and equipment

ANSI/ISEA 105 International Safety Equipment Association - Hand Protection Classification
EN 388: European Standard - Protective gloves against mechanical risks
ISO13997: European Standard – Protective clothing - Mechanical properties – Determination of resistance to cutting by sharp objects

7.0 DEFINITIONS

7.1 Designated Optical Equipment

Designated optical equipment means optical tools and optical equipment for example: - surveyor's theodolite, radar speed gun, microscope, dumpy levels and infrared scanners.

7.2 Process Areas

Process areas are Digestion, Clarification, Precipitation, Calcination, Boilerhouse, Raw Materials and RDA Neutralisation Plant. Roadways, buildings and workshops in these areas are not classed as process areas.

7.3 Chemical Splash Kit

A Chemical Splash Kit consists of 1 x 5 litre Diphoterine Autonomous Shower, 2 x 500ml portable eyewash units, housed in a carry case and a safety shower privacy kit (containing a privacy screen, disposable booties and overalls).

8.0 REVISION DETAILS

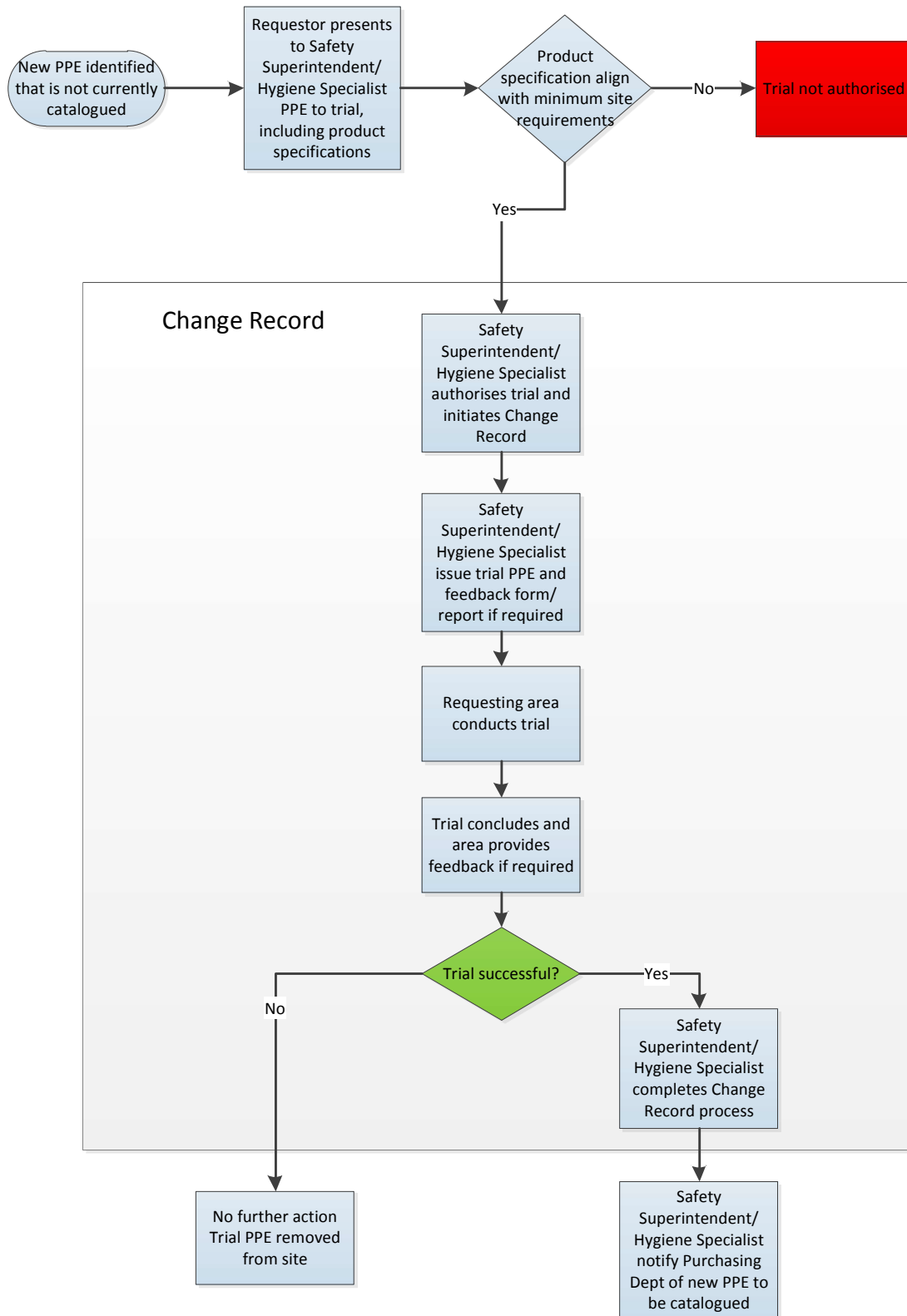
8.1 Latest Document Review Participants

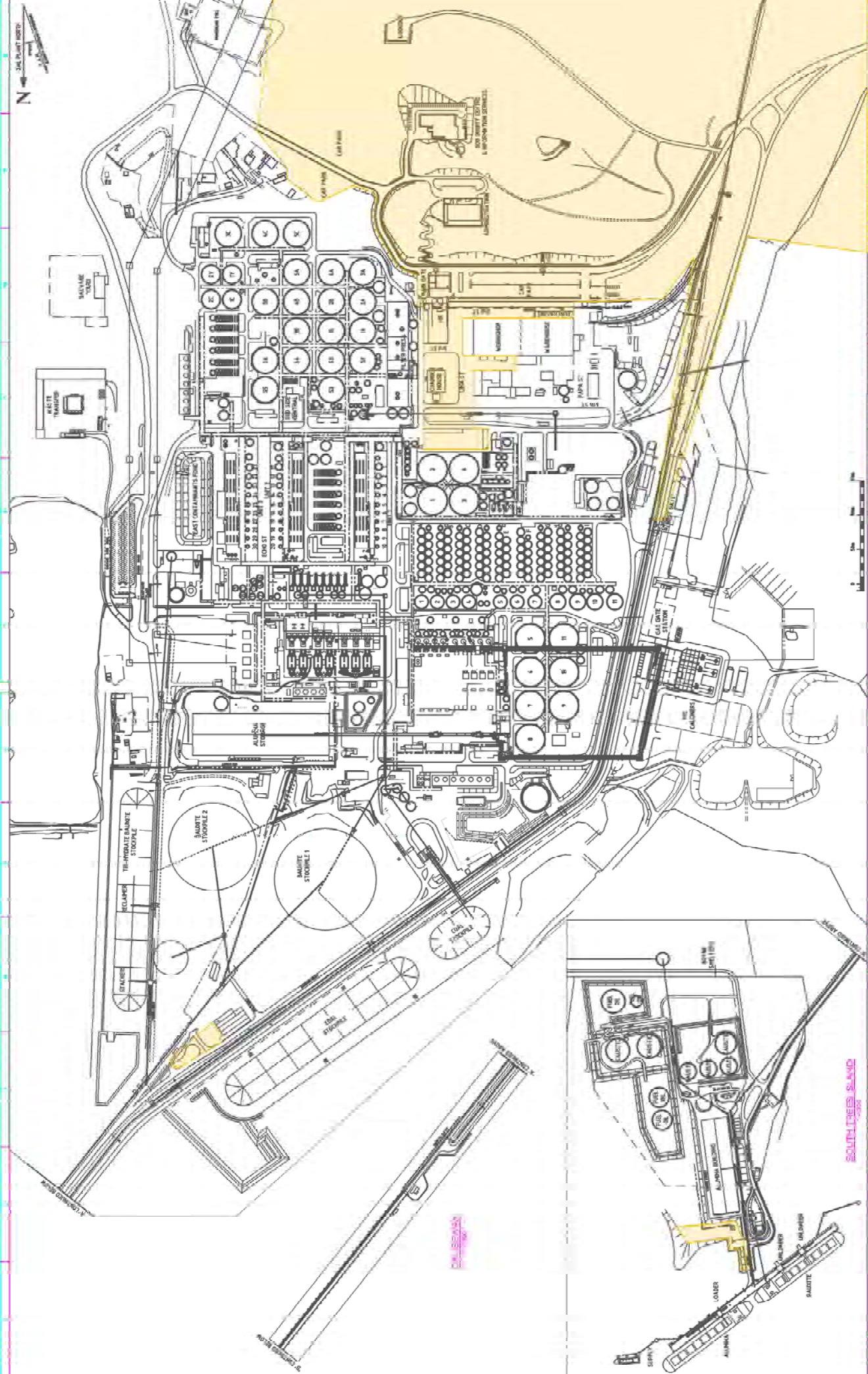
| Name | Role Title | Contribution <i>Technical/Subject Matter Expert, End User, Owner etc</i> |
|---------------------------------|---|---|
| Aaron Farrar | Acting Manager-Contractor Management | Contract Partners QAL Lead |
| Rhoda Tucker | External Services Coordinator | Contract Partners Facilitator |
| Plant Health & Safety Committee | Health & Safety Representatives | Reviewers |
| Julie Phillips | Safety Advisor | Subject Matter Expert |
| Craig Sinclair | Principal Advisor - Safety & Plant Protection | Subject Matter Expert & Content Author |
| Theunis Mienie | Manager-Human Resources | Reviewer |
| Simon Rice | Manager-Health Safety Env & Tailings | Subject Matter Expert & Reviewer |
| Damien Naidu | Superintendent - Digestion | Digestion face shield exemptions |

8.2 Revision History

| Iss | Rev | Date | Lead Reviewer | Details of Change | Approver Role | Approver Name |
|-----|-----|------------|-----------------|--|---|----------------|
| 3 | 13 | 30/06/2022 | Rob Stevenson | Action 4.3.2 - helmet exemption area of Contractor & Maintenance, adjacent toilet facilities and South East Operations Office facilities | | Craig Wise |
| 3 | 14 | 20/09/2022 | Julie Phillips | Section 4.9 Safety Footwear - updated for new safety boot range | | Craig Wise |
| 3 | 15 | 10/02/2023 | Julie Phillips | Wording to Responsibilities in section 3. Cut rating updated to section 4.10 | | Allison Hutton |
| 3 | 16 | 19/03/2026 | Jared Swindells | Exemption to safety footwear with new highlighted areas on Attachment 5.2, 5.6, 5.7, and 5.8 – General Plant PPE exemption areas (Map). Access from main gate along designated walk path to contract partner offices, adjacent to East West Road. Additional face shield exemptions added to 4.12.3 for Digestion. | Manager - Health Safety Environment & Comms | Aaron Farrar |

PPE Trial and Approval Flowchart



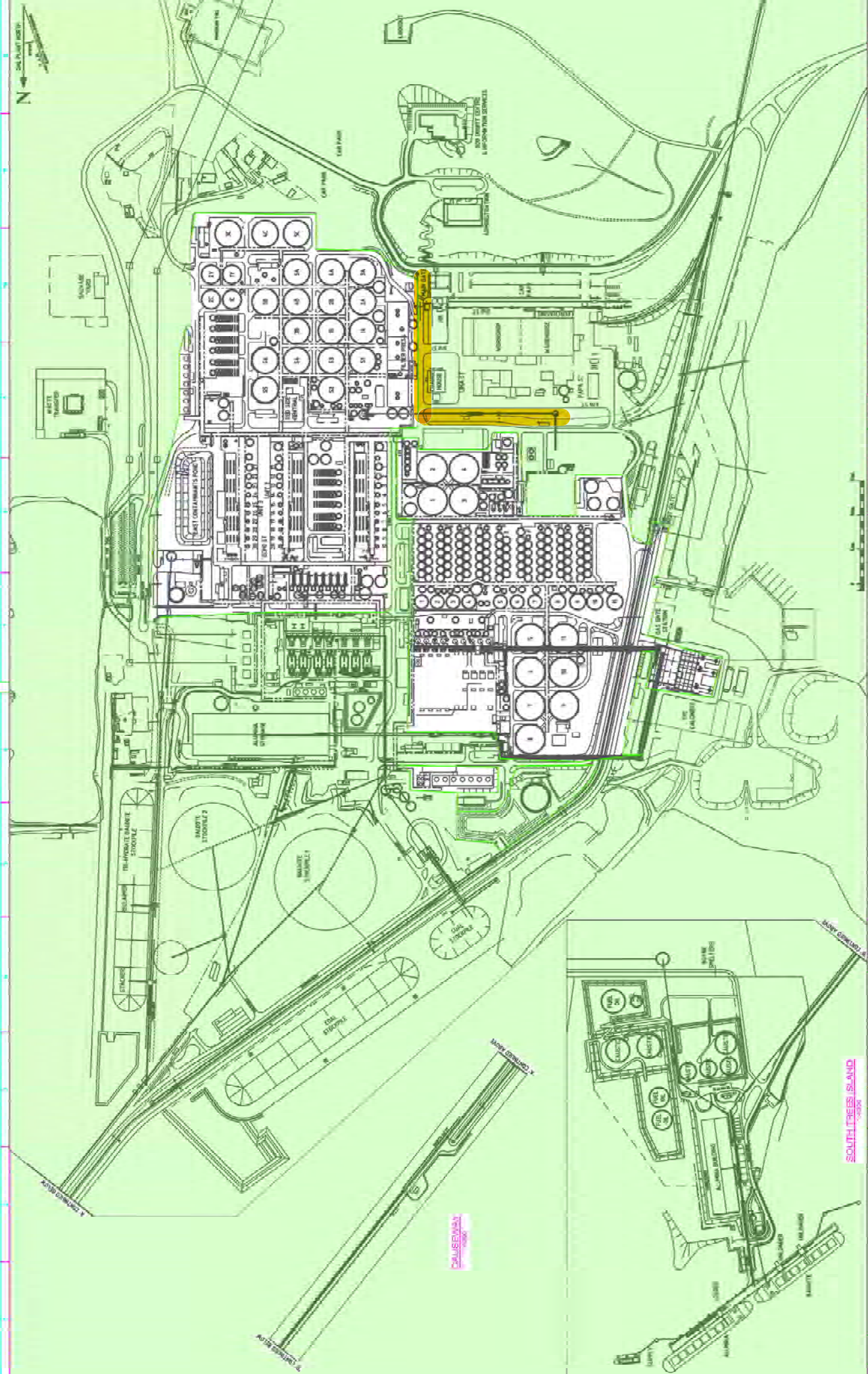


QUEENSLAND ALUMINA LIMITED

GENERAL PLANT
 PPE Exemption Areas
 HULLABAND AND SOUTH TREES ISLAND

- Exempt Monogoggles
- Exempt Protective Clothing (incl safety helmet and hearing protection)
- Exempt Faceshields
- Exempt Safety Helmets and Hearing Protection
- Exempt Hearing Protection only

Scale: 1:500
 Date: 01/04/2016
 Drawing No: 256838000

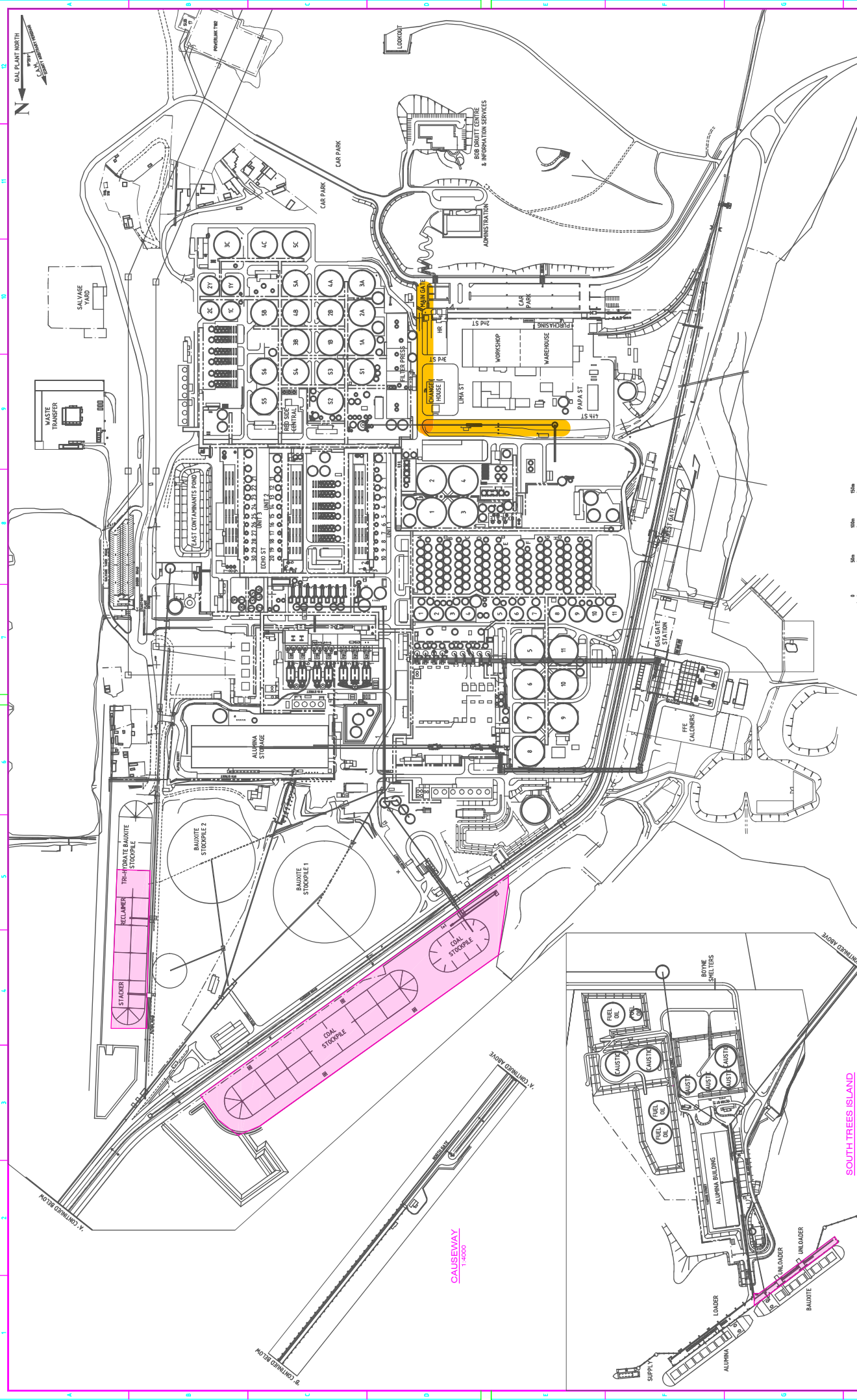


QUEENSLAND ALUMINA LIMITED

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- Exempt Monogoggles
 - Exempt Protective Clothing (incl. safety helmet and hearing protection)
 - Exempt Faceshields
 - Exempt Safety Helmets and Hearing Protection
 - Exempt Hearing Protection only
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| QUEENSLAND ALUMINA LIMITED | | GLADSTONE QUEENSLAND | |
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| GENERAL PLANT | | DATE | 15/02/2010 |
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| MAINLAND AND SOUTH TREES ISLAND | | DATE | |
| TYPE | EXEMPTION AREA | REVISION | NO. |
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| ACCOUNT ASSIGNMENT | | DATE | |
| APPROVAL | | DATE | |
| DRAWN BY | | DATE | |
| CHECKED BY | | DATE | |
| APPROVED BY | | DATE | |
| ALL DRAWINGS IN THIS PROJECT ARE TO BE VIEWED IN COLOUR UNLESS OTHERWISE SPECIFIED | | NOTE: THIS DRAWING IS BEST VIEWED WHEN PLOTTED IN COLOUR | |
| DRAWN TO AS PER PROJECT SPECIFICATION | | NOTES | |
| Exempt Monogoggles | | ● | |
| Exempt Protective Clothing (incl safety helmet and hearing protection) | | ● | |
| Exempt Faceshields | | ● | |
| Exempt Safety Helmets and Hearing Protection | | ● | |
| Exempt Hearing Protection only | | ● | |
| Exempt Hearing Protection—Shutdown-only | | ● | |
| Exempt Hearing Protection only | | ● | |
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