



October 30, 2015

Dear Towrang Community Members,

Holcim Australia Pty Ltd (Holcim) operates the Lynwood Quarry. Holcim is proposing to modify the Lynwood development consent through Modification 4 and open a new granite pit on Holcim owned land. The granite pit will replace the ignimbrite material currently being extracted. The granite material is better suited to providing consistent aggregate products for the life of the quarry. Throughout the assessment process Holcim has actively engaged with the surrounding communities to present the proposed changes contained in Modification 4 and listened to community feedback and concerns.

In response to concerns raised by members of the Towrang community regarding aspects of the operations at the Lynwood Quarry and potential impacts from the Modification 4, Holcim has developed a set of objectives and commitments which we believe will minimise potential impacts to the Towrang community. Holcim recognize that it is up to Holcim to develop the systems to achieve the objectives

Holcim propose the following;

### **Proposed Granite Pit**

## **Objectives**

Holcim will do everything practicable to ensure operational elements for the proposed granite quarry pit and associated works, including haul roads, trucks, plant and machinery are fully screened from sight from all existing residences in the Towrang Valley and surrounds.

Holcim will do everything practicable to ensure operational elements of the proposed granite quarry pit and associated works, including haul road traffic, plant and machinery do not impact the existing residences in the Towrang Valley and surrounds as far as is practicable in relation to noise, dust and vibration.

It is understood that the building of the bunds, haul roads, and overburden mounds will be visible during construction and maintaining vegetation, however Holcim will undertake these activities in a way to limit the offsite visual, noise and dust impacts.

## **Holcim's Commitments**

Holcim proposes to achieve the objectives through commitments included in our Environmental Assessment and project description lodgment to the State Government.

These commitments include:



- A 12 metre high amenity bund will be constructed adjacent to the western boundary of the proposed granite pit. A 12 metre high amenity bund connecting with the western amenity bund will be constructed adjacent the northern boundary of the proposed granite pit. The northern amenity bund will extend from the western boundary and will terminate before it intersects with the tributary which flows from the northern extent of the project area toward Lockyersleigh Creek. At spot locations the bund may be extended to 14 metres in height if required.
- Holcim will re-vegetate the granite pit eastern overburden bench as soon as practicable.
- Holcim will plant suitable native species to thickly vegetate the western and northern faces of the amenity bunds to grow to a height of 2-3 metres above the bund height.
- Holcim will engage a suitably qualified botanist/horticulturalist to ensure appropriate plants are chosen to ensure a thick, evergreen, robust screen can be achieved.
- In addition to the amenity bund, where required, Holcim propose to use semipermanent visual screens to shield the overburden removal activities. The screens will
  be of sufficient height to obscure vision of mobile plant undertaking top soil and
  overburden removal activities. The screens will be repositioned as the overburden
  removal activities progress through the development stages.
- Holcim will construct bunding along the western and southern faces of the haul road to screen vehicle movements leaving the pit and traveling to the established primary crusher. The proposed bunding will be of a height of 5 metres where required to screen vehicle movements, entering and leaving the pit and travelling to and from quarry processing facilities.
- Holcim will ensure that noise escaping from the granite pit operation will be minimised
  as far as practicable and will undertake noise attenuation measures as required,
  including, if necessary, the use of rubberised liners in the truck bodies.
- All crushing of material from the granite pit will be conducted at the existing crushing facilities. Holcim will only use machinery required to undertake extraction as per our development conditions, including drilling, blasting, loading, hauling, dust suppression, overburden removal and activities related to these operations.
- Overburden will only be removed during daylight hours.



# **Required Maintenance:**

- Holcim will ensure that the amenity bund is properly maintained to ensure its efficacy for the duration of the quarry license.
- Holcim will ensure all bund vegetation is appropriately maintained, watered, fertilized and where required replaced or replanted from time to time to ensure the objective of the bund and vegetation is continually achieved.
- When from time to time during the quarry license period improved technical innovations emerge that would deliver an improved outcome to the above objective Holcim will promptly adopt those innovations where practicable.
- Trucks will be maintained to ensure noise reduction measures do not diminish over time.

#### **Off Site Lighting Impacts**

## **Objective**

Holcim will do everything practicable to prevent and or minimise any off site lighting impacts from the Lynwood Quarry to all existing residences in the the Towrang Valley and surrounds.

## **Holcim's Commitments**

- Holcim will build a light proof fence with a minimum height of 9 metres along the full length of the western boundary of the car park access road and car park, shielding from view all road lighting and car park lighting fittings.
- Holcim will reduce the height of all light fittings used to illuminate the car park access road and car park to a height no greater than 8.5 metres above ground level.
   Holcim will cut off the surplus length of all light poles along the car park access road and in the car park just above the light fittings at 8.5 metres and ensure the light fitting cannot be moved to a greater height.
- All conveyor lights above the lighting screens are to be by default turned off and only
  illuminate when required maintenance or repair. When such maintenance or repair has
  been completed the conveyor lights will be turned off again.
- All conveyor lights above the lighting screen will be fitted with appropriate screens or light shades to reduce as far as is practicable any off site lighting impacts
- Holcim has committed to re-examine the Webb lighting report and to review the lights on the upper sections of the conveyor system. If additional screening is possible and practicable Holcim will modify accordingly.



• The list of recommendations made by Webb, presented and discussed at meeting 24 April 2015, includes a number of activities including adjusting light angles, reducing some 400w luminaires with 150w luminaires etc. Holcim will update the list of adjustments and attached to the Statement of Commitments with agreement that these light reduction modifications not be diminished or reduced, but they can be, by agreement, improved upon when the opportunity arises.

#### Maintenance:

- Holcim will maintain and repair when necessary the light proof fence so that for the duration of the licence period, and during any renewed licence period, the fence will achieve the stated objective.
- Holcim will ensure that at no time light fittings are mounted at a height greater than that
  of the light proof fence, with the exception of the current conveyor lights which exist
  above the lighting screen. Holcim have committed to installing switches controlling the
  upper half of the conveyor lights which exist above the lighting screens. Holcim commit
  to only using the lights to undertake emergency maintenance at night time as required.
- When from time to time during the quarry license period improved technical innovations emerge that would deliver an improved outcome to the above objective Holcim will promptly adopt those innovations where practicable.

I believe the objectives Holcim are committing to will be achieved by the means we are proposing.

Yours sincerely

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ttem No.	Applicable to:				
Car Pa	Applicable to:	Recommended Action	Comments	Priority *	Comments
i	ark Lighting	Replace 6# existing 400W (type B) fixtures and 2# existing type C			
Al	Car Park Lighting	fixtures with 150W MH Pierlite Mini-Master GMRA luminaries equipped with two step HID dimming ballast	AS 1158.3.1 Category P11b compliance can be achieved. Subject to Pierlite advice. Consider remote dimming ballast if integral ballast is not an option	1	No Longer required due to the introduction of the screen.
	Car Park Lighting	Mount new 150W luminaries at 7.5m above finished ground level	Subject to proceeding with Al	1	Due to the introduction of the screen this is no longer required
		Do not fit back light shields to new car park luminaries. Remove back			
A3	Car Park Lighting	light shields from remaining luminaries if A8 adopted Provide two (2) pole mounted PIR motion sensors to control dimming	Subject to proceeding with AI	1	Due to the introduction of the screen this is no longer required
A4 A5	Car Park Lighting Car Park Lighting	of car park lights, preset to 10 minute delay.  Remove top section of pole above 7.5m	Lighting communication by control cable or Wi-Fi	2	No Longer required due to the introduction of the screen.  Complete
A6	Car Park Lighting	Paint the top section of each pole (above 2.5m AFGL)	Use a flat matt black paint suitable for application on galvanised steel	2	This action no longer required as the top sections of poles are being removed
		Redesign car park lighting using new LED luminaries with sharp backlight control and Wi-Fi controlled dimmable drivers		2	
A7 A8	Car Park Lighting Car Park Lighting	Removal of L36, L38, L40 & L42	Option for consideration if Pierlite advise A1 is not feasible Option 2 in lieu of A1+A2	3	No Longer required due to Screen Installation  No Longer required due to Screen Installation
Roadw	ay and General	Site Lighting			
	Roadway and General Site		The back light shields on these luminaries are a high luminance source that is visible from off site. Their removal will reduce this off-site lighting		
Bl	Lighting Roadway and General Site	Remove back light shields from ALL lights mounted on the 15m poles Modify the mounting configuration of affected luminaries so that all	impact.	1	Complete
B2	Lighting	supporting structure is above the fixture	By under-slinging the fixtures the brackets would not be directly illuminated	1	Complete
В3	Roadway and General Site Lighting	Paint the top section of each pole black (above 2.5m AFGL)	Use a flat matt black paint suitable for application on galvanised steel or other effective method	2	This action no longer required as the top sections of poles are being removed
					Pole No.47 carries two fittings - one faces east (i.e. towards plant) and the other faces west (i.e. towards admin blg). The west facing
	Roadway and General Site	Remove the luminaire on L47 that faces Administration building			has been disconnected and the east facing will be lowered to 7.5m
D4	Lighting	Remove the luminaire on L47 that faces Administration building		1	(below the screen height). Pole No.48 carries two fittings - one faces east (i.e. towards plant)
	Roadway and General Site	Temporarily disable the luminaire on L48 that faces the Administration/			and the other faces west (i.e. towards admin blg). The west facing has been disconnected and the east facing will be lowered to 7.5m
	Lighting Roadway and General Site	Amenities building courtyard		1	(below the screen height).
B6	Lighting	Provide alternative courtyard lighting on the buildings, as required		2	No Longer required due to Screen Installation
В7	Roadway and General Site Lighting	If B5 is considered a preferred long term solution, remove the disabled luminaire		2	No Longer required due to Screen Installation
В8	Roadway and General Site Lighting	Provide local IP56 rated light switch on poles L50 and L64 at Dam 1 and Dam F pump stations	Create an operational procedure to ensure these lights are only turned ON when required.	1	Complete
	Roadway and General Site Lighting	Provide new pedestrian lighting between Admin building, Control Room & Process Plant Area	For safe navigation by pedestrians	2	No Longer required due to Screen Installation.
В/	Lighting	Noon et roces rant rica	For saic navigation by processians	2	100 Longer required due to Screen instanation.
Conve	yor Gantry Ligh	ting			
C1	Conveyor Gantry Lighting	Provide local key switching of gantry lights that are above nominal RL 673m at entry and exit points to each gantry	Incorporate mechanism to prevent lights being switched OFF inadvertently and a work practice procedure to ensure lights are only ON when required	2	Currently being designed by Holcim Contractor cannot be installed until Practical Completion - we have a design solution in place and awaiting access to the site
					The screen eliminates the need to do this below RL 673. For those above RL 673 an alternative light design GEOLED with inbuilt cover and LED lighting has been recommended (reference action
C2 C3	Conveyor Gantry Lighting Conveyor Gantry Lighting	Install light weight perforated cover Replace existing gantry lighting with LED handrail type lighting	To screen lights and conveyor covers above RL.673 from view	3	X3). This option has been superseded by option C1 and C2.
C41	A El J T :-	1.4			
Stacke	r Area Flood Lig	gnting I			
D1.1	Stacker Area Flood Lighting	Adjust tilt to max 10 <sup>0</sup>	Incorporate mechanism preventing tilt above $10^0$	1	Currently being designed by Holcim Contractor cannot be installed until Holcim are given access to the plant by Metso - we have a design solution in place and awaiting access to the conveyors
					Currently being designed by Holcim Contractor cannot be installed
D1.2	Stacker Area Flood Lighting	Provide local switching	Develop procedure to ensure lights are only turned ON when required	1	until Holcim is given access to the plant by Metso - we have a design solution in place and awaiting access to the conveyors
D1.3	Stacker Area Flood Lighting	Provide remote switching from control room	Subject to operational requirements	3	Currently being designed by Holcim Contractor. Remote Control is being considered.
D1.4	Stacker Area Flood Lighting	Provide dimming ballasts and remote control	Subject to operational requirements	3	Dimming will not be an option. Remote Control is being investigated.
	Lights on Buildin Area Lights on Building	g Facades			
E1.1	Facades	Adjust tilt to max 10 <sup>0</sup>	Incorporate mechanism preventing tilt above 100	1	Complete
	Area Lights on Building Facades	Replace 400W luminaries with lower wattage	Where mounting height is low	2	No Longer required due to Screen Installation.
D ". ~:					
Rail Si	aing				These lights are below the screen height - Holcim will
Fl	Rail Siding	Upgrade lighting to increase levels	Subject to Holcim risk assessment	2	independently assess as part of operational risk
	rn Site Boundary				
	Western Site Boundary Western Site Boundary	Construct a wall Construct an earth mound and / or	Investigate effectiveness at various heights and lengths	3	Currently underway. Not required - Refer to Item.Gl.1
	Western Site Boundary	Plant dense plantation of suitable trees	Investigate tree selection	3	Not required - Refer to Item.G1.1
04	., .				
Other X1	items being cons	idered by Holcim			Lights along the access road to the car park - light fittings to be reduced from 12.5m to 7.5m.
					Investigation of installing shields around the conveyor lights for
X2					those lights above RL of the top of screen fence  Outcome from item.X2 - to replace the current fitting with new  GEOLED. Fitting for those conveyor lights that are above the
1 [					
Х3					Screen Height.

Notes:

Priority.1 = Highly recommended to undertake immediately
Priority.2 = Recommended for concept development / review and potential implementation (subject to outcome of the development/review)
Priority.3 = Proposed option(s) for consideration
Items.X1, X2, & X3 are Holcim initiatives (over and above the recommendations from Webb Aust)