

HOLCIM EMP CONSULTANT RECOMMENDATIONS

Document	Consultant	Item #	Nonconformance/Opportunity for improvement	Recommendation description	Comments by Holcim	Status
2023 EMP Audit	Envirorisk Management	1	Opportunity for improvement	Complete, issue and implement the Work Procedure being developed for waste management training.		
2023 EMP Audit	Envirorisk Management	2	Opportunity for improvement	Conduct an annual refresher induction for relevant Holcim employees, examining particular issues (beneficial and detrimental) that occurred over the preceding year as well as a reminder of the key environmental aspects of the site, highlighting any changes from the preceding year.		
2023 EMP Audit	Envirorisk Management	3	Opportunity for improvement	Prepare an EMP variation to pick up on items not corrected in the most recent 5 year review (e.g. some of the changes to EPA's legislation).		
2023 EMP Audit	Envirorisk Management	4	Opportunity for improvement	Some dirt is being tracked onto the roadway at the truck pull-over area outside the main gate. This should be investigated as to whether this was a 'one off' situation or a consistent problem, and rectified if the latter.		
2023 EMP Audit	Envirorisk Management	5	Opportunity for improvement	Continue progressively replacing air monitors with new machines as a priority. Take any other necessary preventative measures to reduce the likelihood of data gaps occurring in future and respond to equipment outages, e.g. refurbishment or replacement of weather monitoring station (see Rec. 1), using BoM data from nearby representative monitoring station to cross-check site data.		
2023 EMP Audit	Envirorisk Management	6	Opportunity for improvement	Revise the sub-sections referring to fortnightly noise monitoring to incorporate the following methodology. All monitoring at resident locations should occur initially by measuring the 5 min LAeq (the 'noise level estimate'), with the measurer noting whether quarry noise is audible. Where a location registers a level estimate within 1 dB of the applicable EMP limit on two successive occasions where quarry noise is clearly audible, an expert with qualifications and experience in environmental noise measurement should be engaged to assess the noise level at that location in accordance with the published EPA Vic methodology current at the time to determine compliance with the EMP limit.		
2023 EMP Audit	Envirorisk Management	7	Opportunity for improvement	Where a distinction between the contributions of paddock runoff and quarry water needs to be made to help investigate inputs and sources, Dam water discharge should be field-tested at the end of the discharge pipe from the Dam (located at the toe of dam wall), not within the Dam itself.		
2023 EMP Audit	Envirorisk Management	8	Opportunity for improvement	Holcim should implement the two (2) recommendations of the AECOM Groundwater and Spring Review letter report of 15 March, 2023.		
2023 EMP Audit	Envirorisk Management	9	Opportunity for improvement	Holcim advises that it plans to install visual level gauges in each quarry pit/dam (northern and southern). These should be calibrated by survey so water levels can continue to be recorded as R.L.s (AHD).		
2023 EMP Audit	Envirorisk Management	10	Opportunity for improvement	The AECOM slope inspection letter report (Feb, 2023) makes a number of recommendations for remedial works to mitigate the minor movements and other land stability issues observed. These recommendations should be entered into the ICARE 'action items' system and tracked to close out.		
2023 EMP Audit	Envirorisk Management	11	Opportunity for improvement	Where early morning truck queuing adversely impacts local amenity, advisory measures such as signs at the bottom of Mt Shamrock Road should be considered and implemented in consultation with the responsible authority.		
2023 EMP Audit	Envirorisk Management	12	Opportunity for improvement	Holcim should update the smoke alarms and detectors inspection checklist to remove reference to detectors with no remote indication.		
2023 EMP Audit	Envirorisk Management	13	Opportunity for improvement	As part of the EMP variation referenced in iii above, Holcim should draft appropriate waste management target(s) and submit to ERC for comment, and Council for approval, as provided for in s.8.3 EMP Variation and Appendix 3 of the EMP, 2021.		
2023 EMP Audit	Envirorisk Management	14	Opportunity for improvement	Confirm with the priority waste removal contractor whether comingling of grease and silicon cartridges is acceptable practice. If not and the latter is a contaminant, toolbox relevant personnel on correct segregation of these items and put signs on containers to reinforce the message.		
2023 EMP Audit	Envirorisk Management	15	Opportunity for improvement	As part of the EMP variation referenced in iii above, Holcim should revise the annual waste survey requirements of the EMP to a form of words that – a. best reflects a credible and effective waste minimisation and disposal strategy that aligns with the waste hierarchy and the circular economy principles of sustainable resource management, and b. provides a means of achieving the waste management targets.		
2023 EMP Audit	Envirorisk Management	16	Opportunity for improvement	Progress all outstanding recommendations from the 5 yearly Dam integrity report that were contingent on completion of the consequence category assessment.		
2023 EMP Audit	Envirorisk Management	17	Opportunity for improvement	Investigate and implement actions to mitigate the impacts of kangaroos and deer on the rehabilitation works.		
2023 EMP Audit	Envirorisk Management	18	Opportunity for improvement	The quarry boundary fence should be fixed if practical and effective to prevent feral animal damage and undermining.		
2022 Groundwater and Spring Review	AECOM	1	Opportunity for improvement	Decrease the number of spring surveys to one event per annual review period. The spring survey should be completed during the same season to capture late spring and summer conditions, when springs are likely not affected by significant periods of rainfall	Agreed. To be adopted in 2023	Complete

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2022 Groundwater and Spring Review	AECOM	2	Opportunity for improvement	Remove SP10 from ongoing monitoring where ground disturbance associated with the 2014 construction of the fire access track has stopped this seep from being a discrete groundwater discharge point separate from SP09.		
2022 Slope stability review	AECOM	1	Opportunity for improvement	Maintain existing regular visual inspection procedures by site personnel (i.e. maintain the approximately weekly to fortnightly inspections of each area as part of general operations, with more frequent visits to locations with identified issues). If indications of slope instability are identified, notify a suitably experienced and qualified geotechnical engineer / engineering geologist for further assessment	Agreed. Inline with current practices	Complete
2022 Slope stability review	AECOM	2	Opportunity for improvement	Continue efforts to manage surface water runoff from the natural springs; and	Agreed. Inline with current practices	Complete
2022 Slope stability review	AECOM	3	Opportunity for improvement	Continue to undertake annual inspections during spring and potentially following extended periods of prolonged, intense rainfall should it occur during the review period	Agreed. Inline with current practices	Complete
2022 Slope stability review	AECOM	4	Opportunity for improvement	Remedial treatment of Mass13 and Mass06 Dam with reinstatement of the dam crest		
2022 Rehabilitation Report	Naturelinks	1	Opportunity for improvement	South-East Extraction - Continued herbicide application to Chilean needle grass.	Agreed. Inline with current practices	Complete
2022 Rehabilitation Report	Naturelinks	2	Opportunity for improvement	South-East Extraction - Continued slashing and selective herbicide application to perennial exotic grasses	Agreed. Inline with current practices	Complete
2022 Rehabilitation Report	Naturelinks	3	Opportunity for improvement	South-East Extraction - Maintain broadleaf-selective herbicide application	Agreed. Inline with current practices	Complete
2022 Rehabilitation Report	Naturelinks	4	Opportunity for improvement	South-East Extraction - Continuation of plantings of dry-tolerant mid and lower story species along ridgeline and back slope to expand revegetation zone and reduce weed coverage	Agreed - Naturelinks engaged to complete plantings	
2022 Rehabilitation Report	Naturelinks	5	Opportunity for improvement	Southern Extraction - Continue targeting of Phalaris aquatica via slashing and follow up herbicide application in 2023 to encourage native germination	Agreed. Inline with current practices	Complete
2022 Rehabilitation Report	Naturelinks	6	Opportunity for improvement	Southern Extraction - Continual management of broad-leaf exotic species with selective herbicide application.	Agreed. Inline with current practices	Complete
2022 Rehabilitation Report	Naturelinks	7	Opportunity for improvement	Southern Extraction - Continual management of Chilean needle grass via herbicide application	Agreed. Inline with current practices	Complete
2022 Rehabilitation Report	Naturelinks	8	Opportunity for improvement	Southern Extraction - Plant additional drought tolerant species	Agreed - Naturelinks engaged to complete plantings	
2022 Rehabilitation Report	Naturelinks	9	Opportunity for improvement	Extraction Site - Planting of small dry tolerant shrubs on rise below main access track	Agreed - Naturelinks engaged to complete plantings	
2022 Rehabilitation Report	Naturelinks	10	Opportunity for improvement	Extraction Site - Targeting broad leaf exotic species and blackberry with herbicide application by knapsack	Agreed. Inline with current practices	Complete
2022 Rehabilitation Report	Naturelinks	11	Opportunity for improvement	Phase A & B Site - Follow up annual targeted herbicide application of Chilean Needle Grass with the aim of eventual elimination is recommended.	Agreed. Inline with current practices	Complete
2022 Rehabilitation Report	Naturelinks	12	Opportunity for improvement	Phase A & B Site - Conduct off site survey on Holcim owned properties to better understand infestations of Chilean Needle Grass encroaching on Phase A & B's future impact on rehabilitation.	Agreed - Naturelinks engaged to complete this work	
2022 Rehabilitation Report	Naturelinks	13	Opportunity for improvement	Phase A & B Site - Herbicide application targeting blackberry in this area is recommended in the autumn of 2023.	Agreed. Inline with current practices	Complete
2022 Rehabilitation Report	Naturelinks	14	Opportunity for improvement	Phase A & B Site - Continued managing thistle species by herbicide application using knapsack and tanker spray units	Agreed. Inline with current practices	Complete
2022 Rehabilitation Report	Naturelinks	15	Opportunity for improvement	Phase A & B Site - Additional plantings to be undertaken on the northern end of site to bolster screening for nearby stakeholders	Agreed - Naturelinks engaged to complete plantings	
2022 Rehabilitation Report	Naturelinks	16	Opportunity for improvement	Phase A & B Site - Recommend deer impact to be independently assessed by a pest management consultant and that repair of external fencing to be considered	Under review	
2022 Rehabilitation Report	Naturelinks	17	Opportunity for improvement	Phase A & B Site - Expand species diversity by planting a small number of over storey species	Agreed - Naturelinks engaged to complete plantings	
2022 Rehabilitation Report	Naturelinks	18	Opportunity for improvement	Phase C - Continue control of broadleaf weeds and blackberry with herbicide	Agreed. Inline with current practices	Complete
2022 Rehabilitation Report	Naturelinks	19	Opportunity for improvement	Phase C - Chainsaw large woody weeds in area marked in blue and to the south of the area marked in red (See Figure 7).	Agreed. Inline with current practices	Complete
2022 Rehabilitation Report	Naturelinks	20	Opportunity for improvement	Phase C - Increasing species diversity by planting a small number of Powelltown Coreia reflexa var. lobatus	Agreed - Naturelinks engaged to complete plantings	
2022 Rehabilitation Report	Naturelinks	21	Opportunity for improvement	0.8 Hectare Revegetation Site - Continue targeting broadleaf exotic species with herbicide application	Agreed. Inline with current practices	Complete
2022 Rehabilitation Report	Naturelinks	22	Opportunity for improvement	0.8 Hectare Revegetation Site - Continue expanding species diversity in particular shrub species more adapted to stabilised conditions	Agreed - Naturelinks engaged to complete plantings	
2022 Rehabilitation Report	Naturelinks	23	Opportunity for improvement	0.8 Hectare Revegetation Site - Lily plantings to be double staked and guarded in the same way as trees and shrubs	Agreed - Naturelinks engaged to complete plantings	
2022 Rehabilitation Report	Naturelinks	24	Opportunity for improvement	Landslip Sites - Due to extremely late planting monitor plant survival and possible plant replacement in 2023		

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2022 Rehabilitation Report	Naturelinks	25	Opportunity for improvement	Landslip Sites - Herbicide treatment of blackberry stands and Spear Thistles Mass 4.	Agreed. Inline with current practices	Complete
2022 Rehabilitation Report	Naturelinks	26	Opportunity for improvement	Net Gain Site - Managing problem exotic species with herbicide application and hand-weeding including Bishop's Weed (Ammi visnaga), English ivy (Hedera helix), Japanese Honeysuckle (Lonicera japonica) and St. Augustine Grass (Stenotaphrum secundatum).	Agreed. Inline with current practices	Complete
2022 Rehabilitation Report	Naturelinks	27	Opportunity for improvement	Net Gain Site - Increasing species diversity by planting a small number of Powelltown Corea, Corea reflexa var. lobatus	Agreed - Naturelinks engaged to complete plantings	
2022 Rehabilitation Report	Naturelinks	28	Opportunity for improvement	Net Gain Site - Recommend deer impact to be independently assessed by a pest management consultant	Under review	
2022 Rehabilitation Report	Naturelinks	29	Opportunity for improvement	1.2 Hectare Revegetation Site - Keeping broadleaf weeds controlled via selective herbicide application by spray tanker. Site access by vehicle with attached trailer mounted tanker may be challenging during the wetter months. Continue to work with Quarry management about improved vehicle track access	Agreed. Inline with current practices	Complete
2022 Rehabilitation Report	Naturelinks	30	Opportunity for improvement	1.2 Hectare Revegetation Site - Undertake second round of planting similar to the first broadening species diversity and increasing indigenous tree and shrub coverage	Agreed - Naturelinks engaged to complete plantings	Complete
2022 Rehabilitation Report	Naturelinks	31	Opportunity for improvement	1.2 Hectare Revegetation Site - Recommend deer impact to be independently assessed by a pest management consultant	Under review	
2022 Rehabilitation Report	Naturelinks	32	Opportunity for improvement	Paddock Replacement Site - Repair of damaged quadrants to exclude cattle		
2022 Rehabilitation Report	Naturelinks	33	Opportunity for improvement	Paddock Replacement Site - Potential replacement of a small number of dead plantings in 2023		
2022 EMP Audit	Envirorisk Management	6	Opportunity for improvement	Consideration of a peer review (by an agreed independent hydrogeologist) of the spring water report be revisited should concern continue to be raised by neighbours following the winter period.	GHD have been issued a PO for this work.	In-progress
2022 EMP Audit	Envirorisk Management	13	Opportunity for improvement	Investigate with the owner of the on-site electrical transformer unit regarding its polychlorinated biphenyls (PCB) status. If residual PCBs are present a clean up of leaked oil will likely be required.	New transformer has been ordered by Ausnet and will be replaced.	In-progress
2021 - Slope stability review	AECOM	1	Opportunity for improvement	Fill animal burrowing holes and revegetate scarps at Mass11	Agreed will complete when ground conditions permit	In-progress
2021 - Slope stability review	AECOM	4	Opportunity for improvement	Remedial treatment of Mass06 Dam with reinstatement of the dam crest and construction of a barricade to prevent animal access to the dam crest.	Carried over in the 2022 report actions.	
2021 EMP Audit	Envirorisk Management	11	Opportunity for improvement	To ensure consistency and reliability in data gathering, Holcim should develop a noise monitoring procedure so that it is to be followed by all personnel conducting routine and periodic noise monitoring as specified in the monitoring section of the EMP	Drafted	In-progress
2021 EMP Audit	Envirorisk Management	23	Opportunity for improvement	Develop and deliver a toolbox talk on waste management on the site, after further management measures have been agreed with the waste contractors	Will be developed as a work procedure.	In-progress
2020 Die Back Report	Naturelinks	5	Opportunity for improvement	Access track provided through site to ensure access for future management vehicles, to ensure effective and efficient watering and weed control.	In review with Naturelinks - additional access gates may assist	In-progress