

104 Market Street Wollongong NSW 2500 Australia

MONTLY SITE INSPECTION REPORT

July 2019 J153825-03

NSW Department of Education

Cringila Public School 35 Sheffield St, Cringila NSW 2502

C107741: RC/TO

greencap.com.au ABN 76 006 318 010



Statement of Limitations

All and any Services proposed by Greencap to the Client were subject to the Terms and Conditions listed on the Greencap website at: www.greencap.com.au/about-greencap/terms-and-conditions. Unless otherwise expressly agreed to in writing and signed by Greencap, Greencap does not agree to any alternative terms or variation of these terms if subsequently proposed by the Client. The Services were carried out in accordance with the current and relevant industry standards of testing, interpretation and analysis. The Services were carried out in accordance with Commonwealth, State, Territory or Government legislation, regulations and/or guidelines. The Client was deemed to have accepted these Terms when the Client signed the Proposal (where indicated) or when the Company commenced the Services at the request (written or otherwise) of the Client.

The services were carried out for the Specific Purpose, outlined in the body of the Proposal. To the fullest extent permitted by law, Greencap, its related bodies corporate, its officers, consultants, employees and agents assume no liability, and will not be liable to any person, or in relation to, any losses, damages, costs or expenses, and whether arising in contract, tort including negligence, under statute, in equity or otherwise, arising out of, or in connection with, any matter outside the Specific Purpose. The Client acknowledged and agreed that proposed investigations were to rely on information provided to Greencap by the Client or other third parties. Greencap made no representation or warranty regarding the completeness or accuracy of any descriptions or conclusions based on information supplied to it by the Client, its employees or other third parties during provision of the Services. Under no circumstances shall Greencap have any liability for, or in relation to, any work, reports, information, plans, designs, or specifications supplied or prepared by any third party, including any third party recommended by Greencap. The Client releases and indemnifies Greencap from and against all Claims arising from errors, omissions or inaccuracies in documents or other information provided to Greencap by the Client, its employees or other third parties.

The Client was to ensure that Greencap had access to all information, sites and buildings as required by or necessary for Greencap to undertake the Services. Notwithstanding any other provision in these Terms, Greencap will have no liability to the Client or any third party to the extent that the performance of the Services was not able to be undertaken (in whole or in part) due to access to any relevant sites or buildings being prevented or delayed due to the Client or their respective employees or contractors expressing safety or health concerns associated with such access.

Unless otherwise expressly agreed to in writing and signed by Greencap, Greencap, its related bodies corporate, its officers, employees and agents assume no liability and will not be liable for lost profit, revenue, production, contract, opportunity, loss arising from business interruption or delay, indirect or consequential loss or loss to the extent caused or contributed to by the Client or third parties, suffered or incurred arising out of or in connection with our Proposals, Reports, the Project or the Agreement. In the event Greencap is found by a Court or Tribunal to be liable to the Client for any loss or damage arising in connection with the Services, the Client's entitlement to recover damages from Greencap shall be reduced by such amount as reflects the extent to which any act, default, omission or negligence of the Client, or any third party, caused or contributed to such loss or damage. Unless otherwise agreed in writing and signed by both parties, Greencap's total aggregate liability will not exceed the total consulting fees paid by the client in relation to this Proposal. For further detail, see Greencap's Terms and Conditions available at www.greencap.com.au/about-greencap/terms-andconditions.

The Report is provided for the exclusive use of the Client and for this Project only, in accordance with the Scope and Specific Purpose as outlined in the Agreement, and only those third parties who have been authorized in writing by Greencap. It should not be used for other purposes, other projects or by a third party unless otherwise agreed and authorized in writing by Greencap. Any person relying upon this Report beyond its exclusive use and Specific Purpose, and without the express written consent of Greencap, does so entirely at their own risk and without recourse to Greencap for any loss, liability or damage. To the extent permitted by law, Greencap assumes no responsibility for any loss, liability, damage, costs or expenses arising from interpretations or conclusions made by others, or use of the Report by a third party. Except as specifically agreed by Greencap in writing, it does not authorize the use of this Report by any third party. It is the responsibility of third parties to independently make inquiries or seek advice in relation to their particular requirements and proposed use of the site.

The conclusions, or data referred to in this Report, should not be used as part of a specification for a project without review and written agreement by Greencap. This Report has been written as advice and opinion, rather than with the purpose of specifying instructions for design or redevelopment. Greencap does not purport to recommend or induce a decision to make (or not make) any purchase, disposal, investment, divestment, financial commitment or otherwise in relation to the site it investigated.

This Report should be read in whole and should not be copied in part or altered. The Report as a whole set outs the findings of the investigations. No responsibility is accepted by Greencap for use of parts of the Report in the absence (or out of context) of the balance of the Report



Document Control

Document Quality Management Details.			
Report Name:	Cringila Public School - Monthly Site Inspection Report		
Site Details:	Cringila Public School, 35 Sheffield Street, Cringila NSW 2502		
Project Number:	J153825-03		
Client Name:	NSW Department of Education		
Client Number:	C107741		
	Prepared By:	Reviewed By:	
Signatures:	Tom Oyston Property Risk Consultant	Rowan Clark Senior Consultant - Property Risk & Environment	

Issue Status

Version No.	Date	Creator	Reviewer
1	26/07/2019	Tom Oyston	Rowan Clark

Document Circulation

No of Copies	Туре	Customer Name	Position & Company
1	Electronic	Greg Mott	Senior Group Leader, School Infrastructure NSW, Southern NSW AMU

Page ii greencap.com.au



Cringila Public School - Monthly Site Inspection Report

NSW Department of Education

Table of Contents

1.	Site Inspection Checklist (completed by Greencap consultant)	1
2.	Discussion	2
	Near-surface Temperature Monitoring	
	Ambient Air Quality Monitoring	
2.3	Indoor Air Quality Monitoring	2
2.4	Subsurface Gas Monitoring	2
	Appendix A – Site Photographs	3
	Appendix B – Site Map	4

Page iii greencap.com.au

1. Site Inspection Checklist (completed by Greencap consultant)

Inspection Item	Yes	No	Action Required
Were all areas of the site inspected? (see Appendix B) 1. North-western hotspot area 2. Western carpark & garden 3. Basketball courts & play area 4. Northern & southern grassed areas	✓		Continue inspections of all areas of the site on a regular basis (weekly inspections for the north-western hotspot, monthly for other areas). Make note of any areas that are inaccessible at time of inspection.
Was the exclusion zone fencing surrounding the north-western hotspot area intact?	✓		Continue inspections of exclusion zone fencing on a weekly basis. If exclusion zone fencing is not intact, take a photo and mark the area of concern. Inform the School Principal.
Was any evidence of subsidence or slope failure observed within the north-western hotspot area?		✓	Continue inspections of north-western hotspot area on a weekly basis. If evidence of subsidence or slope failure is observed, take a photo and undertake spot monitoring for gases of concern. Inform the Greencap Project Managers (Sydney & Wollongong).
Was any visual or olfactory evidence of combustion (e.g. fumes, smoke, sulphurous smell) observed within the north-western hotspot area?		√	Continue inspections of north-western hotspot area on a weekly basis. If visual or olfactory evidence of combustion is observed, take a photo and undertake spot monitoring for gases of concern. Inform the Greencap Project Managers (Sydney & Wollongong).
Was any evidence of deteriorating vegetation observed within the north-western hotspot area?		✓	Continue inspections of north-western hotspot area on a weekly basis. If evidence of deteriorating vegetation is observed, take a photo and inform the Greencap Project Managers (Sydney & Wollongong).
Was weekly near-surface temperature monitoring conducted within the northwestern hotspot area?	√		Continue near-surface temperature monitoring on a weekly basis. If monitoring identifies concerningly high temperatures or rapid change in the spatial extent of the underground hotspot, inform the Greencap Project Managers (Sydney & Wollongong).
Was weekly ambient air quality monitoring conducted within the north-western hotspot area?	✓		Continue ambient air quality monitoring on a weekly basis. If monitoring identifies concentrations of hazardous gases in exceedance of assessment criteria, inform the Greencap Project Managers (Sydney & Wollongong).
Was weekly indoor air quality monitoring conducted within school buildings?	√		Continue indoor air quality monitoring on a weekly basis. If monitoring identifies concentrations of hazardous gases in exceedance of assessment criteria, inform the Greencap Project Managers (Sydney & Wollongong).
Was monthly subsurface gas monitoring conducted within installed gas wells and service pits?	✓		Continue subsurface gas monitoring on a monthly basis. If monitoring identifies concentrations of hazardous gases in exceedance of assessment criteria, inform the Greencap Project Managers (Sydney & Wollongong).

If at any time a Critical Incident or emergency occurs, follow the protocols set out in **Section 9** of the Interim Site Management Plan (ISMP Version 3, December 2018).

2. Discussion

2.1 Near-surface Temperature Monitoring

Near-surface temperature monitoring results for the month of July indicated that the spatial extent of the northwest hotspot appears to remain localised.

No significant near-surface temperature variations were identified during the period of monitoring.

2.2 Ambient Air Quality Monitoring

Ambient air quality monitoring results for the month of July did not indicate the presence of monitored gases in elevated concentrations; even at the source (i.e. the subsurface hotspot vent source).

Concentrations of gases commonly associated with combustion (e.g. carbon monoxide (CO), carbon dioxide (CO₂), volatile organic compounds, sulphur dioxide (SO₂), hydrogen sulphide (H₂S), methane (CH₄ – LEL), oxygen (O₂), nitric oxide (NO) and nitrogen dioxide (NO₂), were not detected at concentrations that pose a risk to human health in the North-Western Hotspot area, including locations surrounding the hotspot.

2.3 Indoor Air Quality Monitoring

Indoor air quality monitoring results for the month of July did not indicate the presence of monitored gases in elevated concentrations.

Carbon dioxide (CO₂) concentrations are compared against the ASHRAE Standard 62-2010 *Ventilation for Acceptable Indoor Air Quality* (American Society of Heating, Refrigeration and Air-Conditioning Engineers). Carbon monoxide (CO) concentrations are compared against the National Environment Protection (Ambient Air Quality) Measure (EPA 2016). Concentrations of carbon dioxide and carbon monoxide did not exceed the thresholds set by the adopted guidelines.

2.4 Subsurface Gas Monitoring

Subsurface gas monitoring results for the month of July did not indicate the presence of monitored gases in dangerously elevated concentrations.

The calculated Gas Screening Values for methane (CH₄) and carbon dioxide (CO₂) indicated a Characteristic Gas Situation of CS1 ("Very Low Risk") in all monitoring wells. Results also indicated that gas emissions from service pits were below relative criteria and indicative of background concentrations.

Appendix A - Site Photographs



Picture 1 – Exclusion zone fencing surrounding north-western hotspot area



Picture 3 – Slope within north-western hotspot area



Picture 2 - Slope within north-western hotspot area



Picture 4 - Vegetation within north-western hotspot area

Appendix B - Site Map

N



Legend:

1. North-western hotspot area



2. Western carpark & garden



3. Basketball courts & play area



4. Northern & southern grassed areas



Site	Cringila Public School	
Consultant	Rowan Clark/Tom Oyston	
Month	July 2019	
Job Number	J153825-03	
Version	1.0	