**History of the Cringila Public School underground activity**

May 2001 Smoke was first sighted emanating from under the surface of the south western playground of Cringila Public School (Area A). A detailed investigation identified that the fill added to the school site to form the playgrounds in the 1970’s consisted mainly of poorly compacted coal wash and slag. The school buildings however were founded on natural (cut) soils, excavated as part of the site preparation works.

A hazard reduction strategy was developed which aimed to render the site safe in the short term and prevent the reoccurrence in the long term. Short term works involved capping of the hotspots with shotcrete to prevent the ingress of air/oxygen and these works were completed by Aug 2001

May 2001 – 2003 A remediation strategy was developed and implemented. The remediation work included bentonite injections and capping of the area to restrict air flow to starve the coal wash fill of oxygen. This remediation was successful and the area handed back to the school for use. (Area A)

June 2003 – 2008 As part of ongoing monitoring of the site underground activity was detected in the north west area of the school (Area B). The Department of Education then engaged an environmental specialist and a project manager to provide advice on the remediation action required

After significant investigations a contract was issued for the remediation of the site. The southern portion of the area was returned to the school for use at the start of the 2008 school year. The northern area has remained fenced so ongoing monitoring could continue until underground temperatures reached acceptable levels. (Area B)

September 2017 Smoke was observed rising from the ground within the securely fenced area on the western side of the staff carpark at Cringila Public School, indicating a level of underground activity associated with the landfill material.

The department engaged environmental consultants to provide specialist advice on the appropriate remediation action and to undertake air monitoring of the site including the school buildings and surrounding areas. These results are available on the Department of Education’s web site.

<https://education.nsw.gov.au/about-us/strategies-and-reports/our-reports-and-reviews/school-environment-reports/cringila-public-school-underground-hotspot>

**Frequently Asked Questions**

1. Q. What is causing the current problem?
2. The north western area of the school site was filled with coal waste from the Port Kembla Steelworks over 20 years ago and the fill has self-combusted, which is typically followed by an increase in subsurface temperature.
3. Q. Is the area safe?
4. The Department of Education is regularly monitoring air quality. All reports indicate the air quality is safe and the weekly reports are published on the department’s web site. The department is continuing to monitor the underground temperature and the area has been secured with a new fence.
5. Q. What area is impacted?
6. Testing has identified the north western area of the school (which is securely fenced) is the only area currently impacted. The environmental consultants will continue to monitor surface and sub surface temperatures in other areas of the site. This area is thought to be outside of previously remediated Areas A and B.
7. Q. Why doesn’t the department just dig up the coal waste and remove it?
8. There are a number of risks with this strategy. Self-combustion occurs when coal (or coal waste) absorbs oxygen from the air. By digging this will increase oxygen flow to affected area and the results will be unpredictable.
9. Q. What is the proposed or best way to treat?
10. The department has engaged a Site Auditor and an Environmental Consultant to provide expert advice on the most appropriate action. In ground treatment has previously been successful in remediating other parts of the site.
11. Q. How long to fix the issue?
12. We will endeavour to remediate as quickly as possible while maintaining the safety of the school and community. Previously it has taken an extended period, (several years), to successfully remediate the site.
13. Q. What is being done to ensure the area continues to safe?

A. Until the remediation plan is finalised, the affected area will remain isolated by fencing, have vegetation maintained, have air quality and temperature monitoring undertaken, and have the capping layer of sand maintained and kept watered. With monitoring information and advice on progress reported online via the School Internet site.