

ANALYSIS AND OBJECTION

A Review of Lead Contamination in the Bungendore Rail Corridor and its Impact New BHS Site

Part 1

Introduction

This review has been undertaken to examine the extent of lead contamination within the Bungendore Rail Corridor and its impact on the site chosen for the new Bungendore High School (BHS)

Map 1 at Appendix A to this report shows the Bungendore rail corridor.

Background/History

Bungendore Railway Station is a heritage-listed (1999) railway station located on what now is the main line from Canberra to Sydney. The line was opened in stages to Tarago (January 1884), Bungendore (March 1885), and Queanbeyan (September 1887). Construction of the Bungendore station building, station master's residence, goods shed, and gatekeeper's residence commenced in September 1884. All the structures were completed when the station opened on 4 March 1885.

The Impact of Mining at Captains Flat

The rail line from Captains Flat to Bungendore was built to serve a collection of mines in the hills above the town of Captains Flat. The shipment of ore to Bungendore began when the rail line opened on 28 November 1939.



Mining operations in Captains Flat, which was one of the largest mining towns in the southern mining region, were carried out during two main periods: first, between 1882 and 1899, and then from 1939 to 1962.



A shipment of lead ore departing Captain's Flat for Bungendore circa mid 1950s



Uncovered wagons of the type that departed Bungendore for Port Kembla carrying lead ore from the Captain's Flat mines.

Between November 1939 and March 1962 (almost 23 years), nearly four million tons of complex copper-lead-zinc ore were extracted from the Captains Flat mine and transported in small, uncovered wagons the 36 km to Bungendore, where it was transferred into larger wagons uncovered and transported via rail to Port Kembla for

processing. Mining operations at Captains Flat ceased on 9 March 1962, and the line was closed to traffic on 28 August 1968.

See Maps 2, 3, 4 and 5 at Appendix A to this report

Discovery of Lead Contamination

The NSW Department of Transport is the agency responsible for managing the Bungendore Rail Corridor. In early 2022, the Department directed that soil samples be taken along the rail corridor to test for the presence of lead. The decision to test the soil along the track was prompted by local residents who were aware of the history of lead mining in the area and concerned about its impact on the local residents and the environment.

As a result, elevated lead levels were found in the areas immediately adjacent to or within the rail tracks and some areas where trains were previously required to slow down, stop, or load and unload from the Captain's Flat mine. Generally, the level of lead found in the soil samples decreased as the distance from the rail track and former loading and unloading areas increased indicating that the spillage and dust from the open ore carriages were the most likely source of the contamination.

The Bungendore rail corridor between Majara St and Powell Street on the east/west axis and Turallo Terrace and Malbon St on the north/south axis is the primary area of interest for this report. It includes the SP2 Public Administration Building, the two blocks to the north of it initially set aside for the Abbeyfield project and the now abandoned community services building fronting Turallo Terrace. It includes Lot 4 DP 830878, Lot 2 DP 814518, the historic station master's house, the Turallo Terrace gate keepers cottage and public infrastructure lands including the unofficial BPS staff car park.

EPA Declares Bungendore Rail Corridor Significantly Contaminated Land

The NSW Environment Protection Authority (EPA) declaration on 4 April 2023 identified the Bungendore Rail Corridor and Station as significantly contaminated land under the Contaminated Lands Management Act 1997. As a result, the land, which is used for public transportation and other services, has been recognised as having elevated levels of lead, most likely due to its historical use for transporting lead ore from the Captain's Flat mines.

See Maps 6 and 7 at Appendix A

The 4 April EPA Declaration specifically mentions all of the rail corridor between Majara Street and Powell Street as significantly contaminated land under the Contaminated Lands Management Act 1997. For reasons that are not clear, the land compulsorily acquired for the new Bungendore High School was not included in the investigation nor mentioned in the declaration.

It is highly likely that the site acquired by the DoE for the new Bungendore High School has been impacted by the contaminated land bordering it on two sides to the east and the south.

Appendix C to a Department of Health document that explains the health risks associated with lead contamination especially its impact on the health of young children.

Investigations into Lead Contamination in the Bungendore Rail Corridor

ERM (Environmental Resources Management) carried out the first investigation into the possibility of lead contamination in the Bungendore rail corridor. It was done at the behest of John Holland Rail (JHR) on behalf of Transport NSW in the form of a Preliminary Site Investigation (PSI) of the Bungendore railway corridor land. The PSI was commissioned to assess possible lead contamination impacts associated with the transport of ores, including lead ore, from mining operations in Captains Flat.

ERM is a reputable global provider of environmental, health, safety, risk, and social consulting services. The company has been involved in various projects worldwide, including environmental assessments, remediation, and management of contaminated sites.

JHR is a rail infrastructure and operations provider with a strong presence in Australia. Its contract with the Country Regional Network (CRN) involves the operation, management, maintenance, and upgrade of the CRN railway lines across NSW.

The ERM review (2022) took several samples within the rail corridor adjacent to the New High School site. Reported concentrations of lead obtained from these areas were above the health investigation level (HIL-A) applied for the land use setting 'residential with garden/accessible soil'.

The objectives of the ERM PSI included collecting information to identify potential sources of lead contamination and the nature and extent of identified contaminants in surface soils. The scope of works for the PSI included a desktop review of historical information for the site and its environmental setting, a site inspection walkover, and the collection of 119 primary shallow soil samples to develop a conceptual site model.

The review of desktop information indicated that the Bungendore rail corridor is approximately 2.5 km long and 40 m to 50 m wide and includes three sidings. The review of the site history and information obtained from JHR indicated that the line was historically used to transport lead ore from mining operations at the Lake George Mine located in Captains Flat. It was further identified that the lead ore was transferred to larger railway wagons in one of the three sidings, located south of the Bungendore Railway Station buildings (to the south of Malbon Street and east of Majara Street).

The image below shows the abandoned goods shed in the contaminated area, which was used as the local Men's Shed until the site was closed. Note also the shipping containers belonging to a local football club that cannot be accessed.

The ERM conceptual site model for the rail corridor site identified the historical handling and transport of lead ore as a primary potential source of contamination. It found that:

The sampling design rationale for the investigation involved both systematic and judgemental sampling. Systematic sampling was undertaken as transects across the rail corridor at approximately 200 m intervals, and where space allowed, three samples were collected on each side of the rail tracks. Judgemental sampling was undertaken across the three siding areas, targeting areas where transfer of ore was believed to have occurred. Soil samples were collected from shallow surface soils to a maximum depth of 0.2 m (8 inches) below ground level, with deeper soils and groundwater excluded from the investigation.

The results of the soil sampling indicated that the reported concentration of lead was generally elevated immediately adjacent to or within rail ballast. The reported lead concentrations generally increased in areas where trains may have been required to slow down or stop (e.g., the Bungendore Station area and sidings where ore is understood to have been transferred between railway wagons).

Based on the reported lead concentrations present in surface soils and potentially complete source-pathway-receptor linkages, ERM considered that its duty to notify the NSW Environment Protection Authority under Section 60 of the Contaminated Land Management Act (1997) had been triggered.



The NSW EPA responded by issuing a Declaration of significantly contaminated land.

Section 11 of the Contaminated Land Management Act 1997 Declaration No. 20221101; Area No. 3522. The Environment Protection Authority (EPA) declares the

following land to be significantly contaminated land under s 11 of the Contaminated Land Management Act 1997 (Act).

This Declaration applies to significantly contaminated land described Lot 4 DP 830878, Lot 2 DP 814518 and public infrastructure lands (Land).

See Map 8 at Appendix A for the significantly contaminated areas of the rail corridor.

The EPA Declaration is attached at Appendix B.

Preliminary Site Investigation (PSI) with Limited Sampling (Contamination) New High School in Bungendore by Douglas Partners (DP)

After the compulsory acquisition of the Majara Street site for the new BHS on 26 April 2022, a PSI was conducted to ensure that the site was fit for purpose. Under normal circumstances, this would (and should) have been done prior to acquisition.

The Report on Preliminary Site Investigation with Limited Sampling (Contamination) New High School in Bungendore Majara Street, Bungendore Project 202107.03 September 2021 was prepared for the NSW Department of Education by Douglas Partners.

The Data Quality Objectives (DQO) for the PSI were devised using the seven-step DQO process provided in Appendix B Schedule B2, NEPC (2013) to the DSI report.

This PSI commenced on 3 September 2021 before the discovery of the lead contamination of the Bungendore Rail Corridor (4 April 2023). Lead, therefore, was not the focus of the investigation.

In describing the Soil Sampling Rationale, the Report noted that:

The client (in this case, SINSW) had provided the borehole location plan based on where the site development was proposed (i.e., building locations, car parks, and other site infrastructure). As a result, opportunistic sampling from the concurrent geotechnical boreholes was adopted.

It should be noted that at the time of the intrusive works (March 2021), the northern portion of the site (the ag plot) was not included in the scope of works, and therefore, boreholes were not drilled in this area.

Soil samples were collected from each borehole at depths of approximately 0.1 m, 0.5 m, and 1.0 m, and every 1.0 m thereafter, as well as changes in lithology or signs of contamination.

Map 10 of Appendix A shows four PSI borehole locations in the new BHS site.

Under the heading ‘Limitations’ on page 4 of 22 of the PSI, it states that:

‘the results provided in the report are indicative of the sub-surface conditions on the site only at the specific sampling and/or testing locations and then only to the depths investigated and at the time the work was carried out. DP’s advice is based

*on the conditions encountered during this investigation. **The advice may also be limited by budget constraints imposed by others or by site accessibility***.

'This report or sections from it should not be used as part of a project specification without review and agreement by DP. This is because this report has been written as advice and opinion rather than instructions for construction'.

'The scope of work for this investigation/report did not include the assessment of surface or sub-surface materials or groundwater for contaminants within or adjacent to the site'.

It is clear that the PSI commissioned by SINSW did not test for lead contamination in the proposed new Bungendore High School site. They stated that any testing for contaminants was opportunistic and not targeted. The primary focus of the PSI and preceding investigations was geotechnical data to inform the design and construction of the school buildings.

The PSI recommended a further intrusive investigation of the site, which led to the commissioning of a detailed site investigation (DSI).

Detailed Site Investigation (Contamination)

The objective of the DSI (Contamination) (DSI) was to assess the site's suitability from a contamination perspective for the new high school development and whether further investigation and/or management was required. Results from the DSI were also used to assist in providing preliminary in-situ waste classification advice. The reference to contamination in the DSI title is taken to mean all forms of contamination not just lead.

A detailed site investigation (DSI) (contamination) and preliminary in-situ waste classification for the new high school at Majara Street, Bungendore (the site) was commissioned in September 2021 and submitted in July 2022.

It is important to note that the DSI was not commissioned by the DoE project manager SINSW but rather by Hindmarsh Constructions, which had been awarded the Very Early Contractor Involvement (VECI) tender for the construction of the high school.

Douglas Partners (DP) is an Australian engineering company specialising in geotechnics, environment, groundwater, rock mechanics, geophysics, and earthworks. DP has been associated with both Hindmarsh Constructions and School Infrastructure NSW (SINSW) in various projects in the past. The project manager for the construction of the new Bungendore High School in Bungendore is SINSW.

The DSI (365 pages) is a major step in the site selection process. Clearly, it must be the responsibility of the project manager, SINSW, to ensure that the site is suitable and safe for its intended purpose. It is unclear why Hindmarsh Constructions commissioned Douglas Partners to carry out the DSI instead of SINSW (the project manager), the agency responsible for site safety.

The DSI acknowledges the responsibility of DoE in the following statement:

The new high school in Bungendore is a state-significant development (SSD), and an SSD application has been lodged with the NSW Department of Planning and Environment. As part of the planning process, an assessment of the site's suitability from a contamination perspective is required.

The DSI has been revised to incorporate comments in submissions made during the exhibition period for the SSD application and to include information in third-party reports (the ERM PSI and DSI) commissioned by Transport for NSW on likely off-site sources of contamination.

The objective of the DSI is to assess the suitability of the site, from a contamination perspective, for the proposed development and whether further investigation and/or management is required. Results from the DSI will also assist in providing preliminary in-situ waste classification advice.

The proposed development at the site will include the demolition of the Bungendore Swimming Pool and the Bungendore Community Centre, the repurposing of existing council buildings, and the construction of new school buildings. New facilities for the high school will comprise numerous learning areas, a gymnasium, library, canteen, outdoor learning and play areas that include two game courts.

Note: These planned developments (demolition and construction) are unlikely to be undertaken without significantly disturbing the soil at the proposed new BHS site.

A new agricultural plot is also proposed to the north of the main school site, including a new agricultural building and scout storage shed adjacent to the existing scout hall.

The scope of work for the DSI included the following:

- *A review of previous investigations undertaken at the site.*
- *Intrusive sampling from 52 boreholes drilled using a mini excavator fitted with a 200 mm diameter auger or a hand-held electric post-hole digger fitted with a 75 mm diameter auger.*
- *Collection of soil samples from all test locations at regular depth intervals based on field observations, upon signs of contamination and at changes in strata.*
- *Logging of encountered soil material and pertinent field information.*
- *Backfilling of boreholes.*

- *Laboratory analysis of collected soil samples at a National Association of Testing Authorities (NATA) accredited laboratory for one or all of the following analytes:*
 - o *Total recoverable hydrocarbons (TRH);*
 - o *Benzene, toluene, ethyl benzene and total xylenes (BTEX compounds);*
 - o *Polycyclic aromatic hydrocarbons (PAH).*
 - o *Organochlorine Pesticides and Organophosphate Pesticides (OCP/OPP)*
 - o *Polychlorinated biphenyls (PCBs) Page 3 of 27.*
 - o *Phenols.*
 - o *Metals (As, Cd, Cr, Cu, Hg, **Pb (lead)**, Ni and Zn), and*
 - o ***Asbestos.***
- *Where results of the laboratory analysis indicated it may be required, selected samples were also analysed for toxicity characteristic leachability procedure (TCLP) testing for metals and PAH for preliminary in-situ waste classification purposes; and*
- *Preparation of this DSI report, included:*
 - o *a Data Quality Assessment,*
 - o *an updated conceptual site model (CSM),*
 - o *a discussion of the methods and results of the investigation,*
 - o *an assessment of the risk to the proposed development from contamination,*
 - o ***advice on the type and potential extent of contamination and***
 - o *a statement on the site's suitability and/or need for further assessment/remediation.*

It should be noted that DP's recommendation to Hindmarsh that the DSI include investigation work within the Bungendore railway station/railway forecourt area was rejected on the basis that the project would not be undertaking works in that area. It would have been prudent to include the rail forecourt area in the study, noting the advice contained in the EPA Declaration of Significantly Contaminated Land, which states that:

'The approved use of the adjoining land for residential and school purposes may increase the risk of harm caused by contaminants in the land. Contaminants may have migrated or are likely to migrate from the contaminated land through airborne dust or sediment mobilisation in surface runoff'.

DP advised that:

Based on the CSM and data quality objectives (DQO) the following sampling rationale was adopted for the DSI. A systematic sampling strategy based on the

*NSW EPA Contaminated Sites, Sampling Design Guidelines (NSW EPA, 1995) to determine borehole locations which was adapted **based on areas of access**.*

Borehole locations are shown on Maps 11 and 12 at Appendix A to this document.

DP's report states that:

*'due to the exclusion of the railway forecourt area, the high school site area was reduced to approximately 2.92 ha. NSW EPA (1995) recommends a minimum of 40 sampling points for a site of 2.92 ha for site characterisation. DP had already completed 12 boreholes (BH01-T, BH02-T and BH01 – BH10) as part of the PSI and 52 boreholes (Bores 101 – 152) during the DSI which equates to 64 boreholes in total across the site. Therefore, DP considers that this sampling density is appropriate for investigating the presence of gross contamination at the site, **based on site accessibility**.'*

Para 8.2 on Page 17 of 27 of the DSI contains a surprising admission; it clearly states that:

Bores 101 – 152 could not be drilled in the building footprints of the Bungendore Community Centre and QPRC building or within the Bungendore Swimming Pool area due to access constraints.

This is a clear admission that 64 boreholes were not drilled across the site. Therefore, it falls short of the NSW EPA (1995) recommendation that a minimum of 40 sampling points for a site of 2.92 ha is needed for site characterisation.

See Maps 11 and 12 in Appendix A to this report, which shows borehole sites 101 - 152.

Note that failure to drill boreholes 101 - 152 is attributed to 'access constraints'. As the construction of the fencing along the perimeter of the BHS site commenced on 6 March 2023, the 'access constraints' are not likely to be the result of any physical barriers to the planned borehole locations. It may be that the 'access constraints' refer to a refusal or obstruction by DoE to allow testing for lead contamination on their newly acquired high school site. This could partially explain why SINSW did not commission the DSI – if it had, it would have had to agree to allow DP access to Boreholes 101 – 152, and the discovery of lead contamination of the new high school site could have been a likely outcome.

The DSI goes on to state that:

'Soil samples were collected from each borehole at depths of approximately 0.1 m, 0.5 m, and 1.0 m and every 0.5 m thereafter, as well as changes in lithology or signs of contamination. The general sampling methods are described in the fieldwork methodology included in Appendix D'.

The very clear statement that Bores 101 – 152 could not be drilled due to access constraints has far-reaching implications for the legitimacy of this report; how can soil samples be taken and analysed from boreholes that have not been drilled?

Note: It may be possible to examine the areas where the boreholes were to be drilled to see if there are any backfilled drill holes, especially if a 200 mm (8-inch) auger was used. Another option is to ask DP to confirm that the holes were not drilled and explain the access constraints that prevented them.

The deception appears to have been continued in the following statement:

'The (DSI) testing program included locations inside and outside of Bungendore Public School, the site for the temporary high school, the site for the new agricultural plot for the high school and the site for the new Bungendore High School'.

Again, this is a false and misleading statement, as there were no samples to test.

DP also stated that:

*'Whilst reported concentrations of lead were above the HIL-A within the rail corridor and Bungendore Rail Station adjacent to the east and south of the site, respectively (ERM 2022, and 2022a), the results of the laboratory analysis indicated that reported concentrations of lead were below the adopted assessment criteria within the proposed agricultural plot and areas of the site immediately adjacent to the rail corridor (e.g. boreholes BH131 to BH139). **DP, therefore, considers that on the basis of the current investigation, lead contamination identified in the railway corridor (ERM, 2022 and 2022a) is not impacting the site**'.*

*DP considers that the sampling density undertaken in the areas adjacent to the rail corridor meets the minimum sampling density requirements of the Sampling Design Guidelines (NSW EPA, 1995). **From a contamination perspective, DP considers the site suitable for the proposed use.***

These statements by DP are clearly false, as boreholes 131 - 139 were not drilled. Claims that lead contamination was below the adopted assessment criteria in the soil samples taken from sites (that were never drilled) are also false.

The DP DSI states:

The results of the soil contaminant testing were also compared to NSW waste classification criteria in order to provide a preliminary in-situ waste classification for the material that is understood to be excavated and disposed of off-site during construction. Concentrations of metals (including the nickel in Bore 112/1.0 m and Bore 131/0.1 m with TCLP testing), TRH, BTEX, PAH, OCP, OPP, PCB and phenols were below the CT1 criteria for General Solid Waste (non-putrescible). Therefore, the material will likely be classified as General Solid Waste (non-putrescible).

Based on the natural material observed from the boreholes and chemical analysis of select samples, the natural material underlying the fill could also be classified as

VENM. It should be noted that a VENM classification would be no longer be acceptable should the VENM be mixed with any fill or other potential contaminants.

*Based on the results of the investigation, **it is considered that the site is suitable, from a contamination perspective, for the proposed development at the site.***

Again, this statement by DP in their Executive Summary is false and misleading. In its 'About this Report' section of the DSI, it states that:

*'based on information gained from limited subsurface excavations and sampling, supplemented by knowledge of local geology and experience. For this reason, they must be regarded as **interpretive rather than factual documents**, limited to some extent by the scope of information on which they rely'.*

*'**The borehole and test pit logs presented in the DP report are an engineering and/or geological interpretation of the subsurface conditions, and their reliability will depend to some extent on the frequency of sampling and the method of drilling or excavation. Ideally, continuous undisturbed sampling or core drilling will provide the most reliable assessment, but this is not always practicable or possible to justify on economic grounds. In any case, the boreholes and test pits represent only a very small sample of the total subsurface profile**'.*

This is another honest admission by DP, but it highlights the unsubstantiated assertion that:

"based on the results of the investigation, it is considered that the site is suitable, from a contamination perspective, for the proposed development at the site"?

SINSW Declares BHS Site 'Not Impacted' by Lead Contamination

In a recent project update (Bungendore High School Project update | June 2023), SINSW quotes an 'independent investigation' dated July 2022 (i.e. DP's DSI) to assert that the lead contamination in the Bungendore rail corridor does not impact the site chosen for the new Bungendore High School. It states, in part, that:

The EPA has found significant contamination in the railway corridor adjoining the permanent high school site and claims that the health, safety, and well-being of the school and the local community is their highest priority. The detailed site investigation conducted by the independent consultant in July 2022 found lead contamination identified in the railway corridor was not impacting the school site and that the site is suitable, from a contamination perspective, for the proposed high school development.

SINSW is simply perpetuating the false and misleading information contained in the DP DSI.

Department of Planning and Environment - Request for Additional Information – 1/2024

Madeline Thomas, Team Leader, School Infrastructure Assessments NSW Department of Planning and Environment, is also concerned about the suitability of the Majara Street site for the new BHS. On 10 January 2024, she wrote to Ms Sarah Kelly, Principal Planner, Department of Education Level 8, 259 George Street Sydney NSW 2000, seeking additional information relating to the suitability of the site chosen for the new BHS for its intended purpose being that of a regional high school. The letter specifically requests that:

*An Interim Section A1 Site Audit Statement or an interim Section A2 Site Audit Statement prepared by an EPA-accredited Site Auditor. The interim Section A1 or A2 Site Audit Statement **must verify that the site is suitable for the intended land use**. Should an interim Section A2 Site Audit Statement be provided, you are required to include an Environmental Management Plan prepared by a NSW EPA-accredited Site Auditor.*

You are required to address or have regard to as relevant, any environmental planning instruments (EPIs) (including draft EPIs), plans, policies, and guidelines (including drafts) that were made available since 24 January 2023. Where appropriate please include updated mitigation measures, architectural plans and technical reports in relation to all land that is the subject of the development application.

An **Interim Section A1 Site Audit Statement** and an **Interim Section A2 Site Audit Statement** are documents prepared by a NSW EPA-accredited Site Auditor as part of the NSW site auditor scheme. These statements summarise the findings of a site audit, which is a review conducted to determine various matters related to the management of actual, possible or suspected contamination of land.

Interim Section A1 Site Audit Statement: This statement is used when a site investigation and/or remediation plan has been completed, and a conclusion can be drawn on the suitability of land uses **without** the implementation of an environmental management plan. It outlines the conclusions of a site audit and provides full details of the site auditor's findings, evaluations, and conclusions.

Interim Section A2 Site Audit Statement: This statement is used when site investigation and/or remediation has been completed, and a conclusion can be drawn on the suitability of land uses **with** the implementation of an active or passive environmental management plan. Like the A1 statement, it also outlines the conclusions of a site audit and provides full details of the site auditor's findings, evaluations, and conclusions.

It should be noted that an Interim Environment Management Plan has been issued for the Bungendore rail station (See Map/Image 14). It clearly shows the station building's

shielding effect in restricting the spread of asbestos particles on the western side of the station's vertical structures.

For statutory site audits, a site auditor must provide a copy of the site audit statement to the NSW Environment Protection Authority (EPA) and the local council. The aim of these audits is to protect the environment and human health through proper management of contaminated land.

The letter dated 10 January 2024, signed by Madeline Thomas, Team Leader, School Infrastructure Assessments NSW Department of Planning and Environment, is attached in Appendix D.

Asbestos Contamination

DP's DSI states in its Executive Summary that 'Based on the results of the investigation, it is considered that the site is suitable, from a contamination perspective, for the proposed development at the site. It is also considered that the fill material is suitable for reuse (from a contamination perspective) at the site with reference to the following recommendations before and during any future development works:

- A Construction Environment Management Plan (CEMP) should also be prepared before future development works, including an 'unexpected finds protocol' and asbestos finds protocol (including underground services that may contain ACM) and implemented during the works (i.e. hydrocarbon staining and/odours observed during works, suspected ACM fragments of asbestos fibres); and
- Should suspected asbestos be encountered at the site, the affected area should be fenced off and assessed by an NSW-licensed asbestos assessor.

A word search of the DSI shows that 'asbestos' is mentioned 241 times, while 'lead' is mentioned 58 times. Although the DSI has identified ACM in its boreholes and in on-site fill, it is difficult to identify the source. The four aerial photos in Appendix A show the Majara Street site as virgin ground without any soil dumps and well away from any earlier construction that may have used ACM. For example, the soil from the excavation of the swimming pool was retained on the western side of the pool and is visible today. See Maps/Images 16 at Appendix A.

The community centre building was constructed after asbestos building products were banned in 2003 and it is highly unlikely that the QPRC or its predecessors would have agreed to the dumping of building waste or fill on the site.

It is unlikely that building waste/fill containing ACM is the source of the asbestos found in the soil. The proposed BHS site was virgin land before any construction began. See Maps/Images 3, 4 and 5 at Appendix A.

Noting that all ACM was banned in Australia in December 2003, it could not have been used to construct either the community centre or the council buildings.

In this SSDA, there is a distinct lack of awareness of the asbestos dust produced when the brakes were applied on trains and carriages, from the introduction of asbestos brake pads in the 1930s until the banning of asbestos in 2003, a period of almost 70 years.

Each train and carriage wheel had a braking system (see Map/Image 15), and a burst of micro-particle asbestos dust was produced each time the brakes were applied. Trains entering the Bungendore rail corridor from the north applied their brakes to negotiate the bend adjacent to the historic gatekeeper's cottage on Turallo Terrace and again to stop at the Bungendore station. Similarly, trains entering Bungendore from the south also applied their brakes to stop at the station. The same thing occurred during the steam era from 1884 to the 1960s, when trains stopped to take on water at the tanks located near the gatekeeper's cottage (often incorrectly referred to as the 'signalman's cottage') on Turallo Terrace and adjacent to the rail crossing on Malbon Street.

Train traffic through the Bungendore rail corridor was heavy and constant during the mining of the Captain's Flat mine especially during the WWII period 1939 - 1945. It was also very busy during the Snowy Mountain scheme. Construction of the Snowy Hydro began on 17 October 1949 and took 25 years to complete, ending in 1974.

This massive project is considered the largest engineering project undertaken in Australia. Materiel for the project was transported by rail to Cooma where it was unloaded for further shipment by truck to the construction site. For a quarter of a century, all these trains passed through the Bungendore rail corridor at a rate of about one train every 20 minutes. ALL trains applied their brakes on entry to the station from either direction, cumulatively creating significant quantities of asbestos dust.

The Lanier Law Firm in America, acting on behalf of rail workers suffering from asbestos-related cancers, noted that:

Asbestos was used in brake shoes on rail cars until the 1980s. Many of our clients have described the huge clouds of dust that would be released when the train brakes were applied. These sources of exposure put railroad brakemen, conductors, track workers and carmen at risk of getting cancer.

Because of its strength and resistance to heat and friction, asbestos was used in brake pads, brake linings, and clutches. These parts eventually wear down and sometimes rip, exposing workers to asbestos fibres. This released a significant amount of asbestos dust into the air that was easily inhaled.

It is reasonable to conclude that for the 70 years during which asbestos brake pads were used on all rail vehicles using the Bungendore rail corridor, a significant amount of asbestos dust and fibres were released into the atmosphere within the rail corridor. This dust then settled on the land on either side of the tracks and is likely to have been wind-spread much further than the heavy lead particles released from the shipment of lead ore.

The information below is taken from DP's DSI of July 22 Appendix E, Site Assessment Criteria Majara Street, Bungendore 202107.04.A.005.Rev0 July 2022 Page 4 of 7.

E2.2 Asbestos in Soil

Based on the CSM and/or current site access limitations, a detailed asbestos assessment was not considered to be warranted at this stage. However, due to the history of widespread use of ACM products across Australia, ACM can be encountered unexpectedly and sporadically at a site. Therefore, the presence or absence of asbestos at a limit of reporting of 0.1 g/kg (AS:4964) has been adopted for this investigation/assessment as an initial screen. It is noted that this corresponds to the health screening level for residential with garden land use setting (HSL-A) for bonded ACM of 0.01% provided in the NEPM.

ACM is not a likely source of asbestos on the BHS site as it was not used in the construction of the community centre and there is no evidence of the site being used as a dump for building waste.

See Map/Image 17 at Appendix A.

Asbestos Dust From The Train And Carriage Brakes

The use of asbestos in brake pads was banned in Australia on **31 December 2003**. After this date, replacement brake pads, brake shoes, and clutch plates fitted to vehicles in Australia were required to be asbestos-free. This ban was part of the Australian Government's prohibition on the importation, manufacture, supply, sale, and use or reuse of asbestos and asbestos-containing products. Asbestos brake products posed a significant health risk, as asbestos is a known carcinogen linked to diseases such as lung cancer and mesothelioma.

Until asbestos brake pads were banned in 2003, all trains using the Bungendore rail corridor produced brake dust, including those that stopped to take on water from the Bungendore railway pump house, which is adjacent to the tracks just north of the gatekeeper's cottage on Turallo Terrace.

Remediation of Contaminated Land

Considerable publicity has been given to the issue of remediating lead contamination in Captains Flat and the rail corridor in Tarago. The remediation plans for these two towns are far more advanced than the equivalent plans for Bungendore. Map 9 is illustrative of the detailed planning taking place in Tarago to remediate their contaminated land.

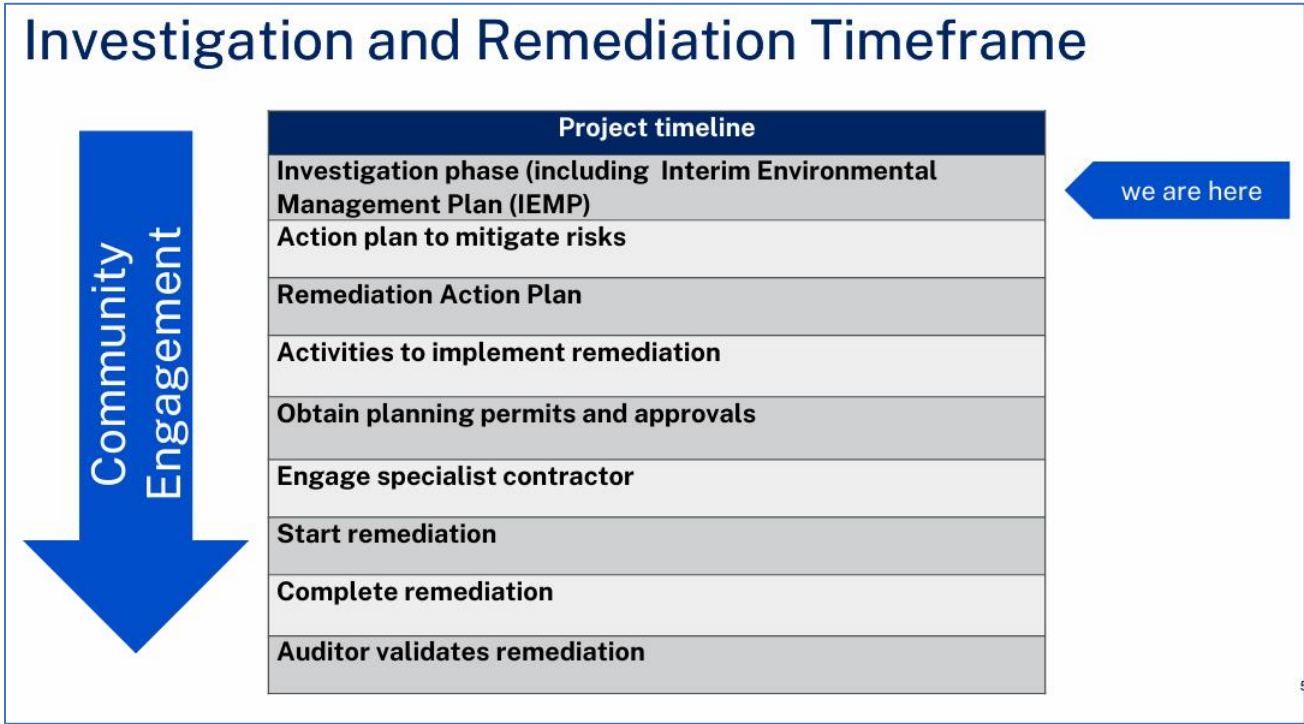
Interim Environmental Management Plan Bungendore Station Project No. 0608750

ERM produced an Interim Environmental Management Plan on 23 August 2022 that places significant restrictions on the use of the Bungendore railway station land. Noting that the remediation of the Bungendore rail corridor is likely to be a long and difficult process.

Children in the proposed new BHS playground would be exposed to both lead and asbestos from the soil disturbed during the remediation process from the north (ag plot) east (rail corridor) and the south (station precinct).

Investigations into the nature and extent of the contamination are ongoing. However, it is considered (by ERM) that it may be appropriate to implement interim measures in order to mitigate potential risks to receptors (people, including school children) associated with the reported lead concentrations in shallow soil.

Further assessment of impact is required at the Site and as such the IEMP will remain a live document which may be updated and revised as required. This IEMP may be updated and made permanent if further investigation and/or risk assessment find that permanent controls are required or may be removed from use if the risk profile at the Site is considered to have changed to the point where controls are no longer required. The table above, taken from the Department of Transport website, provides the current proposed timeline for remediating the Bungendore rail corridor.



Summary

Close examination of the **Declaration of Significantly Contaminated Land** dated 4 April 2023 shows that most of the land in the Bungendore rail corridor between Majara and Powell streets and Turallo and Malbon is significantly contaminated.

The scope of work for **the DP PSI did not include the assessment of surface or sub-surface materials or groundwater for contaminants within or adjacent to the site.**

It should be noted that at the time of the intrusive works (March 2021), the northern portion of the site was not included in the scope of works, and therefore, boreholes were not drilled in this area.

A close examination of Map 10 reveals that only four boreholes were drilled in the rail corridor within the boundaries of the new high school site, and only opportunistic selected sampling from the 10 geotechnical boreholes was carried out.

The DSI commissioned by DP, did not carry out drilling at any of the 52 borehole sites shown at Maps 11 and 12. The DSI states quite clearly that: 'It should be noted that Bores 101 – 152 could not be drilled in the building footprints of the Bungendore Community Centre and QPRC building or within the Bungendore Swimming Pool area due to access constraints'. The access constraints are most likely to be the refusal by DoE to allow DP access to drill the boreholes on their compulsorily acquired BHS site.

It should also be noted that DP proposed that the DSI include an investigation of the Bungendore railway station/railway forecourt area. DP was requested not to undertake investigation work within this area as the project would not be undertaking works in the railway station or railway forecourt area. This is despite the fact that the EPA had advised that **the approved use of the adjoining land for residential and school purposes may increase the risk of harm caused by contaminants that may have migrated or are likely to migrate from the contaminated Land through airborne dust or sediment mobilisation in surface runoff.**

Noting that the Bungendore rail corridor will require extensive remediation, which is still in its investigative phase, soil disturbance during remediation will occur when the new BHS is open, with children within a few metres away in their free space or playground. It should also be noted that the fenced-off contaminated area of the railway station area is less than 15 metres from the eastern fence of the Bungendore Primary School and the new temporary BHS.

DP also states that its reports are based on information gained from limited subsurface excavations and sampling, supplemented by knowledge of local geology and experience. For this reason, **they must be regarded as interpretive rather than factual documents**, limited to some extent by the scope of information on which they rely.

DP also states that 'ideally, continuous undisturbed sampling or core drilling will provide the most reliable assessment, but this is not always practicable or possible to justify on economic grounds. **In any case, the boreholes and test pits represent only a very small sample of the total subsurface profile**'.

DP goes on to state that 'This report, or sections from this report, should not be used as part of a specification for a project, without review and agreement by DP because it has been written as **advice and opinion rather than instructions for construction**'.

Despite all of the above, DP was prepared to state that “the site is suitable, from a contamination perspective, for the proposed development at the site” and the land compulsorily acquired by the DoE for the new Bungendore High School is not affected by contamination.

See Map 8 at Appendix A.

This review of both the PSI and DSI cast serious doubt on the veracity of the DSI prepared by DP for Hindmarsh Constructions in relation to the Bungendore High School site.

This review clearly shows that the new high school site has not been tested for lead contamination, and therefore, any claim that the new BHS is free of lead contamination cannot be substantiated.

It is worth noting that the challenges posed by the significant contamination of the Bungendore rail corridor are also affecting Captains Flat and Tarago to a very significant extent. A state-controlled monitoring and remediation plan is needed for all three rail corridors to ensure the local population – especially young children - are not exposed to the risk of harm from lead (and asbestos) contamination. This will be a major undertaking.

Remediation of the lead contamination in the Bungendore rail corridor is only at the investigative stage and will take many years to complete. If the BHS is built on the Majara St site, the remediation, with its expected earthworks and disturbance of topsoil, will pose a serious risk to students in the proposed new high school grounds (open space).

Because of the seriousness of lead contamination along the rail corridor between Majura Street and Power Street, the children of Bungendore must be given the benefit of the doubt as to the extent of the contamination. Unless the site can be declared free of any lead contamination with absolute certainty, it should be abandoned as the site for Bungendore's new high school, especially as far more suitable sites are available.

Conclusions

The claim that the new BHS site is not affected by lead contamination and that the site is suitable for the construction of a high school has not been conclusively established by DP in its DSI. See also Appendix D to this document.

SINSW should review its support for DP's investigation's findings and withdraw its claim that the site is suitable (from a contamination perspective) for the proposed development until an EPA-accredited agency can undertake testing of the site as set out in Appendix D.

If, as SINSW states in its latest project update ‘The health, safety, and well-being of the school and the local community is our highest priority’, it should abandon any plan to build a high school in the lead-contaminated Bungendore rail corridor.

Knowing that the northeast quadrant of the intersection of Majara Street and Malbon Street is significantly contaminated and has been fenced off, and that the rail station is significantly contaminated, request the NSW EPA to engage ERM to conduct a dedicated

investigation into the extent of the lead contamination on both sides of the railway line out as far as Majara Street and Powell Street including the land acquired by DoE.

It beggars belief that lead dust or spillage from uncovered ore wagons could have significantly impacted the portion of the Bungendore rail corridor between Gibraltar and Malbon but not similarly impacted the area between Turallo and Gibraltar streets. There must be considerable doubt about SINSW's claims that the proposed new Bungendore High School site is free of lead contamination in light of the fact that Boreholes 101 – 152 were not drilled.

See Map/Image 14 at Appendix A

Recommendations

1. Abandon the plan to build a high school on land that is highly likely to be significantly contaminated by lead (and asbestos) and that needs significant long-term remediation.
2. To protect the residents of Bungendore, fence off the rail corridor between Majara Street and Powell Street between Turallo and Malbon Streets.
3. Commission ERM to conduct a DSI of the new BHS site on Majara Street to determine the extent of lead contamination within the land area compulsorily acquired by DoE.
4. Encourage the NSW Government to develop a site remediation plan along the lines of the plan being formulated by Transport New South Wales under its obligation to monitor and remediate the contamination in Tarago and Captain's Flat. Note that remediation of the contaminated land is not a quick or easy process and will take many years to complete.
5. Reinstate the site selection process that was prematurely aborted two years ago because of ill-considered political interference as the most effective and fastest way of completing the promised high school for Bungendore.

Part 2

A Review of

Lanterra's Detailed Site Investigation (Contamination)

Communication and Tasking Pathway

The task of providing a response to DPHI's request for further information regarding lead contamination in the proposed site for the new BHS appears unnecessarily complex and confusing. The pathway is understood to be:

- Madeline Thomas, Team Leader, School Infrastructure Assessments Department of Planning and Environment (now Department of Planning, Housing and Infrastructure), on 10 Jan 24 writes to Ms Sarah Kelly, Principal Planner Department of Education. The letter requests additional information in the form of an NSW EPA accredited Site Auditor's interim Section A1 Site Audit Statement or an interim Section A2 Site Audit Statement.
- Ms Sarah Kelly, Principal Planner Department of Education (or SINSW), presumably after some internal consultation, asks/tasks Hindmarsh Construction to engage an appropriately qualified agency to provide the interim site audit statement requested by DPHI.
- Hindmarsh Pty Ltd engages Loek Munnichs, a NSW EPA accredited Contaminated Land Auditor employed by EP Risk Management Pty Ltd (EP Risk), to provide Contaminated Site Audit Services for the Site located at 2-10 Majara Street, Bungendore NSW, and part of Bungendore Park. EP Test's task is to frame a response to DPHI (Madeline Thomas).
- EP Test completes a gap analysis to help develop the terms of reference for a DSI which will form the basis of the interim site audit statement requested by DPHI.
- Hindmarsh concludes that the planned response to DPHI will need to be supported by a further site investigation, which would be best satisfied by another DSI.
- Hindmarsh then engages Lanterra Consulting (rather than continuing with Douglas Partners) to undertake the DSI (Contamination), seeking to prove that the proposed new BHS is fit for purpose. Note that Lanterra is not listed as a NSW EPA-accredited site auditor.
- Lanterra's DSI accepts and expands upon the earlier Douglas Partner's investigations without having read them in detail and failing to identify their major flaws.
- The Lanterra DSI was cleared by EP Test in the following terms:
*The Auditor concludes the report reviewed was of a generally good quality. The Auditor is of the opinion that if the Remediation Action Plan (RAP) will be (sic) implemented, the Site (200m plot) **can be made suitable** for proposed land use.*
- EP Test respond by providing Site Auditor Interim Advice #4 New High School in Bungendore, NSW for Hindmarsh Pty Ltd EP3547.005 dated 24 May 2024.

Note the EP Test statement that: ***This letter is provided as Interim Advice and does not constitute a Site Audit Report or Site Audit Statement. This letter does not preempt the findings of the site Audit. A Site Audit Statement and Site Audit Report will be issued at the completion of the Audit.***

- It is unclear where the process stands at the time of writing as there is no evidence of how the Site Auditor Interim Advice (ISAS) #4 New High School in Bungendore submitted by EP Test to Hindmarsh has been processed, i.e. accepted and onforwarded to DoE.
- It is not known if DoE has accepted the ISAS and submitted it to DPHI as the formal and final response to the DPHI request of 10 Jan 24.
- As the interim letter does not satisfy the DPHI request, it is reasonable to conclude that the request from DPHI for further information has not been completed.

The convoluted communication and tasking pathway involved in responding to DPHI's request for further information in their letter of 10 Jan 24 is symptomatic of the Bungendore High School project as a whole. It is difficult to understand why a state-significant development application for the BHS that is incomplete and that cannot be properly assessed and commented on by those adversely impacted by it has been placed on exhibition.

Lanterra's DSI (Contamination)

In this SSDA, Lanterra's DSI (Contamination) should, as the title suggests, focus on contamination – and in particular lead and asbestos - within and adjacent to the proposed new BHS site.

The most likely sources of contamination are lead from the rail corridor and from the same area, asbestos dust from the train brake pads.

The DSI appears to address three main issues:

- Secretary's Environmental Assessment Requirements (SEARs) requirements (in relation to contamination).
- The data gap identified by EP Test for which further information/analysis is needed to inform the preparation of their interim site audit statement requested by the DPHI in their letter of 10 Jan 24.
- A site remediation plan.

Under the heading 'Contamination', the SEARS requirement is to:

*Assess and quantify any soil and groundwater contamination and demonstrate that the site is suitable for the proposed use in accordance with SEPP 55. This must include the following prepared by **certified consultants** recognised by the NSW Environment Protection Authority:*

- *Preliminary Site Investigation (PSI).*
- *Detailed Site Investigation (DSI) where recommended in the PSI.*
- ***RAP** where remediation is required. This must specify the proposed remediation strategy.*
- *Preliminary Long-term Environmental Management Plan (LEMP) where containment is proposed on-site.*

EP Test's Data Gap Analysis

Hindmarsh Pty Ltd (Hindmarsh) engaged Loek Munnichs, a NSW EPA accredited Contaminated Land Auditor employed by EP Risk Management Pty Ltd (EP Risk), to provide Contaminated Site Audit Services for the Site located at 2-10 Majara Street, Bungendore NSW, and part of Bungendore Park.

*The following areas of environmental concern (AECs) were identified in the **data gap analysis** conducted by the auditor for further investigations across the site:*

AEC 1 – Proposed Agricultural Plot

*The proposed agricultural plot underwent **prior contamination investigations** due to historical use, possible fill presence, and proximity to the eastern railway. Results from confirmatory soil tests by Douglas Partners in 2022 affirmed the site's suitability for its intended use (refer to Section 3.1).*

However, Douglas Partner's (DP) DSI of 2021 and/or 2022 was invalid as 51 boreholes BH101 -152 were not drilled, and soil samples were not taken.

Considering the age of the earlier Douglas Partners investigation, it was deemed necessary to conduct additional sampling to evaluate any potential changes in site conditions.

Lanterra drilled only six boreholes in the agricultural plot site in 2024. If the 14 undrilled DP boreholes are also excluded from the count, the sampling density is simply not sufficient to meet the EPA guidelines.

AEC 2 – Railway

The railway infrastructure adjacent to the site's east boundary was historically used for transporting lead ore from the former Captains Flat mine. This activity carries a contamination risk due to heavy metal dispersion from cargo spillage and dust.

Earlier investigations evaluated contamination risks related to the railway. However, additional confirmatory soil sampling, especially for lead concentrations, was conducted closer to the railway areas of the site (see Figure 3b, Appendix A).

No results are offered for the ‘additional confirmatory soil sampling, especially for lead concentrations’ referred to above.

The six boreholes drilled by Lanterra along the eastern boundary of the BHS site were unlikely to find lead particles because they were drilled BELOW the soil levels, which were in situ at the time the contamination occurred. Photographic evidence shows that soil was moved to create a level site for the council buildings and then used in landscaping in other areas of the proposed BHS site.

See Map/Image 17 at Appendix A.

Lanterra does not mention the likely impact of the remediation of the rail corridor on the BHS site with children in the school playground. See TfNSW Interim Environmental Management Plan for the station precinct.

No mention is made of any collaborative effort by Hindmarsh (who commissioned both the Lanterra and Douglas Partners DSIs) and ERM working on behalf of TfNSW, to implement a joint mediation plan for both lead and asbestos.

Any work to remediate the rail corridor between Turallo Terrace and Gibraltar Street must be carried out jointly by DoE and TfNSW, as the two areas are essentially a continuation of the same area, separated only by a red line on a map. The remediation plan instigated by TfNSW is in its very early stages, and if lead contamination removal at Tarago is any guide, it will take considerable time to complete. It would be inconceivable if this remediation were to be undertaken beside a school playground full of school children and their teachers.

AEC 3 – Fill Material

Previous investigations examined the risk linked to possible contaminated fill materials across the site (refer to Section 3.1). However, based on the data gap analysis and the latest SAQP (Lanterra Consulting, 2024), additional soil sampling was carried out in various areas including:

- *Vacant land east of the Mick Sherd Oval.*
- *Areas surrounding Community and Council Building.*

- Road verges along Gibraltar Street, Majara Street, and Turallo Terrace.
- Proposed Agricultural Plot located to the north of Turallo Terrace.

Based on the findings of previous investigations and this detailed soil investigation, a summary of the key findings is shown below:

- Fill material was identified in the soil across the site. But no suggestion is offered as to the source of the fill.
- This material corresponds with topsoil, reworked material, road base and **imported fill** with signs of anthropogenic materials (construction waste in BH26, BH27, BH41, BH42, BH43, BH44 and BH45).

Note that this cluster of boreholes in the northeast corner of the site is arguably the most representative of the site conditions prior to the preparation of the building sites for the community centre and the council buildings and should be considered to be typical of the whole site.

Map/Image 20 at Appendix A shows the location of this cluster.

- None of the soil samples analysed across the site showed any presence of asbestos fines or fibrous asbestos (AF/FA). However, a lack of awareness of the source of the asbestos dust from the train brake pads may be the reason for this.
- Nonetheless, fragments of asbestos containing material (ACM) were noted as sheet debris in the fill material of borehole BH27, above the adopted criteria for the presence of bonded ACM in soil (Figure 3d, Appendix A).
- Considering the similarity of fill material observed in boreholes BH26, BH27, BH41, BH42, BH43, BH44 and BH45; the potential presence of more ACM fragments and/or AF/FA in this imported fill soil poses a risk for the human health.

Finally, an honest admission of the risk to human health.

- Apart from the asbestos-impacted fill material mentioned above, the soil throughout the site has not been affected by other contaminants of particular concern (COPC) since they mostly fell below the laboratory's limit of reporting (LOR) and the adopted assessment criteria for this study.

The testing for lead cannot be considered anywhere near sufficient to support this statement – only six holes were drilled along the eastern boundary of the proposed BHS site and then in the wrong places.

See Maps/Image 18 at Appendix A which supports this statement.

- For waste classification purposes, lead concentrations in samples BH25 0.0-0.1 (240 mg/kg), BH27 0.0-0.1 (340 mg/kg), and BH44 0.0-0.1 (110 mg/kg) were found to exceed the

lead criteria of 100 mg/kg specified in Table 1 of the EPA NSW (2014) 'Waste Classification Guidelines – Part 1: Classification of Waste'. Therefore, these materials fall under the Restricted Solid Waste classification. However, further assessment using the toxicity characteristics leaching procedure (TCLP) may potentially downgrade the classification to General Solid Waste.

There does not appear to be any plan for DoE to approach TfNSW to engage in a collaborative remediation effort. It may be that the same 'access constraints' that prevented DP from drilling the 51 boreholes mentioned earlier may again come into play.

Lanterra's Remediation Plan

Based on the findings above, Lanterra concludes and recommends the following remediation plan:

- *Based on the results of the investigation, a remediation area of approximately 200 m² corresponding with the impacted fill material has been defined (see Figure 3d, Appendix A). It is recommended that the surface is scraped to a depth of 0.2-0.3 m bgl [below ground level] which is the approximate thickness of fill in this area. This would result in approximately 40 - 60 cubic metres (m) of asbestos waste that will require disposal to a suitably licensed waste facility.*
- *If soil resembling the characteristics of the remediation area is uncovered around borehole BH45 (located between the footpath and the car park) during remedial activities, it will be included with the asbestos waste for proper disposal.*
- ***Before any remedial excavation, a remedial action plan (RAP) report must be prepared by a suitably qualified environmental consultancy, and remediation must be undertaken in accordance with this report.*** *The RAP should provide details regarding the method of remediation and validation criteria to be adopted.*
How can Planning consider something that is not provided? Will the remediation be carried out in collaboration with TfNSW and their remediation plan for the rail corridor? A thin red line is the only thing that separates the two land parcels, yet thus far, their assessments seem to reach vastly different conclusions.
- *Excepting the lead exceedances in samples BH25 0.0-0.1, BH27 0.0-0.1 and BH44 0.0-0.1, and asbestos occurrence, most of the soil across the site has been assessed suitable for disposal as General Solid Waste when compared against 'Waste Classification Guidelines – Part 1: Classification of waste'.*
- *However, any soil to be removed from the site as part of the proposed high school construction and/or remediation works (Figure 3d, Appendix A) must be assessed in accordance with the following guidelines:*
 - o *EPA NSW (2014) 'Waste Classification Guidelines – Part 1: Classification of waste' and standalone waste classification report(s) must be prepared.*

- o *Excavated natural material (ENM) as defined by NSW EPA Excavated Natural Material Order 2014.*
- o *Virgin excavated natural material (VENM) as defined in Schedule 1 of the Protection of the Environment Operations Act 1997.*
- *Based on the results of the investigation, the site **may be considered suitable** for the proposed high school, subject to the recommendations above being undertaken and the site validated.*

Note the use of the word 'may' in the paragraph above indicating some doubt about the site being validated.

In clearing the Lanterra DSI, EP Test concluded that the report was generally of good quality. The Auditor is of the opinion that if the RAP will be implemented (sic), the Site (200m plot) **can be made suitable** for proposed land use. By changing 'may be considered' to 'can be considered', the auditor is showing far greater optimism than Lanterra in achieving a contamination-free site for the new BHS.

What is the plan for this remediation to occur?

- *A construction environmental management plan (CEMP) should be prepared prior to any construction work commencing. The CEMP must include an unexpected finds protocol (UFP) to manage any unexpected occurrences of contamination should they be encountered during the development of the site.*

Remediation of Contaminated Soil

EP Test claims that:

The contaminant source is limited to ACM fragments/asbestos-impacted soil, with an anticipated area of 200m to a thickness of 0.2—0.3m bgl and a volume of 40-60 cubic metres.

The statement above fails to acknowledge the impact on the rail corridor (and beyond) of the asbestos dust given off by the brake pads fitted to the wheels of the trains and carriages that travelled the Bungendore rail corridor over a period of 70 years from the mid-1930s through to 2003. Without a full understanding of the importance of this key factor, there is no way to identify the real source of asbestos at this location. The likelihood of finding any existing building waste and fill containing ACM here is low. The only potential sources might be the council buildings - neither of which were constructed using ACM as it was banned in Australia on 31 December 2003.

According to EP Test, the site remediation objectives are:

- To remediate the site to a level that is suitable for the proposed use as a secondary school.
- To prevent or minimise further migration of contaminants from the source.
- Validate the soil remedial works by demonstrating that the asbestos impacted material has been removed.

Remediation Plan Flaws

Pre-remedial works presented by Lanterra include characterisation of fill materials for excavation by the installation of three test pits/boreholes:

*The Auditor notes that data from these three new sampling locations will need to be **combined with pre-existing data from this area (i.e. DP's DSI)**, which has included lead concentrations at three surface (0 – 0.1m bgl) locations which exceeded the CT1 waste criteria, with an associated waste classification as Restricted Solid Waste.*

However, as BH 101 – 152 were not drilled due to unexplained ‘access constraints’ the proposed remediation method is not valid. In effect, it compounds the omission. Once again, reliance on DP’s false data analysis from boreholes that were never drilled, renders the proposed remediation plan invalid.

Moreover, Lanterra and EP Test's claim that remediation requires the removal of only 40 -60 cubic metres of fill is extremely optimistic. The estimation of the fill quantity Testing of DP 1139067 Lots 12, 13, and 14 cannot be done properly until the building on Lot 14 has been demolished. In fact, Lots 12 and 13 have never been adequately sampled due to the aforementioned access constraints.

The source of asbestos contamination explained above is not understood by the report authors and therefore, testing for it is deeply flawed.

The challenge of remediating the site has been significantly understated. The sources of fill material have not been explained. It is not clear why fill was brought onto the site. Earthworks carried out on the site can only relate to site preparation for two projects - the community centre and the council buildings. That would have involved moving contaminated soil and using it for landscaping. Aerial photographic evidence suggests that excess contaminated soil may have been moved to the area on which the Scout Hall currently stands.

It is assumed that the request by the EP Test Site Auditor for further analysis of the data gap for the BHS site is required for inclusion in the interim site audit statement requested by DPHI on 10 January 24.

The following notice was issued by SINSW on 6 March 2024 in relation to the Bungendore High School Works.

- Site investigations will take place in and around Gibraltar Street, Majara Street and Turallo Terrace (see map) from 11 – 13 March 2024.
- The investigations include **geotechnical** testing to support the SSD process.
- The testing involves soil sampling in 34 small test pits in areas in the Majara/Gibraltar Street precinct where the construction works for the new permanent high school site will occur.
- Many of the test pits will be undertaken within the road, or road verge as this helps in our planning for new on-street parking, new roundabouts, new bus stops and new kiss and drop areas.

Although the announcement of the ‘works’ is reasonably clear, there is no mention of any testing for contamination. The notice is intended to give the impression that the sole purpose of the ‘works’ is geotechnical testing, to “support the SSD process”.

It appears that SINSW is avoiding using the ‘C’ word (contamination) for fear of alarming the local residents and families of children attending the new BHS.

The soil sampling plan needed to acquire further detailed information for the requested ISAS was devised by EP Test. It included the number and location of boreholes to supplement those claimed by Douglas Partners (falsely) to have already been drilled as part of their investigation. As the DP DSI Report indicates on p 17 of 27 these boreholes were never drilled and no samples were taken. This is a fatal flaw.

Lanterra’s soil sampling plan is illustrated in Maps 18 and 19 Appendix A copied from their DSI (Contamination). The major problem with this plan is that it assumes that Douglas Partners actually drilled boreholes 101 to 152. Without the data from the 51 borehole sites that were never drilled, the required sampling density was never achieved. As a result, the true extent of the lead and asbestos contamination was not accurately identified and defined. The actual rate of risk remains unknown, and thus a major issue in the assessment of any site where children are involved.

Lanterra's DSI (Contamination) should have focused mainly on contamination from the two major contaminants, lead and asbestos, emanating from the rail corridor. Both these contaminants pose a major risk for students attending the Bungendore High School. The warnings contained in the declaration of contaminated land issued by the EPA on 4 April 2022 states:

The EPA believes that the Land is contaminated and that the contamination is significant enough to warrant regulation under the Act for the following reasons:

- **There is potential for harm to human health as the concentrations of lead and arsenic in the soil on the Land were found to exceed the national guideline values for the protection of human health.**
- There is potential for harm to the environment as the concentrations of lead, arsenic, copper and zinc in the soil were found to exceed the national guideline values for the protection of the environment.
- Lead is considered toxic, persistent and bio accumulative with concentrations exceeding the national guideline values for human health and the environment identified in the surface soils.
- While lead is the primary contaminant other heavy metals, including arsenic, cadmium, chromium, copper, nickel, zinc and mercury have also been noted, although at lower concentrations.
- There are potentially complete exposure pathways for onsite industrial and recreational users and onsite ecological receptors.
- The current use of the Land by industrial and recreational users may increase the risk of harm from the presence of contaminants on the Land.
- **The approved use of the adjoining land for residential and school purposes may increase the risk of harm caused by contaminants of the Land.**
- **There is potential for contaminants to have migrated or are likely to migrate from the Land (rail corridor) by way of airborne dust or mobilisation of sediment in surface runoff.**

In Australia, the National Health and Medical Research Council (NHMRC) provides guidelines for managing individual exposure to lead. The NHMRC recommends that if a person has a blood lead level greater than 5 micrograms per decilitre, the source of exposure should be investigated and reduced, particularly if the person is a child or pregnant woman.

This guideline is based on the understanding that children are far more susceptible to the harmful effects of lead exposure. Lead can affect almost every organ and system in the body, but the central nervous system is particularly sensitive.

Even low levels of exposure have been linked to cognitive impairment and behavioural disorders in children. It's important to note that these are guidelines; the goal is to prevent, to the greatest possible extent, any level of lead exposure in children.

A great many doubts remain regarding lead and asbestos contamination in and around the proposed new BHS site, especially regarding identifying the extent of the contamination and the best way to respond. Remediation plans are currently being considered by both DoE and TfNSW for their adjoining properties, yet without any obvious signs of collaboration, close or otherwise.

In the absence of any such collaboration between DoE and TfNSW to identify the true extent of the contamination of the Bungendore High School site, it might be argued that there is an unspoken conspiracy on one side, if not both, to conceal the true extent of lead contamination in the proposed new BHS site – perhaps with the intention of allowing the construction of the school to proceed as planned.

If that is so, then DoE is displaying a callous disregard for the health and well-being of our children – WHY ? especially when a far superior site is available.

In the **LIMITATIONS** section of its report, EP Test make the following statement:

This Site Auditor Interim Advice #4 was conducted on the behalf of Hindmarsh Pty Ltd for the purpose/s stated in the Objective section. EP Risk has prepared this document in good faith but is unable to provide certification outside of areas over which EP Risk had some control or were reasonably able to check.

The report also relies upon information provided by third parties. EP Risk has undertaken all practical steps to confirm the reliability of the information provided by third parties and do not accept any liability for false or misleading information provided by these parties.

EP Risk failed to read Page 17 of 27 of DP's DSI (Contamination) report, which states, without explanation: "*It should be noted that BH101 -152 could not be drilled due to access constraints*".

Clearly, EP Risk failed to take all practical steps to confirm the reliability of the information on which they then rely - a crucial factor when this has been provided by third parties such as DP.

Lanterra/EP Test Summary and Conclusions

Lanterra's summary and conclusions (based on false/faked data analysis results) includes the following statement:

*Based on the results of the investigation, the site **may** be considered suitable for the proposed high school, subject to the recommendations above being undertaken and the site validated.*

On Page 55 of their interim advice document, EP Test's conclusions contain the following:

*Lanterra conclude that the objectives of the onsite remediation will be achieved subject to the successful implementation of the actions contained in this RAP, which **will** enable the site to be made suitable for ongoing open space use and the proposed new high school in Bungendore.*

Yet the request from DPHI for information of 10 January 24 does not ask for future promises or projections. It states:

*The Department requests that you provide an interim Section A1 Site Audit Statement or an interim Section A2 Site Audit Statement prepared by a NSW EPA-accredited Site Auditor. The interim Section A1 or A2 Site Audit Statement must verify that the site **is** suitable for the intended land use. Should an interim Section A2 Site Audit Statement be provided, you are required to include an Environmental Management Plan prepared by a NSW EPA-accredited Site Auditor.*

The NSW EPA accredited Site Auditor engaged by EP Test has provided a Site Auditor Interim Advice #4 New High School in Bungendore, NSW. The objectives of the interim audit advice include:

*Observations, conclusions and action items recommended by the Auditor based on **a review of a Remediation Action Plan** submitted by duly qualified environmental consultants, with an objective of **providing independent advice in the assessment and management of contamination issues at the Site in accordance with relevant legislative requirements.***

The nature of the interim advice as described by EP Test is:

*Interim audit advice is provided to assist in the assessment and management of contamination issues at the Site. **Interim audit advice should not be regarded as 'approval' of any proposed investigations or remedial activities, as any such approval is beyond the scope of an independent review.***

This letter is provided as Interim Advice and does not constitute a Site Audit Report or Site Audit Statement. This letter does not pre-empt the findings of the site Audit. A Site Audit Statement and Site Audit Report will be issued at the completion of the Audit.

The DPHI request asks for full verification that the site "IS SUITABLE", for the intended use as a school. Reporting that it "*may be considered*" doesn't come close to an explicit "IS" – and this failure to comply is exacerbated, first by being "subject to recommendations" and after these are undertaken, then having "the site validated" – which is what "is suitable" asks for in the first place. In effect, this two-step answer admits that as-is, the site is NOT SUITABLE.

There is no indication of when the Site Audit Statement and Site Audit Report will likely be made available for comment.

Conclusions

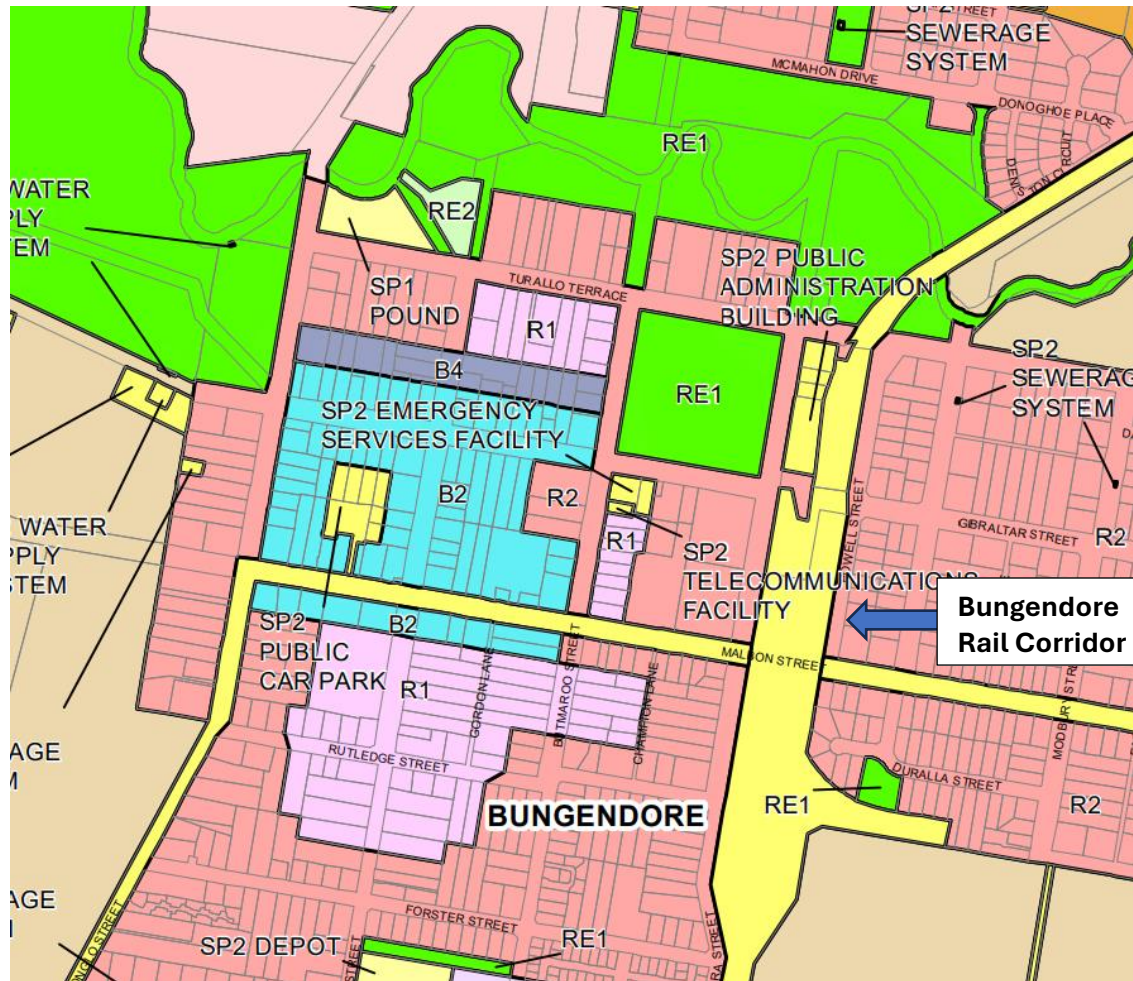
- The failure to read DP's DSI (Contamination) while relying on its content undermines Lanterra's DSI (Contamination). The same applies to the Lanterra DSI. EP Test's reliance on both reports in preparing their Site Auditor Interim Advice #4 New High School in Bungendore, NSW for Hindmarsh Pty Ltd EP3547.005 dated 24 May 2024 also undermines their report.
- The lack of any obvious collaboration between DoE and TfNSW in carrying out the search and testing for lead and asbestos is deeply concerning, and the true extent of contamination within the proposed new BHS site is still not known.
- The proposed remediation plan seriously understates the magnitude of the task and cannot make the necessary amendments until the community centre buildings in Lot 14 have been demolished.
- Noting that the request for further information issued by DPHI stated that '**The interim Section A1 or A2 Site Audit Statement must verify that the site is suitable for the intended land use**' has not been satisfied by the Site Auditor Interim letter, the matter must be held in abeyance until the request is satisfied.
- The results of the various investigation reports referred to in this review do not prove that the Majara Street site is suitable for proposed for the new BHS.
- The lack of thoroughness in the reports – particularly the Lanterra and EP Test reports – are deeply concerning because of their potential adverse effects on the children of our village.

Recommendations

1. Reject DoE's revised SSD.
2. Re-instate the site selection process aborted by the interference of John Barilaro.
3. Find an alternative site which is not contaminated.
4. Allocate the highest possible priority to the remediation of the Bungendore rail corridor in order to protect our citizens and especially our vulnerable children.

5. Hold a round-table discussion with all the key stakeholders to identify the lessons learned over the past four years and, hopefully, lessen the risk of it happening again.

Map 1 – The northern section of the Bungendore rail corridor is shown shaded in yellow.
The source of the map below is the Bungendore Structure Plan 2048.



Appendix A

Map 2. The rail corridor between Turallo Terrace and Gibraltar Street circa 1961 – 12 months before the transportation of lead ore through Bungendore ceased. Note that there is no physical or vegetative barrier on the eastern boundary of the site (outlined with a red line) that would inhibit the uniform distribution of lead contamination (e.g. spillage and dust from the open ore wagons) across the entire site. Note that there is no road linking Turallo Terrace and McCusker Drive.



Appendix A

Map 3 shows the site in 1986. It is largely free of vegetation or evidence of topsoil disturbance.



Appendix A

Map 4. The Bungendore Rail Corridor circa 2007. Note the dirt track leading from Turallo Terrace to Turallo Creek. Note also the swimming pool which was officially opened on 30 November 1991 and later (2007) the newly constructed Bungendore Community Centre.

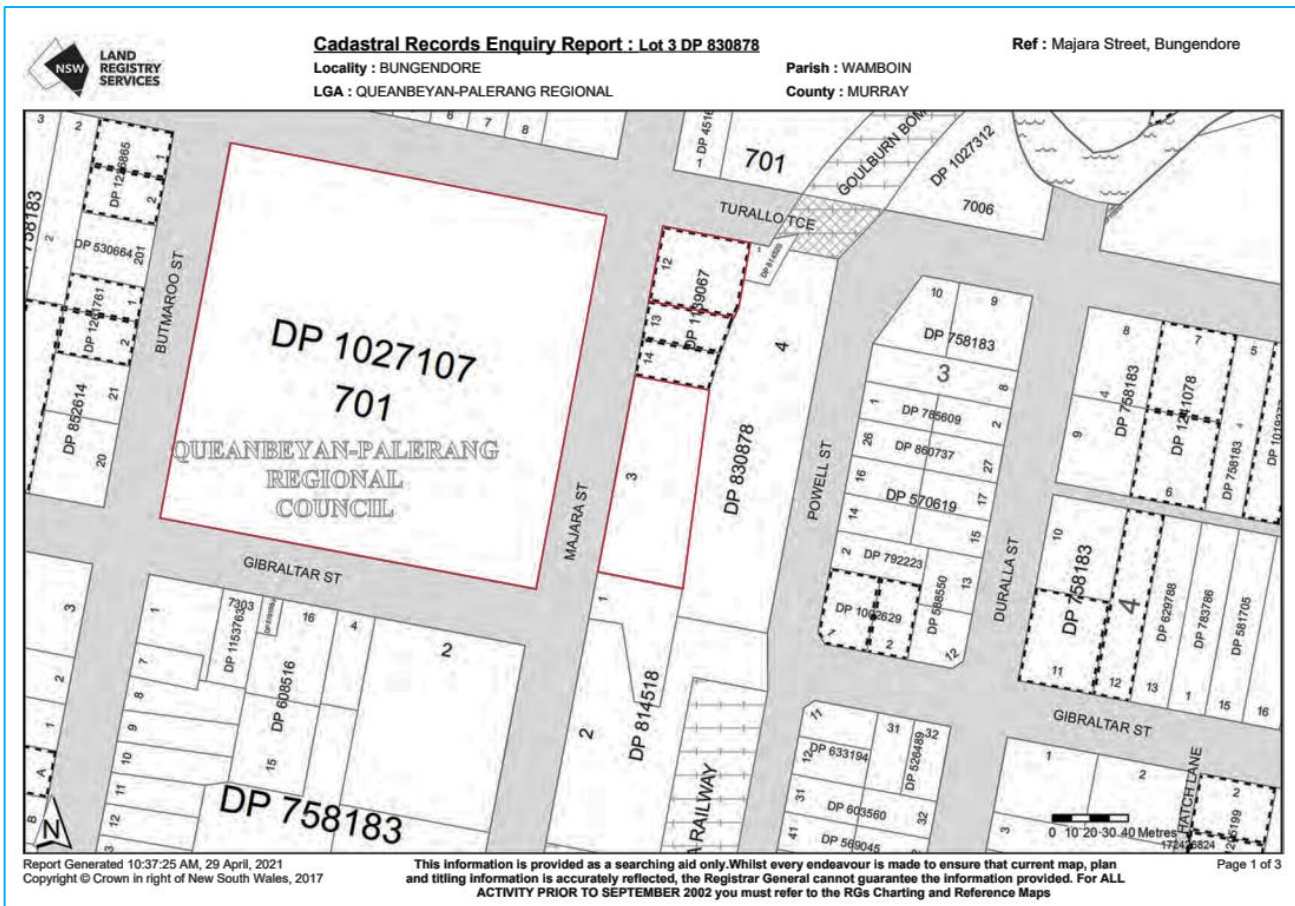


Map 5. Rail Corridor circa 2014. Note construction of Council Buildings and more substantial un-named road linking Turallo Terrace and McCusker Drive.



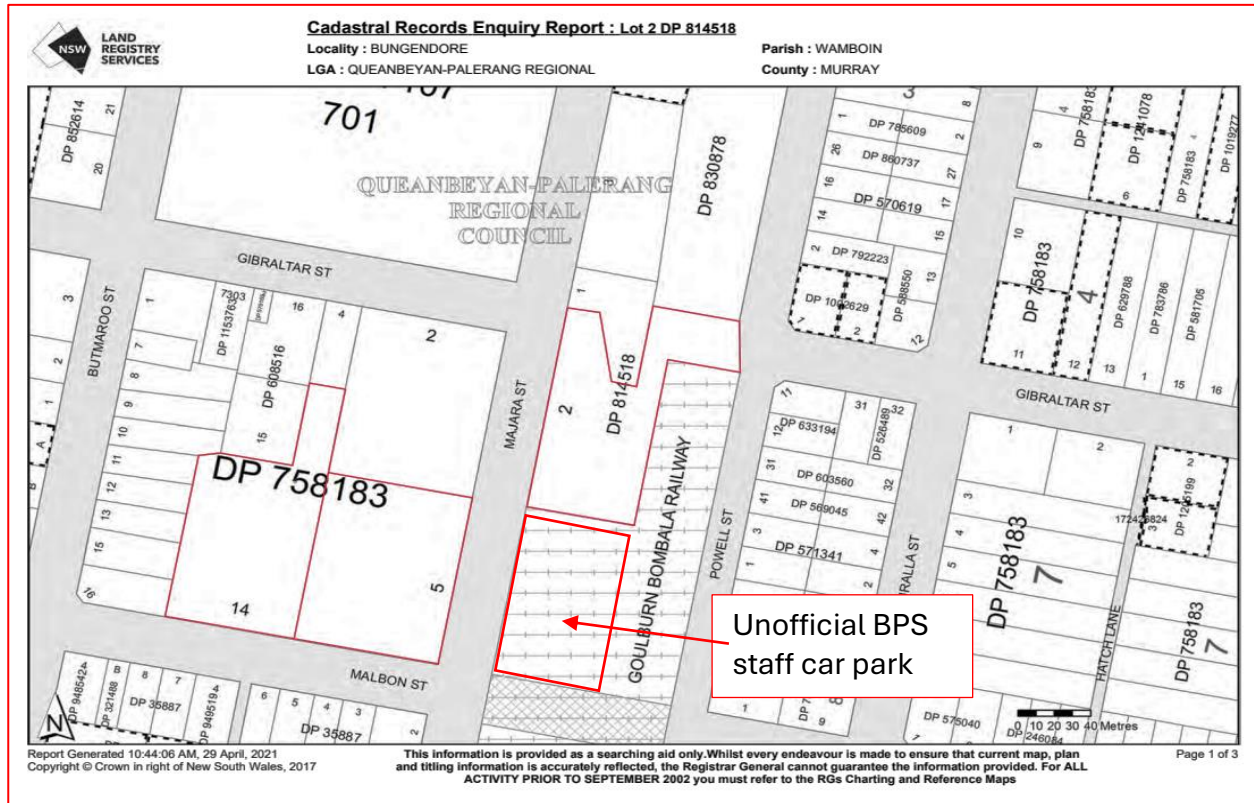
Appendix A

Map 6 shows the extent of lead contamination in the north sector of the Bungendore rail corridor. Note the location of DP 830878 Lot 4 which extends from the eastern boundary of the proposed high school site to Powell St on the east side of the rail line and from Turallo Terrace south to Gibraltar Street.

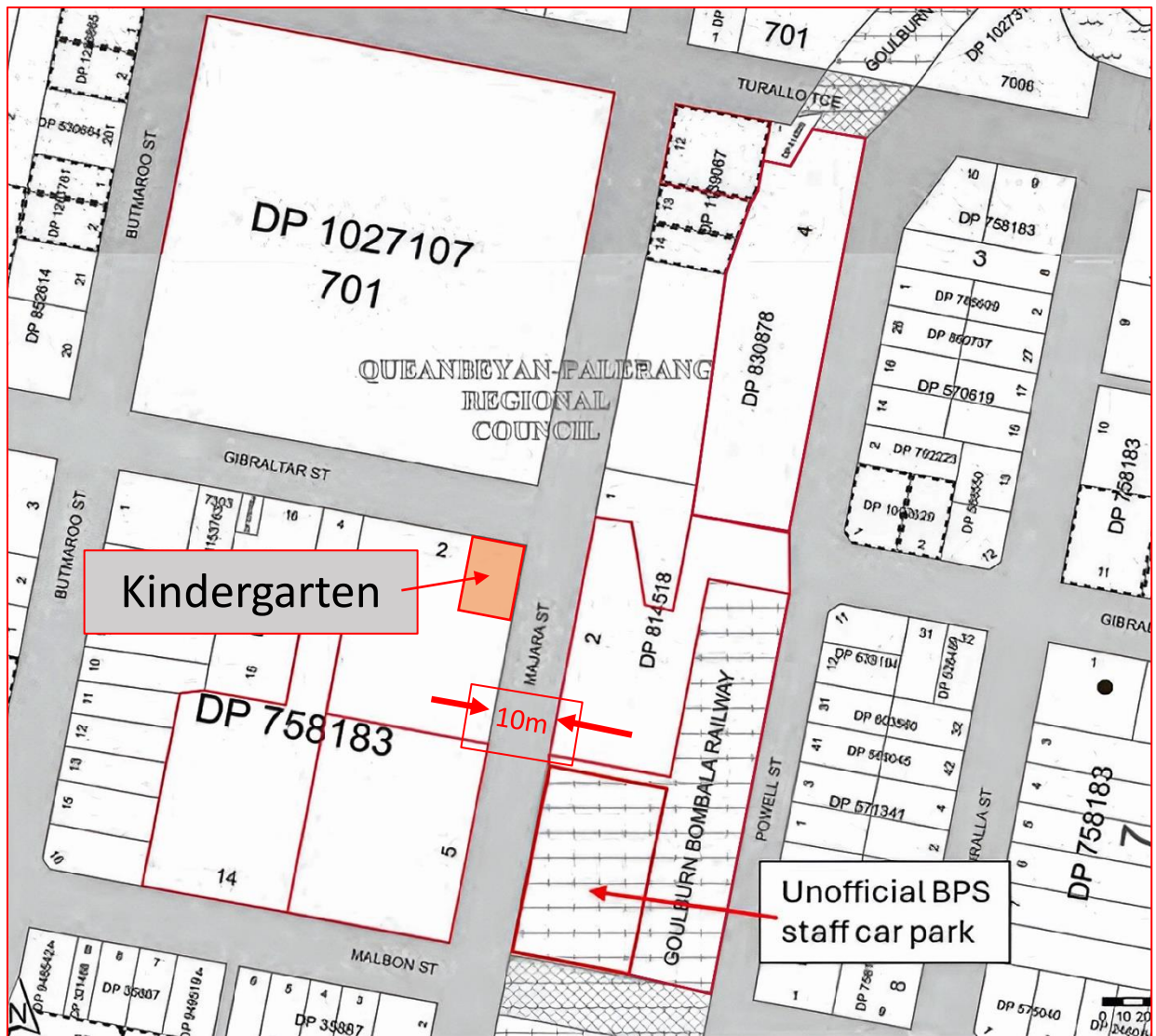


Appendix A

Map 7 shows the location of DP 814518 Lot 2, which extends across the southern boundary of the proposed high school site and the fenced-off unofficial BPS car park.



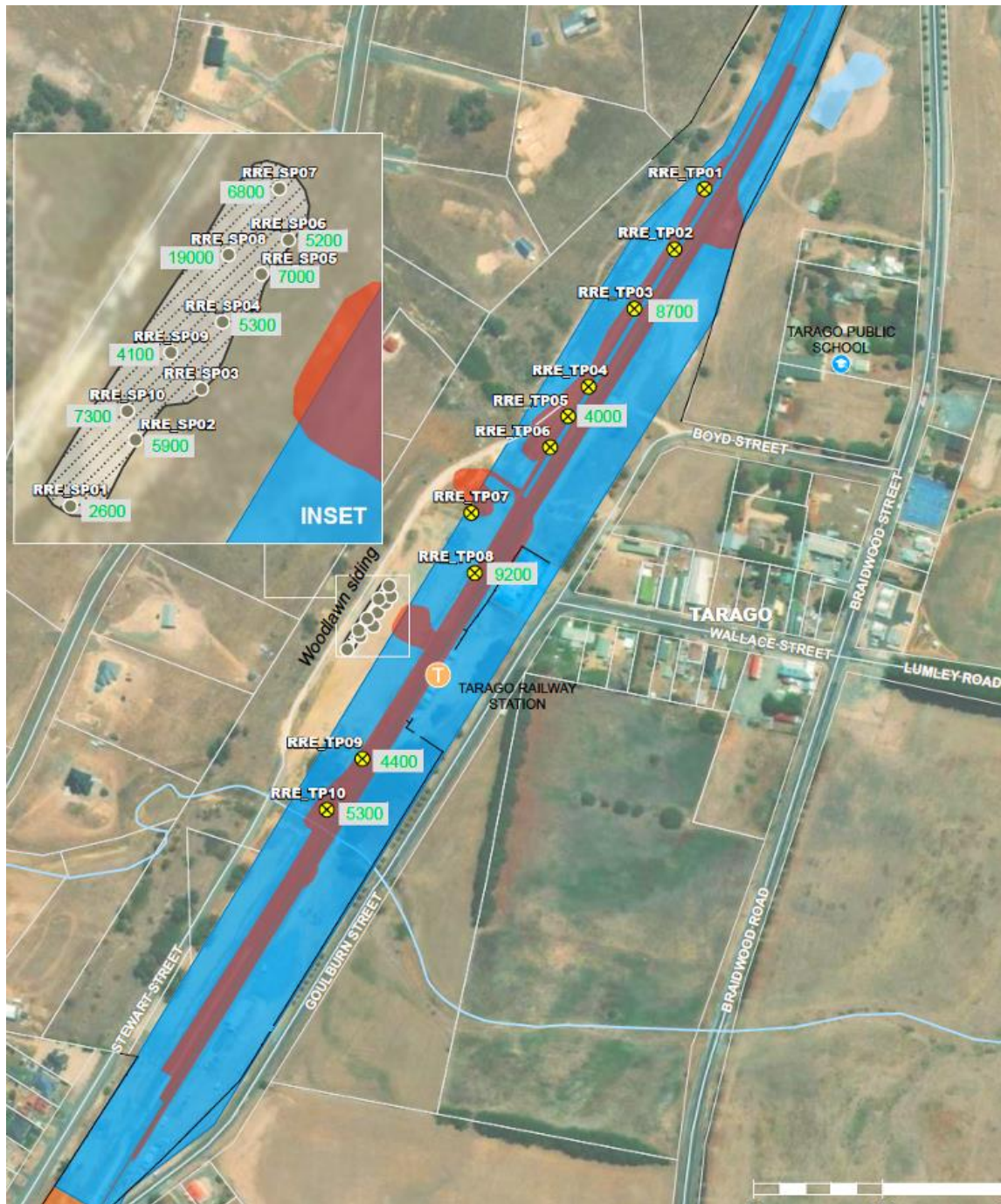
Map 8 combines the two previous maps to show the extent of the rail corridor in the vicinity of the planned BHS and the existing BPS. It also shows the proximity of the Bungendore public school to the contaminated land. The contaminated land is 15 metres from the closest BPS buildings and less than 10 metres to the footpath used by children to access the school grounds.



Appendix A

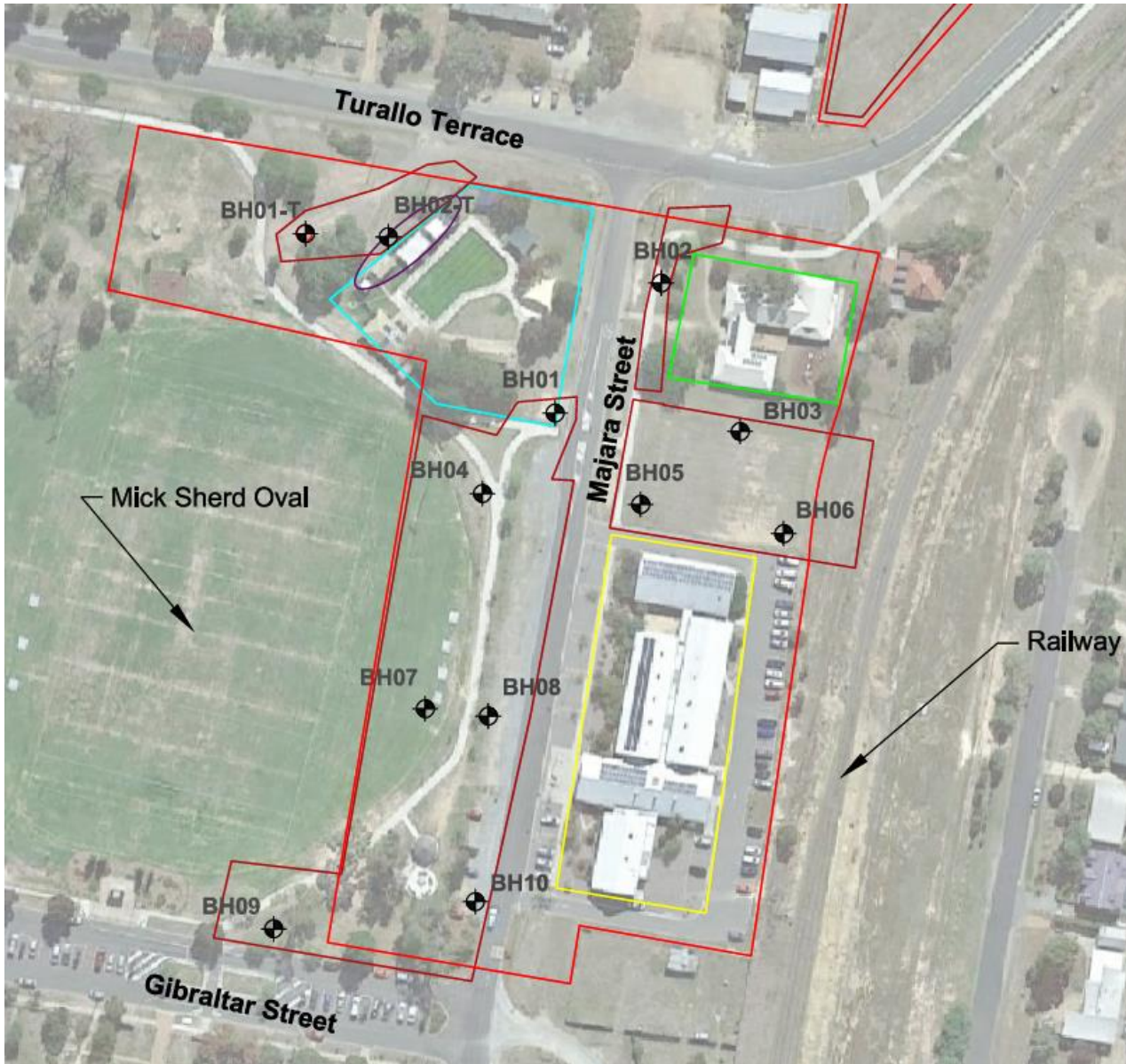
Map 9 is just 1 of 11 maps included in the Tarago Rail Corridor Remediation Assessment Options paper prepared for Transport NSW in February 2024.

Bungendore is yet to achieve this level of planning.



Appendix A

Map 10 shows the location of the ten boreholes drilled during the PSI. Their purpose was to provide geotechnical data for construction purposes, not lead contamination.



Appendix A

Map 11 shows the location of the planned boreholes that were never drilled because of site access issues in particular BH 101 – 115.



Appendix A

Map 12 shows the location of the planned boreholes that were never drilled because of 'site access issues' in particular BH 129 – 139 within the proposed new BHS site.

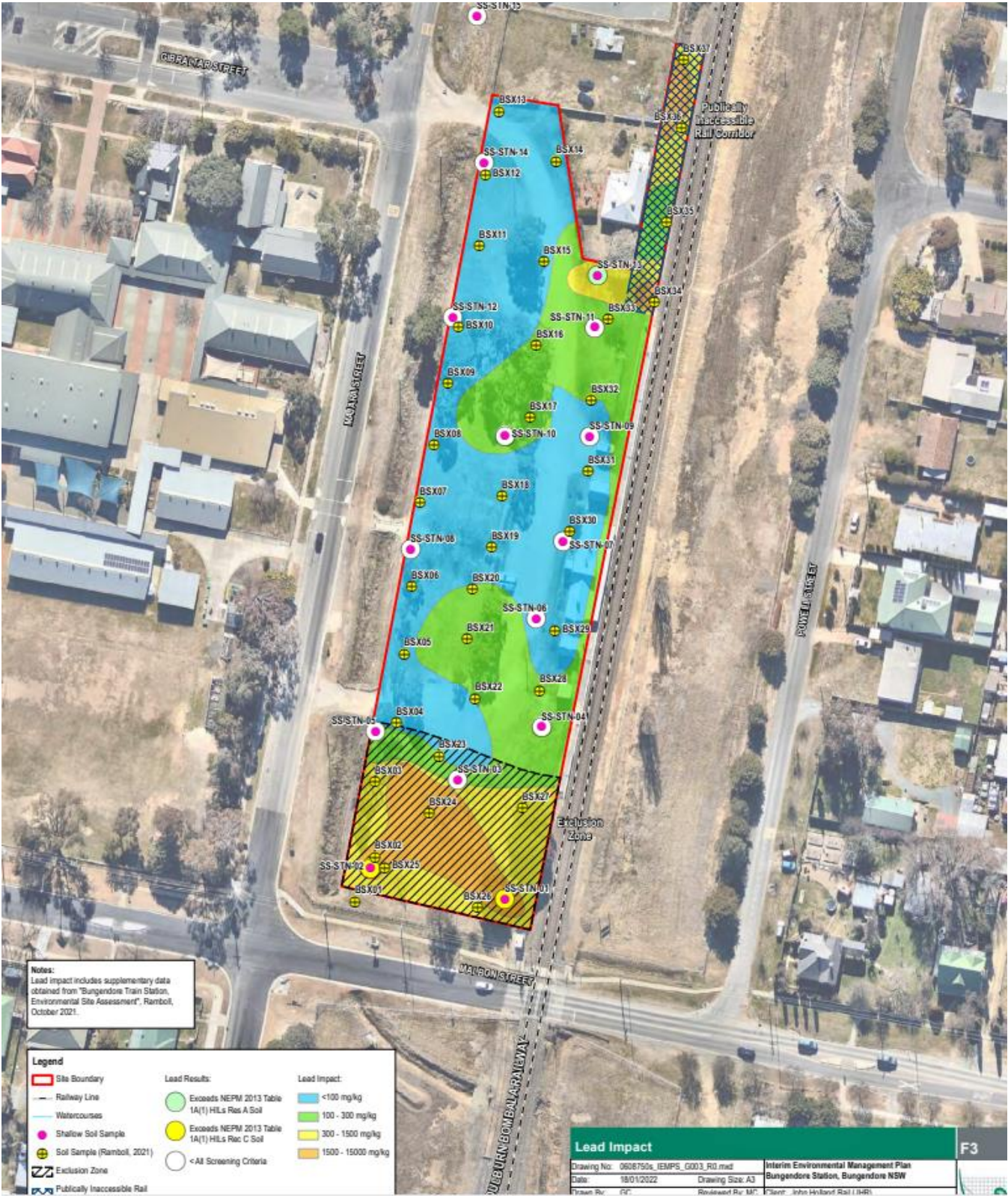


Appendix A

Map 13. The fenced-off section of the contaminated rail corridor has resulted in those needing parking to now park in the front of the station but still in the contaminated area.

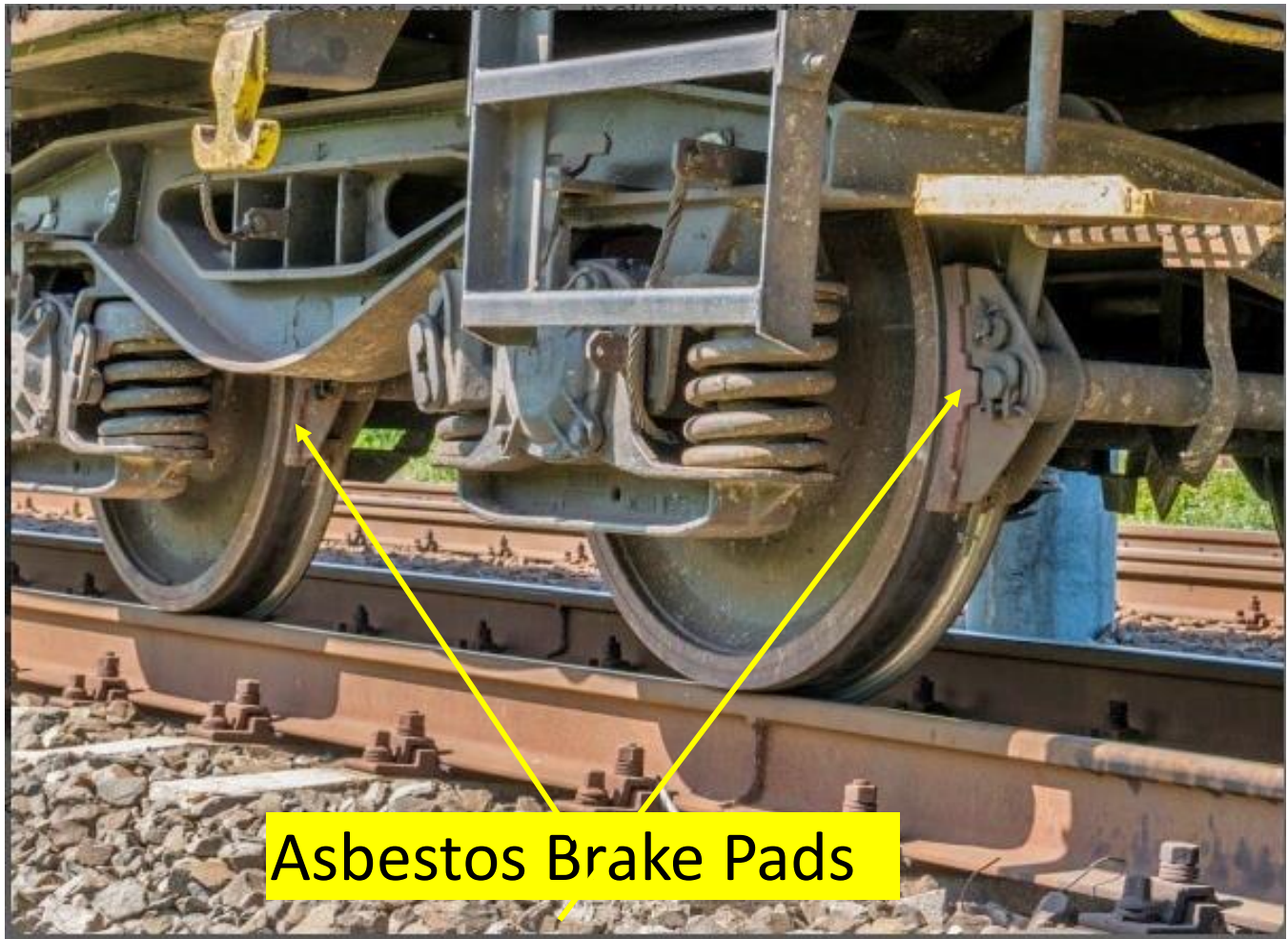


Map 14 ERM Lead Contamination Concentrations Map – Bungendore Station



Appendix A

Map/Image 15



Appendix A

Map/Image 16



Appendix A

Map/Image 16

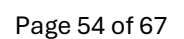


Appendix A

Map/Image 17

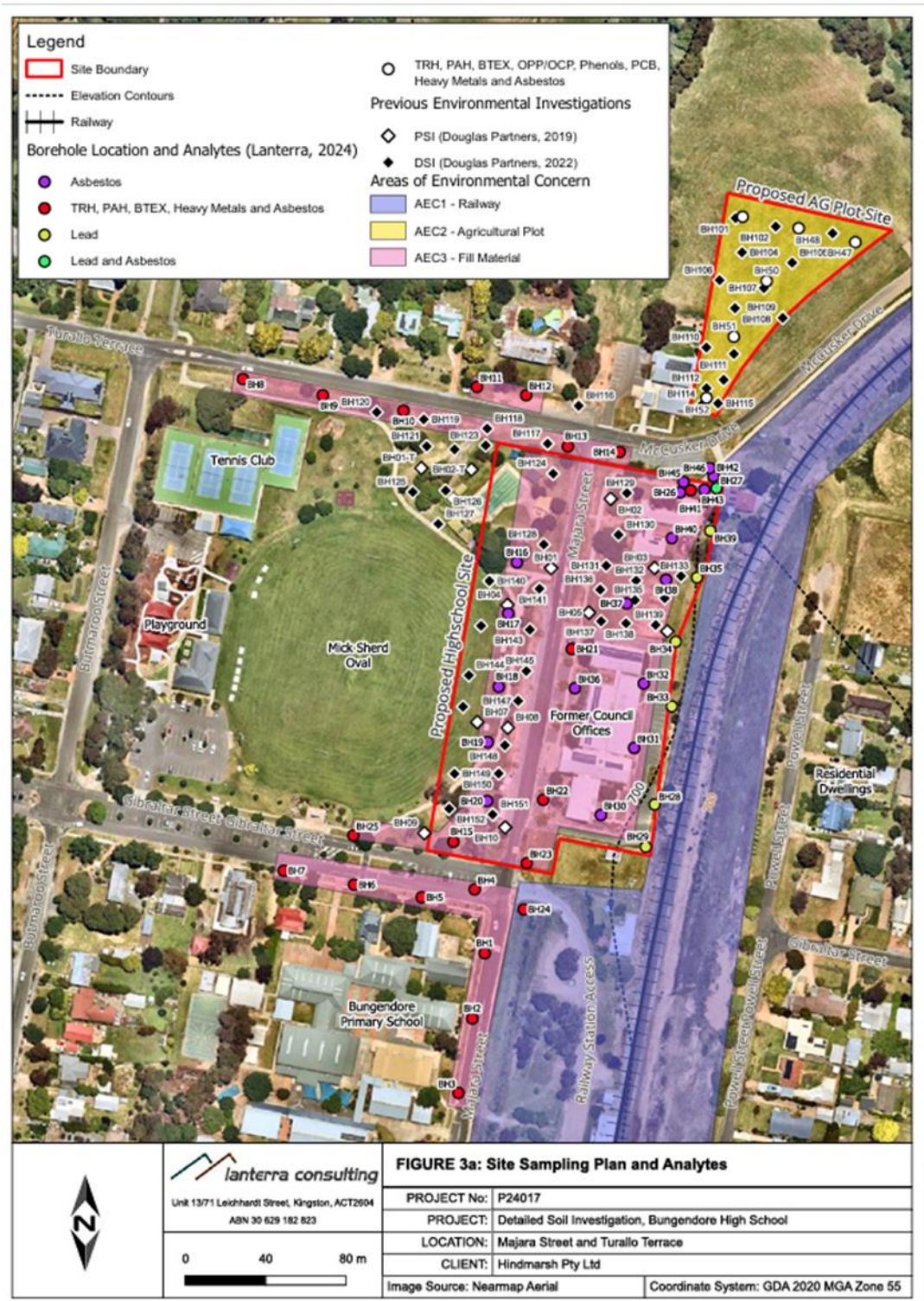


Borehole Locations and Analytes – Lanterra 2024



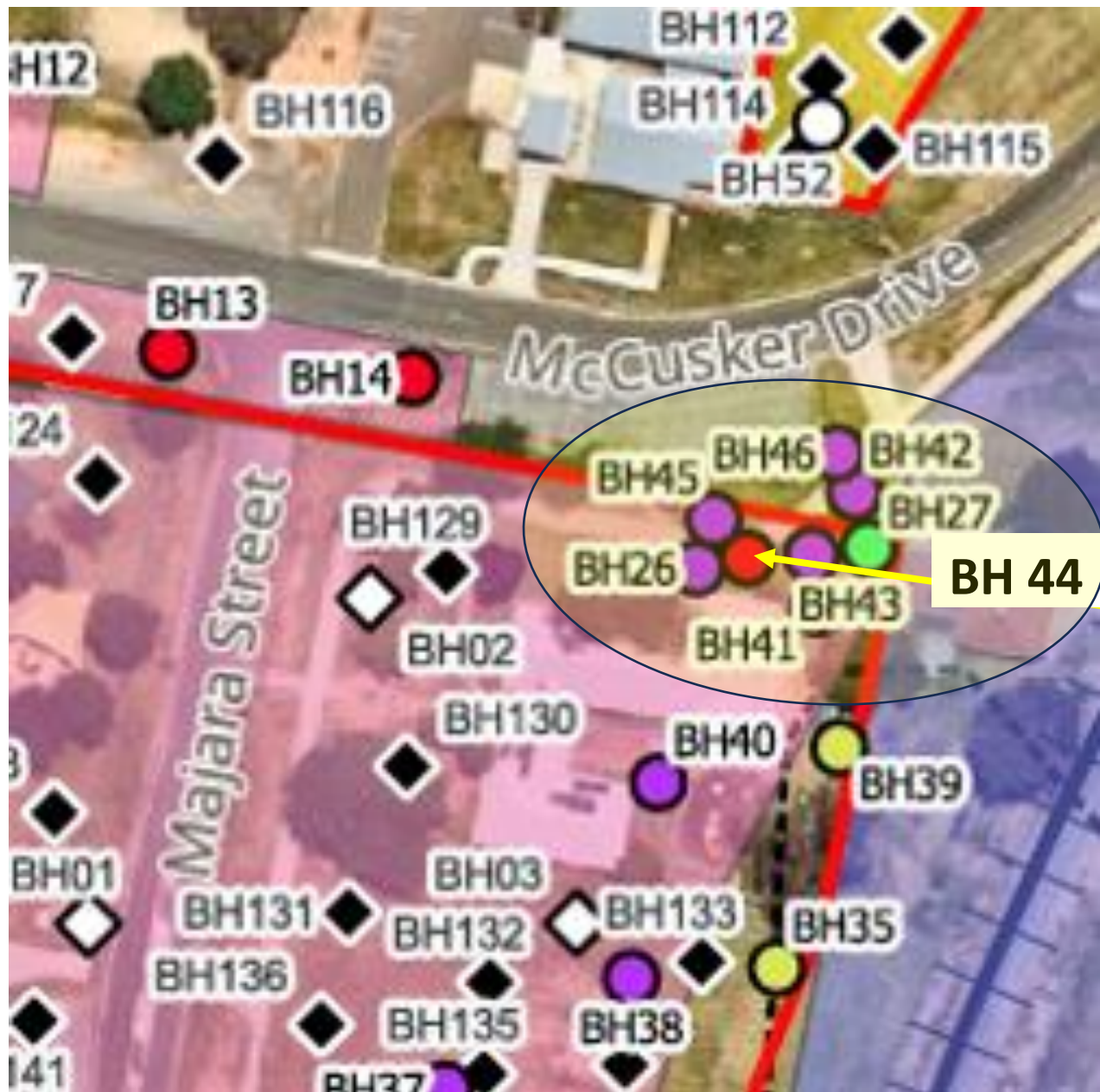
Appendix A
Map/Image 19

Site Sampling Plan and Analytes – Lanterra, 2024



Appendix A

Map/Image 20



Declaration of significantly contaminated land - 4 April 2023

Section 11 of the *Contaminated Land Management Act* 1997 Declaration No. 20221101; Area No. 3522. The Environment Protection Authority (EPA) declares the following land to be significantly contaminated land under s 11 of the *Contaminated Land Management Act* 1997 (Act).

Land to which this Declaration applies.

1. This Declaration applies to significantly contaminated land described Lot 4 DP 830878, Lot 2 DP 814518 and public infrastructure lands (Land).
2. A map of the Land is attached to this Declaration.

Significant Contaminants Affecting the Land

3. The EPA has reason to believe that the Land is contaminated with the following substances (Significant Contaminants) in such a way as to warrant regulation as significantly contaminated land under the Act:
 - (i) Lead;

Nature of harm caused, or that may be caused, by the Significant Contaminants

4. The EPA has reason to believe harm may be caused by the Significant Contaminants, including:
 - (i) Elevated concentrations of lead and arsenic were found after completing shallow soil sampling on the Land and associated with activities related to the transport of material from the Lake George Mine; and
 - (ii) Potential harm may be caused to human health and the environment onsite due to the presence of contaminants.

Matters considered before declaring the Land to be significantly contaminated land

5. Before making this declaration, the EPA considered relevant guidelines and each of the matters listed in s 12(1) of the Act with respect to the Significant Contaminants that the EPA believes cause the Land to be contaminated.
6. The EPA believes that the Land is contaminated and that the contamination is significant enough to warrant regulation under the Act for the following reasons.
 - a. There is potential for harm to human health as the concentrations of lead and arsenic in the soil on the Land found to exceed the national guideline values for the protection of human health. There is potential for harm to the environment as the concentrations of lead, arsenic, copper and zinc in the soil were found to exceed the national guideline values for the protection of the environment.

- b. Lead is considered toxic, persistent and bio-accumulative, with concentrations exceeding the national guideline values for human health and the environment identified in the surface soils. While lead is the primary contaminant, other heavy metals, including arsenic, cadmium, chromium, copper, nickel, zinc and mercury, have also been noted, although at lower concentrations.
- c. There are potentially complete exposure pathways for onsite industrial and recreational users and onsite ecological receptors.
- d. The current use of the Land by industrial and recreational users may increase the risk of harm from the presence of contaminants on the Land.
- e. The approved use of the adjoining land for residential and school purposes may increase the risk of harm caused by contaminants of the Land.
- f. There is potential for contaminants to have migrated or are likely to migrate from the Land by way of airborne dust or mobilisation of sediment in surface runoff.

Further action to carry out voluntary management under the Act

- 7. The making of this Declaration does not prevent the carrying out of voluntary management of the Land by any person. Any person may submit a voluntary management proposal for the Land to the EPA.

Submissions invited

- 8. Any person may make a written submission to the EPA on:
 - whether the EPA should issue a management order in relation to the Land; or
 - any other matter concerning the Land.
- 9. Submissions should be made in writing and sent to:

Email info@epa.nsw.gov.au or

Post Manager

Regulatory Operations – Regional South

NSW Environment Protection Authority

Locked Bag 5022

PARRAMATTA NSW 2620

- 10. Submissions should be made by no later than **5:00pm on 28 April 2023**.
- 11. Information on contaminated land management can be found on the EPA's website at: www.epa.nsw.gov.au/your-environment/contaminated-land

[signed 4 April 2023]

Cate Woods

Director Regulatory Operations

NSW Environment Protection Authority

(by delegation) Date of this Declaration: 4 April 2022

Health NSW Website

[Lead exposure in children and adults - Fact sheets \(nsw.gov.au\)](https://www.health.nsw.gov.au/Lead/Pages/Lead-exposure-in-children-and-adults.aspx)

Last updated: 20 May 2024

Lead exposure in children and adults

- Children and adults can be exposed to lead in number of ways including by breathing fumes or dust, or by eating or drinking something contaminated with lead.
- Lead exposure at low levels can affect physical and mental development in children. In adults, it can cause high blood pressure and affect kidney and brain function.
- At high levels, lead exposure can cause seizures, coma and death.
- To minimise exposure to lead at home, clean your house regularly, wash your hands before eating and keep children and pregnant women away when renovating.
- You can minimise exposure to lead in the workplace by using personal protective equipment and washing your hands.
- If you suspect that you or someone you know has been exposed to lead, contact your doctor or your local Public Health Unit on 1300 066 055.

What is lead?

Lead is a naturally occurring metal and is used widely in manufacturing because it is soft and resists corrosion. Lead is harmful to the human body.

How does lead affect human health?

Lead can enter the human body by inhalation (breathing in dust or fumes) or ingestion (eating or drinking). It can affect almost every organ and system in the body.

People with elevated blood lead levels may not show any symptoms, but some symptoms associated with lead exposure include:

- constipation and/or abdominal pain
- anaemia
- headache
- fatigue

- restless legs and arms
- tingling or prickling sensations in skin
- muscle and joint pain
- loss of appetite
- sleep disturbance
- lack of concentration
- abnormal kidney function and kidney damage
- seizures, convulsions, coma and even death.

Lead exposure in children even at low levels can be harmful and can result in decreased intelligence, impaired neurobehavioral development, decreased stature and growth and impaired hearing.

Lead ingested by pregnant women can pass through the placenta and affect babies.

How might I be exposed to lead?

Lead may be found in the following items:

- Paint, especially lead-based household paints used before 1970 in Australia. Paint containing lead is still used in some countries.
- Household dust which may contain lead particles from deteriorating lead-based household paint, contaminated soil or dust brought into the house on your or your pets' feet.
- Soil or dirt contaminated with lead by deteriorating or removed lead-based paint, or through previous industrial activities and mining.
- Water sources if old household pipes which may have been soldered with lead, or if there is leaching of lead from the roof and pipes.
- Rainwater from water tanks if lead containing dust has contaminated the roof or guttering.
- Very old toys and cots with original paint.
- Imported traditional remedies or medicines, cosmetics, ceremonial powders or spices.

You may also be exposed to lead through the following activities:

- Renovating a house built before 1970 where lead paints were used.
- Hobbies such as target shooting (exposure to lead dust), making glazed pottery or stained glass, furniture refinishing, car and boat repair, and casting lead (e.g.,

to make ammunition, fishing sinkers or toy solders). People can take lead residues into their homes on clothes, skin, hair and equipment.

- Occupations where workers may inhale lead dust or fumes, or ingest dust while eating, drinking or smoking through hand to mouth contact. Examples include:
 - Mining and smelting
 - Work involving sanding, scraping, abrasively blasting or welding directly onto lead-based paints (homes, boats, cars and furniture)
 - Recyclers of metal, electronics and batteries
 - Soldering (working with radiators, stained glass and electronics)
 - Manufacturing bullets, ceramics, electronics and jewellery

How can I reduce my exposure to lead?

The following actions can help to reduce lead exposure.

At home

- Wash your hands and face, and scrub your nails before eating, drinking or smoking.
- During home renovations, take precautions to reduce lead dust.
- Take care when accessing areas such as ceiling spaces and cavity walls as these can accumulate large amount of dust.
- Don't allow children, pregnant women or breast-feeding mothers in a house or area where lead based paint is being disturbed.
- Clean floors with a wet mop and wipe furniture, windowsills and other dusty surfaces with a damp cloth.
- Vacuum carpets, curtains, furniture and upholstery using a vacuum cleaner fitted with HEPA filter and dispose the dust in the bin instead of the garden.
- Use door mats and leave shoes outdoors to prevent dust from coming inside.
- Eat regular well-balanced meals can help to lower the amount of lead that is absorbed, especially in children.
- Be aware that imported products such as Ayurvedic or other traditional remedies, cosmetics, ceremonial powders, spices and toys may be contaminated with lead. It is best to avoid the use of products that may contain lead. For more information, see the Centres for Disease control

At work

- Use exhaust ventilation or wet methods to reduce lead dust exposures.
- Ensure that lead contamination is confined to designated lead process areas.
- Use protective clothing (coveralls, booties, hat, and gloves) and a respirator (meeting the requirements of Australian Standard 1716) when the work might involve lead-bearing dust or fumes.
- Keep immediate work area and lead process area clean and tidy.
- Eat and drink in designated areas that are free from lead.
- Wash your hands and face, and scrub your nails before eating, drinking or smoking.
- Shower and discard contaminated clothing, then change clothing in designated clean areas before going home from high lead risk work.
- Do not sweep or vacuum up dust that may contain lead – use a vacuum cleaner fitted with a HEPA filter instead.

Water

- When water has been left standing for extended periods, flush cold taps for 2-3 minutes before using the water for drinking or cooking. This will lower the level of lead and other metals that may be present. This 'first flush' of water can be used for washing up, watering plants, or other non-drinking uses.
- Only use water from the cold water tap for drinking and cooking. Hot water systems may contain more dissolved minerals and metals, due to the heating process.
- Ensure that plumbing fittings and pipes comply with AS/NZS 4020 and/or Watermark.
- Do not collect rainwater from roof painted with high lead products (e.g. pre-1970s paint).
- Do not collect rainwater from roofs with uncoated lead flashing or lead washers for roofing screws. As a precaution, existing lead flashing can be painted. Replace lead washers with plastic washers.

Health and varied diet

Regular meals and good nutrition might help lower lead absorption. People who have dietary deficiencies in iron, calcium and vitamin C are more susceptible to harm from lead exposure. Iron-sufficient diets discourage the absorption of lead. Calcium competes with lead and can inhibit its absorption. Vitamin C may increase excretion by the kidneys.

Dietary sources of iron, calcium and vitamin C

Sources of iron

- Meat: lean beef, veal, ham, pork, chicken, lamb
- Cereal: iron-fortified cereals, wheat germ
- Fish: clams, mussels, oysters, tuna, trout, cod, sardines
- Fruits: dried fruits (apricots, raisins, prunes, dates)
- Eggs
- Liver
- Vegetables (only fair sources): spinach, collard greens, lentils, peas, beans, peanut butter

Sources of calcium

- Milk, ice cream, yoghurt, cheese
- Fish: sardines, anchovies, shrimp, trout, cod, mackerel, tuna, salmon, crab, lobster
- Vegetables: cabbage, collard, kale broccoli, spinach, bok choy, mustard greens
- Fruits: oranges, pineapples, raisins, fortified orange juice

Sources of vitamin C

- Fruits: grapefruit, oranges, cantaloupe, strawberries, juices
- Vegetables: broccoli, green peppers, greens

What to do if you are concerned about lead exposure?

If you suspect that you or someone you know has been exposed to lead, contact your doctor or your local Public Health Unit on 1300 066 055.

For more information

- [**NSW Environment Protection Agency**](#)
- [**SafeWork NSW**](#)
- [**NSW Fair Trading**](#)
- [**DIY Safe**](#)

Current as at: Monday 20 May 2024

Contact page owner: [**Environmental Health**](#)

Department of Planning and Environment

Our ref: New High School in Bungendore (SSD-14394209)

Ms Sarah Kelly
Principal Planner
Department of Education
Level 8, 259 George Street Sydney NSW 2000

10 January 2024

Subject: Request for Additional Information – 1/2024

Dear Ms Kelly,

I refer to the decision made by the NSW Land and Environment Court (NSWLEC) on 13 December 2023 on *Save Bungendore Park Inc v Minister for Education and Early Learning* [2023] NSWLEC 140, which declared the development consent to SSD-14394209 invalid and ordered that the development be set aside.

The Department notes that the LEC judgement, in relation to the judicial review, found that landowner consent for the lodgement of the SSD application had not been obtained from the Minister administering the Crown Land Management Act 2016 (NSW) on behalf of the Crown.

The Department is requesting that you provide the consent of the Minister administering the Crown Land Management Act 2016 (NSW) on behalf of the Crown (as the owner of dedicated or reserved Crown land) in relation to the lodgement of the development application, in respect of that land required for the carrying out of the development being SSD-14394209.

The Department is also requesting that you provide additional information to address the information in Appendix A. Please note that the information requested in Appendix A is required to respond to any draft, amended Environmental Planning Instruments and Environment Protection Authority declarations since 24 January 2023.

You are requested to provide the information, or notification that the information will not be provided, to the Department by 5 March 2024. If you cannot meet this deadline or do not intend to provide the additional information, please advise the Department via the NSW planning portal.

If you have any questions, please contact Jenny Chu on (02) 8275 1327 or via email at jenny.chu@planning.nsw.gov.au. 4 Parramatta Square, 12 Darcy Street, Parramatta NSW 2150 Locked Bag 5022, Parramatta NSW 2124 www.dpie.nsw.gov.au 1 Department of Planning and Environment

Yours sincerely,

Madeline Thomas

Team Leader, School Infrastructure Assessments

Department of Planning and Environment

Appendix A

Interim Site Audit Statement

The Department notes that on 4 April 2023, the NSW Environmental Protection Authority (EPA) declared land along the rail corridor at Bungendore to be significantly contaminated (Declaration No. 20221101; Area No. 3522). Whilst the Department notes that the subject site is not part of the land to which the declaration applies, the Department requests that you provide an interim Section A1 Site Audit Statement or an interim Section A2 Site Audit Statement prepared by a NSW EPA accredited Site Auditor.

The interim Section A1 or A2 Site Audit Statement must verify that the site is suitable for the intended land use. Should an interim Section A2 Site Audit Statement be provided, you are required to include an Environmental Management Plan prepared by a NSW EPA-accredited Site Auditor.

Statutory Context

The Department notes that since 24 January 2023, select relevant legislation, environmental planning instruments (EPIs) (including drafts), plans, policies, and guidelines have been updated or made effective. This includes but is not limited to

- State Environmental Planning Policy (Sustainability Buildings) 2022
- Flood Prone Land Policy and Flood Risk Management Manual 2023
- Draft Shelter-in-place Guideline.

You are required to address or have regard to as relevant, any environmental planning instruments (EPIs) (including draft EPIs), plans, policies, and guidelines (including drafts) that were made available since 24 January 2023. Where appropriate please include updated mitigation measures, architectural plans and technical reports in relation to all land that is the subject of the development application.