

21 January 2025

NSW Department of Education (DoE)
Level 8, 259 George Street
Sydney, NSW 2000

Advice Prepared for NSW Department of Education

**Re: Interim Advice 2 (IA2) – Review of Contamination Reports for the Proposed
Gledswood Hills High School, 9 Gregory Hills Drive, Gledswood Hills NSW 2557**

1 Introduction

The Department of Education (DoE) has appointed Rebeka Hall of Geosyntec Consultants Pty Ltd (Geosyntec), a NSW EPA Auditor accredited under the Contaminated Land Management (CLM) Act 1997, to conduct an Audit of 9 Gregory Hills Drive, Gledswood Hills NSW 2557 (the site). The land is identified as Lot 2 in DP126720, occupies an area of 4.15 hectares and is currently vacant.

This Interim Advice letter has been prepared to support a Review of Environmental Factors (REF) for the construction and operation of the proposed Gledswood Hills High School (the **activity**).

The overall aim of the Auditor engagement is to enable a Section A site audit statement (SAS) and associated site audit report (SAR) to be prepared that confirms the suitability of the site for the proposed secondary school. The Audit is being conducted in accordance with the NSW EPA (2017) Contaminated Land Management Guidelines for the NSW Site Auditor Scheme (3rd edition).

2 Site Description

The site is located at 9 Gregory Hills Drive, Gledswood Hills, within the Camden Local Government Area (LGA), approximately 60km southwest of the Sydney CBD and approximately 3.5km from Narellan Town Centre. It comprises one lot, legally described as Lot 2 in DP 1262720, that measures approximately 4.15ha in area. The site is bound by Digitaria Drive to the north and Gregory Hills Drive to the south. To the east lies two vacant lots, a childcare centre and a fast-food outlet. To the west lies another childcare centre and a vacant lot (which also has approval for a childcare centre).

An aerial image of the site is shown in Figure 1. The site is currently fenced, vacant land.



Figure 1: Aerial Image of Site (Source: NearMap)

3 Summary of the Activity

The works are proposed by the DoE to meet the growth in educational demand in Gregory Hills and Gledswood Hills, and the broader Southwest Growth Area.

The activity is the construction and operation of a new high school known as Gledswood Hills High School. The new school will accommodate up to 1000 students. The proposal involves the following:

- A series of school buildings along the northern, eastern and southern site boundaries.
- A school hall.
- An assembly area, sports field and multi sports courts.
- Car parking and a Kiss and Drop zone.
- Associated on and off-site infrastructure to support the school, including a new pedestrian crossing and relocation of the existing bus stop on Gregory Hills Drive to the site frontage.

The layout for the proposed high school is shown in Figure 2.



Figure 2: Proposed new high school layout

4 Scope of Audit and Nature of Interim Advice

NSW EPA (2017) describes the site assessment and audit process as:

- *Consultant is commissioned to assess contamination.* The contaminated site consultant designs and undertakes the site assessment and, where required, all remediation and validation activities to achieve the objectives specified by the owner or developer; and
- *Site auditor reviews the consultant's work.* The site owner or developer commissions the Auditor to review the consultant's work. The Auditor then prepares a SAR and SAS at the conclusion of the review, which are given to the owner or developer.

Therefore, the contaminated land consultant and other relevant parties should be satisfied that the work to be conducted conforms to all appropriate regulations, standards and guidelines and is suitable based on the site history and the proposed land use.

5 Current Interim Advice

In preparing this interim audit advice, the Auditor has reviewed the following reports related to land contamination assessment:

- ADE Consulting Group (ADE) (29 November 2013) Fill Management Protocol, Gregory Hills Corporate Park Pty Ltd, Proposed Commercial Subdivision, Lot 701, DP1154882, Gregory Hills Drive, Gledswood Hills NSW, (Ref.: 6908/FMP1/v1 final).

- ADE (3 June 2016) Review of Imported Soil Materials and Validation Report, Stage 3, Gregory Hills Corporate Park, Gregory Hills Drive, Gledswood Hills NSW (Ref.: GRH-02-10383/ENV1.v2 final).
- ADE (7 June 2016), Asbestos Materials Clearance Report, Gregory Hills Corporate Park, Gregory Hills Drive, Gregory Hills NSW (Ref.: GRH-01-10491/CLR1.v1 final).
- ADE (5 June 2017) Review of Imported Fill Material, Gregory Hills Corporate Park, 2016-2017 (Ref.: GRH-03-11909/ENV.v1 final).
- ADE (22 March 2019) Letter: Site Contamination and Imported Fill Summary – Gregory Hills Corporate Park, (Ref.: GRH-05-15898.LTR.v1 final).
- Geotechnique Pty Ltd (Geotechnique) (15 February 2024) Preliminary Desktop Site Investigation (PSI), Proposed Gledswood Hills New High School, 9 Gregory Hills Drive, Gledswood Hills (Ref.: 20465/2-AA final).
- Geotechnique (28 February 2024a) Preliminary Geotechnical Desktop Study and Intrusive Geotechnical Investigation Report, Proposed New High School, 9 Gregory Hills Drive, Gledswood Hills (Ref.: 20465/3-AA.amended).
- Geotechnique (28 February 2024b) Detailed Site Investigation (DSI), Proposed Gledswood Hills New High School, 9 Gregory Hills Drive, Gledswood Hills (Ref.: 20465/4-AA.final v2).
- Geotechnique/TSA Reily (13 December 2024c) Response to Auditor Comments IA1.
- Geotechnique (17 January 2025) Preliminary Site Investigation and Detailed Site Investigation Proposed New Gledswood Hills High School Lot 2 DP1262720 – 9 Gregory Hills Drive, Gledswood Hills (Ref: 20465/6-AA.v1 Revision 1).

6 Summary of Investigations and Site Conditions

6.1 Pre-existing Investigation Reports

6.1.1 ADE (22 March 2019) Site Contamination and Imported Fill Summary

ADE provided a summary of the earthworks completed for the wider Gledswood Hills Corporate Park redevelopment (occupying 29 ha). The earthworks across the 29 ha future commercial precinct was required to achieve design levels.

ADE was engaged by Gregory Hills Corporate Park (GHCP) to oversee the earthworks between November 2013 to April 2017 to ensure that fill imported complied with the ADE (2013) Fill Management Protocol (FMP). It was reported that approximately 330,000m³ of fill would require import.

Based on information presented in ADE (22 March 2019) and supporting ADE (2013-2017) reports, the following was conducted or observed:

- The FMP stated that only material classified as Virgin Excavated Natural Material (VENM), Excavated Natural Material (ENM) or a Site-Specific Resource Recovery Exemption could be imported and used as fill.
- Visual inspection and gate check sampling of imported soil (at a rate of 1:1,000m³ for exempt material and 1:5,000m³ for VENM) by ADE, occurred from November 2013 to April 2017.
- ADE concluded that the fill assessment reports and gate check soil sampling results met the ADE (2013) FMP and commercial/industrial land use criteria (HIL/HSL-D).
- Non-compliances to the FMP were identified between December 2013 and August 2015 (as reported in ADE, 3 June 2016) for certain loads (from various source sites) that did not meet saline, EC or pH thresholds. ADE, however, concluded that as the material was blended

with material from various other sources during compaction works, the minor exceedances were not significant nor affect the future development of the site.

- Non-compliance to the FMP identified in May 2016 (ADE, 5 June 2017) comprised two loads of material impacted with asbestos. Reportedly these loads were isolated and removed offsite. The Auditor has independently reviewed the ADE (2016) Asbestos Clearance Report and notes that the clearance area was located outside the current audit boundary.
- No unexpected finds were identified by ADE during the imported material validation works.

6.1.2 Geotechnique (28 February 2024b) Detailed Site Investigation

The objectives of the report were to:

- Determine the contamination status of the site
- Assess the suitability of the site for the proposed high school land use
- Make recommendations regarding any future remedial works, if required.

The scope of works included:

- Review of the PSI (Geotechnique, 2024) report findings
- Site inspection
- Collection of soil samples from 15 locations (BH1 to BH15, BH1a, BH3a, BH4a, BH8a, BH9a, TP1a, TP4a to TP6a and TP8a) drilled during the geotechnical investigation.

The outcomes of the report were:

- The site was vacant at the time of sampling and site inspection.
- All the soil laboratory test results satisfied the adopted criteria with results either not present i.e. concentrations less than laboratory limits of reporting, or present at concentrations that do not pose a risk to human health or the environment for the proposed high school land use scenario.
- Potential for off-site impact to groundwater and offsite waterbodies were considered to be low.
- Geotechnique concluded that no further investigation was necessary and the site is suitable for the proposed new high school land use.
- Waste classification is to be assessed in accordance with NSW EPA (2014) Waste Classification Guidelines should site materials be required to be removed from site.
- Material importation is to be assessed by a qualified environmental consultant prior to importation. Only VENM or ENM are to be imported onsite for use.

6.2 Recent Investigation

In evaluating compliance to NSW EPA made or endorsed guidelines for assessing contaminated land, the Auditor considered that the pre-existing environmental reports provided sufficient information on land use history and the identification of potential sources of contamination. No gross contamination had been identified by the earlier investigation reports prepared by ADE (2009-2019) and Geotechnique (2024).

However, the pre-existing data set did not meet the NSW EPA minimum sampling standards to assess, with certainty, current soil conditions and the land's suitability for high school land use. Historical imported fill data (ADE, 2013-2019) was assessed to guidelines at that point in time and for commercial/industrial land use suitability. With updates to EPA guidance, including adjustments to threshold levels and contaminants of concern (e.g. PFAS), additional investigation of the site was required.

The scope of the additional investigation, to address the remaining data gaps in site characterisation, was confirmed with the Auditor in December 2024 with findings of the additional detailed site investigation (ADSI) reported by Geotechnique (17 January 2025).

6.3 Geotechnique (17 January 2025) Preliminary Site Investigation and Detailed Site Investigation

The objectives of the ADSI were to achieve site characterisation and to confirm site conditions are (or can be made) suitable for the proposed secondary school land use. The ADSI also addressed Site Auditor Interim Advice 1 (IA1) comments on the pre-existing information.

Geotechnique completed the following:

- A detailed site inspection
- Excavation of 36 test pits (TP101-TP1036) across the site to supplement the Geotechnique (2024) investigation findings from samples collected in 2023.
- Soil analysis, data assessment and report preparation.

An assessment of the soil samples did not identify any contaminants above the adopted criteria (for secondary school land use).

Geotechnique concluded that the site is suitable for the proposed new Gledswood Hills high school land use. No further site investigation or remediation is required. However, Geotechnique made the following recommendations:

- Removal and appropriate disposal of fly tipped waste identified onsite (including disused diesel oil bottles, fuel filters and truck brake pads).
- Following the remove of the fly tipped waste, an inspection by an environmental consultant to confirm successful removal.
- Implementation of an Unexpected Finds management protocol and a Construction and Demolition Waste Management Plan.
- Any imported material must be assessed by a qualified environmental consultant prior to importation. The imported fill should either be virgin excavated natural material (VENM) or excavated natural material (ENM).

7 Mitigation Measures

The mitigation measures associated with this IA are presented in Table 1.

Table 1 Mitigation Measures

Potential Impact/Activity	Mitigation Measure	Reason for Mitigation Measure
Identification of contamination during earthworks	An Unexpected Finds Protocol (UFP, incorporated into the development's Construction Environmental Management Plan (CEMP), should be implemented in the unlikely event contamination is encountered during earthworks. The UFP should identify potential 'types' of items that could be considered an unexpected contamination find, and corrective actions (including any follow up testing).	In the event a contamination unexpected find (UF) is uncovered, the UFP outlines corrective measures to be taken to ensure the UF is appropriately removed, the area tested and confirmed to be suitable for the proposed secondary school land use.

Surplus fill/soil to construction needs	Complete waste classification in accordance with NSW EPA (2014) Waste classification guidelines	Ensures appropriate classification and lawful disposal of waste material. Compliance with the waste regulations.
Importation of fill to facilitate earthworks/construction	Imported fill should comprise certified excavated natural material (ENM), or virgin excavated natural material (VENM), quarried product or material generated under a NSW EPA Resource Recovery Order (and its application to land as outlined in the Exemption). Contractor to implement a material tracking register and ensure documentation provided confirms ENM or VENM, or complies with relevant RRO/RRE.	Ensures no contaminated material is imported to site, and the site continues to be suitable for the proposed use.

8 Auditor Conclusion

Based on the available data and the findings from the most recent additional detailed site investigation (Geotechnique, 2025), Auditor considers that the Site has been suitably investigated and no contamination has been identified that exceeds the human health and/or environmental criteria for a secondary school land use.

On this basis the Auditor can prepare a Section A Site Audit Statement (SAS) and Report (SAR) to confirm the suitability of the site for the proposed activity subject to the implementation of the above mitigation measures during construction works.

9 Closure

This interim advice does not constitute a SAS or a SAR, but rather is provided to assist the Client in the assessment and management of contamination issues at the site. The information provided herein should not be considered pre-emptive of the final Audit conclusions. It represents the Auditor's opinion based on the review of currently available information.

Should you have any queries or wish to discuss any points, please do not hesitate to contact Fiona Wong or the undersigned.

Yours sincerely,



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