

To: Sara Westcott, Team Leader Consents
From: Stuart Wright, Senior Consents Monitoring Officer
CC:
Date: 16 June 2026
Re: Foxton Solar Farm Contaminated Land Assessment Technical Memo

1. Scope of Assessment

This memorandum provides a technical assessment of proposed management of potential contaminated land for a solar farm proposed to be constructed on a 436 ha site north of Foxton (Application APP-2025205573.00). The focus of the assessment is on the potential for contaminated land on the site and how it is proposed to be managed during the construction phase of the project. This assessment considers and assesses the potential effects on the environment and whether the proposed controls and actions will mitigate potential risk sufficiently. This assessment has been undertaken considering the principles of the Ministry of Environments Contaminated Land guidelines.

This assessment is based on information provided in the Preliminary Site Investigation - Foxton Solar Farm Fast Track Approvals Act Application for Genesis Energy Limited, prepared by SLR Consulting New Zealand (SLR) (dated 10 December 2025). The assessment also comprised a site walkover with the applicant on 28th April 2026. The assessment also considers the draft consent conditions.

1.1.Scope of works

The scope of works being assessed include:

- Establishment of approximately 14 km of access tracks, which are proposed to be 4 to 6 m wide and require the removal of the top 0.35m and covered in compacted soil and aggregate.
- Excavation and installation of approximately 50 km of cable trenches, which will be 1.2 m deep and between 0.3 to 2 m wide. These will result in approximately 48,000 m³ of excess soil.
- Installation of a substation area that will require an area of 11,000 m² to be excavated, levelled and have a concrete slab constructed. This may result in 7,700 m³ of excess spoil.
- Installation of a Battery Energy Storage System (BESS) that will require an area of 17,500 m² to be excavated, levelled and have a concrete slab constructed. This may result in up to 12,250 m³ of excess soil.
- The installation of approximately 300,000 solar panels, which are to be installed onto driven piles from the surface. The method of installation will mean minimal land disturbance will occur and there will not generate notable volume of waste soils
- Up to 14,00 m² of contingency and minor works, such as landscaping, fencing ancillary buildings, etc.

1.2.Site description

The site is largely a flat area and is currently an operating farm that has been levelled to reduce the elevations from the historic sand dunes that would have been present in the area. There is a network of waterways that cross the site and areas of wetlands.

2. Technical Assessment of Approach

The Preliminary Site Investigation (PSI) comprised of a desktop review and site walkover of the site to help identify potential sources of contaminated land or potentially contaminating activities. This approach is considered the standard approach when assessing a site for the potential presence of contaminated land. The PSI was prepared and reviewed by environmental consultants SLR. These are considered to meet the requirements of a suitably qualified and experienced person (SQEP) who would be capable of undertaking a suitable PSI.

2.1.Sources

The PSI identified the potential sources of contamination as being a potential sheep dip and bulk fuel, chemical and fertiliser storage and application. This is consistent with the likely sources of contamination on or from land used for agriculture.

The areas of bulk storage of chemicals are located in areas that are not proposed to be developed as part of the project, as they will be either retained by the current landowner for ongoing farm use or are outside the footprint of the proposed development. Therefore, disturbance of potentially contaminated land is unlikely.

The location of the potential sheep dip area is currently designated as an area where solar panels will be sited. Piling of the solar panel support structures is unlikely going to create exposure pathways for potential contaminants. Therefore, bulk excavation and land disturbance will be confined to excavation of the cable trenches in that area. This means there is the possibility of disturbance, exposure and movement of potentially contaminated soils, which are proposed to be managed. It was noted that there was no visual confirmation of the sheep dip, however, residual contamination may still be present.

The potential contaminants of concern (COPC) associated with sheep dips, identified in the PSI, include heavy metals (arsenic, copper and zinc) and organochlorines and pesticides (OCPs). This is considered appropriate and is consistent with potential sheep dip scenarios.

No other potentially contaminating activities were identified, which, given the location and the land use history being agricultural use, is considered likely and reasonable.

2.2.Receptors

The adjacent receiving environment that could potentially be impacted by migration of contaminants are largely limited to groundwater extraction bores, onsite waterways and wetland areas. The nearest significant waterway is the Manawatu River approximately 2.4

km to the southeast. It is however unlikely to be impacted by the proposed works given the distance and the lack of pathway between the potential sources and receptor. There are also a small number of residential dwellings adjacent to the project area, particularly to the south. Similarly, these properties are unlikely to be impacted by potential contamination impacting the residents. The PSI appropriately identifies that the construction workers during the development as a more likely potential receptor.

3. Recommendations and Conditions

Applicant's proposed Condition A15 – Table 4 provides a list of management plans the consent holder is required to produce. A Contaminated Soils Management Plan (CSMP) is listed. It is suggested that the wording is updated so that the CSMP is required prior to soil disturbance in areas where there is potential for contaminated land, consistent with condition A26 below. Table 4 also references the need for a site management plan if contaminated soil is confirmed. However draft condition A26 refers only to a CSMP. It is not clear why a separate Site Management Plan is required in addition to a CSMP and a Construction Environmental Management Plan (CEMP). It is likely that a CEMP and CSMP would be sufficient to cover the information required.

Applicants proposed condition A25 - This condition currently requires soil sampling and analysis to be undertaken if soil disturbance is required with the area of the former sheep dip. This is considered an important step to confirm the absence or presence of contaminants in the soils excavated. This will help inform if or how the waste soil and residual impacts should be managed.

Applicants proposed condition A26 - If contaminants are found as a result of testing and analysis, then this condition requires the consent holder to provide Manawātū - Whanganui Regional Council (MWRC) with a Contaminated Soil Management Plan (CSMP) for technical certification. This must be provided to MWRC at least 20 days prior to commencing soil disturbing activities in the former sheep dip area. This approach is considered reasonable and appropriate.

It is also recommended that reference is made to the CSMP being developed in accordance with the Ministry for the Environment's Contaminated Land Management Guidelines

Applicants proposed Condition A27 – This condition provides requirements if unexpected potentially contaminated soil is identified during earthworks. The consent holder must inform MWRC and Horowhenua District Council within 5 working days, engage a SQEP, and provide a CSMP or updated CSMP that details remediation or management procedures to MWRC for technical certification. This approach is considered reasonable and an appropriate way of managing potential unexpected finds and is consistent with best practice.

Applicants proposed condition A28 – This condition currently outlines how potentially contaminated soils may be identified. There are no requirements of a consent holder to action anything in this condition as it is currently worded. Therefore, this text could be provided as an advice note to condition A27 or be stated in a relevant management plan.

4. Conclusion

Based on the information provided, the site setting and proposed scope of works, the general approach to managing potentially contaminated land for this project is considered appropriate. Although extensive contamination within the project area is unlikely there is the potential for discrete amounts that may need to be managed appropriately. It will be important that the management plans are prepared by a SQEP and have independent review and certification by MWRC.