

Economics Legislation Committee
ANSWERS TO QUESTIONS ON NOTICE
Industry, Innovation and Science Portfolio
2017 - 2018 Budget Estimates
31 May – 1 June 2017

AGENCY/DEPARTMENT: CSIRO

TOPIC: CSIRO Ginninderra site

REFERENCE: Written Question – Senator Rhiannon

QUESTION No.: BI-75

With regard to Ginninderra site that has been under investigation due to past contamination can you supply?

1. Links to or hard copies of all environmental reports on the contamination
2. Details of Surface Soil Sampling and deeper Soil Sampling of the contamination
 - a. Including a map[s]of the sites where the sampling was carried out, the method of sampling and analysis techniques.
 - b. Were any readings over the safety threshold followed up with a dense grid over all anomalies?
3. If such sampling has not been carried out why was it not carried out?
4. A list of chemicals used at the site, where they were sprayed or used including for each chemical used
 - a. The concentration
 - b. The volume
 - c. The reason the chemical was used
 - d. How it was used
 - e. Did it achieve the purpose for which it was used
5. Has any sampling been conducted of water on the station? Please detail tests on lakes, streams, bores, water table aquifer etc.
6. Are there any chemical, paint, sheep dip or other potentially toxic dumps on the station?
7. Can you provide a referenced map of Surface Soil Sampling and deeper Soil Sampling undertaken at the Ginninderra Site?
8. Were any readings over any safety thresholds followed up with a dense grid of testing over and in the vicinity of all anomalies? If not, why not?
9. How can I access a/the register/diary of daily activities regarding the use of chemicals over the site?
 - a. May I have a copy of that register please? If not, why not?
10. Given that chemicals are easily leached and transported to "lows" and/or percolate into sub-stratum and eventually the water table, has any sampling been conducted of water on the station, including Lakes, streams, bores, water table aquifer etc.
11. Are there any chemical/paint/hydrocarbon or other dangerous chemical "dumps" and sheep dips on the station? Does the register of daily activities record any such activity on the site?
12. Is CSIRO planning any deeper cored holes on the station?

ANSWER

1. The most recent formal environmental report on the Ginninderra site was undertaken by CH2M and delivered to CSIRO in December 2016. This report, the *Site-wide Environmental Investigation, Ginninderra Research Station, ACT, 2016* (SWEI) and the associated *Environmental Site Auditor's letter* are available on the Ginninderra Project website at <https://ginninderraproject.com.au/wp-content/uploads/2017/08/CSIRO%20Ginninderra%20Sitewide%20Environmental%20Investigation%20CH2M%20Dec%202016.pdf>
2. This information is detailed in the SWEI report.
 - a. Sampling maps are included in the SWEI report.
 - b. Concentrations above published investigation screening criteria were reported in soils in an isolated number of locations (refer to page 49 of the report). Additional sampling was conducted at these locations to assess the nature and extent of potential contamination.
3. Not applicable - this sampling was conducted as detailed in the SWEI report.
4. All chemicals known to have been used at Ginninderra Experiment Station are commercially available registered agricultural products. A table listing chemicals used on site has been provided at **Attachment A**. The detail requested by the Senator related to these chemicals is provided within this table to the best of CSIRO's held records.
5. Yes, sampling and testing of surface water features (including lakes/dams, streams/creeks and stormwater drains, and sediment within these features) and new and existing groundwater bores was conducted between November 2014 and August 2016. The sampling is detailed in the SWEI report, but in summary included: 35 surface water samples; 41 sediment samples; and 21 groundwater samples.

In addition, CSIRO scientists are in the process of establishing a water baseline monitoring program for Ginninderra. They have also been in consultation with the Ginninderra Catchment Group in relation to the Waterwatch program, which puts out an annual Catchment Health Indicator Program report card: <http://www.act.waterwatch.org.au/chip.html>. As part of this program, there are several water quality sampling sites located in close proximity to our Ginninderra property.
6. Several areas where chemical use, storage or disposal has been conducted have been identified via the site history study conducted as part of the environmental investigation of the site. These are detailed in the SWEI report (refer to pages 57 and 73 of the report). These include: a maintenance area with underground petroleum storage tanks; a herbicide shed with an associated spill catchment drain and soakaway pit; and a sheep and cattle yard area with a sheep spray race and collection ponds. A former builder's spoil landfill was also identified. Each of these areas were investigated for potential contamination and recommendations for management (where required) are included in the SWEI report.
7. Multiple referenced maps are included in the SWEI report.
8. Refer to answer to question 2b.
9. The spray sheets and Field Station Records folios are provided at **Attachment B**.
10. Yes, refer to the answer provided to question 5.
11. Refer to the answer provided to question 6.
12. Sampling depths are detailed in the SWEI report. Boreholes have been extended to depths of 20m (into bedrock) for the purposes of installing groundwater bores.

ATTACHMENTS

Attachment A - Chemicals used on site.

Attachment B - Field Station Records folios.