



Decision in Respect of Appeal Against Classification

Contaminated Sites Committee (CSC 05/2018)

Contaminated Sites Act 2003, Part 8, Division 2

APPELLANT: Form 1 submitter

SITE: Maidment Parade and Hutt Drive, Dalyellup, otherwise known as the Greenpatch development (**the site**), comprising:

- Lot 9105 on plan 404839 (Landgate PIN:12165612) as shown on certificate title 2871/951, Dalyellup, WA 6230;
- Lot 9105 on Plan 404839 (Landgate PIN:12165611) as shown on certificate of title 2871/951, Dalyellup, WA 6230;
- Lot 9076 on Plan 55511 (Landgate PIN:11693033) as shown on certificate of title 2696/377, Dalyellup, WA 6230;
- Lot 9076 on Plan 55511 (Landgate PIN:11693032) as shown on certificate of title 2696/377, Dalyellup, WA 6230 and
- Lot 8019 on Plan 55511 (Landgate PIN:11693031) as shown on certificate of title LR3154/141, Dalyellup, WA 6230.

DATE: 20 October 2020

1. This is an appeal against a notice of classification given by the Chief Executive Officer (**CEO**) of the Department of Water and Environmental Regulation (**DWER**)¹ under s15 of the *Contaminated Sites Act 2003 (Act)* on 27 March 2018. That notice of classification advised that the CEO had classified the site as *report not substantiated*. See Act, Sch 1 (Classification of sites). The site, known as Greenpatch, is Crown Land and is, in effect, owned by the Department of Housing.
2. The site is comprised of lot 9105 (which includes an area known as the Eastern Turning Circle (**ETC**), a former operational area (**Area 8**), lot 9076 and lot 8019. The site is east of the former Waste Residue Disposal Facility (**WRDF**) which is lot 9077. Part of the site (lots 9076 and 8019) is bisected by what appears to be a public access road leading from Maidment Parade to the WRDF.
3. For convenience of reference, a site map of the area is attached to these reasons.
4. The Reasons for Classification given by the CEO found that:
“Based on the investigations undertaken and information provided to DWER, including DWER enquiries and site inspections, the site appears suitable for unrestricted use, including sensitive uses such as residential, primary schools and childcare centres”

¹ The Department of Water and Environmental Regulation (DWER) was established on 1 July 2017 following the amalgamation of the Department of Water, the Office of the Environmental Protection Agency and the Department of Environmental Regulation (DER). DER was separated from the former Department of Environment and Conservation (DEC) in June 2013. The use of the name 'DWER' is used in this document to refer to both DER and DEC. The CEO, herein refers to the CEO of DWER or its predecessors.

Background

Greenpatch Development

5. The Greenpatch development site (**Greenpatch**) was reported to DWER as a suspected contaminated site under the Act on 19 October 2017 and then again on 24 January 2018.
6. Following the reporting of the site, DWER undertook a desktop study of all the available technical information, including environmental assessments for Greenpatch and for the former WRDF located adjacent and west of the site.
7. Portions of the Greenpatch Development referred to as the 'Eastern Turning Circle' (ETC) and 'Area 8' was understood at the time to have been used for minor operational activities as part of the operation of the WRDF. Based on all the available information at the time of classification, Area 8 and the ETC were not considered to be areas of potential concern.
8. On 16 March 2018, DWER undertook a site inspection of Greenpatch to verify the conclusions of the previous environmental assessments and to assess the presence of any visible waste or Treated Solid Residue (**TSR**) at Greenpatch. The inspection concluded that there was no substantial evidence that TSR had been disposed of on the Greenpatch site.
9. Chemicals of potential concern (hexavalent chromium) were present at concentrations below the relevant public health criteria and the risk to the environment was considered low. These findings were consistent with the conclusions of the Mandatory Auditor's Report (MAR) prepared for the adjacent WRDF in October 2013 and July 2015.
10. The Department of Health (DoH) and DWER concluded that there were no grounds to indicate that any significant contamination was present at Greenpatch. The site was then classified as '*report not substantiated*' under the Act on 27 March 2018.
11. New information regarding the Greenpatch site was provided to DWER in May 2018. In response, a site inspection was conducted by DWER officers, the Radiological Council and Cristal Pigment Australia (Cristal) in June 2018. During this inspection treated solid residue (TSR) was visually identified in a number of localised areas within Area 8 and the ETC. A band of TSR measuring 10cm in thickness was identified along the open face of the rehabilitated dunes. This band was exposed after a firebreak was cut along the fence line dividing the former WRDF from the Greenpatch site. The majority of TSR appeared to be present as clay-like particles at the surface and at shallow depths across portions of Area 8 and the ETC. The material used to cap this area was validated as part of the works completed for the adjacent WRDF where it was noted that a small percentage of TSR was present in the capping layer. The potential risk to human health from the TSR is from radiological exposure via direct contact/ingestion/dust inhalation of radionuclides in the TSR material or from exposure to radiation. The Radiation Professionals undertook a gamma survey for Area 8 and ETC, which identified radiation to be comparable with background values for the area. It was concluded that the TSR present did not constitute radioactive material and was therefore exempt from regulation as specified in the *Radiation (Safety) Regulations 1983*.
12. DWER recommended that, based on this new information, a classification of '*possibly contaminated-investigations required*' should be considered for the portion of Lot 9105 on Plan 404839, known as Area 8 and the ETC.

Former Waste Residue Disposal Facility

13. Historically, the WRDF comprised of several disposal ponds (two northern ponds, one central pond and two southern ponds) with the remainder of the site being access roads and coastal dunes. The WRDF is located directly adjacent to and to the west of the proposed Greenpatch site.
14. The WRDF was regulated during its operation under the *Environmental Protection Act 1986* through Ministerial Statements and a Part 5 licence that allowed for the disposal of TSR from the production of titanium dioxide pigment between March 1989 and March 2013. A Closure Notice was served by the Department on 4 May 2013.

15. Monitoring of radiation, soil and groundwater had been undertaken at the WRDF since the early 1990's in accordance with its licence conditions. Human health and environmental investigations have been undertaken since 2001.
16. Rehabilitation of the southern ponds commenced in 2001 and rehabilitation of the northern and central ponds commenced in 2014, all in accordance with a final closure plan that was developed for the site.
17. Based on the information provided in the October 2013 and 2015 MAR, it was agreed between DWER, DoH and the Radiological Council that the WRDF appeared to be suitable for use as endemic bushland, but may not be suitable for more sensitive land uses including irrigated parkland or playing fields due to the potential for on-going irrigation to generate or increase leachate. Consequently, DWER classified the WRDF as *remediated for restricted use* on 21 February 2018, with the access road remaining classified as *possibly contaminated—investigation required* due to uncertainty regarding the material used beneath the roadway.

Appeal

18. On 24 May 2018, the Appellant provided the Contaminated Sites Committee (**Committee**) with an appeal application against the classification of the site as *report not substantiated*. The grounds of appeal and large volumes of technical reports were provided in support of the appeal.

Time limitation

19. An appeal against a site classification made under s13 of the Act is to be effected in accordance with s18 of the Act. An appeal is to be brought, dealt with and determined in accordance with Part 8 of the Act. By s79(2), a notice of appeal is to be lodged within 21 days after the day on which the appellant is given the notice or certificate which gives rise to the appeal, or such later time as may be specified in the notice. The notice the subject of this appeal was dated 24 May 2018 and specified a period of 45 days from the date of service of the notice as the period during which an appeal may be lodged. The Committee noted that the appeal was submitted late (lodged within 51 days) due to the time it took for the Department to provide the letter to the Appellant and the delays in postage. The Committee determined the appeal application was valid.

Grounds of appeal

20. The Appellant has requested the Committee to revoke the *report not substantiated* site classification and change it to *possibly contaminated – investigation required* for the following reasons (in summary):
 1. Earthworked Area/Area 8 was part of the WRDF southern ponds.
 2. Area 8 was used to stockpile dried TSR.
 3. Area 8 was not assessed as part of the southern ponds closure.
 4. The Area 8 capping material validation sampling was not adequate due to location and analysis inaccuracies.
 5. The Preliminary Site Investigation (**PSI**) only checked the top 2m of capping in Area 8.
 6. Hexavalent Chromium exceedances in Greenpatch bores (DM9A and DM9C) have highlighted the need for further investigation.
 7. There is an unconfirmed contamination pathway on the Greenpatch site.
 8. The Dalyellup WRDF has inconsistency in groundwater testing methodology.
 9. The Dalyellup WRDF data and reporting regarding the Greenpatch bores, DM9A and DM9C contain inconsistencies and discrepancies.
 10. There are discrepancies in the WRDF conceptual site model and the bore construction data.
 11. The guidelines for Total Chromium are provisional due to the high toxicity of hexavalent chromium.
 12. Sensitive Water receptors are present on the Greenpatch site.

13. Further hydrological modelling of the WRDF and Greenpatch site needs to be undertaken.
14. Reliability of Health Risk Assessment is questioned.
21. The Appellant sought that various additional studies be undertaken in relation to the site. The Committee has no power to order such further work, but the implementation of the Committee's decision might well lead to such fresh work.

DWER response to the Appeal

22. In response to the appeal, the CEO of DWER provided the Committee with a report under section 80(a) and (b) on 4 January 2019. After giving consideration to all of the Appellant's grounds of appeal, DWER recommended that grounds 1-5 be upheld and a classification of *possibly contaminated-investigation required* be considered for the portion of Lot 9105, known as the ETC. The CEO further recommended that the Appellant's grounds 6-14 be dismissed and the current classification of *report not substantiated* be retained for the balance of the Greenpatch site.
23. In response to the Appellant's further submissions, DWER advised the Committee on 12 August 2019 that, regarding radiological matters, DWER had relied upon advice from the Radiological Council. It was the Radiological Council's understanding that no disposal involving elevated levels of naturally-occurring radioactive material was undertaken on Greenpatch, therefore no management strategies were required with respect to radiation other than those pertaining to the existing management plans for the WRDF, including ongoing radiation monitoring and any potential mitigation requirements. There was no evidence of radiation levels above background over the areas surveyed. Thus, these areas could be considered for unrestricted use with respect to radiation. There was also uncertainty over whether the buffer zone had been established surrounding the tailings facility. The CEO reiterated that lot 9105 on Plan 4040839 (ETC and Area 8) should be re-classified from *report not substantiated* to *possibility contaminated – investigation required*.
24. The Committee wrote to the CEO of DWER on 23 June 2020 requesting clarification of a number of issues.
 - i. Area 8 and ETC – The CEO advised that the boundary of Area 8 and the ETC was based on historical aerial photos showing disturbed areas, combined with observations of TSR made by Departmental officers and Radiological Council officers on two site visits during June 2018. Since Area 8 and the ETC are wholly contained within the portion of lot 9105 located to the south of the access road, if there were concerns whether the boundaries encompassed all areas containing TSR, an alternative approach would be to classify the whole portion of lot 9105 south of the access road as *possibly contaminated – investigation required*. The Department considered there were no grounds to indicate possible contamination by TSR or any other substance on any part of the appeal site other than the portion of lot 9105 south of the access road.
 - ii. Access Road – The CEO advised that the access road is sealed and there is no evidence to suggest that TSR was used for its construction or repair. The Department considered that the access road, being portion of lot 9077 does not form part of the appeal site classified as *report not substantiated*.
 - iii. Radiological survey – The CEO advised that the Committee has been provided with all relevant information in relation to radiological matters.

Committee's consideration of the appeal

25. The Committee has given consideration to all grounds of appeal and other matters raised in the correspondence and information that has been provided by the Appellant and the CEO.
26. Grounds of Appeal 1-5 submitted by the Appellant have been upheld in substance for the following reasons:

- i. The earth worked areas (including Area 8) were within operational areas used as part of the WRDF.
 - ii. TSR could have migrated from the ETC, access road and Area 8 to other locations within the Greenpatch site.
 - iii. The PSI has not fully assessed the contamination status of the Greenpatch site.
 - iv. Area 8 and the ETC have not been adequately investigated.
27. The Committee noted that DWER has effectively conceded some of these points.
28. As to the balance of the Grounds of Appeal (numbered 6-14) submitted by the Appellant, the Committee has reached the conclusion that the appeal should be upheld in relation to Greenpatch for the following reasons:
- i. There appears to be missing technical information and inadequate investigations conducted across the whole of the Greenpatch site.
 - ii. Further investigations may support or question the existing site boundaries, including the access road.
 - iii. Soil from the ETC, Area 8 and the access road may have migrated across portions of the Greenpatch site.
 - iv. It appears that the PSI has not adequately assessed the contamination status of the Greenpatch site. In particular, only a "Draft" PSI report was provided to the Committee. The Committee is not aware if a final report has been prepared upon which DWER based its decision for classification.
 - v. The Radiological Council has advised that its position in relation to possible risk at Greenpatch is based upon its understanding that: 1) there was no disposal of naturally-occurring radioactive material at Greenpatch; and 2) that a buffer zone would be defined (and managed either external to the WRDF upon agreement of the Capel Shire Council, developers of the Dalyellup Beach Estate and Cristal Pigment, or within bounds of the WRDF as part of an ongoing management plan. It is unclear whether these assumptions of the Radiological Council have been appropriately addressed.
 - vi. Historically, environmental consultants were not able to identify the presence of TSR at locations (the ETC and Area 8) where TSR was later visually identified by representatives from DWER and the Radiological Council during a site inspection.
 - vii. The PSI appears to rely heavily upon documentation pertaining to the investigation of the WRDF. However, the Greenpatch site was not included within the investigations of the WRDF and the Greenpatch site investigation reporting was not reviewed by an accredited Auditor.
29. By reason of all these matters, on balance there is enough evidence to conclude that there should be further investigation to determine the contamination present at the site.

Conclusion

30. For the reasons stated above, the appeal is upheld to the extent that the site is to be classified under the *Contaminated Sites Act 2003* as *possibly contaminated – investigation required*.

Note: section 82(2) of the Act provides that the Committee's decision under that section is final and without appeal. Section 83 of the Act provides that the CEO of the Department is to give effect to the outcome of the appeal as soon as practicable and to ensure that the details are published in the prescribed manner



Jim Malcolm
Chairman

as agent for and on behalf of
the Contaminated Sites Committee

Vanessa Bryant (**Member**)
Anna Ciffolilli (**Member**)
Warren Dodge (**Member**)
Peter McNab (**Member**)