

# Management of Crown Land Site Contamination

## Executive Summary

Report 13: June 2018

### Introduction

This audit assessed whether the State's unallocated Crown land and unmanaged reserves are being effectively managed to minimise human and environmental health risks from contamination on these sites.

The audit focused on unallocated Crown land and unmanaged reserves as these sites make up over one third of the State's total land area.

We reviewed the Department of Water and Environmental Regulation (DWER) as the agency responsible for administering the *Contaminated Sites Act 2003* on these lands. We also reviewed how the Department of Planning, Lands and Heritage (DPLH) identified, investigated, reported and where necessary remediated contamination on unallocated Crown land and unmanaged reserves.

### Background

In December 2006, Western Australia's *Contaminated Sites Act 2003* (the Act) and the associated Contaminated Sites Regulations 2006 became law. The purpose of the Act is to protect human health, the environment and environmental values through identification, recording, management and remediation of contaminated sites.

Contamination can occur from a variety of past and current activities including:

- landfills
- tailings dumps from mining
- chemical storage and disposal sites
- timber milling and treatment sites
- illegal dumping.

The Act defines contaminated as '*having a substance in or on that land, water or site at above background concentrations that presents, or has the potential to present, a risk of harm to human health, the environment or any environmental value*'.

Since the Act came into effect over 4,200 known or suspected contaminated sites have been reported to DWER.

### Roles and responsibilities

The Act places requirements on a number of people, including owners and occupiers of land, to report known or suspected contamination to DWER. Timely and accurate reporting of these sites is critical to addressing potential contamination and associated health and environmental risks.

Known contamination must be reported within 21 days, and suspected contamination as soon as reasonably practical. There are significant penalties for failing to report sites in a timely manner.

Under the Act, DWER is responsible for:

- receiving reports of suspected or known contamination

- classifying sites according to the level of contamination and action needed in accordance with Schedule 1 of the Act (Appendix 1)
- advising the land owners or managers of the follow-up actions required
- maintaining records in a publicly accessible contaminated sites database and register.

Land owners and managers are responsible for completing the follow-up and remediation actions prescribed by DWER. A number of State agencies own or manage land that is contaminated with substances such as cyanide, lead, diesel and asbestos.

DPLH is responsible for managing contamination on the 2.3 million km<sup>2</sup> of State Crown land (93% of the State). When Crown land is vested or leased to other departments, organisations or people, the responsibility for identifying, reporting and managing contamination is also transferred.

Unallocated Crown land (UCL) and unmanaged reserves (UMR) account for nearly 1 million km<sup>2</sup> (38%) of the State and make up the bulk of the potentially contaminated land that DPLH manages. UCL is Crown land that is not reserved for a purpose or leased but may have previously been used for a purpose such as mining or agriculture and has now returned to the State. UMR is land that has been reserved for a purpose, such as for landfill, road reserves, a railway siding or a park, but is no longer or has never been used for that purpose.

The Act also established the:

- Contaminated Sites Committee

This is an independent 3 to 5 member committee, which determines appeals against DWER's classification of sites and makes decisions on remediation responsibility. The committee's decisions can be appealed to the Supreme Court on a question of law.

- Contaminated Sites Management Account (CSMA)

On average the CSMA has about \$1.3 million available each year, and nearly \$16 million has been allocated since 2006, to investigate or remediate contaminated sites the State is responsible for. Funds can also be used to ensure compliance with investigation, clean-up and hazard abatement notices. The Minister for Environment decides the allocation of funds, and DWER manages the CSMA on behalf of the Minister.

DWER takes a staged approach to investigation and remediation of site contamination. It agrees the scope of works with each agency prior to paying the full funding amount at the beginning of each stage. No milestones or completion timeframes are set.

The bulk of funds in the CSMA are from parliamentary appropriations, with small amounts coming from fees for information searches or sales of remediated land.

### **DPLH program for identifying and reporting sites to DWER**

In 2007, the then Department of Environment and Conservation (DEC) approved a program developed by the Department of Lands (now part of DPLH) for identification and reporting of sites.

The intent of the program was to systematically assess and report on all known and suspected contaminated sites under DPLH responsibility as soon as possible. Around 5,000 sites were included in the program. The majority of these were UCL and UMR.

The Act required that the program be submitted to the CEO for approval within 6 months of the Act commencing and had to include the:

- sites or types of sites to be identified and reported
- methods to be used to identify the sites to be reported

- timetable for the identification and reporting of sites
- time within which the program was to be completed
- reasons why it was considered necessary or desirable for the sites to be identified and reported.

DEC approved the program without a completion date as it recognised the large task facing DPLH, with preliminary estimates of over 100 years to assess all the sites. It did however require DPLH to provide annual progress reports.

DPLH committed to at least 60 desktop assessments and 6 site inspections each year. Assessment numbers were expected to increase over time as DPLH processes became more efficient. Inspection numbers were always dependent on available resources.

## **Audit conclusion**

Contamination on UCL and UMR, and the risks posed, are not being managed effectively. Lack of effective oversight, poor communication between the agencies and unreliable data contribute to DPLH, and hence DWER, having a limited understanding of the type or size of the risks they are dealing with, and not minimising contamination risks as required under the legislation.

Action to deal with contaminated sites is not timely. DPLH has made very slow progress in inspecting sites, and does not prioritise high risk sites for inspection. At current rates it would take DPLH over 50 years to inspect all of the remaining sites to determine levels of contamination. Further, DPLH's reporting of inspection results to DWER often takes years, adding to delays in investigation and, if necessary, remediation.

DWER's oversight of CSMA funded projects could be strengthened as projects can experience significant delays, prolonging the period of time that a site presents a risk to human health and the environment.

## **Key findings**

Inadequate oversight and poor communication between agencies means that contamination risks are not identified and reported in a timely manner.

- DPLH has not reported its progress on identifying contaminated sites to DWER since 2012. At that time, DPLH considered its program complete and stopped reporting progress to DWER as required. This was despite nearly 500 sites still needing inspection to determine if they were contaminated.
- DWER was unaware that DPLH considered the program finished or had stopped reporting. DWER also had not followed up to determine why reports were not being received. As a result, DWER does not know if DPLH is making effective progress on its program to identify and report potential contamination.

DPLH is not effectively minimising the risks of human and environmental exposure to contamination.

- Risks posed by potentially contaminated sites are considered as a low priority within the agency's broader priorities and inspections regime. At the current inspection rate, DPLH will take over 50 years to fully assess around 380 sites to determine if they need to be reported to DWER. Even when DPLH identified sites as potentially contaminated we found delays of several years and, in some cases, failure to report the sites to DWER.
- DPLH senior management do not oversee the agency's progress towards identifying and reporting potential contamination, or site status or risks. Such oversight is necessary to ensure that management decisions on resourcing and prioritisation of site inspections are made with full knowledge of potential risks. Management reporting could also highlight delays and improve the timeliness of reporting sites to DWER.

DPLH does not have reliable information on which to base its investigation and remediation efforts.

- DPLH's database does not provide reliable figures on the number of potentially contaminated UCL and UMR sites it is responsible for. The number of sites reported to us varied from around 2,602 to 2,668 depending on how the database was queried.
- There were also errors in the number of contaminated sites DPLH is responsible for remediating.

DPLH managed its initial planning, inspections and reporting of sites effectively.

- In 2007, DPLH appropriately planned a program to identify, assess and report to DWER on over 5,000 sites. DPLH exceeded the program's targets for desktop assessment and site inspections and reported annually to DWER up until 2012. Twenty-two of the 38 sites inspected were reported to DWER as potentially contaminated.

DWER's oversight of CSMA projects does little to ensure timely completion of works. Three unfinished CSMA projects have experienced significant delays of between 8 and 11 years. One DPLH project has not been completed 11 years on from the original funding.

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## Recommendations

1. **DPLH and DWER should agree on a methodology and timeframe for a revised identification and reporting program.**

**DPLH response: *Agreed***

**DWER response: *Agreed***

**Implementation timeframe: by 31 December 2018**

2. **DPLH should review and upgrade its systems and processes to enable:**

- **timely reporting to DWER**
- **complete and accurate information in its database**
- **inclusion of risk assessments and ratings as part of desktop assessments**
- **senior management oversight of DPLH's progress towards identifying and reporting potential contamination to DWER, site status and risks.**

**DPLH response: *Agreed***

**Implementation timeframe: *by 30 June 2019***

3. **DWER should adopt processes to follow up delayed CSMA projects quickly and consider options to achieve timely completion of funded projects.**

**DWER response: *Agreed***

**Implementation timeframe: *by 31 December 2018***

## Agency responses

### Department of Planning, Lands and Heritage

DPLH agrees with the findings of this audit and can advise that progress is already being made to address the concerns raised. DPLH also agrees with the proposed timeframes.

DPLH is responsible for the management of all unallocated Crown land and unmanaged reserves, this equates to over 35% of the State's land area. DPLH is responsible for management of all contaminated sites which occur on this land. While this is important, due to limited resources it has to be balanced against other land management responsibilities such as fire management, dangerous trees, dumped rubbish and pest and weed infestations. These hazard management actions often take priority due to the immediate risk they pose.

Presently, a functional review of how DPLH delivers its land management obligations is underway. A key component of this review will be whether the resourcing, funding and systems support for this function is adequate. We look forward to working with the Department of Water and Environmental Regulation on this matter.

### Department of Water and Environmental Regulation

DWER accepts the finding that communication between the agencies could be improved. DWER acknowledges it had not followed up with the Department of Planning, Lands and Heritage (DPLH) to determine why annual reports on progress with implementation of DPLH's section 12 programme for reporting sites were not being received. DWER is committed to working with DPLH to improve communication between the agencies regarding DPLH's section 12 programme and progress on DPLH's sites funded from the Contaminated Sites Management Account (CSMA), including regular meetings.

DWER notes the finding that its oversight does not encourage timely completion of investigation or remediation projects. For the nine incomplete projects, DWER will agree schedules and milestones for the remaining approved works with the relevant agencies and continue to monitor progress through quarterly acquittals. For future investigation and/or remediation projects funded from the CSMA, a project schedule, including milestones, will be agreed before funds are transferred to the relevant agency. Quarterly reporting requirements will include progress against the agreed schedule.