

## Deciding shares of responsibility for remediation

### *An explanatory guideline from the Contaminated Sites Committee*

The Contaminated Sites Committee (**Committee**) is an administrative tribunal established under the *Contaminated Sites Act 2003 (Act)*. It determines appeals against classification decisions of the CEO of the Department of Water and Environmental Regulation (**DWER**) and makes decisions about shares of responsibility for remediation of contaminated sites.

When the Committee makes decisions about shares of responsibility for remediation of contamination its starting point is the quantum of contamination identified by the CEO of DWER as requiring remediation when the site was classified as *contaminated – remediation required*. The Committee's decision relates to the shares of responsibility for that remediation. The Act outlines the hierarchy of responsibility, however, the determination of responsibility can be complicated and, where the parties cannot agree, there is provision for the Committee to make a decision about the parties who are responsible and the extent of their responsibility.

The Committee makes its decisions based on relevant information, including information provided by the interested parties. Early in its consideration of a matter the Committee contacts interested parties, requiring them to provide all relevant information. Failure to do so is an offence under section 94 of the Act.

As an example, service stations, with a long history of operation and changes in ownership and operation provide a number of complex matters which the Committee must take into consideration in its decision-making process.

In making determinations of shares of responsibility associated with service stations the Committee is guided by calculations that estimate the amount of contamination caused in various periods of the history of the site associated with the different suspected sources of that contamination such as pieces of equipment that leaked or spills that have occurred. This guidance note is an aid to demonstrate how those calculations are made and the information on which they are typically based.

Sometimes there can be more than one source of contamination. For example, there may be evidence of a high level of contaminants adjacent to a tank and other evidence near a remote fill point. In such instances the Committee uses the available evidence to decide what proportion of the contamination is associated with each source.

Following detailed review of the information provided by parties the steps generally taken by the Committee to allocate the shares of responsibility are as follows.

- 1) Attempt to **determine the sources** (causes) of contamination at the site that are known or, on the balance of evidence, are likely to have contributed to the body of contamination present that has given rise to the *Contaminated - remediation required* classification.
- 2) **Estimate the rates** at which those sources would each be capable and likely to have contributed to the amount of contamination requiring remediation.
- 3) **Determine the times (periods)** at which the sources may have contributed to the amount of contamination requiring remediation.

- 4) Depending upon the type of contamination and the quality and detail of investigation information provided that can be relied upon, **the impacts of natural attenuation** on the amount of contamination are considered for each time period (see below).
- 5) **Assign per cent allocation of responsibility** to each of the respective sources during each of the periods at which those sources would have contributed to the total volume of contamination requiring remediation.
- 6) **Sum the allocations across all periods** as they apply to each of the relevant respective responsible parties.

### Spills

The case of a major spill is relatively straightforward. The contamination caused will be directly related to the volume of the spill, and the parties responsible will likely be known. Multiple, smaller spills can be more complicated, depending on the available information.

### A constant leak

If there is evidence that a piece of equipment started to leak, due to a breach of its integrity or a failure to make the joints liquid-tight, and the Committee is of the view that some of the contamination requiring remediation was related to that source, in the absence of more specific information the Committee would, generally, conclude that the piece of equipment leaked at a constant rate from the time the leak started to the time the leak was rectified. This means that the responsibility for that contamination is directly related to the length of time the leak persisted. In such a case the Committee's decision would be guided by a calculation that spread the responsibility for the likely percentage of the contribution to contamination over the time that the leak continued.

There are two aspects to the causing of contamination by leakage and both are required for contamination to be caused. Firstly the equipment must be leaky and secondly the leaky equipment must be used.

The responsibility for remediation of contamination caused by such a leak would usually be shared between the party that should have installed or maintained the equipment so that it did not leak (typically the owner of the equipment) and the party which operated the equipment while it was leaky. Other things being equal the responsibility would be shared equally between those parties.

If, during the time the leak continued, there were changes in the identity of the owner or operator of the equipment, in accordance with the assumption of a constant rate of leakage, the responsibility would be shared between the different owners or operators on the basis of the time each owned or operated the equipment.

The Committee usually divides the relevant history of the site into periods, with a change of owner or operator or a change to the relevant source(s) marking a change of period.

Some items of equipment may only leak while in use. For example, a fill pipe, leading from a fill point to a tank, would usually only contain fuel when filling of the tank is actually taking place, so the rate of leakage from such a pipe would be less than that from a pipe which was constantly in use, containing fuel under pressure. In such cases information about the history of use of the equipment (e.g. fuel deliveries) will assist in estimating the times when contamination was caused.

### A variable leak

If equipment develops a leak due to corrosion, the assumption of a constant rate of leakage is not appropriate because such a leak starts small, often a mere pinprick, and the size of the hole grows

gradually over time and, with it, the rate of leakage increases. This means that those parties who were responsible earlier in the life of the leak should have smaller shares relative to those who had responsibility later, when the rate of leakage was greater.

Typically the date when a pinprick hole develops is not known with accuracy. However, since the rate of leakage initially is very small, a change in the start date has little effect on the overall shares of responsibility.

In such an instance the share of responsibility associated with that corrosion leak source would still be shared over time, but the rate of leakage, in the absence of more specific information, would be assumed to start from zero at the likely date the leak started and assumed to increase, at a constant rate of increase, to reach a maximum at the time the leak was rectified, calculated so as to allocate the total share of responsibility associated with that leak over the time that the leak continued.

#### Natural attenuation

Contamination present in soil or groundwater does not necessarily remain unchanged through time. Microbes may naturally attenuate the contamination, reducing the quantum of remediation that is required. This could lead to parties responsible for contamination caused earlier in the life of the site bearing less responsibility.

Since accurately determining what this lessening of responsibility may be is complex and the Committee will rarely have detailed information upon which to make such an assessment, some general estimates may be applied. However, this option is only exercised where the Committee considers that relevant adjustments may be material to the responsibility outcome. Consequently, the Committee initially assesses responsibility without adjustment for natural attenuation and then determines whether an adjustment for natural attenuation has a potential material bearing on the outcome. Where it does not, no adjustment will be made.

#### **Contaminated Sites Committee**

Jim Malcolm	Chair
Vanessa Bryant	Member
Anna Ciffolilli	Member
Warren Dodge	Member
Peter McNab	Member