

### 3.11 Contaminated land

This Section describes the known contamination of the land in the study area based on a Phase 1 contamination assessment undertaken for the Project (Maunsell 2007d, 2006b). Contaminated land impacts associated with the Project are discussed in Section 9.4.

Current and former land uses along the existing rail corridor between Quakers Hill and Vineyard may have resulted in the contamination of soils. It is likely that the rail corridor was constructed using imported fill materials, possibly including coal ash and slag. There is also potential for contamination within the rail corridor due to the likelihood of minor spills of lubricants, engine oil or other materials from operating trains or maintenance activities that may have occurred during the rail line's 144 years of operation.

The Phase 1 contamination assessment undertaken for the Project indicated a moderate to high potential to uncover contaminated materials in the following locations within the Project area:

- rail embankments and sidings
- high voltage meter panels
- signal huts
- transformers
- site hut/plant room just north of the Quakers Hill pedestrian level crossing
- stormwater drains traversing beneath the rail corridor
- former Schofields stock feed and fertiliser store located adjacent to the existing Schofields Station
- vehicle parking areas adjacent to the rail corridor at Quakers Hill and Schofields
- Rural Fire Brigade Station located adjacent to the existing Schofields Station
- substation located adjacent to the existing rail line at Schofields
- rural land adjacent to the rail corridor
- Department of Defence land adjacent to the rail corridor between Quakers Hill and Schofields.

The contaminants that may be encountered in these areas include total petroleum hydrocarbons (TPH), polychlorinated biphenyls (PCBs), polyaromatic hydrocarbons (PAHs), organochlorine and organophosphorus pesticides (OCP/OPP), heavy metals and asbestos.

The Phase 1 contamination assessment determined that the rail corridor is underlain by soils that are not known or expected to contain acid sulfate soil materials. A search of the DECC Contaminated Lands Register (DECC 2007a) did not identify any records of contaminated land in the study area. A summary of the Phase 1 contamination assessment with respect to areas identified as having a moderate to high risk of encountering contaminants during construction is provided in Section 9.3.1.

A Phase 2 contamination assessment is currently underway for the Project. The results of this assessment will form a key input during the detailed design phase of the Project.