

# CHECKLISTS AND OTHER INFORMATION

## APPENDIX 3 – REMEDIATION ACTION PLAN REPORT CHECKLIST

REPORT SECTION	REQUIRED INFORMATION	PRESENT? (YES/NO /NA)	COMMENTS (ACTIONS, REQUESTS, RED FLAGS)
<b>Document control</b>	Report date within 2 years		
	Report version, author and reviewer, including consultant certification <sup>1</sup> (for example, experienced contaminated land specialist, certified environmental practitioner)		
	Details of who commissioned the report		
<b>Executive summary</b>	Background		
	Objectives of the remediation		
	Summary of the selected scope of remediation works		
<b>Scope of work</b>	A clear statement of the scope of work		
<b>Site identification (where available)</b>	Street number, street name and suburb		
	Property identifier (for example, lot and deposited plan number).		
	Geographic coordinates related to a nearby cadastral corner of a state survey control marker		
	Locality map		
<b>Site history or previous contamination assessment report (where available)</b>	A summary is adequate if detailed information is included in an available referenced previous report. If not, refer to the PSI checklist for information that should be included		
<b>Condition of site and surrounding environment (where available)</b>	A summary is adequate if detailed information is included in an available referenced previous report. If not, refer to the PSI checklist for information that should be included.		
<b>Geology, hydrogeology and hydrology (where available)</b>	A summary is adequate if detailed information is included in an available referenced previous report. If not, refer to the DSI checklist for information that should be included.		
<b>Previous contamination assessments (where available)</b>	A summary of previous contamination assessment reports for the site (PSI, DSI and site assessment reports)		
<b>Data gap assessment</b>	Data gaps in previous assessments for the site and provisions for addressing them during the remediation works (Note: This can lead to a pre-remediation conceptual site model)		

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<b>Remediation criteria</b>	A table listing all selected remediation criteria and references		
	A rationale for the selection of criteria, including assumptions and limitations of the criteria and any deviations from the approved guidelines		
	Development of a rationale for any site-specific remediation criteria through a site-specific risk assessment <sup>1</sup>		
	Refer to the <i>PFAS NEMP</i> <sup>2</sup> or guidance on environmental levels that indicate the need for action		
<b>Results</b>	A summary is adequate if detailed information is included in an available referenced previous DSI report. In this case, provide previous tabulated results relating to the remediation action plan that: <ul style="list-style-type: none"> <li>• show all essential details, such as sample identification numbers and sampling depths</li> <li>• show remediation assessment criteria</li> <li>• highlight all results exceeding any remediation criteria</li> </ul>		
	Sample descriptions for all media, where applicable (for example, soil, sediment, surface water, groundwater and biota)		
	Site plan showing all sample locations		
	Site plans showing the extent of soil and groundwater contamination exceeding selected remediation criteria for each sampling depth, including sample identification numbers and sampling depths of all samples analysed		
	Site plans showing the proposed extent of remediation		
<b>Site characterisation (where available)</b>	A summary is adequate if detailed information is included in an available referenced previous report		
	Assessment of the types of all environmental contamination		
	Assessment of the extent of all identified contamination, including offsite areas		
<b>Conceptual site model</b>	Conceptual site model <sup>3</sup>		

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<b>Remediation options</b>	Description of remediation objectives		
<b>Assessment and remediation strategy (where available)</b>	A review of possible remediation options		
	Rationale for the selection of the recommended remediation option, in accordance with the preferred hierarchy of site remediation and/or management <sup>4</sup>		
	Description of the remediation works to be undertaken		
	Description of criteria for acceptance of fill material – must be virgin excavated natural material, excavated natural material or otherwise classified under a resource recovery order and assessed as suitable for use at the site		
	A validation plan that includes proposed testing to validate the site during and after remediation, including a sampling and analysis quality plan		
	Contingency plan if the selected remediation strategy fails		
	Interim site management plan before remediation, including fencing, erection of warning signs, stormwater diversion and so on. Site management plan during remediation. Detailed construction environment management plans consisting of the following (remediation technology-specific) plans: <ul style="list-style-type: none"> <li>• noise control</li> <li>• dust control</li> <li>• odour control</li> <li>• soil management</li> <li>• stormwater management</li> <li>• unexpected finds protocol</li> <li>• contingency plans to respond to site incidents, to remove potential effects on the surrounding environment and community</li> </ul>		
	Description of regulatory compliance requirements, such as licences and approvals or financial assurance		
<b>Waste management (if applicable)</b>	Waste classification reporting requirements in accordance with <a href="#">NSW EPA's Waste Classification Guidelines</a> . <sup>5</sup> Description of material handling and tracking plan. Statements regarding materials being disposed via an appropriately licensed facility or re-used under an order or exemption. Waste disposal dockets or other waste documentation for any disposed waste <sup>6</sup>		

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<b>Remediation technology pilot trial (if applicable)</b>	Details and results from treatability trials, and proof of performance testing, to demonstrate that the remediation option chosen was suitable for the site (for major remediation projects). If trials have not been completed, include an indicative scope of the proposed trial		
<b>Conclusions and recommendations</b>	Conclusions addressing the stated objectives, and a summary of the proposed remediation activities		
	Any assumptions used in reaching the conclusions		
	A clear statement as to why the consultant considers that the site can be made suitable for the proposed use if the remediation action plan is implemented		
	A summary of proposed limitations and constraints on the use of the site post-remediation. The proposed environmental management plan for long-term management of residual contamination at the site (where applicable)		
	Recommendations for further work, if appropriate		

**Note:** PSI = preliminary site investigation; DSI = detailed site investigation; ASC NEPM = National Environment Protection (Assessment of Site Contamination) Measure 1999; PFAS NEMP = PFAS National Environmental Management Plan.

**Source:** NSW Environmental Protection Authority. (2020). *Consultants reporting on contaminated land: Contaminated land guidelines*; National Environment Protection Council. (November 2010). *ASC NEPM field checklist* [spreadsheet], 'SAP, QAQC', 'Soil', 'Groundwater', 'Surface Water' and 'Soil Gas' tabs; NSW Environmental Protection Authority. (2017). *Contaminated land management: Guidelines for the NSW site auditor scheme* (3rd ed.).

<sup>1</sup> Refer to ASC NEPM Schedules B4, B5a, B5b, B5c, B6 and B7.

<sup>2</sup> National Chemicals Working Group, Heads of the EPAs of Australia and New Zealand. (January 2020). *PFAS National Environmental Management Plan* (version 2.0).

<sup>3</sup> Refer to the conceptual site model checklist (Appendix 5).

<sup>4</sup> National Environment Protection Council. (n.d.). *Key principles for the remediation & management of contaminated sites* [draft].

<sup>5</sup> <https://www.epa.nsw.gov.au/your-environment/waste/classifying-waste/waste-classification-guidelines>

<sup>6</sup> For waste management requirements, refer to section 4.3.7 ('Waste Management') of the NSW Environmental Protection Authority's *Contaminated Land Management: Guidelines for the NSW Site Auditor Scheme*.