



Environment,
Climate Change
& Water

Regulation Project

James Hardie Asbestos Waste Contamination Legacy

Summary Project Report

April 2010

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Executive Summary

In 2007 the Department of Environment, Climate Change and Water (DECCW) was made aware of the potential existence of several sites in the Sydney area containing asbestos-associated contamination resulting from former operations of James Hardie Industries and related entities (James Hardie). The sites were used by James Hardie as asbestos disposal sites, and identification of the sites would facilitate effective management and decision making by responsible parties.

In order to address the potential contamination legacy of these sites, DECCW identified, assessed, and proposed recommendations for management by appropriate stakeholders of the former asbestos disposal sites.

To identify the location of the sites, DECCW issued notices under section 77 of the *Contaminated Land Management Act 1997* (CLM Act) to James Hardie and its associated companies through the Asbestos Injuries Compensation Fund (the Fund), requiring provision of all available information on asbestos waste disposal sites in the Sydney area.

The Fund provided information on 47 potential asbestos disposal sites across Sydney associated with James Hardie entities. DECCW assessed the information provided by the Fund and determined that 27 of the sites required inspection and assessment of the contamination. Investigation of the information on the other 20 sites determined that they had variously been; redeveloped, subject to change of use such as road widening or extensions, incorporated into larger landfills, subject to change of ownership and identity or inaccuracies in the information provided by the Fund, making sites unidentifiable. Based on this no further action was deemed necessary or feasible as contamination had been dealt with during redevelopment, was being actively managed by public authorities, or were unidentifiable because of the quality of information provided by the Fund.

Between December 2007 and February 2008 DECCW conducted site inspections of the 27 sites determined to require assessment. The inspections revealed that most of the asbestos at the sites was capped, contained or buried, and where present at the surface it was in small amounts of bonded asbestos sheets or pipes. Councils were not involved in the site inspections.

A review of the 27 located sites showed that none were considered to pose a significant risk of harm as defined by the matters (then) listed under Section 9 of the CLM Act. This was largely due to the buried nature of much of the disposed material and the inaccessible locations of many disposal sites. Thus regulation of the sites under the CLM Act was not appropriate.

Several options for management of the contamination were investigated. It was determined that the most effective option for management of asbestos contamination at the located sites was for DECCW to support local government management of the sites by conducting site assessments and preparing assessment reports for all accessible James Hardie asbestos disposal sites. The reports would include recommendations to Council for management of the contamination. The proposed recommendations received in principle support from NSW Health via the Sydney West Area Health Service.

In 2008, after gaining input from all relevant stakeholders, DECCW prepared the draft Asbestos Assessment reports, including recommendations, for each affected local government area. In 2008 – 2009 the draft reports were forwarded to the relevant Councils for comment. Those comments and additional local knowledge were incorporated into the final reports, and the final

reports have been forwarded to the relevant Councils/ public authority for their action. This process has seen councils take significant ownership of the issues and outcomes of this project. DECCW will assist the relevant Councils/ public authorities if further support is requested.

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1. Background

James Hardie was Australia's largest manufacturer of asbestos-containing products throughout the 20th century, including asbestos-containing insulation products, asbestos "fibro" cement sheeting, and asbestos-containing pipes and friction materials.

In 2007 the Department of Environment, Climate Change and Water (DECCW) was made aware of the potential existence of several sites in the Sydney area containing asbestos-associated contamination resulting from former operations of James Hardie Industries and related entities (James Hardie). The sites were used by James Hardie as asbestos disposal sites, and identification of the sites would facilitate effective management and decision making by responsible parties.

2. Scope

DECCW was informed of incidents of asbestos waste being uncovered at several of the former James Hardie asbestos disposal sites, mainly in the Parramatta City Council area, and to ensure the future protection of public health and the environment DECCW initiated and developed a strategy to identify, assess and propose recommendations for management by appropriate stakeholders of the potential contamination legacy of these sites.

Site inspections were to be performed at verified sites and proposed recommendations for management of the former asbestos disposal sites were to be developed.

3. Notices

To identify the location of the former James Hardie asbestos disposal sites, in 2007 DECCW issued notices under section 77 of the *Contaminated Land Management Act 1997* (CLM Act) to James Hardie and its associated companies through the Asbestos Injuries Compensation Fund (the Fund). The notices required provision of all available information on asbestos waste disposal sites in the Sydney area, including details of materials disposed. The Fund cooperated fully with DECCW. See attachment 1 for an example of the notices issued.

4. Assessment

The Fund provided information on 47 potential asbestos disposal sites across Sydney associated with James Hardie entities. The majority (29) of the potential disposal sites were located within the Parramatta Local Government Area, with the remainder of sites located within the Holroyd (5), Homebush (3), Auburn (3), Fairfield (2), Blacktown (2), Baulkham Hills (1), Liverpool (1) and Wingecarribee (1) Local Government Areas. See appendix 1 for the list of potential asbestos disposal sites.

DECCW assessed the information provided by the Fund in relation to the 47 potential disposal sites and determined that 27 of the sites would require inspection to assess the level (if any) of

contamination. It was determined that the remaining 20 sites did not require further action as contamination had previously been remediated during redevelopment, was being actively managed by public authorities, in some cases had become part of larger landfills, or was unidentifiable because of change of use or ownership and/or the quality of information provided by the Fund.

Where potential sites were unable to be identified as information supplied by the Fund was very limited or referred to businesses or streets that no longer exist, DECCW requested further information from the Fund in relation to these sites. The Fund confirmed that all available information had been submitted to DECCW in response to the section 77 notices issued previously, and no further information was available. The majority of sites unable to be verified were located in the Parramatta local government area. The available information on these sites was provided to Parramatta Council in the relevant asbestos assessment report.

Several sites did not require further assessment as they had been redeveloped prior to the commencement of DECCW investigations. Any asbestos contamination at these sites would have been addressed during the development process.

No further action is required to be undertaken in relation to the 20 potential disposal sites which are listed in appendix 2.

5. Management Options

The strategy for the management of former James Hardie asbestos disposal sites was developed by assessing the risk posed by asbestos contamination at the potential sites and prioritising the implementation of the necessary clean up or waste management actions. Several management options were considered:

Pursue Polluter under CLM Act

A review of the verified sites showed that none were considered to pose a significant risk of harm as defined by the matters (then) listed under Section 9 of the CLM Act. This was largely due to the buried nature of much of the disposed material and the inaccessible locations of many disposal sites. As the sites were not considered to pose a significant risk of harm DECCW was unable to issue remediation orders to the polluter or owner, or agree to a voluntary management proposal under the CLM Act to remediate the sites.

Issue notices under POEO Act

As the sites are not currently owned by James Hardie and the pollution is historic, DECCW has limited regulatory powers under the *Protection of the Environment Operations Act 1997* (POEO Act). In *Section 253A – Enforcement of Undertakings*, DECCW may accept a written undertaking given by a person in connection with a matter in relation to which DECCW has a function. However, DECCW would need to regulate under the Act to allow the development of a contract. This was not considered applicable.

Environmental Trust grants

The Environmental Trust's Emergency Pollution Cleanup Program (EPCUP) is restricted to funding the clean up of sites that are considered as presenting serious pollution and require immediate action for clean up.

The Environmental Trust's Contaminated Land Management Program provides grants for contamination considered significant risk of harm and where the polluter cannot be found or does not have the financial capacity to pay for remediation.

The former James Hardie asbestos disposal sites were found to be ineligible under current Environmental Trust guidelines.

Management by Council

Under the POEO Act a prevention notice can be issued if the appropriate regulatory authority (ARA) reasonably suspects that any activity has been or is being carried on in an environmentally unsatisfactory manner at any premises or by any person. As the identified sites were determined not to pose a significant risk of harm to human health and/ or the environment, Council was deemed to be the ARA for the former James Hardie asbestos disposal sites.

As the ARA Council has powers under the POEO Act to regulate the clean up of the former James Hardie asbestos disposal sites. Council also has regulatory powers under the *Local Government Act 1993* to enter into a voluntary process with former James Hardie entities for the remediation and management of affected sites.

Recommended Option

It was determined that the most effective option for management of asbestos contamination at the verified sites was for DECCW to support local government by conducting site assessments and preparing assessment reports for all verified James Hardie asbestos disposal sites in dialogue/ consultation with Council. The reports would include recommendations to Council for management of the contamination.

6. Inspection Results

DECCW undertook site inspections of 27 sites between December 2007 and February 2008. Councils did not take part in the inspections. See appendix 3 for a list of inspected sites.

The inspections revealed that most of the asbestos was capped, contained or buried, and if not it was only present in small amounts in bonded form as broken asbestos sheets and pipes. Observations varied from visible evidence of asbestos in surface soils at some sites to no evidence of asbestos at other sites.

Recommendations put to relevant Councils can be generalised into the following:

1. Any visible asbestos should be periodically removed in accordance with recognized Occupational Health and Safety practices.
2. A management plan should be developed by an occupational hygienist with recognized experience in asbestos identification and management to ensure that the asbestos is not disturbed unless appropriate plans for investigation / remediation are developed as suitable for implementation by a site auditor accredited under the CLM Act.
3. Council should consider making appropriate notation on the relevant planning certificates (i.e. Section 149 planning certificate).

For full details of inspection results and recommendations to Council see attached Asbestos Assessment Reports.

7. Endorsement by NSW Health

Following a meeting held on 3 July 2008 between Parramatta City Council, DECCW and the Centre for Population Health, the proposed recommendations received in principle support from NSW Health via the Sydney West Area Health Service. See attachment 2 for a copy of the letter stating the position of NSW Health.

8. Reports

In 2008 - 2009, after gaining input from all relevant stakeholders, DECCW prepared draft Asbestos Assessment reports for those Councils in which the potential asbestos disposal sites were able to be verified and inspected. The draft reports were forwarded to the relevant Councils and management authorities for comment.

Comments were received from Parramatta City Council, Holroyd City Council, and the Sydney Olympic Park Authority. Councils that did not provide comment were contacted in order to confirm that no comments were forthcoming.

Discussions were held with Councils and public authorities where required, and the submitted comments were incorporated into the final assessment reports. See attachment 3 for a copy of the final reports sent to Council.

9. Current Position

The final reports have been or are in the process of being forwarded to the relevant Councils/ public authority for their action. DECCW will assist the relevant Councils/ public authorities if further support is requested.

10. Outcome

The project has successfully fulfilled its scope of helping to ensure the future protection of public health and the environment through identifying, assessing and managing the potential contamination legacy of former James Hardie asbestos disposal sites in Sydney.

11. Appendices

Appendix 1 – List of potential former James Hardie asbestos disposal sites - April 2008

	Site	Location	LGA	Current land use	Inspected	Visible Evidence of Asbestos	Survey Summary	Action Taken/Recommended	Land Owner
1	RailCorp, Camellia	Lot 11, DP603457 Grand Avenue, Camellia	Parramatta	Rail associated.	Yes	Yes	There is evidence of asbestos at the site, however if asbestos is undisturbed it is not considered a significant risk of harm to human health and the environment.	<p><u>Action taken</u></p> <ul style="list-style-type: none"> • Clean up notice issued 28/3/07 requiring submission of a remediation action plan to DECCW. <p><u>Recommendation</u></p> <ul style="list-style-type: none"> • The asbestos is removed following recognised Occupational Health and Safety practises; • A management plan is developed by an occupational hygienist with recognised experience in asbestos identification and management to ensure the asbestos is not disturbed, unless appropriate plans for investigation/remediation are developed and assessed as suitable for implementation by a site auditor accredited under the CLM Act; • Council considers making appropriate notation on the relevant planning certificates (i.e. s. 149 certificate). 	RailCorp

2	Former Country Timber Merchants Site	off Grand Ave. Camellia	Parramatta	Unknown	No	N/A	N/A	N/A	N/A
3	Land to west of Clyde-Carlingford railway line near former Tasman Street.	Formerly Tasman Street, Camellia which no longer exists (map available)	Parramatta	Tasman St no longer exists and is now likely to be part of the Grand Avenue Camellia site.	No	N/A	N/A	N/A	N/A
4	Embankment along stormwater canal.	Hassall and Ruse Streets, Parramatta	Parramatta	Hambeldon Cottage. Disposal area covered by grass and vegetation.	Yes	Yes	There is evidence of asbestos at the site, however if asbestos is undisturbed it is not considered a significant risk of harm to human health and the environment.	<ul style="list-style-type: none"> • The visible asbestos is removed following recognised Occupational Health and Safety practises; • A management plan is developed by an occupational hygienist with recognised experience in asbestos identification and management to ensure the asbestos is not disturbed, unless appropriate plans for investigation/remediation are developed and assessed as suitable for implementation by a site auditor accredited under the CLM Act; • Council considers making appropriate notation on the relevant planning certificates (i.e. s. 149 certificate). 	Parramatta City Council

5	Embankment along stormwater canal	Albert, Dalby and Prince Streets, Granville	Parramatta	Council assessed and considered the likely disposal location is residential or possibly RTA land.	Yes	See site 6	There is evidence of asbestos at the site, however if asbestos is undisturbed it is not considered a significant risk of harm to human health and the environment.	<ul style="list-style-type: none"> • The visible asbestos is removed following recognised Occupational Health and Safety practises; • A management plan is developed by an occupational hygienist with recognised experience in asbestos identification and management to ensure the asbestos is not disturbed, unless appropriate plans for investigation/remediation are developed and assessed as suitable for implementation by a site auditor accredited under the CLM Act; • Council considers making appropriate notation on the relevant planning certificates (i.e. s. 149 certificate). 	Sydney Water, Parramatta City Council RTA Residential
6	17 A'Beckett St Granville	17 A'Beckett Street Granville	Parramatta	Residential	Yes	Yes	There is evidence of asbestos at the site, however if asbestos is undisturbed it is not considered a significant risk of harm to human health and the environment.	<ul style="list-style-type: none"> • The visible asbestos is removed following recognised Occupational Health and Safety practises; • A management plan is developed by an occupational hygienist with recognised experience in asbestos identification and management to ensure the asbestos is not disturbed, unless 	Sydney Water Parramatta City Council RTA Residential

								<p>appropriate plans for investigation/remediation are developed and assessed as suitable for implementation by a site auditor accredited under the CLM Act;</p> <ul style="list-style-type: none"> • Council considers making appropriate notation on the relevant planning certificates (i.e. s. 149 certificate). 	
7	Former Campbell's Transport site	Tennyson Street, Clyde	Parramatta	Commercial and other.	Yes	Yes	<p>There is evidence of asbestos at the site, however if asbestos is undisturbed it is not considered a significant risk to human health and the environment.</p> <p>Further information is required to determine the degree of potential exposure to asbestos at the back of the Sakrete property.</p>	<ul style="list-style-type: none"> • The visible asbestos is removed following recognised Occupational Health and Safety practises; • A management plan is developed by an occupational hygienist with recognised experience in asbestos identification and management to ensure the asbestos is not disturbed, unless appropriate plans for investigation/remediation are developed and assessed as suitable for implementation by a site auditor accredited under the CLM Act; • Council considers making appropriate notation on the relevant planning certificates (i.e. s. 149 certificate). • Further information is obtained to determine 	Parramatta City Council – median strip?

								whether the stockpiled material at the back of the Sakerete property contains asbestos. Then these material should be lawfully removed and disposed.	
8	Rosehill Bowling Club	Hassall Street, Rosehill Noller Pde, extension of Grand Av across Ashton	Parramatta	Car park and bowling green	Yes	Yes	There is evidence of asbestos at the site, however if asbestos is undisturbed it is not considered a significant risk to human health and the environment.	<ul style="list-style-type: none"> • The visible asbestos is removed following recognised Occupational Health and Safety practises; • A management plan is developed by an occupational hygienist with recognised experience in asbestos identification and management to ensure the asbestos is not disturbed, unless appropriate plans for investigation/remediation are developed and assessed as suitable for implementation by a site auditor accredited under the CLM Act; • Council considers making appropriate notation on the relevant planning certificates (i.e. s. 149 certificate). 	Rosehill Bowling Club
9	Dundas Park	Quarry rd, Dundas Valley	Parramatta	Unknown	Yes	Yes	There is evidence of asbestos at the site, however if asbestos is	<ul style="list-style-type: none"> • The visible asbestos is removed following recognised Occupational Health and Safety practises; • A management plan is 	Parramatta City Council

							undisturbed it is not considered a significant risk to human health and the environment.	developed by an occupational hygienist with recognised experience in asbestos identification and management to ensure the asbestos is not disturbed, unless appropriate plans for investigation/remediation are developed and assessed as suitable for implementation by a site auditor accredited under the CLM Act; <ul style="list-style-type: none"> • Council considers making appropriate notation on the relevant planning certificates (i.e. s. 149 certificate). 	
10	15 Ettalong rd, Pendle Hill	15 Ettalong rd, Pendle Hill	Parramatta	Site resumed by RTA for construction of M4	Yes	No	James Hardie associated companies have notified DECCW that asbestos has been disposed of on the site. However, inspections undertaken by DECCW found there was no visible evidence of asbestos on the open area of the site.	<ul style="list-style-type: none"> • RTA to ensure that location of asbestos contaminated area is accurately surveyed; • Should the area be disturbed then RTA should develop appropriate management plans to ensure that human health is protected; • Management plans should be assessed as suitable for implementation by a site auditor accredited under CLM Act. 	RTA

11	Rydal Steel Ltd Industrial Estate	South Street Rydalmere	Parramatta	industrial estate	No	N/A	N/A	N/A	N/A
12	Catt & Goldsmith Pty Ltd site	Victoria Rd, Parramatta	Parramatta	Commercial site Possibly a timber yard.	Yes	No	<p>Although James Hardie associated companies have notified DECCW that asbestos has been disposed of on the site, inspections undertaken by DECCW found there was no visible evidence of asbestos on the open area of the site.</p> <p>However, the area detailed in the report supplied to DECCW claims that "asbestos cement visible in fill between storage shed". This area was not able to be located.</p>	<ul style="list-style-type: none"> • Council consider noting factual information on the site's history (i.e. s. 149 certificate); • Should the area be disturbed then appropriate asbestos management plans for the site should be developed to ensure human health is protected. • Further information is obtained to determine if asbestos cement visible in fill between storage shed. This material should be incorporated into the management plan. 	Unknown
13	Doyle Sports Ground	Buller Street Parramatta Fennell Street, Parramatta	Parramatta	Sports oval (well utilised).	Yes	Yes	There is evidence of asbestos at	<ul style="list-style-type: none"> • The visible asbestos is removed following recognised Occupational 	Parramatta City Council

							the site, however if asbestos is undisturbed it is not considered a significant risk to human health and the environment.	<p>Health and Safety practises;</p> <ul style="list-style-type: none"> • A management plan is developed by an occupational hygienist with recognised experience in asbestos identification and management to ensure the asbestos is not disturbed, unless appropriate plans for investigation/remediation are developed and assessed as suitable for implementation by a site auditor accredited under the CLM Act; • Council considers making appropriate notation on the relevant planning certificates (i.e. s. 149 certificate). 	
14	Granville Showground	Granville Showground/Parramatta City Raceway (Rosehill).	Parramatta	Showground and Raceway	Yes	No	James Hardie associated companies have notified DECCW that asbestos has been disposed of on the site. However, inspections undertaken by DECCW found there was no visible evidence of asbestos on	<ul style="list-style-type: none"> • Council consider noting factual information on the site's history (i.e. s. 149 certificate); • Should the area be disturbed then appropriate asbestos management plans for the site should be developed to ensure that human health is protected. 	Parramatta City Council Parramatta City Raceway

							the open area of the site.		
15	Brambles Liquid Cartage Division	Ashton Street (now James Ruse Dr) Camellia	Parramatta	Unknown	No	N/A	N/A	N/A	N/A
16	DE Taplin Pty Ltd (now BBA Industries Australia)	Ashton Street (now James Ruse Dr) Camellia	Parramatta	BBA Industries Australia (commercial/ industrial)	No	N/A	N/A	N/A	N/A
17	Parramatta showground	Old Windsor Rd, Westmead	Parramatta	Parramatta hospital being constructed on site	No	N/A	N/A	N/A	N/A
18	14 Prince St, Oatlands	14 Prince Street, Oatlands	Parramatta	Not determined Residential?	Yes	Yes	There is evidence of asbestos at the site, however if asbestos is undisturbed it is not considered a significant risk to human health and the environment.	<ul style="list-style-type: none"> • The visible asbestos is removed following recognised Occupational Health and Safety practises; • A management plan is developed by an occupational hygienist with recognised experience in asbestos identification and management to ensure the asbestos is not disturbed, unless appropriate plans for investigation/remediation are developed and assessed as suitable for implementation by a site auditor accredited under the CLM Act; • Council considers making 	Residential 12-16 Prince Street, Oatlands

								appropriate notation on the relevant planning certificates (i.e. s. 149 certificate).	
19	PH Jeffrey Reserve	Isabella Street, (Barton St, North)Parramatta	Parramatta	Parkland	Yes	Yes	<p>There is evidence of asbestos at the site, however if asbestos is undisturbed it is not considered a significant risk to human health and the environment.</p> <p>As a precaution, Council was notified the asbestos material around the children's playground. They agree to remove the visible pieces and recap the rest.</p>	<ul style="list-style-type: none"> • The visible asbestos is removed following recognised Occupational Health and Safety practises; • A management plan is developed by an occupational hygienist with recognised experience in asbestos identification and management to ensure the asbestos is not disturbed, unless appropriate plans for investigation/remediation are developed and assessed as suitable for implementation by a site auditor accredited under the CLM Act; • Council considers making appropriate notation on the relevant planning certificates (i.e. s. 149 certificate). 	Parramatta City Council
20	Vic James & Sons Engineering	23 Crescent Street, Granville	Parramatta	Factory buildings. James Vic & Sons Engineering Pty. Ltd.	Yes	No	James Hardie associated companies have notified DECCW that asbestos has been	<ul style="list-style-type: none"> • Council consider noting factual information on the sites' history (i.e. s. 149 certificate); • Should the area be disturbed then appropriate asbestos management 	Unknown

							disposed of on the site. However, inspections undertaken by DECCW found there was no visible evidence of asbestos on the open area of the site.	plans for the site should be developed to ensure that human health is protected.	
21	Pacific Transport	Merrylands Rd, Merrylands	Parramatta	Unknown	No	N/A	N/A	N/A	N/A
22	Springbank Engineering site	Camellia	Parramatta	Unknown	No	N/A	N/A	N/A	N/A
23	Eastern side of Oatlands Golf Course	Bettington rd, Oatlands (eastern side bounded by Rock Farm Avenue and Adderton Road)	Parramatta	Golf Course	Yes	No	James Hardie associated companies have notified DECCW that asbestos has been disposed of on the site. However, inspections undertaken by DECCW found there was no visible evidence of asbestos on the open area of the site.	<ul style="list-style-type: none"> • Council consider noting factual information on the site's history (i.e. s. 149 certificate); • Should the area be disturbed then appropriate asbestos management plans for the site should be developed to ensure that human health is protected. 	Oatlands Golf Course Parramatta City Council – median strip

24	Furniture Factory, Briers Rd. Northmead	Briers Rd. Northmead	Parramatta	Factory	No	N/A	N/A	N/A	N/A
25	Shell Oil (Clyde) Refinery	Camellia/Rosehill	Parramatta	Oil Refinery	Yes	No	James Hardie associated companies have notified DECCW that asbestos has been disposed of on the site. However, inspections undertaken by DECCW found there was no visible evidence of asbestos on the open area of the site.	<ul style="list-style-type: none"> • Shell should ensure that location of the areas is appropriate and accurately surveyed; • Should the area be disturbed then Shell should develop appropriate management plans to ensure human health is protected; • Management plans should be assessed as suitable for implementation by a site auditor accredited under the CLM Act. 	Shell
26	Cumberland Oval	O'Connell Street, Parramatta	Parramatta	Parramatta Stadium Parramatta Pool	Yes	No	James Hardie associated companies have notified DECCW that asbestos has been disposed of on the site. However, inspections undertaken by DECCW found there was no visible evidence of	<ul style="list-style-type: none"> • Council consider noting factual information on the site's history (i.e. s. 149 certificate); • Should the area be disturbed then appropriate asbestos management plans for the site should be developed to ensure that human health is protected. 	Parramatta Leagues Club Parramatta City Council

							asbestos on the open area of the site.		
27	Joinery Works	Alfred and Ritchie Street, Rosehill	Parramatta	Unknown	No	N/A	N/A	N/A	N/A
28	Pike Street Rydalmere (off south Street)	Pike Street Rydalmere (off south Street)	Parramatta	Unknown Road?	Yes	Yes	There is evidence of asbestos at the site, however if asbestos is undisturbed it is not considered a significant risk to human health and the environment.	<ul style="list-style-type: none"> • The visible asbestos is removed following recognised Occupational Health and Safety practises; • A management plan is developed by an occupational hygienist with recognised experience in asbestos identification and management to ensure the asbestos is not disturbed, unless appropriate plans for investigation/remediation are developed and assessed as suitable for implementation by a site auditor accredited under the CLM Act; • Council considers making appropriate notation on the relevant planning certificates (i.e. s. 149 certificate). 	Parramatta City Council
29	ICAL Ltd site	38 South St, Rydalmere	Parramatta	Industrial estate with multiple offices Embankment of Parramatta River	Yes	Yes	There is evidence of asbestos at the site, however if asbestos is undisturbed it	<ul style="list-style-type: none"> • The visible asbestos is removed following recognised Occupational Health and Safety practises; • A management plan is developed by an 	Unknown Parramatta City Council

							is not considered a significant risk to human health and the environment.	occupational hygienist with recognised experience in asbestos identification and management to ensure the asbestos is not disturbed, unless appropriate plans for investigation/remediation are developed and assessed as suitable for implementation by a site auditor accredited under the CLM Act; <ul style="list-style-type: none"> • Council considers making appropriate notation on the relevant planning certificates (i.e. s. 149 certificate). 	
30	Homebush Tip	Unknown	Homebush	Unknown	No	N/A	N/A	N/A	N/A
31	King Ave. railway land	Showground Rd, Homebush	Homebush	Unknown	No	N/A	N/A	N/A	N/A
32	King Ave. Abattoir	Showground Rd, Homebush	Homebush	Heritage listed buildings within Olympic Park complex	No	N/A	N/A	N/A	N/A
33	Adjacent to Smithfield Road near Kenyons Bridge	Smithfield Road near Kenyons Bridge, Smithfield	Holroyd	Unknown	No	N/A	N/A	N/A	N/A
34	Former Brick Pit	Canal Road Merrylands West/ Greystanes. Exact location of brick pits	Holroyd	Site subdivided into residential, Holroyd High school and	No	N/A	N/A	N/A	N/A

		unknown.		parkland.					
35	Former Holroyd Tip	Hylands Road, Greystanes (end of Gipps Road)	Holroyd	Playing fields	Yes	Yes	There is evidence of asbestos at the site, however if asbestos is undisturbed it is not considered a significant risk to human health and the environment.	<ul style="list-style-type: none"> • The visible asbestos is removed following recognised Occupational Health and Safety practises; • A management plan is developed by an occupational hygienist with recognised experience in asbestos identification and management to ensure the asbestos is not disturbed, unless appropriate plans for investigation/remediation are developed and assessed as suitable for implementation by a site auditor accredited under the CLM Act; • Council considers making appropriate notation on the relevant planning certificates (i.e. s. 149 certificate). 	Holroyd City Council
36	79 Betts rd Merrylands	79 Betts Road Merrylands	Holroyd	Unknown	Yes	Yes	There is evidence of asbestos at the site, however if asbestos is undisturbed it is not considered a significant risk	<ul style="list-style-type: none"> • The visible asbestos is removed following recognised Occupational Health and Safety practises; • A management plan is developed by an occupational hygienist with recognised experience in asbestos 	Unknown

							<p>to human health and the environment.</p> <p>The asbestos has been discussed with Holroyd City Council as they issued a clean-up notice to the company that owned the factory that was burned down. Whilst the majority of the damaged building has been removed there are still asbestos fragments located across the site.</p>	<p>identification and management to ensure the asbestos is not disturbed, unless appropriate plans for investigation/remediation are developed and assessed as suitable for implementation by a site auditor accredited under the CLM Act;</p> <ul style="list-style-type: none"> • Council considers making appropriate notation on the relevant planning certificates (i.e. s. 149 certificate). 	
37	79-91 Cumberland Highway, Smithfield	79-91 Cumberland Highway, Smithfield	Holroyd	Unknown	Yes	Yes	<p>There is evidence of asbestos at the site, however if asbestos is undisturbed it is not considered a significant risk to human health and the environment.</p>	<p><u>Action</u></p> <ul style="list-style-type: none"> • The current owner, Allsale Plastics was issued a cleanup notice which the owner referred to Amaca <p><u>Recommendation</u></p> <ul style="list-style-type: none"> • The visible asbestos is removed following recognised Occupational Health and Safety practises; • A management plan is developed by an occupational hygienist 	Allsale Plastics

							<p>The asbestos has been discussed with Holroyd City Council as they issued a clean-up notice to the company that owned the factory that was burned down. Whilst the majority of the damaged building has been removed there are still asbestos fragments located across the site.</p>	<p>with recognised experience in asbestos identification and management to ensure the asbestos is not disturbed, unless appropriate plans for investigation/remediation are developed and assessed as suitable for implementation by a site auditor accredited under the CLM Act;</p> <ul style="list-style-type: none"> • Council considers making appropriate notation on the relevant planning certificates (i.e. s. 149 certificate); • Further information is acquired to determine if asbestos is evident across the site, which should be incorporated in the management plan. 	
38	New Brighton Golf Course	180 Nuwarra Rd Moorebank	Liverpool	Golf course	Yes	No	<p>James Hardie associated companies have notified DECCW that asbestos has been disposed of on the site. However, inspections undertaken by DECCW found there was no visible evidence of</p>	<ul style="list-style-type: none"> • Council consider noting factual information on the site's history (i.e. s. 149 certificate); • Should the area be disturbed then appropriate asbestos management plans for the site should be developed to ensure that human health is protected. 	New Brighton Golf Course

							asbestos on the open area of the site.		
39	Moss Vale tip	Lytton Rd, Moss Vale	Wingecarribee	Unknown	Yes	No	James Hardie associated companies have notified DECCW that asbestos has been disposed of on the site. However, inspections undertaken by DECCW found there was no visible evidence of asbestos on the open area of the site.	No further action is required.	Moss Vale Landfill
40	Silverwater Tip	Unknown	Auburn	Unknown	No	N/A	N/A	N/A	N/A
41	RAN Depot	Jamieson St, Silverwater	Auburn	RAN Depot. No public access.	Yes	No	James Hardie associated companies have notified DECCW that asbestos has been disposed of on the site. However, inspections undertaken by DECCW found there	<ul style="list-style-type: none"> • Sydney Olympic Park Authority to ensure that location of asbestos contaminated area is accurately surveyed; • Should the area be disturbed then Sydney Olympic Park Authority should develop appropriate management plans to ensure human health is protected; • Management plans should be assessed as suitable 	Sydney Olympic Park Authority

							was no visible evidence of asbestos on the open area of the site. The Sydney Olympic Park Authority has performed extensive review on its possible contamination.	by a site auditor accredited under CLM Act.	
42	Rosehill tip	Unknown	Auburn or Parramatta	Landfill	No	N/A	N/A	N/A	N/A
43	Transavia Corp Pty Ltd	Seven Hills	Blacktown	Unknown	No	N/A	N/A	N/A	N/A
44	Shannon Brick and Tile Works	Station Street Seven Hills	Blacktown	Industrial	No	N/A	N/A	N/A	N/A
45	St John's Park Bowling Club	Edensor and Bulls Roads, St Johns Park	Fairfield City	Bowling Club	Yes	No	James Hardie associated companies have notified DECCW that asbestos has been disposed of on the site. However, inspections undertaken by DECCW found there was no visible	<ul style="list-style-type: none"> • Council consider noting factual information on the sites' history (i.e. s. 149 certificate); • Should the area be disturbed then appropriate asbestos management plans for the site should be developed to ensure that human health is protected. 	St John's Park Bowling Club

							evidence of asbestos on the open area of the site.		
46	Old Clay Pit	Off Elizabeth Drive, near Swan Rd, Edensor Park/ Bonnyrigg	Fairfield City	Mixed	Yes	Yes	There is evidence of asbestos at the site, however if asbestos is undisturbed it is not considered a significant risk to human health and the environment.	<ul style="list-style-type: none"> • The visible asbestos is removed following recognised Occupational Health and Safety practises; • A management plan is developed by an occupational hygienist with recognised experience in asbestos identification and management to ensure the asbestos is not disturbed, unless appropriate plans for investigation/remediation are developed and assessed as suitable for implementation by a site auditor accredited under the CLM Act; • Council considers making appropriate notation on the relevant planning certificates (i.e. s. 149 certificate). 	Residential Energy Australia? Fairfield City Council
47	Former Coronet Caravan Factory	Loyalty Road, North Rocks	Baulkham Hills	Appears industrial	No	N/A	N/A	N/A	N/A

Appendix 2 – Details of former James Hardie asbestos disposal sites that require no further action

Site	Description	Follow-up
Site 2	Former Country Timber Merchants Site, off Grand Ave Camellia	Unable to verify site location due to ownership changes and quality of information provided by James Hardie.
Site 3	Land to the west of Clyde-Carlingford railway line near former Tasman Street (now part of Grand Avenue, Camellia)	Site unidentifiable due to change of road alignment
Site 11	Rydal Steel Ltd Industrial site, South Street Rydalmere.	Unable to verify site location due to ownership changes and quality of information provided by James Hardie.
Site 15	Brambles Liquid Cartage Division formerly Ashton Street (now part of James Ruse Drive, Camellia).	Inspection confirmed that site has been redeveloped.
Site 16	DE Taplin P/L (now BBA Industries Australia) formerly Ashton Street (now part of James Ruse Drive, Camellia).	Inspection confirmed that site has been redeveloped.
Site 17	Parramatta Showground, Old Windsor Road, Westmead	Inspection confirmed that site has been redeveloped.
Site 21	Pacific Transport, Merrylands Road Merrylands	Unable to verify site location due to ownership changes and quality of information provided by James Hardie.
Site 22.	Springbank Engineering Site Camellia.	Unable to verify site location due to ownership changes and quality of information provided by James Hardie.
Site 24	Furniture Factory, Briers Road Northmead	Unable to verify site location due to ownership changes and quality of information provided by James Hardie.
Site 27	Joinery Works, Alfred and Ritchie Street Rosehill	Unable to verify site location due to ownership changes and quality of information provided by James Hardie.
Site 30	Homebush Tip, Homebush	Exact location within tip not possible to identify and development of tip anticipated to have covered dump site
Site 31	King Avenue railway land, Showground Road, Homebush.	Managed by Sydney Olympic Park Authority
Site 32	King Avenue abattoir, Showground Road, Homebush.	Managed by Sydney Olympic Park Authority
Site 33	Adjacent to Smithfield Road near Kenyons Bridge, Smithfield.	Unable to verify site location due to ownership changes and

		quality of information provided by James Hardie.
Site 34	Former Brick Pit, Canal Road, Merrylands West/Greystanes.	Site redeveloped and location no longer identifiable
Site 40	Silverwater Tip, Auburn.	Exact location within tip site not possible to identify and development of tip anticipated to have covered dump site
Site 42	Rosehill Tip, Auburn/Parramatta.	Exact location within tip site not possible to identify and development of tip anticipated to have covered dump site
Site 43	Transavia Corp Pty Ltd, Seven Hill.	Unable to verify site location due to ownership changes and quality of information provided by James Hardie.
Site 44	Shannon Brick and Tile Works, Station Street, Seven Hills.	Exact location within brick and tile works site not able to be identified and development of site anticipated to have covered dump site
Site 47	Former Coronet Caravan Factory, Loyalty Road, North Rocks.	Unable to verify site location due to ownership changes and quality of information provided by James Hardie.

Appendix 3 – List of former James Hardie asbestos disposal sites inspected by DECCW

Site	Asbestos visible		Land Owner
	Y	N	
Site 1 Grand Avenue Camellia	√		RailCorp
Site 4 and 4 b Embankment along stormwater canal, Parramatta	√		Parramatta City Council
Site 5 Embankment along stormwater canal, Parramatta	√		Parramatta City Council
Site 6 17 A'Beckett St, Granville	√		Parramatta City Council
Site 7 Former Campbell's Transport site, Tennyson Street Clyde	√		Parramatta City Council
Site 8 Rosehill Bowling Club, Rosehill	√		Parramatta City Council
Site 9 Dundas Park, Parramatta	√		Parramatta City Council
Site 10 15 Ettalong Road Pendle Hill (now M4)		√	RTA
Site 12 Catt and Goldsmith P/L, Victoria Road Parramatta		√	Parramatta City Council
Site 13 Doyle Sports ground, Buller Street Parramatta	√		Parramatta City Council
Site 14 Granville Showground, Parramatta		√	Parramatta City Council
Site 18 14 Princes Street, Oatlands	√		Parramatta City Council
Site 19 PH Jeffrey Reserve 105 Barton Street, Parramatta	√		Parramatta City Council
Site 20 Vic James and Sons Engineering 23 Crescent Street, Granville		√	Parramatta City Council
Site 23 Eastern side of Oatlands Golf course		√	Parramatta City Council
Site 25 Shell Oil (Clyde) refinery		√	Shell Refining (Australia) Pty Ltd
Site 26 Cumberland Oval Parramatta		√	Parramatta City Council
Site 28 Pike Street Rydalmere	√		Parramatta City Council
Site 29 ICAL Ltd 38 South St, Rydalmere	√		Parramatta City Council
Site 35 Former Holroyd Tip - Hylands Road Greystanes	√		Holroyd City Council

Site 36 79 Betts Road Merrylands	√		Unknown
Site 37 79-91 Cumberland Highway, Smithfield	√		Allsale Plastics/ Holroyd City Council
Site 38 New Brighton Golf Course		√	Liverpool Council / New Righton Golf Course
Site 39 Moss Vale Tip (Resource Recovery Centre, Berrima Road, Moss Vale)		√	Wingecarribee Council
Site 41 RAN depot – Sydney Olympic Park		√	Sydney Olympic Park
Site 45 St Johns Park Bowling Club		√	Fairfield City Council
Site 46 Old Clay Pit, Elizabeth Drive, Edensor Park	√		Baulkham Hills Council
Total	16	11	

12. Attachments

Attachment 1 – Example of section 77 notice issued under the CLM Act

Attachment 2 – Letter stating position of NSW Health

Attachment 3 – Final reports issued to Councils/ Public Authorities