



Licence Number L7064/1997/11

Licence Holder City of Rockingham

File Number: 2010/005913

Premises Millar Road Landfill Facility
Millar Road, BALDIVIS WA 6176
Lot 2170 on Plan 211650

Date of Amendment 27/04/2018

Amendment

The Chief Executive Officer (CEO) of the Department of Water and Environmental Regulation (DWER) has amended the above Licence in accordance with section 59 of the *Environmental Protection Act 1986* (EP Act) as set out in this Amendment Notice. This Amendment Notice constitutes written notice of the amendment in accordance with section 59B(9) of the EP Act.

Signed 27/04/2018

Rebecca Kelly

MANAGER LICENSING (WASTE INDUSTRIES)

REGULATORY SERVICES (ENVIRONMENT)

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Definitions and interpretation

Definitions

In this Amendment Notice, the terms in Table 1 have the meanings defined.

Table 1: Definitions

Term	Definition
Amendment Notice	refers to this document
Category/ Categories/ Cat.	categories of Prescribed Premises as set out in Schedule 1 of the EP Regulations
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department Administering the <i>Environmental Protection Act 1986</i> Locked Bag 33 Cloisters Square PERTH WA 6850 info@dwer.wa.gov.au
Delegated Officer	an officer under section 20 of the EP Act
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V, Division 3 of the EP Act.
DWER	Department of Water and Environmental Regulation
EP Act	<i>Environmental Protection Act 1986 (WA)</i>
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)</i>
Licence Holder	City of Rockingham
Occupier	has the same meaning given to that term under the EP Act.
Prescribed Premises	has the same meaning given to that term under the EP Act.
Premises	refers to the premises to which this Decision Report applies, as specified at the front of this Decision Report.
Risk Event	as described in <i>Guidance Statement: Risk Assessment</i>

Amendment Notice

This amendment is made pursuant to section 59 of the *Environmental Protection Act 1986* (EP Act) to amend the Licence issued under the EP Act for a prescribed premises as set out below. This notice of amendment is given under section 59B(9) of the EP Act.

This notice is limited only to an amendment to incorporate the acceptance of household hazardous wastes (including motor oil, chemicals and used paints) at the Premises, and to permit the acceptance, storage and mulching of green waste. No changes to the aspects of the original Licence relating to Categories 62 or 64 have been requested by the Licence Holder.

The following guidance statements have informed the decision made on this amendment:

- *Guidance Statement: Regulatory Principles (July 2015)*
- *Guidance Statement: Setting Conditions (October 2015)*
- *Guidance Statement: Land Use Planning (February 2017)*
- *Guidance Statement: Decision Making (February 2017)*
- *Guidance Statement: Risk Assessment (February 2017)*
- *Guidance Statement: Environmental Siting (November 2016)*

Amendment description

The Licence Holder has applied to incorporate household hazardous wastes (including liquids) and green waste acceptance and storage at the Premises which has been occurring for a number of years but is not adequately reflected on the current licence.

Hazardous wastes

The Licence Holder has applied to accept and store household hazardous wastes at the Premises including waste oil, household chemicals, fire extinguishers, flares, batteries, fluorescent lamps and tubes, smoke detectors, gas cylinders (small household) and paints. The applicant has nominated a proposed throughput of up to 90 tonnes per annual period. Photos of the current household hazardous waste acceptance and storage infrastructure are shown in Appendix 3.

Household hazardous wastes have previously been accepted under the Household Hazardous Waste (HHW) Program. They have been delivered to the Premises by members of the public and placed in a dedicated and bunded storage area comprised of a concrete bund with raised edge containment. Staff will relocate materials into a shelved storage shed in segregated plastic boxes on shelves or for larger containers onto self bunded pallets (see Appendix 3, Photo 2). Separate enclosed metal cabinets are available for oxidisers and flares.

The premises has a dedicated metal storage tank for waste oil. The tank is covered to prevent rain entry. Waste motor and gear oil is delivered by the public and placed either on a self-bunded pallet, or on a draining section located within the tank.

Paint has also previously been accepted at the premises under the HHW Program. The HHW program provided Intermediate Bulk Containers (IBC's) for separate storage of water-based and solvent-based paint. Paint will be accepted under the Paintback scheme following this amendment. The Paintback scheme will provide self-bunded stillages for separate storage of water-based and solvent-based paint. The self-bunded (fully contained and welded) metal stillages are 1.1m by 1.1m by 1.1m in external dimensions and are designed to capture spills and leaks. See Appendix 4 for a photo and schematic of the stillages.

Paint is to be delivered to the premises by both members of the public and commercial

painters. Members of the public deliver it into a bunded shed (see Appendix 3, Photo 6). The bunded shed is expected to capture spills and leaks during receipt and temporary storage of waste paint. Staff from the Premises will transfer the paint into the self-bunded stillages. Commercial painters are permitted to deposit paint directly into the stillages.

The storage area or stillages are progressively filled until there is sufficient volume to warrant removal. For paint, an estimated six tonnes (excluding weight of stillages) within 10-14 stillages will be on the Premises at any one time. The paint is then removed from the Premises and transported for further processing and disposal.

The Licence Holder has estimated there to be up to 50 tonnes of household hazardous wastes including paints, and up to 40 tonnes of recycled motor oil that will be accepted per annual period.

Green waste processing

The Licence Holder has also applied to permit the acceptance, stockpiling and mulching of green waste. The Licence Holder estimates that approximately 7,000 tonnes of green waste is received on site annually which therefore meets the definition of a Category 61A premises.

Green waste is received from local residents, commercial contractors and the City of Rockingham's operations and stored on a limestone hardstand area. Once sufficient material has accumulated (approximately every two to three months), a mulching machine is brought onto the premises to process the material. As part of this process the larger green waste items are cut up to enable them to be processed through the mulching machine.

Once mulched, the majority of the product is removed within one week and taken to a composting facility. The remaining portion of the material is stored on site and used by the City for its parks and garden landscaping requirements with a small amount made available to the public free of charge. Mulched green waste that is stockpiled on the Premises is placed in windrows typically 3.5 to 4.0 metres high, approximately 10 metres wide with a fire break access a minimum of 5 metres wide. The windrows are occasionally turned to prevent heat build-up and to maintain aerobic conditions.

Amendment history

Table 3 provides the amendment history for L7064/1997/11

Table 3: Licence amendments

Instrument	Issued	Amendment
L7064/1997/11	04 September 2015	Licence re-issue
L7064/1997/11	01 October 2015	Licence amendment to correct conditions
L7064/1997/11	24 March 2016	Licence amendment to increase Category 62 throughput
L7064/1997/11	18 April 2018	Amendment Notice 1 – Addition of household hazardous waste types and green waste storage.

Location and receptors

Table 4 below lists the relevant sensitive land uses in the vicinity of the Prescribed Premises.

Table 4: Receptors and distance from activity boundary

Residential and sensitive premises	Distance from Premises boundary
Residential Property	Approximately 470 metres south

Residential Premises – Suburb of Wellard	Approximately 550 metres north
Commercial/Industrial properties	Immediately adjacent to the west and south boundary

Table 5 below lists the relevant environmental receptors in the vicinity of the Prescribed Premises which may be receptors relevant to the proposed amendment.

Table 5: Environmental receptors and distance from activity boundary

Environmental receptors	Distance from Premises boundary
Groundwater	Groundwater is located approximately 10 metres below ground level
Conservation category wetlands	Approximately 500 metres north west Approximately 550 metres south west
Bush Forever site 349 (also designated as Parks and Wildlife Managed Land)	Adjacent to the north
Bush Forever site 356 (also designated as Rockingham Lakes regional parkland)	Approximately 850 metres west
Threatened Ecological Communities	A number of communities are identified immediately adjacent to the Premises.
Unnamed surface water body (within Bush Forever Site 349)	Approximately 360 metres north west

Risk assessment

Table 6 below describes the Risk Events associated with the amendment consistent with the *Guidance Statement: Risk Assessments*. The table identifies whether the emissions present a material risk to public health or the environment, requiring regulatory controls.

Table 6: Risk assessment for proposed amendments during operation

Risk Event					Consequence rating	Likelihood rating	Risk	Reasoning	
Source/Activities	Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts					
Hazardous Waste Storage	Acceptance and storage of household hazardous wastes, paint and motor oils	Odour: Storage of open containers within bunded area	Residential Receptors	Air/ Wind dispersion	Amenity impacts	Minor	Rare	Low	The Delegated Officer considers odour may cause low level impacts to amenity (minor consequence) and this would only happen in exceptional circumstances (rare likelihood) due to the proposed storage infrastructure controls. Any odour generation is expected to be limited to the immediate storage areas. The Delegated Officer considers spills may cause low level onsite or offsite impacts to these potential receptors (overall moderate consequence), and this would only happen in exceptional circumstances (rare likelihood) due to the proposed storage infrastructure controls and the depth to groundwater).
			Commercial/ Industrial properties						
		Discharge of paints to land: Spillages and failure of containment infrastructure	Groundwater	Infiltration through underlying soils	Impacts to groundwater quality	Moderate	Rare	Medium	
			Conservation category wetland	Direct emission, overland flow	Impacts to surface water quality				
			Bush Forever sites 349 and 356	Direct emission, overland flow	Impacts to native vegetation, Impacts to surface water quality within Site 349, Health impacts to ecosystem				

Risk Event					Consequence rating	Likelihood rating	Risk	Reasoning	
Source/Activities	Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts					
			On-site and neighbouring soils (including Threatened Ecological Communities)	Direct emission, overland flow	Contamination of soil, vegetation and impacts to threatened ecological communities				
Cat 61A: Solid Waste Facility	Acceptance storage and mulching of green waste	Odour: From the decomposition of green waste material	Residential Receptors	Air/ Wind dispersion	Amenity impacts	Minor	Rare	Low	The Delegated Officer considers that odour will be minimal given the limited time that green waste will be stored on the premises prior to processing.
			Commercial/ Industrial properties						
		Leachates: From rainwater entering the green waste stockpile.	Groundwater	Infiltration through underlying soils	Impacts to groundwater quality	Minor	Rare	Low	The Delegated Officer considers leachates may cause low level onsite or minimal offsite impacts to these potential receptors (minor consequence), and this would only happen in exceptional circumstances (rare likelihood) due to the proposed storage infrastructure controls and the distance to groundwater.
			Conservation category wetland	Groundwater discharges	Impacts to surface water quality				
Bush Forever sites 349 and 356	Overland flow	Impacts to native vegetation, Impacts to surface water quality within Site 349, Health impacts to ecosystem							
On-site and neighbouring soils (including Threatened Ecological Communities)	Direct emission, overland flow	Contamination of soil, vegetation and impacts to threatened ecological communities							

Risk Event					Consequence rating	Likelihood rating	Risk	Reasoning
Source/Activities	Potential emissions	Potential receptors	Potential pathway	Potential adverse impacts				
	Smoke: From the unauthorised burning of green waste	Residential Receptors	Air/ Wind dispersion	Amenity and health impacts	Minor	Rare	Low	The Delegated Officer considers the risk of smoke emissions to be low given the regular mulching and removal of green waste and storage practices for any mulched green waste stored
		Commercial/ Industrial properties						
	Noise: From the use of a mulcher	Residential Receptors	Air/ Wind dispersion	Amenity impacts	Slight	Possible	Low	The Delegated Officer considers noise from mulching to be minimal given the infrequent use.
		Commercial/ Industrial properties						

Decision

The Delegated Officer has determined that the Licence will be amended as requested to permit the storage and mulching of up to 7,000 tonnes per annual period of green waste, and therefore category 61A will be added to the Licence. The Licence will also be amended to permit the acceptance and storage of up to 99 tonnes per year of household hazardous wastes including paint and waste oil. The acceptance and storage of household hazardous waste material above this tonnage may require an additional amendment to include Category 61 on the Licence.

The Licence Holder's proposed controls will also be conditioned to maintain the risk ratings of 'medium' for discharge of paints to land and 'low' for all other identified risks, and therefore conditions will be added specifying that hazardous wastes may only be received and stored (not decanted or otherwise treated) in a dedicated and banded storage container. Paint may only be received and stored (not decanted or otherwise treated) in a dedicated and banded storage container provided by the Paintback Scheme. Green waste will be conditioned to limit the storage location and size, and require regular removal of mulched material.

Conditions relating to reporting requirements will also be amended to reflect the additional waste categories.

Licence Holder's comments

The Licence Holder was provided with the draft Amendment Notice on 23 March 2018. Comments received from the Licence Holder have been considered by the Delegated Officer as shown in Appendix 2.

Amendment

- The Prescribed Premises Categories are amended by the insertion of the red text shown in underline below

Category number	Category description	Category production or design capacity	Approved premises production or design capacity
<u>61A</u>	<u>Solid waste facility: premises (other than premises within category 67A) on which solid waste produced on other premises is stored, reprocessed, treated, or discharged onto land.</u>	<u>1 000 tonnes or more per year</u>	<u>7 000 tonnes per annual period</u>
62	Solid waste depot: premises on which waste is stored, or sorted, pending final disposal or re-use.	500 tonnes or more per year	50,000 tonnes per annual period
64	Class II or III putrescible landfill site: premises on which waste (as determined by reference to the waste type set out in the document entitled "Landfill Waste Classification and Waste Definitions 1996" published by the Chief Executive Officer and as amended from time to time) is accepted for burial.	20 tonnes or more per year	450,000 tonnes per annual period

- Table 1.2.3 of Condition 1.2.3 of the Licence is amended by the insertion of the red text shown in underline below

Table 1.2.3: Waste acceptance		
Waste type	Quantity limit tonnes/ year	Specification ¹
Inert Waste Type 1	Combined total of 50,000 tonnes per annual period	Waste containing visible asbestos or ACM shall not be accepted
Inert Waste Type 2		No more than 100 tyre units stored on the premises
Special Waste Type 1		Non-friable asbestos, friable asbestos and asbestos contaminated soil
Special Waste Type 2		Biomedical/clinical waste which is radioactive must not be accepted ²
Clean Fill		None specified
Contaminated Solid Waste		Must meet the Acceptance Criteria for Class III landfills, as specified in the Landfill Definitions.
Putrescible Waste		Must be accepted in accordance with the DoA <i>PMS 2015</i>
Quarantine Waste		
<u>Green waste</u>	<u>7,000 tonnes per annual period</u>	<u>None specified</u>
<u>Hazardous wastes</u>	<u>up to 99 tonnes per annual period</u>	<u>Limited to paints and resins, waste oils, and household hazardous wastes</u>

- Table 1.2.4 of Condition 1.2.5 of the Licence is amended by the insertion of the red text shown in underline below

Table 1.2.4: Waste processing		
Waste type(s)	Process	Process limits ^{1,2}
All	Disposal of waste by landfilling	<ul style="list-style-type: none"> Shall only take place within the area depicted in Cells 12 to 28 shown on the Map of Site Features in Schedule 1. The separation distance between the base of the landfill and the highest groundwater level shall not be less than 2.6m.
Clean Fill	Receipt and handling prior to disposal by	None specified

	landfilling	
Contaminated Solid Waste	Disposal of waste by landfilling	
Inert Waste Type 1	Receipt, handling, storage prior to removal offsite or disposal by landfilling	<ul style="list-style-type: none"> Crushing and screening of Inert Waste Type 1 is not permitted
Inert Waste Type 2	Receipt, handing, storage prior to disposal by landfilling or removal offsite	None specified
Putrescible Waste	Receipt, handing, storage prior to disposal by landfilling	<ul style="list-style-type: none"> Only to be stored and sorted on a hardstand area bunded to prevent run-off; Shall not be stored on the site for longer than 24 hours
Green Waste	Receipt, handling, storage prior to removal offsite or disposal by landfilling	<ul style="list-style-type: none"> Shall not be burned; <u>Shall only be stored on a compacted limestone hardstand;</u> <u>Unprocessed green waste shall only be stored at the Premises for a maximum of 4 months;</u> <u>Mulched green waste to be stored in windrows no more than 3 metres high, 4 metres wide and be separated by at least 5 metres;</u> <u>Mulched green waste is to be removed within 1 week of mulching except for volumes being kept at the Premises for use by the Licence Holder; and</u> <u>Mulched green waste windrows with an internal temperature exceeding 80 degrees Celsius shall be turned, mixed or otherwise treated, to reduce the temperature;</u>
Special Waste Type 1 (Asbestos Waste)	Receipt and handling prior to disposal by landfilling	<ul style="list-style-type: none"> Only to be disposed of into a designated asbestos disposal area within the landfill; Not to be deposited within 2m of the final tipping surface of the landfill; and No works shall be carried out on the landfill that could lead to a release of asbestos fibres.
Special Waste Type 2		<ul style="list-style-type: none"> Only to be disposed of into a designated biomedical waste disposal area within the landfill cells as defined in Schedule 1; and Not to be disposed within 2m of the final tipping surface of the landfill; and No works shall be carried out on the landfill that could lead to biomedical wastes being excavated or uncovered
Quarantine Waste	Receipt and handling prior to disposal by landfilling	<ul style="list-style-type: none"> Shall be managed in accordance with the DoA <i>PMS 2015</i>
<u>Hazardous Waste</u>	<u>Receipt and handling prior to removal offsite</u>	<ul style="list-style-type: none"> <u>Household hazardous wastes (excluding paint) shall be stored in dedicated impermeable bunded storage areas</u> <u>Paint shall be stored in dedicated storage containers ('stillages') provided by the Paintback Scheme</u> <u>Shall not be decanted or treated at the Premises</u>

4. Table 2.2.1 of Condition 2.2.1 of the Licence is amended by the insertion of the red text shown in underline below

Table 2.2.1: Monitoring of inputs and outputs				
Input/Output	Parameter	Units	Averaging period	Frequency
Waste Inputs	Inert Waste Type 1, Inert Waste Type 2, Special Waste Type 1, Special Waste Type 2, Clean Fill, Solid Contaminated Waste, Putrescible Waste and Quarantine Waste, <u>Green waste</u> , <u>Household hazardous waste</u>	<u>Tonnes</u> m ³	N/A	Weekly (estimates recorded during weekly inspections)
Waste Outputs	Waste type as defined in the Landfill Definitions			Each load leaving or rejected from the Premises

Appendix 1: Key documents

	Document title	Availability
1	Licence L7064/1997/11 – Millar Road Landfill Facility	accessed at www.dwer.wa.gov.au
2	City of Rockingham, December 2017. Application for Amendment.	DWER records (A1587002)
3	City of Rockingham, March 2018. Email with further information as requested.	DWER records (A1638308 and A1638309)
4	DER, July 2015. <i>Guidance Statement: Regulatory principles</i> . Department of Environment Regulation, Perth.	accessed at www.dwer.wa.gov.au
5	DER, October 2015. <i>Guidance Statement: Setting conditions</i> . Department of Environment Regulation, Perth.	
6	DER, February 2017. <i>Guidance Statement: Land Use Planning</i> . Department of Environment Regulation, Perth.	
7	DER, February 2017. <i>Guidance Statement: Risk Assessments</i> . Department of Environment Regulation, Perth.	
8	DER, November 2016. <i>Guidance Statement: Decision Making</i> . Department of Environment Regulation, Perth.	
9	DER, November 2016. <i>Guidance Statement: Environmental Siting</i> . Department of Environment Regulation, Perth.	

Appendix 2: Summary of Licence Holder comments

The Licence Holder was provided with the draft Amendment Notice on 23 March 2018 for review and comment. The Licence Holder responded on 16 April 2018 and the following comments were received on the draft Amendment Notice.

Section/Condition	Summary of Licence Holder comment	DWER response
Throughout the Amendment Notice	<p>The Licence Holder applied for the acceptance of household hazardous wastes including liquid wastes, however the amendment wording references only hazardous liquid wastes in some sections which the licence holder is concerned now excludes solid items such as batteries.</p> <p>The applicant has provided tracked changes for the proposed conditions which remove the word liquid and include the other waste types accepted under the household hazardous waste program.</p>	<p>Within the amendment notice DWER assessed the acceptance and storage of both solid and liquid household hazardous wastes up to a volume of 99 tonnes per annual period however the wording in some sections inadvertently made reference to liquid wastes only. The amendment notice has been updated to ensure that the amendment permits the acceptance of both solid and liquid household hazardous wastes.</p>
Table 1.2.3 of Condition 1.2.3	<p>The Licence Holder has requested Table 1.2.3 is amended to permit hazardous wastes which “includes paints and resins, waste oils and household chemicals, fire extinguishers, flares, batteries, fluorescent lamps and tubes, smoke detectors, gas cylinders (small household)”</p>	<p>DWER considers that the wording proposed by the Licence Holder does not sufficiently specify the hazardous waste types that are authorised to be accepted. The wording “Limited to paints and resins, waste oils and household hazardous wastes” sufficiently covers the waste types specified in the application and described in the Premises description.</p>
Table 2.2.1 of Condition 2.2.1	<p>The Licence Holder has requested the units are changed from m³ to tonnes.</p>	<p>DWER considers that either unit of measurement is acceptable and therefore the change is accepted.</p>
Amendment description and Appendix 3 photos	<p>The Licence Holder has provided clarification around the storage of the waste types, provided updated photo captions and included an additional photograph to demonstrate how large containers are stored on self banded pallets.</p>	<p>Changes accepted.</p>

Appendix 3: Premises photos



Photo 1: Household Hazardous Waste Storage Shed



Photo 2: Household Hazardous Waste Storage Shed Exterior Storage for Large

Containers (on Bunded Pallets)



Photo 3: Inside of Household Hazardous Waste Shed with Boxes in Segregated Sections



Photo 4: Inside of Household Hazardous Waste Storage for Oxidisers



Photo 5: Oil Recycling Drop Off Area

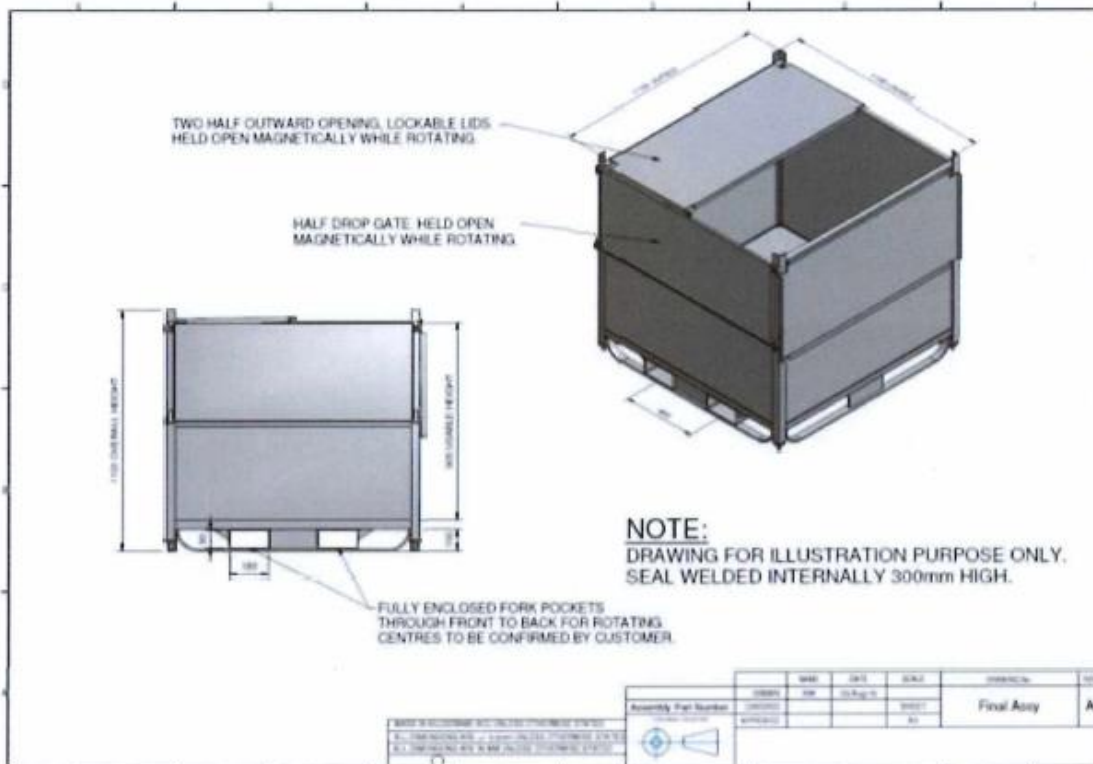


Photo 6: Paint Recycling Drop Off Area (Self Bunded Shed)

Appendix 4: Paintback photo and schematic



Photo 1: Stillages provided by the Paintback Scheme



Schematic 1: Stillages provided by the Paintback Scheme, including dimensions