

Agency performance



► Highlights

In its fourth and final year of operation, the Department had a number of significant achievements during 2016–17.

Air quality services

To better understand dust issues at Point Samson and at Port Hedland, including the location of dust sources and the movement of dust plumes in the air, the Department undertook separate dust monitoring studies during 2016–17 using Light Detection And Ranging (LiDAR) technology. The LiDAR mapped particle plumes every 10 minutes over a circular area in a six kilometre radius. To support each study, a particle monitoring network providing real-time particle information from key locations was implemented. The reports of the results of these studies will be published by the DWER during 2017–18.

The Department also commenced a 12-month field trial of a vehicle-mounted Remote Air Pollution Infrared Detector (RAPID) in November 2016. The RAPID provides a stand-off monitoring capability and is able to detect 87 air toxics through the use of an infrared detector that can automatically monitor and identify industrial chemicals, providing reliable identification of gas plumes at a distance of up to five kilometres.

Environmental Protection Regulations 1987

The Department began a review of schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) to clarify the application of the regulations and waste levy to development sites.

The intent of the regulation amendments is to ensure that the use of clean fill for development, which has historically not been subject to the waste levy, can continue without attracting the levy.

The amendments will also ensure that waste-derived uncontaminated fill which has been tested to show that it meets environmental and health standards can be used without being subject to the waste levy. Amendments to the *Landfill Waste Classification and Waste Definitions 1996 (as amended December 2009)* will support these amendments.

The DWER will undertake targeted stakeholder consultation on the proposed amendments to the EP Regulations.

Waste avoidance and resource recovery

The Department is developing amendments to the *Waste Avoidance and Resource Recovery Regulations 2008* (WARR Regulations) to require reporting and record-keeping of waste and recycling data by local governments, waste recyclers and licensees of major regional landfills.

The Western Australian Waste Strategy: *Creating the Right Environment*, published in March 2012, set out strategic directions and priorities for waste management in Western Australia and established targets for diversion of waste from landfill.

To assess Western Australia's performance against the landfill diversion targets in the waste strategy and to report against budget key performance indicators, waste and recycling data are collected annually from local government and industry in Western Australia. Through its administration of the waste levy, the Department collects data on waste disposed of to landfill. Data are also provided voluntarily through the annual Local Government Waste and Recycling Census and the Recycling Activity Review, which annually surveys businesses that recycle materials.

The provision of waste and recycling data on a voluntary basis has resulted in an incomplete dataset due to variable response rates, reducing the effectiveness of assessment of progress against the targets.

The Department's [consultation paper](#) on the proposed amendments was released for stakeholder consultation from 1 July 2016 to 26 August 2016. Twelve submissions were received, comprising of:

- five individual local governments;
- one regional council;
- two associations (Western Australian Local Government Association and Waste Management Association of Australia); and
- one waste contractor, one waste recycler, one individual, and one consultant.

A paper with the analysis of stakeholder submissions and recommendations for the proposed amendments was published on the Department's website in June 2017.

Stakeholder submissions will inform the regulatory amendments required to give effect to the data reporting requirements. The DWER intends to develop methods for measurement and calculation, as well as guidance on direct waste measurement techniques and other estimation methodologies. Draft methods will be developed in consultation with stakeholders. The requirement to report data will not commence until the relevant method has been approved.

Programs

The Department's existing programs had the following achievements:

- The BurnWise program continued to promote responsible wood heater operation. Workshops were delivered to local government environmental health officers to provide support and tools to reduce the impacts of wood smoke in communities.
- The CleanRun program consists of targeted initiatives to reduce vehicle emissions. The Smoky Vehicle Reporting Program received 479 valid reports between 1 July 2016 and 30 June 2017, resulting in 388 letters being sent to registered vehicle owners. Seventy per cent of letter recipients provided a response to the letters, with nearly half advising they had repaired their vehicle since being reported.
- The Department worked with industry to collect, validate and provide publicly available emissions and transfers data from 811 industrial facilities in Western Australia through the National Pollutant Inventory database.

The Department supported the Waste Authority by delivering initiatives as part of the Western Australian Waste Strategy: *Creating the Right Environment*, including:

- Better Bins Kerbside Collection Program – a \$20 million program to support local governments to introduce best practice kerbside collection systems. Ten local governments participated in the Better Bins Program during the year and \$1.87 million was expended on the program.
- In December 2016, a project to develop a toolkit of communication and engagement materials to be used by local governments participating in the Better Bins Program commenced.
- Recycled Construction Products Program – a \$10 million incentive program for local governments, state government entities, regional councils and the private sector to use recycled construction and demolition products in civil construction, such as roads.
- Charitable recyclers support to reduce the impact of the levy. In 2016–17, seven organisations received rebates worth over \$280,000 through the program.
- Household Hazardous Waste program – \$1.95 million to provide funding to local governments to support the collection, storage and disposal of hazardous waste generated by households.
- The Community and Industry Engagement program, which commenced in 2016–17, supports organisations that promote better waste management behaviours, practices and awareness. Two funding rounds provided \$554,700 to support 17 projects.
- The Community Grants Scheme program supports community groups to reduce waste generation, recover resources and reduce the impact of waste on the environment. There were two funding rounds delivered in 2016–17 which provided \$185,673 to 23 projects.
- The Clean Communities program, which was trialed in 2016, provided collection bags in Australian standard bin colours to volunteer community litter collection groups to enable source separation of the waste collected. Eligible groups were able to claim grant payments of up to \$500 for the waste and recycling they collected during the trial.

National Paint Product Stewardship Scheme

The National Paint Product Stewardship Scheme (Paintback) commenced in May 2016 to encourage painters to appropriately dispose of small amounts of architectural and decorative liquid waste paint at participating waste facilities. The Paintback scheme is funded by a \$0.15 per litre levy on the sale of architectural and decorative paint approved by the Australian Competition and Consumer Commission. The scheme is being implemented by Paintback Limited, a company established by the Australian Paint Manufacturers' Association.

In order to encourage participation in the scheme, the Environmental Protection (*National Paint Product Stewardship Scheme*) Exemption Order 2016, published in the *Western Australian Government Gazette* on 9 September 2016, removes the carrier licence requirement under the *Environmental Protection (Controlled Waste) Regulations 2004* for the transport of 100 litres or less of liquid waste paint. The Exemption Order only applies to trade painters participating in Paintback and complying with the requirements set out in the Order.

The scheme is expected to contribute to the delivery of the State Government's aim of diverting waste from landfill and protecting the environment.

► Report on operations

The Department's performance against the three service areas, and key efficiency and effectiveness indicators, are outlined in this Annual Report.

Information on the Department's [Regulatory Performance](#) is published each quarter on the following functions:

- works approval and licence applications;
- native vegetation clearing permit applications;
- contaminated sites;
- environmental compliance;
- controlled waste licence applications; and
- environmental enforcement.



Service 1: Environmental regulation

The Department adopted a multi-faceted approach to delivering its regulatory role, which broadly fits into three main functions:

- approvals and licensing;
- monitoring, audit and compliance inspections; and
- enforcement, including complaint and incident investigation.

Licensing and approvals

The Department assesses, determines and/or advises on environmental licences and approvals in the areas of:

- industry regulation;
- contaminated sites regulation;
- clearing regulation; and
- noise regulation.

Core regulatory instruments include works approvals, licences, classifications, and clearing permits. These are assessed and determined in accordance with statutory and target timeframes. Performance against timeframes is reported quarterly on the Department's website (Regulatory Performance).

Compliance and enforcement

The Department investigated environmental complaints and incidents as well as undertaking a wide range of proactive compliance programs and initiatives to ensure emissions and discharges met acceptable criteria.

The Department's compliance and enforcement activities foster a balance of proactive engagement and the application of sanctions, as appropriate, to ensure the risks associated with environmental breaches are addressed and instruments contain robust regulatory controls.



Compliance and enforcement outcomes range from licence amendment, suspension or revocation, statutory notices, and orders to modified penalty fines and prosecution.

Compliance and enforcement activities and outcomes are reported quarterly on the Department's website.

Service 1: Environmental regulation – performance summary			
	2016–17 Budget ⁽¹⁾ \$'000	2016–17 Actual \$'000	Variation ⁽²⁾ \$'000
Total cost of service	40,954	36,624	4,330
Less income	29,165	28,513	652
Net cost of service	11,789	8,111	3,678
Employees (full-time equivalents)	241	231	10
Efficiency indicators			
Average Cost per Works Approval and Licence Application	\$19,823	\$28,875	(\$9,052)
Average Cost per Native Vegetation Clearing Permit Application	\$7,296	\$7,629	(\$333)

(1) As specified in the 2016–17 Budget Statements.

(2) Further explanations are contained in the key performance indicators section of this Annual Report.



► Key deliverables

Industry regulation

During 2016–17, the Department received 200 applications for new works approvals and licences, and granted 94 applications and refused one application. The Department's average time for determining an application for a new works approval or licence (excluding clock-stops) was 65 working days. Of the applications for new works approvals and licences determined by the Department in 2016–17, 59 per cent were decided within the 60 working day target timeframe.

The Department also received 389 applications to amend a works approval or licence and granted 342 amendment applications during the 2016–17 year. The Department's average time for determining an application to amend a works approval or licence (excluding clock-stops) was 68 working days. Of the amendment applications determined by the Department in 2016–17, 68 per cent were decided within the 60 working day target timeframe.

As part of the reform process, the Department published or amended a number of important Guidance Statements, including:

- *Guidance Statement: Decision-making* (published November 2016 and amended in February 2017).
- *Guidance Statement: Risk Assessment* (published November 2016 and amended in February 2017).
- *Guidance Statement: Environmental Siting* (published November 2016).
- *Guidance Statement: Land Use Planning* (published October 2015, amended in August 2016 and February 2017).
- *Guidance Statement: Licence Duration* (published November 2014 and amended in August 2016).

The risk-based framework improves the accountability, transparency, robustness and effectiveness of environmental regulation in Western Australia.

During 2016–17, the Department also initiated a program of its ongoing review of existing licences consistent with its *Guidance Statement: Licence Duration*. These reviews ensured the Department's regulatory instruments remained contemporary and effective to control public health and environmental risks.

Clearing regulation

The assessment bilateral agreement commenced on 1 January 2015 to accredit the State's clearing permit assessment carried out under the EP Act under the *Environment Protection Biodiversity Conservation Act 1999* (EPBC Act). A total of eight clearing permit applications were bilaterally assessed in 2016–17, and two decisions were made on applications assessed under the bilateral agreement.

The Department continued to support negotiations for an approval bilateral agreement. The agreements are part of the Federal Government's 'one-stop-shop' for environmental approvals. The execution of the approval bilateral agreement is dependent on amendments to the EPBC Act which are not supported by the Senate. Amendments are also proposed to the EP Act to facilitate implementation of the approval bilateral agreement.

During 2016–17, the Department received 461 applications for a clearing permit and made 392 decisions. The average timeframe to make a decision (excluding clock-stops) was 34 working days. Of the decisions made on applications for a clearing permit by the Department in 2016–17, 71 per cent were made within the target timeframe of 80 per cent of decisions within 60 working days. The target timeframe for deciding a clearing permit application was altered from calendar days to working days at the beginning of 2016–17.

Compliance and enforcement

The Department received 2,893 complaints in Western Australia in 2016–17.

The Department dealt with 420 pollution incidents of which 281 required a clean-up of discharged waste. Fifty-eight of the incidents were classified as hazardous materials emergencies where the Department provided an on-scene environmental monitoring service and advice to the emergency services. Incidents included hazardous materials fires, chemical spills from premises and vehicles, sewage spills, oil spills, and airborne industrial emissions.

Proactive compliance activities are coordinated through the Annual Compliance Program. The Department undertook compliance activities across four major programs: prescribed premises compliance; waste compliance; controlled waste compliance; and pollution response activities.



Ninety-three per cent of the Department's 1,245 planned inspections were undertaken in 2016–17. The Department administered 250 environmental sanctions, including environmental field reports, infringement notices, formal warnings, and prosecutions.

During 2016–17, the Illegal Dumping Program continued to deliver tailored education, surveillance and enforcement initiatives aimed at reducing illegal dumping. Strategic partnerships are now formalised with 11 local government authorities, Main Roads Western Australia, Landcorp, the Waste Authority, and the Keep Australia Beautiful Council. A total of 335 complaints of illegal dumping were investigated, and seven people were convicted of 14 offences under the EP Act with fines totalling \$69,000.

Noise regulation

In its role of supporting Western Australian local governments administering the *Environmental Protection (Noise) Regulations 1997*, the Department provided formal noise assessment advice, data analysis and/or reports to local governments on 46 occasions.

The Department also approved a noise management plan for waste collection within a specified area of the City of Perth central business district.

Training in noise regulation was provided by the Department to local government authorised persons and inspectors in July, August and November 2016 as well as May 2017.

Air quality services

During 2016–17, the Department continued the maintenance and operation of eight metropolitan and five regional fixed air quality monitoring stations, to assess the presence of NEPM criteria pollutants, including carbon monoxide, nitrogen dioxide, ozone, sulfur dioxide, and particles.

All of the Department's monitoring sites operating for the full 2016–17 period achieved a greater than 90 per cent data recovery. During this reporting period, the progressive upgrade of criteria pollutant monitoring equipment used at the Department's monitoring stations continued.

In addition to the air quality monitoring required under the Ambient Air Quality NEPM, the Department undertook two Light Detection And Ranging (LiDAR) studies, at Point Samson from December 2016 to January 2017, and at Port Hedland from February to June 2017. The LiDAR mapped particle plumes every 10 minutes over a circular area in a six kilometre radius. To support each study, a particle monitoring network providing real-time particle information from key locations was implemented. Reports on the studies will be published during 2017–18.

The Department commenced a 12-month field trial of a vehicle-mounted Remote Air Pollution Infrared Detector (RAPID) in November 2016. The RAPID provides a stand-off monitoring capability and is able to detect 87 air toxics through the use of an infrared detector that can automatically monitor and identify industrial chemicals, providing reliable identification of gas plumes at a distance of up to five kilometres.

Specialist technical air quality advice was provided in response to more than 150 requests, with more than 95 per cent delivered within specified timeframes. The advice supported the Department's regulatory functions, and the statutory functions of other government agencies.

The Department participated in the Collie Airshed Study – an industry-funded study to develop a consistent assessment and air quality management regime for the Collie basin, including a comprehensive meteorological database and a verified air quality model. During 2016–17, the Department successfully applied for access to the Pawsey Supercomputer Centre – a world class user facility based in Western Australia. The Department is running advanced three-dimensional weather models on the Pawsey computers, to simulate meteorology for the Collie region at a fine resolution.

Contaminated sites

The reported sites register listed almost 3,550 sites classified in accordance with the CS Act by 30 June 2017.

A Hazard Abatement Notice was served on the owners of 20 Adelaide Street Hazelmere in December 2016 to prevent access to the site and allow the fire risk to be managed.

The Department develops and implements strategic policy and legislation to promote environmentally sustainable outcomes.

Under the EPBC Act, the Department continued to support:

- negotiations for an approval bilateral agreement with the Federal Government to accredit the clearing permit process as part of a 'one-stop-shop' to reduce duplication of environmental assessment and approval processes between Commonwealth and State territories; and
- the strategic assessment of the impact of development in the Perth and Peel regions on matters of national environmental significance.

The Department continued to implement:

- the provision of data to the National Pollutant Inventory, a publicly accessible national internet database that provides the community, industry and government with information on the emissions of 93 selected substances from industry, transport and commercial premises to air, land and water. The Department worked with industry to collect, validate and provide publicly available emissions and transfers data from 811 industrial facilities in Western Australia;
- the BurnWise program to promote responsible wood heater operation. BurnWise provides support and tools for environmental health officers to reduce the impacts of wood smoke in their communities. The BurnWise program delivered workshops to promote correct wood heater operation, and provided support and tools to local government environmental health officers to help reduce adverse impacts on air quality from wood heater smoke. BurnWise program officers attended community events at regional centres with the BurnWise wood heater demonstration trailer; and



- the CleanRun program to address vehicle emissions. CleanRun is an implementation measure of the National Environment Protection (Diesel Vehicle Emissions) Measure and the Perth Air Quality Management Plan, consisting of targeted initiatives to reduce vehicle emissions including on-road vehicle emissions testing and smoky vehicle reporting. The Smoky Vehicle Reporting Program received 479 valid reports



between 1 July 2016 and 30 June 2017, resulting in 388 letters being sent to registered vehicle owners. Seventy per cent of letter recipients provided a response to the letters, with nearly half advising they had repaired their vehicle since being reported.



Service 2: Environment policy – performance summary

	2016–17 Budget ⁽¹⁾ \$'000	2016–17 Actual \$'000	Variation ⁽²⁾ \$'000
Total cost of service	6,999	5,975	1,024
Less income	0	442	(442)
Net cost of service	6,999	5,533	1,466
Employees (full-time equivalents)	39	42	(3)
Efficiency indicator			
Average Cost per Hour of Policy Advice and Recommendations	\$103	\$101	\$2

(1) As specified in the 2016–17 Budget Statements.

(2) Further explanations are contained in the key performance indicators section of this Annual Report.

► Key deliverables



Policy advice

In this reporting period the Department:

- Continued to participate in the implementation of the National Clean Air Agreement, including reviewing national reporting standards for sulfur dioxide, nitrogen dioxide and ozone, and finalising the introduction of standards for non-road ignition engines and equipment.
- Continued to administer the Perth Air Quality Management Plan in consultation with the Air Quality Coordinating Committee.
- Oversaw the monitoring program of rock art on the Burrup Peninsula for its protection against air pollutants.
- Provided climate change advice to state agencies, local governments and other stakeholders on climate change risk and vulnerability assessments and adaptation planning.
- Continued to participate in the development of a National Standard for Environmental Risk Management of Industrial Chemicals to create a nationally consistent approach for managing environmental risks posed by industrial chemicals.
- Commenced a review of the *Environmental Protection (Controlled Waste) Regulations 2004* to streamline processes for the regulation of the transportation of controlled wastes. This review complements amendments that were undertaken in 2014 to provide greater clarity for industry.



Service 3: Waste strategies

The Environment Minister is responsible for ensuring the Waste Authority is provided with services to fulfil its functions. The Department’s staff provided this service, which included implementing programs and projects in the business plan 2016–17.

The Waste Authority has a role in administering the Waste Avoidance and Resource Recovery Account and the delivery of projects and programs in the Business Plan and related government priorities.

Increased waste compliance and enforcement ensures that illegal dumping and levy evasion are not seen as viable options in response to increased waste levy rates.

Service 3: Waste strategies – performance			
	2016–17 Budget ⁽¹⁾ \$'000	2016–17 Actual \$'000	Variation ⁽²⁾ \$'000
Total cost of service	23,197	20,016	3,181
Less income	70,750	70,470	280
Net cost of service	(47,553)	(50,454)	2,901
Employees (full-time equivalents)	60	42	18
Efficiency indicator			
Cost of landfill levy compliance as a percentage of landfill levy income collected	3%	2.4%	0.6%

(1) As specified in the 2016–17 Budget Statements.

(2) Further explanations are contained in the key performance indicators sections of this Annual Report.

► Key deliverables

A schedule to increase waste levy rates that apply to putrescible and inert landfills came into effect from 1 January 2015. Increases in waste levy rates are scheduled until July 2018 to address one of the key drivers of waste disposal – low cost landfilling.

In addition to undertaking prescribed premises and landfill levy compliance inspections, compliance officers investigated the extent of stockpiling of inert waste at landfills and recycling premises. These investigations revealed that the majority of the inert waste diverted from inert landfill, following the levy increase, was received at licensed facilities and had been processed, or was awaiting processing.

The State Government continued to support an illegal dumping team and implemented programs to support local and state government agencies, charitable recyclers and other partners in addressing the issue of illegal dumping of waste. The program delivered tailored education, surveillance and enforcement initiatives aimed at reducing illegal dumping.

The State Government also continued its focus on better practice collection systems for municipal waste through the \$20 million Better Bins Kerbside Collection Program, which supports the rollout of consistent bin infrastructure to households to assist in the recovery of valuable resources being lost to landfill. As of 30 June 2017, 10 local governments had become Better Bins participants, representing approximately 20 per cent of households in the Perth metropolitan region.

The \$10 million Recycled Construction Products Program promotes the use of recycled construction and demolition waste in civil engineering projects such as building roads, car parks and drains. Significant financial savings and environmental benefits can be achieved by using recycled construction and demolition waste, and the program will help realise those benefits. The Department worked with the Waste Authority to address issues relating to product standards which have impacted the uptake of program funding.



► Budget and key performance indicators

Target versus actual results

► Financial targets

Financial targets			
	2016–17 Target ⁽¹⁾ \$'000	2016–17 Actual \$'000	Variation ⁽²⁾ \$'000
Total cost of services (expense limit) – sourced from Statement of Comprehensive Income	71,150	62,615	8,535
Net income (cost of services) – sourced from Statement of Comprehensive Income	28,765	36,810	8,045
Total equity – sourced from Statement of Financial Position	48,040	72,996	24,956
Net increase/(decrease) in cash held – sourced from Statement of Cash Flows	(3,744)	9,800	13,544
	2016–17 Target	2016–17 Actual	Variation
Approved full-time equivalent (FTE) staff level	340	315	25

(1) As specified in the 2016–17 Budget Statements.

(2) Further explanations are contained in Note 37 'Explanatory Statement' within this Annual Report.

► Summary of key performance indicators

Outcome 1: Emissions, discharges and clearing of native vegetation are effectively regulated to avoid unacceptable risks to public health and the environment

Key effectiveness indicators:	2016–17 Target ⁽¹⁾	2016–17 Actual	Variation ⁽²⁾
Percentage of major resource project works approvals and licences applications decided within 60 working days	100%	67%	(33%)
Percentage of other project works approvals and licences applications decided within 60 working days	80%	59%	(21%)
Percentage of native vegetation clearing permit applications decided within 60 working days	80%	71%	(9%)
Percentage of investigations finalised within 60 working days	80%	68%	(12%)

 Key efficiency indicators:	2016–17 Target ⁽¹⁾	2016–17 Actual	Variation ⁽²⁾
Average Cost per Works Approval and Licence Application	\$19,823	\$28,875	(\$9,052)
Average Cost per Native Vegetation Clearing Permit Application	\$7,296	\$7,629	(\$333)

Outcome 2: Development and implementation of strategic policy and legislation that promoted sustainable environmental outcomes

Key effectiveness indicator:	2016–17 Target ⁽¹⁾	2016–17 Actual	Variation ⁽²⁾
Percentage of advice and recommendations that met Ministerial approval, without the need for significant modification	95%	99%	4%

 Key efficiency indicator:	2016–17 Target ⁽¹⁾	2016–17 Actual	Variation ⁽²⁾
Average Cost per Hour of Policy Advice and Recommendations	\$103	\$101	\$2

Outcome 3: Waste avoided and the recovery of materials from landfill maximised

Key effectiveness indicators:	2016–17 Target ⁽¹⁾	2016–17 Actual	Variation ⁽²⁾
Percentage of municipal solid waste reported as diverted from landfill through recycling compared to waste strategy target in the Perth metropolitan region	50%	36%	(14%)
Percentage of commercial and industrial waste reported as diverted from landfill through recycling compared to the statewide waste strategy target	55%	56%	1%
Percentage of construction and demolition waste reported as diverted from landfill through recycling compared to the statewide waste strategy target	60%	57%	(3%)

 Key efficiency indicator:	2016–17 Target ⁽¹⁾	2016–17 Actual	Variation ⁽²⁾
Cost of landfill levy compliance as a percentage of landfill levy income collected	3%	2.4%	0.6%

(1) As specified in the 2016–17 Budget Statements.

(2) Explanations for the variations between target and actual results are presented in the key effectiveness and efficiency indicator section within this Annual Report.