

Report Card 2019-20

The Perth Air Quality Management Plan (AQMP) was released in December 2000. The plan aims to ensure that clean air is achieved and maintained throughout the Perth metropolitan region to 2030 and beyond.

The short- and long-term actions in the Perth AQMP address a variety of issues through eight key initiatives: land use and transport planning; vehicle emissions management; health effects research and indoor air quality; monitoring and modelling; industrial emissions management; small to medium enterprise emissions management; haze reduction; and smoke management.

Some highlights include:

Air quality monitoring and modelling

The objectives of this program are to:

- introduce procedures for the ongoing development of current air quality models and the review of new modelling methods and techniques for application in Perth.
- develop future monitoring programs, based on the exposure to and impact of air toxics and acid gases, and evaluate monitoring options, such as mobile monitoring facilities.

This program run by the Department of Water and Environmental Regulation aims to ensure that the existing monitoring network is maintained and improved, and assesses trends in air quality. The program incorporates reviewing Perth ambient air quality monitoring data, and reviewing and improving monitoring equipment.

Highlights 2019-20

- Established two new air quality monitoring stations in Mandurah (November 2019) and Armadale (April 2020).
- Continued to test new devices/ methodologies, including real time particle sensors.
- Undertook new campaign monitoring programs where a need was identified. Where appropriate, these studies were [published online](#).



RAC autonomous Intellibus®



RAC is undertaking a staged trial of automated vehicle technology with the introduction of a driverless and fully electric shuttle bus. A first in Australia, the technology is being developed in conjunction with the Department of Transport and local governments to comply with road and vehicle safety standards. The innovative shuttle will:

- help to lower emissions and impacts on health and the environment
- provide an innovative mode of transport
- add a new shuttle bus to Perth roads.

This trial affords Western Australians the chance to see the technology developing as more is learned about it in preparation for driverless vehicles becoming part of the Western Australian fleet.

Highlights 2019-20

Since its introduction the RAC Intellibus® has:

- driven over 24,000 kms
- carried over 15,000 people
- taken almost 7,000 trips
- had just under 22,000 registrations to participate.



Your Move program



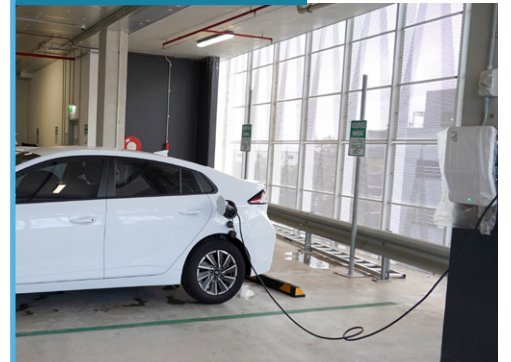
The Department of Transport delivers the Your Move program to increase walking, bike riding and public transport use for trips which would otherwise be made by car.

Your Move projects are run in targeted communities in partnership with local government. Through phone coaching, localised information and wayfinding, Your Move encourages people to find trips they can switch from driving to something more active. Your Move also offers guidance, training and recognition to support local governments, schools and workplaces to facilitate active, low-emission trips by residents, students and employees.

Highlights 2019-20

- The Your Move Bassendean project encouraged 4,066 Bassendean residents to consider active travel choices. One thousand nine hundred eighty-five residents committed to making changes and received practical information (e.g. local access maps) to support them. Three local schools and three workplaces also participated.
- Preparations were made for the next large-scale community project, which will be run in the City of Stirling and aim to encourage 16,000 residents to change some of their trips.
- Some 137 schools were involved in Your Move to plan and implement activities to encourage active trips by their students. Twenty-four schools received a Connecting Schools grant to improve bike or scooter parking.
- Your Move supported efforts by local governments and other workplaces to promote active travel. Their initiatives included bike to work events, providing SmartRider cards for business trips using public transport and running bike skills training for staff and residents.

State Government Electric Vehicle Working Group



To lead by example and help reduce motor vehicle emissions, the State Government is exploring ways to make it easier for government agencies to purchase electric vehicles. They are also installing electric vehicle charging stations in some government agency buildings.

Highlights 2019-20

- The Department of Finance and the Department of Water and Environmental Regulation have installed electric vehicle charging stations in their main buildings at Osborne Park and Joondalup.
- Government trading enterprises are also incorporating electric vehicles in their fleets and have installed charging stations, including Synergy, Western Power, Horizon Power and the Water Corporation.



CleanRun



CleanRun is a program run by the Department of Water and Environmental Regulation which consists of a range of targeted initiatives to reduce vehicle emissions, such as:

- roadside vehicle emissions monitoring and free health checks of vehicle emissions using the remote sensing device (RSD)
- the Smoky Vehicle Reporting Program for community reporting of smoky vehicles.

Highlights 2019–20

- The [2018-2019 Smoky Vehicle Reporting Program – Annual report](#) was published. 482 vehicles reported using online Smoky Vehicle Reporting System with nearly two thirds of vehicle owners reporting having repaired or serviced their vehicles.
- Reporter diversity increased with a larger number of unique reporters. A more diverse reporter base has demonstratively improved the effectiveness of the program.
- Diesel vehicles continue to be over-represented in reports with 4 out of 5 vehicles reported to be diesels.

Heavy industry

The Department of Water and Environmental Regulation continued to effectively manage emissions and discharges to the Perth airshed to avoid unacceptable risks to public health and the environment.

Throughout the year, the department remained focused on its role of protecting and maintaining air quality in Western Australia. We continued to provide strategic, technical and policy advice on air quality matters such as ambient air quality, industrial emissions, odour modelling, meteorology, health standards and air toxics.



Prescribed burning



The Smoke Management Liaison Group in collaboration with Asthma WA led awareness-raising campaigns on smoke impacts from prescribed burning prior to spring 2020, in collaboration with the Department of Biodiversity Conservation and Attractions (DBCA), the Bureau of Meteorology (BoM) and the Department of Health.

The Department of Fire and Emergency Services and DBCA are working with BoM to implement the Air Quality Forecasting system in WA. It is hoped that the more detailed information from this system will help fire managers to identify the potential for smoke impacts and provide more targeted and informative warnings to the community so that vulnerable people can better protect themselves from harm.

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About the Air Quality Coordinating Committee

The Air Quality Coordinating Committee (AQCC) is comprised of representatives from the State Government, industry, business and the community. Its role is to monitor the implementation of the [Perth AQMP](#) and review the progress towards achieving the plan's aims.

AQCC members

Membership as at 30 June 2020:

State Government

- Sarah McEvoy, Chair ([Department of Water and Environmental Regulation](#))
- Mirella Goetzmann ([Department of Health](#))
- Justin McKirdy ([Department of Transport](#))
- Katie MacWilliams ([Department of Biodiversity Conservation and Attractions](#))
- Jacquie Stone ([Department of Planning Lands and Heritage](#))
- Joscyln Sloan ([Department of Mines, Industry Regulation and Safety](#))

Community

- Professor Philip Jennings ([Conservation Council of Western Australia](#))
- Dr Sue Graham-Taylor (Pollution Action Network)
- Martin Chape (Community Member)

Business and Industry

- Nick Jones ([WA Local Government Association](#))
- Chris Oughton ([Kwinana Industries Council](#))
- Anne Still ([Royal Automobile Club of WA](#))

The Air Quality Coordinating Committee met three times between July 2019 and June 2020.

Contact the Air Quality Coordinating Committee

For more information, please contact the secretary:

Phone: 6364 6581

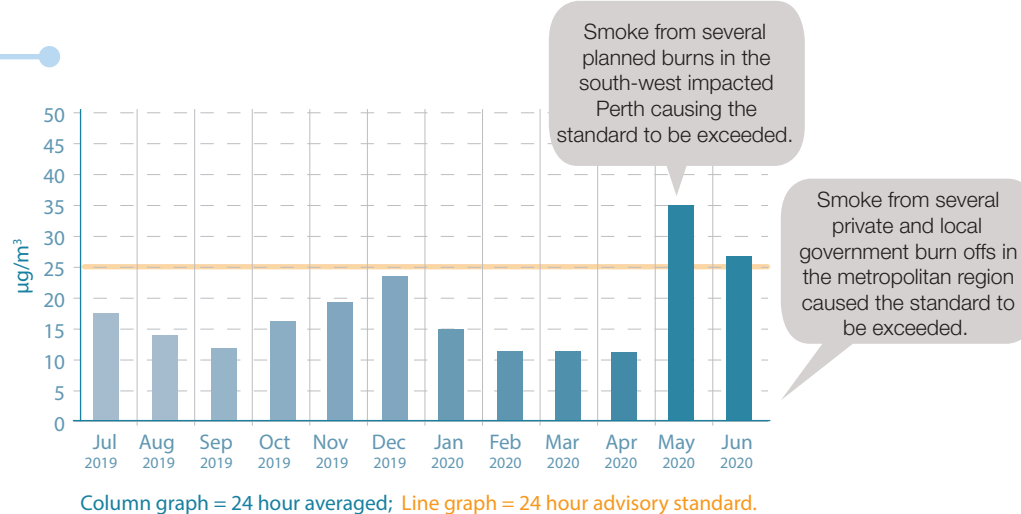
Email: AQCCadmin@der.wa.gov.au

or visit us at the [Air Quality Coordinating Committee, Department of Water and Environmental Regulation](#)

Air pollutant trends 2019–20

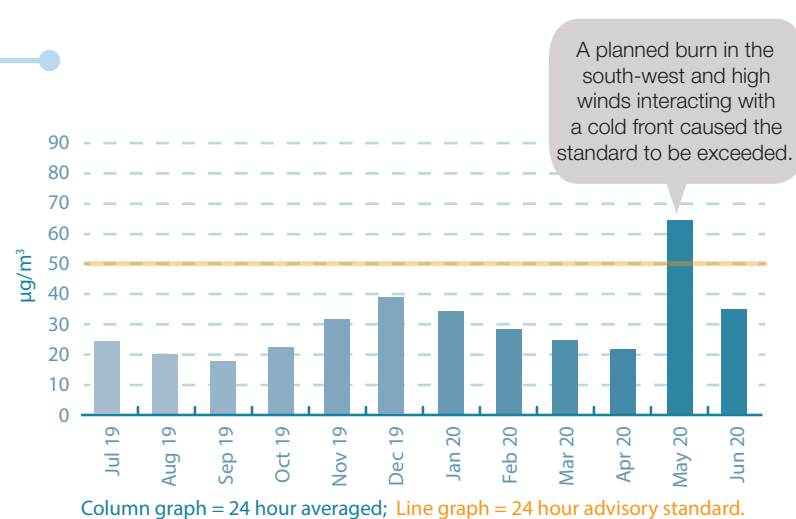
The graphs below show the maximum levels for fine particle ($PM_{2.5}$), coarse particles (PM_{10}), ozone and nitrogen dioxide from 1 July 2019 to 30 June 2020, recorded at Perth monitoring stations (Caversham, South Lake, Duncraig, Rolling Green, Quinns Rocks, Rockingham, Swanbourne and Wattleup). For comparison, the diameter of a human hair is seven times the diameter of the largest coarse particle (PM_{10}). The high concentrations of particles were primarily due to natural dust, smoke haze and local vehicle emissions. The precursors for ozone (an indicator of photochemical smog) are produced predominantly by motor vehicles and industry. Nitrogen dioxide in cities is predominantly caused by motor vehicles and contributes to the formation of photochemical smog.

$PM_{2.5}$ Particles



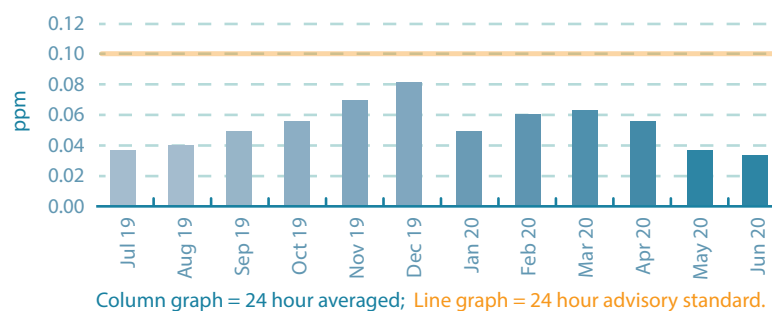
Monthly maximum 24 hour averaged $PM_{2.5}$ from 1 July 2019 to 30 June 2020.

PM_{10} Particles



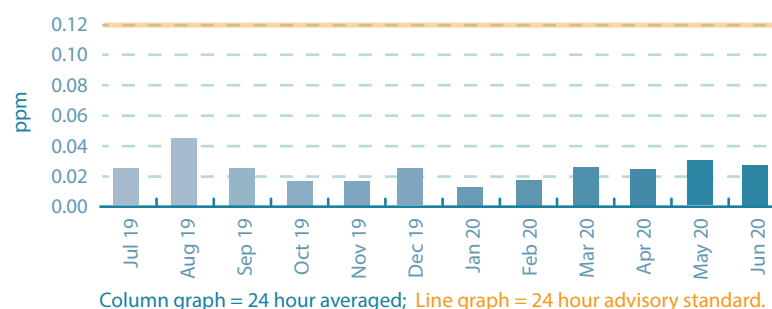
Monthly maximum 24 hour averaged PM_{10} from 1 July 2019 to 30 June 2020.

Ozone



Monthly maximum one hour averaged ozone from 1 July 2019 to 30 June 2020.

Nitrogen dioxide



Monthly maximum one hour averaged nitrogen dioxide from 1 July 2019 to 30 June 2020.

Further details on air pollutant trends in Perth can be found in the [WA Air Monitoring Reports](#) which are available on [the department's website](#). An hourly update of air quality in WA is also available on [the department's website](#).