15th July 2024

TMC Building Design Group
A.B.N. 811 428 67 114
P.O. Box 3194 Moorabbin Vic 3021
Mob: 0416 114 573
Email: tracey@tmcdesign.com.au

Town Planning Department
Wyndham City Council
PO Box 197,
WERRIBEE, VIC, 3030
Via email submission: mail@wyndham.vic.gov.au
statplanning@wyndham.vic.gov.au

Cc: Werribee Wash Works – [redacted]
Via Email: [redacted]

***RE: Planning Permit Amendment for Car Wash Addition***
***Planning Permit Application No: WYP2526.07 (Amended)***
***96-100 BALLAN ROAD, WYNDHAM VALE, VIC 3030***
***Land Title: LOT C on PS 514280B, Mambourin Parish, Vol 10677, Fol 491***
[redacted]

**The Permit Allows:**
**Development and Use of Land for a Car Wash and Dog Wash and associated Signage.**

Dear Planning Department,

Please find our attached application for the minor alterations/extension of the existing Car Wash portion of the overall site. All other areas of the overall site will remain un-altered and will not be further addressed in this application.

Currently, the existing Car Wash area consists of:

- Three (3) Automatic Wash Bays,
- Three (3) Self-Serve Wash Bays,
- Five (5) Vacuum Bays,
- Two (2) Dog Washes,
- A Plant Room and minor Office area with Staff Amenity facilities,
- Attached small GI. Shed (skillion),
- Vending/Change Area,
- 20' Shipping Container,
- Bin Area,
- Three (3) No. Water Storage Tanks,
- Existing on-building signage,
- Existing 2.1M high acoustic timber fence along the northern site boundary,
- One (1) on-site Staff car parking space.

The predominate reasoning for the proposed site enhancements are three-fold:

1. To perform an overall site/equipment upgrade in order to remain competitive with other newer Car Wash sites that are to be/have been recently constructed or renovated within the general car wash catchment area of this site,
2. To upgrade the technical aspect of the site with newer, quieter, more efficient and environmentally friendly car washing equipment and technology, and
3. To provide a more extensive car washing offer (via a new touch free automatic wash bay) to the local community and current patrons which is in great demand.

The proposed demolition works include:

- To remove the existing GI. Shed that is attached externally of the Wash Bay 6 end wall,
- To remove the existing 20' shipping storage container that is located in the top north-eastern corner of the site,
- To remove local raised concrete kerb/islands where required around the site,
- To remove the existing Vacuum Island and raised concrete plinth that is located on the entry (northern) side of Wash Bay 1 and 2,
- To remove the existing line marking and directional text,
- To remove the existing site timber fencing to the north and eastern site boundaries (as needed).

The proposed new works include:

- New install driveway line markings, lane markings, chevron markings, directional arrows and Wash Bay names will be painted on the existing driveway pavement areas to help delineate the access to the different wash bay areas and also to help patrons manoeuvre and exit safely around the Car wash site area.
- To relocate the Staff car parking spot,
- To provide a new fenced Bin Area,
- To install new windows and overhead infill framing (from floor to the underside of the existing Wash Bay ceiling lining) to Wash Bay 4 – 6 on the entry (northern) side,
- To install new acoustic roller doors to Wash Bay 4 – 6,
- To meet customer demands for touch-free car wash units; To extend the main Car Wash building to the eastern boundary for the provision of the new Wash Bay 7 (a new touch-free wash automatic bay) and Store Room. This building extension will be constructed of concrete panels and a flat Colorbond roof which is similar in built form to that of the existing Plant Room at the western end of the building. The proposed building height along the eastern boundary allows the required daylight to the adjoining habitable window of the existing adjoining residence. It also complies with the required side setback building envelope from the side (eastern) boundary,
- To meet walk-up customer demands and reduce customer wait times; To install 2 additional Dog Wash units across from the existing Dog Wash area. The new Dog Wash units will be located under a new slimline 2.9M wide x 5.1M long x 3.0M maximum high skillion roof canopy pitched at 5°,
- New acoustic fencing will be constructed along the northern, part western and part eastern site boundaries where shown on Sh: 2 of the attached drawings. It is proposed to construct a new 3.5M high acoustic fence along part (25M length) of the northern boundary. The fence is then splayed around the existing Stormwater Pit to 2.3M off the northern boundary then it continues through to the eastern site boundary. This 3.5M high fence replaces the existing 2.1M high fence; but will have the lower 2.3M high in acoustic timber and the top 1.2M high as 10mm thick clear Perspex. The Perspex material will be maintained by the Car Wash operator and this clear material will allow natural unobscured light to pass into the yard areas of the adjoining properties.
  Along the rear of the eastern boundary for a 7.8M length; it is proposed to have the lower 2.0M high in acoustic timber and the top 0.6M high as 10mm thick clear Perspex.
  Along the front of the eastern boundary from where the corner of the existing adjoining residence finishes, for a 4.7M length; it is proposed to have the lower 2.0M high in acoustic timber and the top 0.6M high as 10mm thick clear Perspex. Thereafter the existing ~1.0m high timber fence can remain to the front of the site boundary.

- All new building works will match the colour scheme and building materials used of the existing building elements to maintain consistency in both colour and built form throughout the Car Wash site area,
- It is proposed to construct a new 3.0M high acoustic fence from the top corner of the existing water tank (along the western boundary) to near the corner of the entry site driveway. It is proposed to have the lower 1.0M high in acoustic timber and the top 2.0M high as 10mm thick clear Perspex- to allow clear visibility into the site from the roadway.

Over the most recent years the expansion of the Car Wash industry around the country has been phenomenal. New Car Wash sites are being constructed at a great rate, and the pressure of existing older sites to have upgrades to their wash bay offerings (ie: the number of Automatic Wash Bays verses Self-Serve Wash Bays, and by providing both automatic brush washing and automatic touch-free washing options) to be able to compete with newer sites is increasing. Existing Car Wash site Owners are quickly finding that without upgrading their existing Car Wash site and diversifying the options available to customers, their customers are tending to leave due to an alternative site offering faster wash cycles, less wait time, more wash options and providing a better wash quality. Without making changes to keep up with the constant improvement in technology and car wash trends, existing Car Wash site Owners will see a dramatic reduction in sales/productivity of their site which will lead to their eventual demise. The same can be said for this site, which is the reasoning behind the proposed additions.

The environmental benefits of washing your vehicle at a dedicated Car Wash site is well known. Refer to Appendix A for additional information that has been published by Australian Car Wash Association (ACWA) with regards to the ACWA Stormwater Statement- which provides education steps within the community about car washing, responsible vehicle washing methods, critical pollutants commonly found in car wash effluent water etc… Also, the ACWA Environmental Policy Statement is also included which contains information about Stormwater Pollution, Water Efficiency and the public education campaign. Also, refer to the following link http://thedirtytruth.com.au/ which has information and videos with regards to stormwater pollution and community education. As can be seen from those documents; car washing at a dedicated properly designed/constructed Car Washing facility has great benefit to stormwater, community and the overall environment.

Refer to Sh: 3 of the Application drawings which show the vehicle swept paths of the B99 design vehicle manoeuvring through the critical (end) wash bay areas and through to the site exit. The addition of this new line/lane markings, directional arrows and wash bay names will dramatically improve the current travel paths of some vehicles as they move around the site.

The proposed Car Wash upgrade does not require any changes or updates to the existing Planning Permit conditions, only the supplied updated plans require approval.

An Environmental Noise Assessment has been conducted for the proposed works and a report has been prepared by Soundscape Acoustic Consultants, Report No: 3122-NI-01-B, Dated 8th July 2024 which supports the proposed works for the car wash to continue to operate 24 hours per day – 7 days per week.

Should you have any questions or seek any clarification on the information provided, I invite you to contact me directly via telephone on 0416 114 573 or email tracey@tmcdesign.com.au for a timely response.

Yours faithfully,

[redacted]

*Designer/Director*
*TMC Building Design Group*

# APPENDIX A

## Australian Car Wash Association
## Stormwater Statement
## +
## Environmental Policy

AUSTRALIAN CAR WASH ASSOCIATION

# STORMWATER STATEMENT

**ACWA's Mission is to support and encourage responsible vehicle washing which minimizes water usage and prevents pollution of our waterways**.

The Australian Car Wash Association has worked with many State Water Authorities for a number of years devising a response to drought. ACWA's response is acknowledged as world best practice.

Consistent with our desire to create a sustainable water future, the Association now wishes to work to create a sustainable vehicle wash pollution policy as part to its overall environmental responsibility.

**It is ACWA's objective to educate the community about environmentally sustainable car wash practices through ACWA sponsored campaigns and partnerships with environmental organizations and relevant Local, State and Federal authorities**

A key part of this education process is to recognise and understand the effects of washing vehicles on hard surfaces where waste runoff goes to stormwater.

- It is estimated that between 6 and 11.6 Giga liters of contaminated waste water is being directed into our storm water systems across Australia as a result of uncontrolled vehicle washing on hard surfaces (passenger vehicles only, excluding commercial and other vehicles)
- Contaminated waste water is known to negatively impact the environment and water quality. Stormwater in general is recognized as the biggest threat to marine environments. Most water authorities and councils have the objective to reduce contaminated stormwater volumes in urban areas.
- To determine the pollutants in stormwater, scientific tests were conducted on waste water collected under stringent testing conditions at commercial car washes and from cars washed in the street.
- In contrast to home washing, all commercial car washes are required to direct their waste water to sewer, from where it is treated to protect the watershed from impacts of pathogens, heavy metals, detergents, oil, grease and grime that are in car wash waste water.
- All State & Federal Governments and opposition parties are committed to long term sustainable water solutions.
- Environmental authorities, Water Authorities and Local Councils alike are aware of the negative impact of contaminated waste water entering the storm water system, but do not see home car washing as a high priority to improve public awareness, enact appropriate laws or enforce existing laws.
- ACWA is dedicated to work with authorities and organizations to change laws, improve awareness and educate public perception.

The objective of this paper is to share data regarding wastewater discharges, as well as contaminant levels in solid and liquid wastes. This report presents the overall findings of several studies undertaken by ACWA and others and includes the results of water quality testing of effluent of professional car washes and studies where effluent from street car washing was collected.

Stormwater is the water that is collected in drains from street runoff carrying with it a range of pollutants including sediments, pathogens, nutrients, hydrocarbons, heavy metals and chemicals from various activities. These pollutants are deposited into rivers, estuaries and bays with no treatment and significantly degrade river, estuary and bay water quality and aquatic habitat.

The impacts of stormwater are cumulative in that thousands and thousands of individual sources of pollution are combined to cause this contamination.

The information presented in this paper is a collection of the information in the sources quoted at the end. The findings of these studies and the conclusions of this paper show that waste wash water from residential car washing is a considerable source of stormwater pollution. It also demonstrates that any single uncontrolled residential car wash activity might be inconsequential with respect to its contribution to the pollutant load being delivered to stormwater, however, when extrapolated over an urban area for a year, the pollutant loading becomes very significant.

This paper gives an indication of the impact of home car washing across the whole of Australia.

The critical pollutants are summarised as follows;

- Petroleum hydrocarbon waste: gasoline, diesel, and motor oil
- Total Organic Carbon
- Copper
- Lead
- Zinc
- Surfactants
- Suspended Solids

Often society has been slow to recognize the link between individual behaviours and practices, and the detrimental impacts that they may have on our natural aquatic resources. Home car washing is one of these. In some instances, car washing is carried out on lawns, which allows for the infiltration of the wash water. However, in most cases, it is performed on impervious surfaces where the wash water drains directly into the stormwater system.

The following is a brief discussion concerning several of the crucial pollutants detected, the calculated annual pollutant loading for Australia as a whole, with it's consequential impacts water quality. Notable in the ACWA studies is the impact of reduced volume of car washing during drought restrictions so both drought and non drought conditions are quoted. The volumes and concentrations shown here are as they leave the car.

***Petroleum hydrocarbon waste: petrol, diesel, and motor oil*** *(estimated 30 tonnes in drought to 58 tonnes in non drought of annual mass loading).* Compounds in petroleum hydrocarbons are highly toxic, and in the surface water environment, they can cause harm to wildlife through direct physical contact, contamination by ingestion, and the destruction of food sources and habitats. Bottom-dwelling or bottom-feeding aquatic organisms may ingest petroleum contaminants and transmit them up through the food chain until they accumulate in dangerous concentrations in fish. Hydrocarbons also harm fish directly, and damaged fish eggs may not develop properly. Additionally, oil can be particularly problematic because a single spilled cup can contaminate the surface area of a water body the size of a football field.

***Total Organic Carbon*** *(estimated 356 tonnes in drought to 688 tonnes in non drought of annual mass loading)* This is a measure of the carbon bound in organic material and indicates the oxygen demand created by organic material decomposing in water. Sufficient levels of dissolved oxygen in water is necessary to maintain aerobic conditions necessary to support aquatic life. The concentration of 59 mg/L exceeds typical water guidelines of 10 mg/L.

***Dissolved copper*** *(estimated 1,800 kg in drought to 3,500 kg in non drought of annual mass loading).* Exposure to dissolved copper may be sufficient to impair the sensory biology of some fish and has other toxic impacts to a wide variety of marine life. Dissolved copper is also toxic to phytoplankton, the base of the aquatic food chain. The concentration of .3 mg/L exceeds the ANZECC guidelines for 95% in marine waters of .0013 mg/L.

***Lead*** *(estimated 121 kg in drought to 233 kg in non drought of annual mass loading)* Lead is a poisonous metal that can damage nervous connections (especially in young children) and cause blood and brain disorders. In marine environments it can cause anemia, depressed growth, fin degeneration and reduced egg hatching success. The concentration of .02 mg/L exceeds the ANZECC guidelines for 95% in marine waters of .004 mg/L.

***Zinc*** *(estimated 3,000 kg in drought to 5,800 kg in non drought of annual mass loading)* Zinc is most toxic to microscopic organisms in the aquatic environments. The concentration of .5 mg/L exceeds the ANZECC guidelines for 95% in marine waters of .015 mg/L.

***Surfactants*** *estimated 160 tonnes in drought to 315 tonnes in non drought of annual mass loading).* In surface water environments, surfactants are acutely toxic to aquatic life, stripping fish gills of natural oils, thereby interrupting the normal transfer of oxygen.

***Suspended solids*** *(estimated 1,200 tonnes in drought to 2,330 tonnes in non drought of annual mass loading).* Sediment, the most common pollutant in stormwater runoff by volume and weight, makes streams and lakes less suitable for recreation, fish life, and plant growth. Sediment is of particular concern in fish-bearing streams where it can eggs, destroy habitat for insects (a food source for fish), and cover prime spawning areas. It reduces the amount of light in the water available for plant growth and thereby reducing the supply of food for other organisms. The concentration of 200 mg/L is almost 10 times higher than the ANZECC Guidelines in marine waters of 20 mg/L. **Turbidity** is the measure of the cloudiness of water and has similar consequences to suspended solids. The measure of 80 NTU exceeds typical water guidelines of 5 NTU.

Even though commercial car washing facilities employ water treatment systems and in many cases recycle the wastewater, surveys conducted by the International Carwash Industry and the ACWA from 1999 to 2008 indicate that the majority of home washers consistently feel that residential car washing is better for the environment than commercial car washes. From this information, it appears that more effective public education efforts will be needed to affect sufficient behaviour changes to reduce discharges caused by home car washing activity.

The survey data also indicates that people will act in a more environmentally responsible way as more accurate information is attained. Specifically, in response to the question *Do you think that knowing commercial car washes can be more water efficient and less polluting would influence you to use commercial car washes more in the future?* The majority in the ACWA Survey of Car Washing Habits and Intentions, Oct 2008 said yes.

**Conclusions**

The results of this paper show a dramatic amount of pollutants from home car washing going into Australia's streams, rivers, lakes, estuaries and coastal waterways. The ACWA is of the belief that this is an untenable situation and must be addressed by environmental authorities. In most states activities that put the above pollutants in the described concentrations into the storm water system are illegal. At a minimum a public perception campaign to change behaviour should be undertaken to limit the practice of washing cars on hard surfaces and promote the washing of cars on porous surfaces and to encourage the more environmentally sustainable practice of washing cars at a commercial car wash

**Sources**

ACWA, Survey of Car Washing Habits and Intentions, Oct 2008

ACWA, Recycled Water in Commercial Car Washes. July 2009

Bureau of Statistics, Registration of passenger motor vehicles 2008

City of Federal Way Public Works Department, Residential Car Washwater Monitoring Study, July 2009

State of the Derwent Estuary, A review of pollution sources, loads and environmental quality data 1997-2003, Graham Gree and Christine Coughanowr.

Environmental Protection Agency

Brown, C., Water effluent and solid waste characteristics in the professional car wash industry, International Carwash Association, 2000.

# AUSTRALIAN CAR WASH ASSOCIATION ENVIRONMENTAL POLICY STATEMENT

## BACKGROUND

The Australian Car Wash Association (ACWA) is the peak national representative body for the car wash industry with a vision for an economically and environmentally sustainable future.

This includes vehicle washing both inside and outside of the commercial car washing industry.

- Responsible vehicle washing which minimises water usage consistent with the best quality result and water availability; and
- Responsible vehicle washing which includes proper waste water management and prevents pollution of our waterways.

Vehicle washing is a voluntary but consistent activity servicing Australia's 13 million vehicles. It is estimated that home and street washing accounts for 127 million washes per year, which is a significant number with consequences which need to be understood and controlled.

## STORMWATER POLLUTION

The use of a trade waste system, with all waste water directed through interceptor pits and then to sewer, is an integral part of a commercial car wash licencing process to prevent stormwater and waterways pollution.

Waste water from washing vehicles on driveways, in the streets or on any open paved area runs into the urban stormwater system. This polluted water flows directly into the waterways and seriously affects the health of our rivers, creeks, lakes and coastline.

A recent national scientific research project undertaken by Ecowise Environmental (now GHD) identified and quantified the ingredients in the waste water runoff from vehicle washing. Critical pollutants include not only grease, oil, hydrocarbons, surfactants and suspended solids but also heavy metals such as copper, lead and zinc with concentrations up to 30 times higher than the ANZECC guidelines for marine water.

Uncontrolled vehicle washing creates a significant pollution loading when extrapolated over an urban area. It is estimated that over thirteen billion litres of contaminated waste water are being directed into stormwater systems across Australia each year as a result of this activity.

## WATER EFFICIENCY

The car wash industry is a responsible user of water and recycles water wherever possible, taking into consideration health and safety standards for staff and customers

In response to recent drought pressures, and funded by the Smart Water Fund in Victoria, ACWA developed a Car Wash Water Saver Rating Scheme to measure water efficiency. This Water Saver Rating was accredited nationally in 2008 under the auspices of the federal Smart Approved Water Mark, with a 5 star rating for car washes using less than 100 litres per wash.

To ensure that the most environmentally responsible business practices are supported, car owners should be encouraged to look for a commercial car wash which displays the 5 star Car Wash Water Saver Rating sign.

## PRO-ACTIVE PUBLIC EDUCATION CAMPAIGN

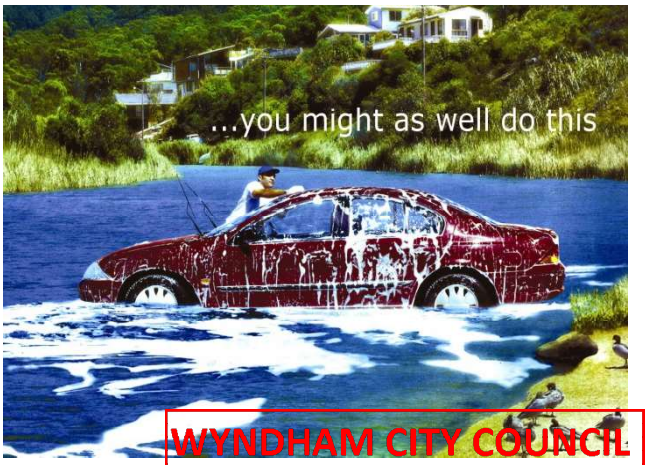
ACWA has a policy of working closely with environmental, water and other relevant regulators on every level to inform and co-ordinate policies which meet government and industry environmental objectives and protect both the life in the waterways and the viable future of the car wash industry.

It is vital that regulators and the public are well-informed about the pollution of the waterways which can result from washing vehicles on non-porous surfaces where the waste water run-off is not controlled.


Part of the education campaign should focus on the fact that the waste water run-off at licensed commercial car washes is controlled, being plumbed directly into the mains sewers.

These businesses are providers of a quality sustainable service with water saving and stormwater protection benefits that greatly reduce the environmental impact of an everyday regular activity.

Go to www.acwa.net.au for the pollution story and to http://www.acwa.net.au/environment.htm for more information on the environmental contamination facts about home car washing.


**Caring for your Car and the Environment**

AUSTRALIAN CAR WASH ASSOCIATION ABN 68 140 680 039
T: 1300 00 2292 F: 03 9011 6229 M: 0400 070 417
P O Box 4390, Langwarrin, VICTORIA 3910
E: contact@acwa.net.au W: www.acwa.net.au