OUTBOARD ENGINE DISTRIBUTORS ASSOCIATION (OEDA)



Reducing emissions from non-road spark ignition engines and equipment

Submission

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This is a submission on behalf of the Outboard Engine Distributors Association (OEDA) in response to the release of a consultation regulation impact statement dated May 2010 requesting comments from stake holders by 27 July 2010.

Reducing emissions from non-road spark ignition engines and equipment

OEDA represents the major outboard engine distributors in Australia comprising Mercury, Yamaha and Tohatsu; most recently reported wholesale market share indicates OEDA members account for in excess of 75% of all wholesale outboard engines sold in Australia. The Outboard Industry is only a small but vital part of the Australian Marine Industry.

Below is a summary of a report on the Marine industry for the 05/06 year conducted on behalf of Grow Boating; it can be seen that a 5% shift upwards in industry participation would support an additional 3710 full time jobs and that recreational boating is closely aligned with tourism and caravan parks. (Refer attachment for the full report).

Size and Economic Contribution of the Marine Industry

The Recreational Boating Industry plays a significant role in Australia's tourism. Currently, Recreational boaters account for 10.3% of Australia's overnight stays and this percentage has risen steadily from the trough of 2000.

Recreational boaters generally have average to higher incomes and are in the family life stages. They also have a strong association with caravan parks in terms of where they stay when on holidays with their boat.

The Recreational Boating Industry has a 4.3% share of Australia's total day trip market. In both the overnight and day trip markets, recreational boating is one of the top 10 activities people undertake when on holiday or on a day trip. This is higher than comparable tourism activities such as going to wineries and festivals/fairs.

In total, the Recreational Boating Industry generated \$5,522M (05/06) in expenditure on holidays and day trips in Australia, therefore making it a significant contributor to the tourism market. The sector accounts for 7.4% of the total tourism spending (\$75B).

The industry generates \$13,370M in spending attributable to operations. This includes industry turnover and also net additional tourism spending.

In total, the Recreational Boating Industry generates direct industry revenue of \$7.8B nationally, including \$1,268M in export sales.

The Industry contributes \$4,066M to the economy (GDP) and supports just over 74,196 jobs both directly and indirectly. Twenty eight thousand people are directly employed in the sector.

Industry Development and Impact

Increasing the consumer participation in the Industry will have a significant economic benefit to

Australia.

If the Industry increases in size by 5%, this will add \$276.1M in tourism spending, \$392.4M to Industry revenues and provide \$203M in economic contribution to Australia. It would also support an additional 3,710 full time equivalent jobs.

The analysis shows that if 5% of recreational boater's trips can be transferred to Australian holidays then this would save \$61.3M in tourism spending going overseas.

OEDA appreciates the opportunity to comment on the RIS and takes seriously the objectives and initiatives proposed. OEDA has shown its enthusiasm to assist DEWHA leading up to the release of the RIS and submits its comments to assist the smooth introduction and transition from today's outboards to a time in the future when all outboards sold in Australia will meet USA EPA standard.

Indeed OEDA has always been concerned with emissions having introduced a Voluntary Engine Labelling Scheme (VELS) into Australia on 1 September 2006 which had the full support of all engine distributors including the current members of AMEC. It is noted in the RIS, AMEC members have stated VELS hasn't worked but that is incorrect; there has been a substantial reduction in high emission outboards in the higher horse power range compared to low emission models. Refer appendix A

It should also be noted the companies that no longer comply with the labelling of engines are now members of AMEC. The AMEC group has been lobbying government for a fast track introduction of environmental regulations in an attempt to obtain a better market share. This is contrary to their parent companies overseas which were unified when negotiating for European and USA regulations .RIS reference page 28.

The RIS correctly identifies that all outboard engines sold in Australia are imported coming mainly from the USA or Japan. Discussions on emission standards in Europe and the USA have been ongoing for in excess of ten years. This has resulted in general acceptance of the USA EPA standard, which the Australian Government is now proposing to adopt in a modified form.

OEDA fully supports the objectives of the RIS but believes the time frame set will disadvantage not only the Industry which cannot be ready in time but also many sections of the public including, indigenous communities, "Grey nomads", the aged, Surf life Saving and the Australian Army.

Safety issues

OEDA agrees with the National Marine Safety Committee (NMSC) as stated in the RIS, page 35, that initially there will be safety issues with buoyancy and hull construction until the Industry can modify boat design. Vessels will require modification providing strengthened transoms for heavier engines and additional flotation. Refer Appendix B for weight comparisons of engines. Note four stroke outboard engines are up to 47% heavier. Also, to receive the same power from a four stroke as the previous two strokes, the horse power will need to be increased as four strokes have different performance characteristics to two strokes per horse power. Comments from AMEC show a lack of understanding of the Marine Industry and their desire to grab market share, i.e. increase their less than 25% wholesale share to the detriment of the public and industry in general.

Industry Issues

Boat builders will be required to remodel their vessels to allow for heavier engines and redesign their fuel systems at considerable cost to meet the proposed evaporative emissions standards (Evap). OEDA has been advised that the technology regarding new evaporative systems is still to be developed, tested and tried in the USA. Once the systems are operative, an educational process will need to be implemented in Australia for our boat builders. It is interesting to note boat builders were not officially invited to the RIS public meeting and at this stage have no knowledge of what is before them.

If the RIS goes ahead as proposed in 2012 it will definitely affect employment in the Boating Industry causing a reduction of employees as boat manufacturers and retailers re-evaluate their businesses unable to meet the regulatory demands and a slowdown in retail purchases caused by an increase cost of the final product. OEDA members have advised the estimated cost difference between 2 stroke or equivalent DFI/4 stroke outboard engine is between 15 – 60% increase. See Appendix L for Mercury's cost comparison as an example. The Industry has been hit hard by the global economic down turn because it survives on discretionary expenditure of the public.

Australian conditions

Australia has different operating conditions to the rest of the world. We have a relatively low population and the majority of our boating is conducted not on lakes as in Europe and the USA but in salt water. E.g. Port Phillip Bay in Victoria, Morton Bay in Brisbane, various harbours in NSW's, off shore in SA and the Oceans surrounding the various States.

Areas of operation

It is noted on page 26 of the RIS "The impacts of emissions are directly related to the population size exposed to emissions and a proportion of emissions from non-road engines and equipment will impact on relatively <u>unpopulated areas where impacts are relatively minor</u>." OEDA believes this is an important statement when considering the timing and scope of the RIS and its implementation. While gardening equipment does operate in populated areas boats definitely do not! There has never been a boat operating in a populated area or in suburban streets unless of course there is a flood.

Consequently, the effect outboard engine emissions have on the population by the definition in the RIS is "relatively minor". It is noted Marine accounts for only 5–7% of emissions from Non-road spark emission engines and only 0.12 - 0.42% of all urban pollution in Australia!

Engine usage

Over 90% of all vessels in Australia are less than 6 meters in length. Over 70% of people that buy boats have the express purpose of going fishing. Many fishing boats are small aluminium vessels or 'car toppers' i.e. the family can hitch up the caravan or trailer put the boat on the roof of the car and go on holidays. Many of the people that buy these engines are retired persons who may become "Grey

Nomads". They may travel Australia for 5-6 months at a time enjoying their retirement; they may also just enjoy their boat package from home. The engine preference for these people is small horse power 2-stroke outboards because they are typically reliable, affordable, light weight, easy to maintain, offer good performance characteristics, when compared with many current equivalent horsepower four stroke outboard models. All these issues are important especially the weight when lifting the engine out of a boot and onto the transom of a boat. If the RIS goes ahead in 2012 these engines will no longer be available!! Refer appendix B

Indigenous Communities

Indigenous communities will also be affected; two strokes are used extensively in outback Australia because they are reliable, work in almost any condition and the fuel doesn't have to be as clean as that used in four strokes. This is not possible with a four stroke. Two strokes can be swamped and within a short time after they are dried out can be used again. They also don't need servicing to change the oil in the sump which in itself would be a problem in the outback. How would the oil be disposed of responsibly? Another possible environmental disaster in the making!

Surf rescue

Two strokes are used solely for surf rescue. They are the only engine reliable enough to withstand the extreme conditions of the surf. Trials have been conducted with four strokes but to date they have been unsuccessful. Following are comments from surf life saving representatives relating to the proposed new legislation

Should the new regulation be implemented without a considerable phase in period, then Surf Clubs will struggle severely and this will compromise their effectiveness as a lifesaving invaluable community service. The new 4 stroke 25 hp motors are more expensive to buy and require specialised service equipment to maintain , in the event of capsize could render the motor permanently damaged, whereas a capsize with a 2 stroke motor will be re instated within 15 minutes.

The weight of a 4 stroke 25 hp Motor is heavier than the current 25 hp 2 stroke version. Surf Lifesaving OH&S "policies allow 2 people to safely lift and carry the current 2 stroke motors. If the new policy was introduced with 4 stroke motors, 4 people would be required to lift the motor; very impractical and unsafe. Injury prevention is a key issue with Surf lifesaving and volunteers do not need to be exposed to anything that may question or compromise that safety.

Balance and safe negotiating of the rescue boat in surf conditions would be severely affected, the craft would be too heavy at the rear, and could easily flip backwards in some open beaches. Safe operation is vital, and the boat balance and performance is critical to safety. Should the 4 stroke motors become legislation then surf lifesaving clubs would have to sell all their current motors and boats and would have to design and test a longer boat to support the heavier 4 stroke motors. This would be very

expensive and in reality would impact severely on many smaller surf clubs that would probably cease to exist.

The Australian Army

Military use can include submerging engines, air drop, and extreme conditions. Only a 2 Stroke can operate under these conditions and be restarted after submersion. They also need to be carried, sometimes long distance, need to be laid down on either side, and need to be able to be serviced quickly with minimal tools. The Australian Army uses two stroke engines for the reasons above.

Tenders

Apart from the groups mentioned above, there are many other groups that use tenders and would be affected by the weight of a motor on the back of a dingy including:- rowing clubs, schools and vessels used for larger vessels.

Comments on the RIS

While it is acknowledged smaller two stroke engines have a higher emission than other cleaner engines by their nature and operation they are not as pollutant as the RIS portrays. These engines are not used in urban areas and are used for only short times to allow a vessel to reach a fishing ground and anchor etc. To liken them to a motor vehicle which is normally used extensively in urban areas is mischievous misrepresenting their use, purpose and affect on the population.

Without doing anything, i.e. no regulations, because our engines are imported, Australia is reaping the benefits of 10 years discussion and legislation around the world and the introduction of VELS by OEDA.

Page 12 of the RIS quotes only 37% of outboard sales in Australia in 2005 were low emission technology. In 2008 this figure has increased to a trend of 49%. Refer Appendix C.

It was noted that dumping would not occur in Australia because it was not feasible to the engine manufacturers in the USA because of the EPA Cap. It should be noted that at the recent Melbourne Boat Show 75% of the engines on display were new technology engines with low emissions; the Industry is self regulating but there is a demand for the smaller two stroke engines for specific purposes. It should be noted that of the larger engines now sold almost all are new technology with low emissions refer Appendix D and E.

Page 11 of the RIS states EPHC is currently reviewing ambient air quality NEPM, a 20% reduction of specified air pollution was suggested. In the last 2-3 years Marine has reduced air pollutants in excess of 20% because of the increased sale of new technology outboards.

Page 13 gives the only reason two stroke outboard engines are preferred and purchased is because of cost! This is clearly not true. The majority of larger horse power engines sold today are low emission new technology. Two stroke outboards are being purchased for the variety of reasons as stated above.

USA EPA versus Australia

Finally, the RIS is inconsistent and shows a lack of understanding of the Marine Industry in Australia.

The RIS states, Sect 6.2.1, the adoption of the USA EPA standard as the appropriate standard in Australia.

USA EPA correctly recognizes that manufacturers, distributors, dealers, and customers need some flexibility in meeting these new regulations. EPA utilizes a strategy called Averaging, Banking, and Trading (ABT) to provide manufacturers with a way to comply with the regulation and still maintain a complete product line. Engines and equipment that can be certified below the standard generate emissions credits and engines that are over the standard consume credits. The manufacturer must maintain a positive credit balance. In addition, there are caps on the emissions levels of any given engine family to prevent high polluters from being placed on the market. For Outboards the cap is at the equivalent of the CARB 1 Star Standard. (Appendix G) There are no actual engines certified to the 1 Star level, so the ABT program is simply averaging 2 and 3 Star level engines and the fleet average is the 3 Star level or better. This is important because of statements that have been made that large numbers of high polluting engines could be dumped on the Australian Market if ABT was allowed in Australia. With the caps in place, this simply is not true.

At the public consultation meeting in Melbourne and also in the RIS document, DEHWA has stated that at no time would regulations be more stringent than that introduced in to the USA. However, the USA regulations have been discussed with the Marine Industry in that country for nearly 15 years and even now some components to be adopted are still being developed. Further, Australia has stated it will not allow Averaging, Banking and Trading (ABT), a critical component for the USA manufacturers which if not introduced in Australia will severely reduce the range of engines allowed into the country. It is interesting to note the Prime Minister recently announced on radio an election promise to remove older cars from the road. Ms Gillard stated: - we're announcing these new emissions standards today for 2015 to give industry time to adjust: it's important to consult and work with industry to give all affected parties time to adopt the new standards.

The Marine Industry consists of four sectors; the Engine distributor, Boat manufacturer, boat retailer and Trailer Manufacturer. The engine distributor only brings engines into the country. The boat manufacturer sometimes when building a boat will fit the engine but on many occasions, particularly with smaller vessels, the hull will be sold to the boat retailer who constructs the "rig" which consists of the boat, engine and trailer. It is the boat retailer's job to balance the rig.

Consequently, before regulations can be introduced into Australia apart from the appropriate engines being designed and developed and lead times considered, boat manufacturers need to be advised and

have time to redesign their craft to meet the need for heavier engines, boat retailers need training in the new configurations of the rig and trailer manufacturers may need to make adjustments to their product especially if the boat design has changed.

On page 38, from the RIS figures there is only a minimal difference between a phased and a non phased approach of the RIS. Considering the fact that outboards have a "relatively minor" affect on emissions and that the introduction of a non- phased approach will dramatically affect the Marine Industry (Retailers, Boat manufacturers and Distributors), consumers including the aged, the indigenous population, Surf Life Saving, "Grey Nomads", and the Army, OEDA strongly recommends DEWHA introduce a phased approach to the introduction of regulations.

The phased timing introduction of the regulations is critical to the ongoing survival of the Marine Industry and the widely sort after recreation of boating and fishing. Four million people go fishing in Australia each year, the majority 80% use small vessels many with 2 stroke engines. This does not mean a disaster for the environment because the engines are not used in urban areas and only used for very short times getting to a fishing spot and then anchoring. However, a non-phased introduction of the regulations will spell disaster for a vibrant Industry and a large number of users.

Recommendation

OEDA recommends a phased introduction of the regulations. OEDA also recommends before DEWHA decides on timing it establishes a select committee of Industry specialists to assist with its decision to minimise the disruption and smooth transition of the new regulations to the public, specialised groups and the Industry.

Questions Raised by DEWHA

In the covering email from DEWHA, four questions were raised; the following is OEDA's answer to those questions.

What is the likely impact of adopting US emissions standards on the purchase price for each type of relevant product?

Answer: The average price of a four stroke outboard over a two stroke outboard under 90 Hp will go up by about 40% ranging from 0% to 90%. Example data is attached from Mercury; a 15 Hp engine will go up by \$1286 AUD, a 40 Hp engine will go up by \$2607AUD and a 90 Hp engine will go up by \$3267AUD. (Appendix L)

There is virtually no impact on engines over 90 Hp. This answer assumes that DEWHA accepts some sort of averaging approach that allows the sale of 2 Star level engines. Otherwise there will be additional costs on the larger engines.

For Sterndrive and Inboard Engines the price increase will be about \$3500AUD per engine. With an averaging approach this can be mitigated on entry level boats that use 4 and 6 cylinder engines.

What is the likely impact of adopting US emission standards on consumer demand for each type of relevant product?

Answer: In the near term, based on other markets, a drop of 10 – 20% in sales the first year can be anticipated.

What is the likely impact of adopting US emission standards on consumer choice for each type of relevant product, i.e., if US standards were adopted, which products would be removed from the market.

Answer: All 2 Stroke outboards would be removed from the market.. If some version of ABT is allowed, all DI 2 Strokes and 4 Strokes would be available. Without some form of ABT many larger DI 2 Strokes would be removed from the market and larger 4 Strokes would require recalibration. In all likelihood, not all would be recalibrated. Without ABT, consumer choice to replace older 2 Strokes would be severely curtailed.

What are impacts to manufacturers and distributors of meeting US Final Rule standards through a phased approach in comparison to a non-phased approach?

Answer: Some form of a phased or delayed approach is essential. Since the timeline is such that a regulation cannot be finalized by the proposed implementation date, the entire timeline on this proposal needs to be reconsidered. Normal regulatory practice is that regulations do not take effect for at least 2-3 years after the regulation is finalized. Also, any phased approach would have to be based on the EPA regulation finalized in 2008, as there will be no engines certified to EPA 2006 by the time this regulation is finalised.

The Prime Minister recently announced on radio an election promise to remove older cars from the road. Ms Gillard stated: - we're an announcing these new emissions standards today for 2015 to give industry time to adjust: it's important to consult and work with industry to give all affected parties time to adopt and develop the new standards.

This is exactly the treatment the Marine is requesting.

OEDA would be available and happy to expand on all issues raised in this submission and would be enthusiastic to participate in any committee established to develop the drafting and introduction of the regulations.

On behalf of OEDA thank you for the opportunity to respond to the RIS.

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