

## PUBLIC REVIEW OF THE EPA

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### Overview

Community Over Mining is a Gippsland community action group **advocating for mining reform** in Victoria to protect public and environmental health in rural and regional Victoria for our future prosperity.

The emphasis of this submission will be based on the person's right to clean air and clean water with a focus on Gippsland in Victoria and attention to Latrobe Valley Open cut coal mines.

I have been actively involved in the workings of EPA for three years and am dismayed at the ongoing lack of resources and integrity from this agency in regulating industry to better manage and avoid risks related to mining and associated production streams. The Environment Protection Act 1970 has always had adequate power but its application is found to be wanting. As such, to improve the health outcomes of our Gippsland communities and reduce the consequential economic cost burdens for the taxpayer, significant changes need to be made. This can only occur if government and agencies are proactive about preventing increased poor health outcomes rather than being reactive to.

Latrobe Valley is an industrialised area and is exposed daily to particulate matter and air toxics released to the air due to industrial and mechanical disturbance of the earth with coal mining and combustion.

My concern is - how will this Committee create tangible changes and reform to the EP Act that will effect real change rather than lip service. That is the reality.

Over the last 10 years there have been numerous significant and hazardous incidents that have occurred in Gippsland requiring a reactive response from EPA.

#### ➤ **For this review, I ask what have EPA learnt.**

All improvements and reform of an Act still requires human intervention in the application of that Act and if -

- integrity issues remains
- lack of resources continues
- non-independence and interference from Government intervention and policy direction continues and;
- nationalising of exposure frameworks are avoided,

then this review would all be for nought.

Economic contribution by industry sets the standards but in managing the risks, the community should never be collateral damage. Similarly, without a healthy environment you cannot have a healthy economy to service the many other industries that contribute so much to our gross regional product.

Under regulatory compliance, industry need to prove their capacity to achieve best practice but EPA, as the responsible agency, have to show the public that they are actually capable of enforcing this compliance to ensure our health is not compromised and our environment can be protected.

EPA monitoring and actions in the past have not kept the community safe from industry's toxic pollutants in areas like Morwell, Longford and Costerfield so, for the sake of our future generations we need EPA, going into the future, **to be a better, stronger independent regulatory body**. Only then can our communities realise their worth.

I attended the EPA community consultation in Traralgon and know that many relevant issues were documented so will provide some personal context to some of those issues under the discussion paper questions below.

In addition, with my ongoing support of Environmental Justice Australia and the National Pollution Summit in Melbourne I endorse the submission prepared by Environmental Justice Australia in response to this inquiry.

**Tracey Anton**

## 1. What do you think are the key environmental challenges which will impact the EPA in the future?

Increase in industry discharges/emissions to the air and water impacting the community's right to clean air and clean water will be key environmental challenges in the future. If appropriate standards and protocols are not introduced and enforced to reduce the impacts, the negative economic, social and environmental cost burdens will be borne by our future generations.

The following is information from EPA Victoria's submission to Senate inquiry into the impacts on health of air quality in Australia 2013.

### ***Victoria's future air quality***

*EPA is currently working on a project with CSIRO to look at trends in Victoria's air quality over the next few decades. A computer model was used to predict air quality impacts in the future. The project used the EPA Victoria 2006 emissions inventory as a baseline year to input into the computer model. A medium impact (most likely future) scenario was developed (including an emissions inventory) for 2030 as an input into the computer model. This scenario was developed by carefully examining trends in population, industry and transport. The final report will be released shortly.*

### ***With regard to particles as PM2.5 the study found that:***

#### ***'we expect:***

- *Significantly reduced particle emissions from diesel engines, but this is somewhat offset by growth from domestic, commercial and industrial activity.*
- *Emissions of particles from industry are expected to grow slightly through long term economic growth. Most particles from industry are emitted from tall stacks or away from residential areas; however some emissions occur close to where people live. Some of these emissions are from **small to medium sized industries that are too numerous to manage through EPA licenses.***

As Victorian EPA has already stated that they will have problems with management of licenses, how is the public to have confidence that our health will not be further compromised?

If the Victorian Government is proposing to increase mining across all areas of Gippsland, it is imperative that pollution standards be nationalised and protective of community health and the environment rather than allowing industry to set the standard based on economic production.

### 3. How can the EPA effectively work in partnership with other government agencies to meet the environmental challenges of the future?

Understanding and costing the health and environmental impacts that would occur from industrial incidents due, primarily, by poor maintenance issue and industry shortcuts is a start.

To be proactive is to work with other agencies and departments like WorkSafe Victoria, Resource and Environment departments along with the Dept of Health when identified issues arise and work on a plan to ensure non-compliance is remedied under regulatory enforcement.

To be reactive without enforcing compliance of license conditions for industry is to incur huge economic, social and environmental cost burdens to the person and state, which ultimately is borne by the taxpayer.

- **Inaction by EPA and partnership stakeholders, for whatever reason, is the single biggest threat to our future.**

### 4. How can the EPA's role in safeguarding the community against the health impacts of pollution be clarified or strengthened?

An **exposure reduction framework is needed** to maximise health benefits with long term targets to decrease exposure. This should also coincide with improved and reformed frameworks for state planning schemes, alignment of state policies to ensure consistency for compliance and enforcement by State Regulators and improved resources for monitoring to protect community health.

**In regards to critical incidents, there is currently no process to actually deal with industry incidents that impact 'others' outside of work.** I have numerous hardcopy information of interaction with Esso, EPA, myself, Ministers and department regarding the first incident in November 2012 at the Longford Gas Plant (see qu. 6) that is unfinished business but highlights how the community are the watchdog and can push industry to safeguard themselves over what EPA, WorkSafe Victoria and Local Council licensing conditions could not.

- **So, how is that possible? This is why EPA is seen as ineffectual and, as such, more of a danger to our health and environment.**
- **We expect industry to take shortcuts but we do not expect our Government through EPA to condone it.**

#### Monitoring

Make monitoring relevant to the objective of protecting health to reduce increased cost burdens socially, economically and environmental.

Reporting standards for particulate matter is still dependent on actual readings and locations of the monitors. It is now known that monitor placement in the Latrobe Valley coal mines are located in the average position for the average person for the average reading so that minority community closest to the mines and most impacted are afforded less protection and given a lower priority ranking. Monitoring is resourced for low risk management for the majority of people whilst ignoring high risk management to the minority.

There is not even any monitoring at the Esso Longford Gas Plant, a Major Hazards Facility (MHF) yet I know there is a litany of complaints related to black plumes of unburnt hydrocarbons dispersed all over the surrounding community.

Additionally, water quality monitoring (**sub-contracted by industry to supply data to EPA**) on pollutant discharge impacts to waterways are not inclusive of all potential toxics to community expectations to protect water biodiversity and river health in the catchment area flowing into the Gippsland Lakes.

### **Compliance and Enforcement**

Our right to clean air is slowly eroding with government legislation prioritising industry over the health of the person. There are currently more protective measures to prioritise and protect the environment and biodiversity in an EES process than there is to argue a case that any proposed mining development will be harmful to a person's health.

Moreover, monitoring in appropriate locations is relevant to ensure industry has not breached licence conditions.

Under the EP Act, a company could be liable for pollution to the environment due to breaches with discharge, emissions and deposits from a coal mine. However, because Victorian EPA has inadequate monitoring, the actual evidential proof to prove industry to be liable as to the severity of the air toxics, etc is greatly diminished.

- **This means that EPA**, the supposed pre-eminent authority to assess pollution and to their impacts, **has greatly undermined their own ability to:**
- make correct and appropriate public warnings to protect human health, and;
  - determine breaches by industry and to their severity.

### **5/ How could statutory frameworks more effectively prevent future environmental risks and land use conflicts?**

To consider this question we first of all need to acknowledge system failures in the way EPA operate and under what legal limitations cause EPA to be reactive to environmental degradation and negative health impacts rather than proactive in preventing them.

**Planning permit applications** assessed and approved by Local Council where **the interpretation and application of planning provisions is in question** is an initial cause of future pollution problems. Only **those who can afford the significant costs** of VCAT can challenge. More often, the developer wins over common sense and forethought.

Reverse of that is planning permit applications denied by Local Council based on land use conflict and overlays but challengeable in VCAT by the developer who often wins.

Examples are -

- the siting of new residential developments in the future where known air toxics disperse due to our unique Gippsland topography rather than a foreign modelling system (planning permit referral system for odour, dust and emissions – buffer zones to sensitive uses)
- Allowing new industry development based on flawed modelling near communities
- Allowing industry to expand further where existing communities and environment are already negatively impacted.

### **Reform**

Our communities in Gippsland have a right to clean air and clean water.

Currently, EPA State Protocols for monitoring of air toxics and pollutants are way too weak in regards to where the monitors are placed. They are positioned for average exposure for an average reading. So, by definition, those that are closest to the source and most impacted are the least protected which is in contradiction to the whole basis of determining that PM2.5 is bad for you. **Therefore, actual risk is in context to what** - controlled low level management over ethical and moral obligation to those most vulnerable?

*EPA undertakes monitoring at long term monitoring stations and in regional centres as part of fulfilling our obligations under the NEPM (AAQ) and to determine the trends of air quality of time. The NEPM AAQ reporting is designed to report on representative general air quality and not for localised impacted areas. (EPA Victoria submission to Senate inquiry into the impacts on health of air quality in Australia)*

Consequently, is it right that those communities who are most impacted by industry air toxics and particulate matter should receive no real monitoring to safeguard and prioritise public health and wellbeing.

Here, in Latrobe Valley, the monitors have never been positioned where the most vulnerable are impacted so no true readings can accurately determine the extent of real exposure and to the health impacts. PM2.5 has no safe level but nothing is enforceable because no actual clear guidelines exist as yet.

- **Never let pollution hotspots be excluded from nationalising standards on PM2.5 and PM10**

Establishing a national framework for both monitoring of air quality and responding to critical incidents based on appropriate data is now appropriate and morally ethical given the intrusion of resource mining into rural and regional communities Australia wide. With the potential for more serious events to impact our communities' in Gippsland, **consistent and binding measures would ensure management within the EPA agency and public health regulator is proactive and more effective.**

**Review of the EP Act 1970** needs to understand the limitations of -

- self-regulation by industry
- ongoing poor maintenance resulting in unburnt hydrocarbons dispersed
- mining being exempt from planning provisions of State Planning Policy Framework
- continued inadequate planning protocols and standards for buffer zones and monitoring
- consideration at any one time of changing policy
- poor modelling application not relevant to area topography
- the ever decreasing regulatory burden that industry and government aspire to but, in reality, always accords social and environmental agendas to a lower ranking.

How will those communities most impacted and in pollution hotspots be better placed into the future if it is the systemic failure of the above issues that is currently failing our communities yet EPA consistently reaffirm their referrals, monitoring and investigations to being effective.

In reality, monitoring is not being proactive in reducing any communities exposure to air pollutants rather is can only be an indicator that we are already exposed and that we should lock ourselves up for the day until some government agency says it's safe to come out and breathe less polluting air.

## 6. What role should the EPA play in emergency management?

*'The Environment Protection Authority, under the auspices of the Environment Protection Act 1970, is responsible for the monitoring of Victoria's air quality, pollution and environmental hazards, and for associated compliance and enforcement action. The EPA utilises a number of methods to monitor compliance by business, including, site visits and inspections; covert surveillance; field and desktop audits; community, employee or duty holder reports; monitoring data and sample collections; and observations and reports by EPA officers and other agencies.*

*... if people are experiencing ill effects that they believe to be as a direct result of pollution, they should seek advice from a medical professional and report the incident to the EPA via the 24 hour telephone helpline on 1300 372 842.'* (previous State Govt Minister for Local Government, Janette Powell)

## **Background:**

Esso Longford Gas Plant is a Major Hazards Facility (MHF) and had an approx. 2 million litre crude oil spill in Nov 2012 resulting in a significant benzene leak that caused serious health impacts to the neighbours of the gas plant. The official amount of the spill as recorded in EPA's 2013 annual compliance report is still being challenged.

The point of the following stories is how easily chemical spills and their severity can be hidden from the public due to inadequate and/or lack of monitoring of MHF, lack of integrity by EPA, coordination between relevant departments (especially Dept of Health) and failure to understand seriousness of chemical interactions and dispersal outside of plant boundaries.

***The Emergency Risks in Victoria*** report released last year by Government warned that the annual likelihood of a medium impact mine failure is close to 100 per cent - higher than other emergencies including storm, bushfire, marine pollution and heatwave. <http://www.justice.vic.gov.au/home/safer+communities/emergencies/emergency+risks+in+vi+ctoria+report>

Of the potential emergencies considered in the report, a locust plague or other insect pest outbreak is rated most likely to occur, but with the lowest impact on the state, while a hazardous materials disaster - **such as a chemical spill or fire - is least likely but most dangerous.**

**A hazardous materials disaster could result in "human injury, illness and death", and cause property damage, pollution and economic loss.**

<http://www.theage.com.au/business/coalmine-fires-and-other-disasters-predicted-by-state-government-report-20140502-37lci.html>

## **News stories**

### **EPA and the pong**

<http://www.gippslandtimes.com.au/story/1241110/epa-and-the-pong/?cs=1450>

*Jan. 17, 2013, noon – PRINT MEDIA & ONLINE*

*THE Environment Protection Authority has not responded to a request from the Gippsland Times to confirm a notice to act will be issued to Esso following complaints of an odour emanating from its Longford gas plant.*

*Complaints about the odour were first made in November last year when a crude oil spill occurred from corroded decommissioned pipes. EPA investigated the complaint some weeks later but did not consider the odour at that time to be offensive enough to be a breach of licence. The EPA's Gippsland manager, Dieter Melzer, was reported by ABC radio as saying the EPA could not prove Esso had breached its licence but the company would be served with a notice by the end of this week, to conduct works to try and stop the odour. "That's why . . . we're in the process of serving notice on Esso, requiring them to conduct some assessment work, to install equipment, require changes of operations and process to address this risk of odour," Mr Melzer said.*

## Esso plays down concerns over chemical leak

<http://www.abc.net.au/news/2012-12-19/esso-plays-down-concerns-over-chemical-leak/4435400>

*Esso has played down fears over a leak of the cancer-causing chemical benzene at its plant at Longford, Victoria. Esso has confirmed benzene vapours were leaked into the air after a crude oil spill at the Longford plant last month. Company spokesman Chris Welberry could not say how much oil was spilled or how much of the chemical staff and nearby residents were exposed to. But he said the levels were too low to cause serious illness. He says staff onsite were treated for nausea at the time. A local resident complained about a bad smell on November 19, but Esso did not report the incident to the EPA until December 4. The company spokesman could not explain the delay*

## EPA enlists help to probe Esso odour

*Posted Tue 9 Apr 2013, 10:45am AEST*

*The Environment Protection Authority (EPA) will recruit other Government regulators to help investigate the continuing odour problem from the Esso gas and oil plant at Longford. A strong sulfur smell forced a neighbouring family from their home last week and more complaints have been registered on its pollution hotline this week.*

*Late yesterday, the EPA received reports of the smell 10 kilometres from the Longford plant. The EPA amended Esso's licence agreement in 2006 to try to fix similar incidents caused by bacterial infections in waste ponds at the plant. <http://www.abc.net.au/news/2013-04-09/epa-recruits-help-to-probe-esso-odour/4617906>*

*'In the event of an incident that may impact the local community, Esso will notify the appropriate agency / emergency service for the incident. This may include notification to the Wellington Shire Council where that is appropriate.'* Esso comment in response to Planning Permit application.

Esso did not contact Wellington Council of an 'incident' that occurred on 5th April resulting in the regional town of Sale being impacted by an offensive odour two days after a one million litre glycol spill incident but not knowing the cause.

### ➤ **There is no evidence that this incident was ever investigated.**

My concern is that there exists a grey area on who is responsible for what to ensure public are not further impacted by toxic contaminants.

Furthermore, the evidence that toxic emissions have occurred or continuing to occur is dependent on the -

- MHF reporting dangerous incident at the time it occurs (not days later)
- **EPA attending to verify existence of air toxics** and;
- Facility providing data evidence of pollutants (which is not in their best interest to do).

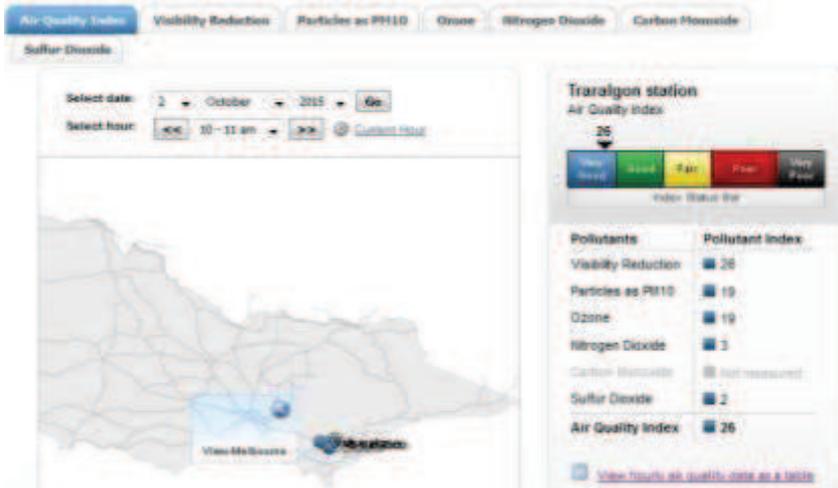
Meanwhile, the public could be exposed to any number of unknown toxic chemicals whilst the MHF underplays the incident and the air or water toxics are conveniently dispersed.

### 8. What can the EPA do to avoid potential future problems?

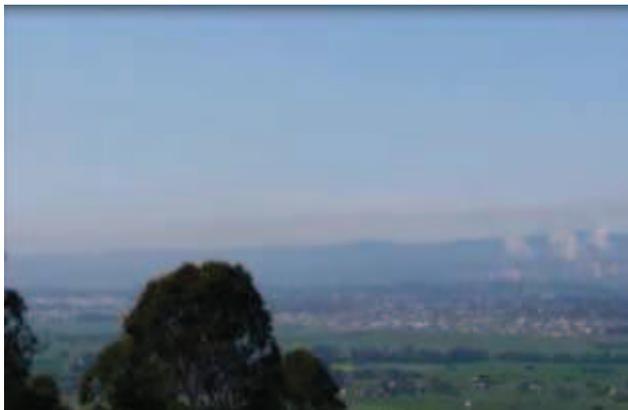
The following photos came from my video of pollution in the Latrobe Valley 10.15am on Friday 2nd October, 2015 which was a clear and smoke free day. I uploaded the video to the Voices of the Valley Facebook page on late Sunday afternoon 4th October along with screenshot readings of pollution on the day that noted good and very good air quality readings.



View from north looking south with Strzelecki Ranges in the background. Yallourn Power Station (furthest west of Latrobe Valley’s power stations) with plume blowing the normal easterly.



More plumes added from Hazelwood Power Station and Australian Paper Mill in Morwell (centre of the Valley)



Loy Yang power station (furthest east of LV's power stations) with the same top plume from Yallourn and a further three lower plumes.  
# Note the plumes extend further east towards residential areas of Rosedale and Sale.  
(The brown plumes are not abnormal)

**Traralgon EPA responded** to the video acknowledging smoke plumes from all three coal fired power stations plus the Paper Mill. That's four layers of pollution. However, according to EPA's three main stations monitoring Air Pollution Index (a measure of particles in the air), the area where people live and breathe remained in the 'Good' and 'Very Good' categories and **none of the plumes reached the surface**. So, where do these smoke plumes disperse to that are filled with particulate matter, as they don't stay buoyant for long?

What I found disturbing is that the plumes were dropping the further east they travelled and contributes to acid rain that those residential areas east of Latrobe Valley experience, namely Rosedale and Sale.

The interesting thing about the following statement is that our government and agencies have been saying to Gippslanders that there is no acid rain as part of air pollution from Latrobe Valley Coal Mines. The community know differently.

➤ **How will this review propose to educate the experts?**

*Research has identified that secondary PM<sub>2.5</sub><sup>1</sup> makes an important contribution to sulphur and nitrogen deposition, leading to the acidification and eutrophication of natural ecosystems<sup>2</sup>. Though seemingly subtle and isolated, such impacts on ecosystems may, in turn, have consequences for human health due to our reliance on their many services, including food.*

- Using the photos and smoke plumes as an example, to avoid potential problems in the future, **EPA could be reactive** and influence planning to not site residential development where acid rain falls in a hope that significant health problems can be avoided.
- Alternately, **EPA could be proactive** and **enforce compliance of polluting industries** whilst working with other stakeholders to ensure smoke stacks are maintained and not allowed to deteriorate to such a state that our health is severely impacted.

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<sup>1</sup> PM<sub>2.5</sub> refers to particles with an aerodynamic diameter of 2.5 micrometres or less. Some particles are emitted directly; others are formed in the atmosphere when other pollutants react (secondary PM<sub>2.5</sub>).

<sup>2</sup> Air Quality Expert Group (2012) Fine particulate matter (PM<sub>2.5</sub>) in the United Kingdom. Available at:

[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/69635/pb13837-aqeg-fine-particulate-matter-20121220.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69635/pb13837-aqeg-fine-particulate-matter-20121220.pdf)

EPA should have the power to enforce directives that are binding on a company to fix what is causing the pollution in the first place. Some say that EPA already has that power. If this is the case why is Latrobe Valley suffering from significant pollutant discharges from industry stacks while EPA pretend that Latrobe Valley's air quality is good.

### **9. What role should the EPA play in improving environmental outcomes beyond those necessary to safeguard human health?**

True realistic reform cannot be effective to address poor health and environmental outcomes from exposure in pollution hotspots if this Committee disregards the source of pollution as noted in the previous question. More of the same policy means more of the same pollution which means more of the same poor monitoring and more to adapt to. That is being reactive.

No authority/agency/board can strategically plan for the future if government policy to expand mining is one of the single most detrimental threats to the environment and their ability to manage, apply and implement master plans. Whilst mining remains exempt from planning provisions, all other management areas accord a lower priority of ranking so money and time invested will ultimately be for nought if real reform does not reflect a broader approach to strategic planning that takes into account the past environmental legacy of mining, the present and future predictions of its impacts.

All mining extraction creates a waste stream with fluid waste treated and discharged into our waterways. A change in Ph is problematic for biodiversity but it is aquifer depletion and the lowering of water levels in the bores causing higher mineralisation and saline levels leading to corrosion and productivity issues that will cause problems for the environment in the future. Then there is the leaching from tailings dams of toxic chemicals entering the drinking water system.

#### **➤ Why is this a problem for EPA**

Gippsland Water operates 16 water supply systems, with 16 water treatment plants (WTP), supplying 35 localities (42 towns). The water for these systems is sourced from a variety of water supplies including stream off-takes, reservoirs, and groundwater (bore water). Pollution of our waterways takes away our right to clean water that EPA can either be reactive too or be proactive to prevent problems in the future as water availability will be the new political imperative for the future.

### **11. How do you see environmental justice being applied to the work of the EPA?**

- Environmental standards should be nationalised and uniform so industry and community have a clearer understanding of regulation and expectations on industry compliance and regulatory enforcement.
- License conditions and data need to be easily accessed to the public
- There needs to be consequences for license exceedances' particularly in relation to ongoing maintenance issues causing pollution.

- Of great concern, the issue of liability for contaminate pollution to the community has never been seriously addressed in any licencing conditions and for that community to seek reparation. Mostly, pollution abatement notices and fines are the norm.

**13. Are there any other issues relevant to the Terms of Reference that you would like to raise?**

*Consider the best way to combine environmental protection with economic viability and growing sustainable jobs in Victoria, including through improving regulatory efficiency and minimising regulatory burden;*

The discussion on a National Clean Air Agreement rightly confirms the need for responsive measures in acknowledgment of the different types of contaminate air pollution our communities are exposed to and to the consequential impacts on associated costs to the Australian health bill and environment.

With the many serious incidents that have occurred in Gippsland over the last 10 years aside from normal industry production and discharges -

- **The community has incurred an economic and social cost burden.**
- **The Local Council has incurred a cost burden which will consequently impact on ratepayer services.**
- **State Government has incurred the most significant cost burden which will be passed onto taxpayers.**

Subsequently, the community bears the ongoing economic, health and social impacts from government and industry negligence while industry and shareholders profit.

No longer can it be business as usual while those entrusted in protecting remain ignorant to the full cost impacts from pollution hotspots.

Compliance is premised only on a very narrow range of issues with environment listed but not enacted upon.

There have been significant mining incidents in Gippsland with reports and reviews following each yet we find ourselves back each time asking the same questions about the same issues and implementing what?

- I ask this inquiry the most pertinent of questions, **‘what are you going to recommend that will make any difference to ensure these industries and our governments do right by the people and for the people.**