

Notes from discussion with Councillors and EPA Victoria, 8 April 2013

At the invitation of the Latrobe City Mayor, EPA Victoria CEO and officers met with Latrobe City Councillors to discuss air quality monitoring in the Latrobe Valley.

Present:

John Merritt, CEO EPA Vic

Paul Torre, EPA Vic.

Annie Volkering, EPA Vic

Dieter Meltzer, Gippsland Regional Manager EPA Vic.

Cr Christine Sindt, LCC

Cr Graeme Middlemiss, LCC

Cr Peter Gibbon, LCC

Cr Darrel White, LCC

Deirdre Griepsma, Manager Natural Environment Sustainability LCC.

Discussion notes:

- o Council through the development of its Council Plan has a role of advocacy for its community on air quality and other environmental issues. Topics tabled for discussion included air monitoring and quality, odour issues and the buffer around APM, and the increasing cost to Council regarding landfill construction, operation, rehabilitation and aftercare.

Air Quality & Monitoring

- o Councillors would like a review of the air monitoring stations and air quality in Latrobe City and the Latrobe Valley. This includes understanding the adequacy of the current base data and regulatory requirements.
- o EPA Vic sees a role in supporting Councils priority of air quality improvement.
- o The Latrobe Valley Air Monitoring Network (LVAMN) was established under the SECV and was well resourced. Councillor expressed the view that this network and source monitoring has not been as well resourced and maintained post privatisation, and requires improvement as the coal resource and industry grows and changes. Dust suppression activities (water sprinklers) and data collection do not appear to be performed by private operators.

A commitment was made by EPA Vic CEO to conduct regular forums with Councillors to discuss issues.

- o A key concern of Councillors is community health, particularly particulate matter (PM10) in the air caused by coal dust.
- o EPA explained that there is two types of air monitoring that occurs; monitoring for general health and air quality (e.g. Traralgon station); and monitoring for base data collection and quality campaigns for specific projects (e.g. HRL Duel Gas proposal). Air monitoring statutory requirements are in the National Environmental Protection Measures (NEPM) Ambient Air Quality document.
- o The air monitoring station installed at Hourigan Rd, Morwell was installed for a campaign and has not been removed at this point in time. The station has remained to collect air quality data during fuel reduction burns across the summer and autumn conducted by DSE. The air quality monitoring data associated with the HRL proposal was compared to international standards; SOx and NOx were not identified as an issue.
- o EPA commented that the Latrobe Valley has had lots of monitoring over the years. Wal Delaney (EPA) has viewed the data over years from approx 30

- sites, including stationary sources and air dispersion models. The Latrobe Valley air shed has been well studied.
- o In 2008 another review of the LV area air quality was undertaken. The National Environmental Protection Measures (NEPM) provides guidelines for the number of quality monitoring station based on a ratio of population. The Latrobe Valley is dealt with as a regional population base as any one town alone does not meet the required population base to trigger air quality monitoring. There have been no air quality parameter levels recorded that exceed the NEPM standards.
 - o The Latrobe Valley air quality issues are particulate matter; PM₁₀ and PM_{2.5} associated with extreme events such as bushfires, dust storms, controlled burns that are dictated by climate.
 - o There may be a need to expand monitoring of PM₁₀ in Traralgon. Councillors requested information on what modelling of larger particles was undertaken as there is a perception by residents that Morwell is a dirty town due to the brown coal dust from the open cut mines and briquette dust.
 - o Power station emission licencing is based on source emissions. Councillors acknowledged that emissions and air quality has improved; better than the past due to improvements in technology.
 - o Councillors expressed that the number of air quality monitoring stations in the Latrobe Valley area should not be based on the same criteria (i.e. population density) as other rural regional cities (Bendigo & Ballarat) as the industry base profile is not the same (i.e. coal industry). EPA commented acknowledging that the Latrobe Valley is a specific case, over and above the general profile.
 - o Councillors would like the Morwell Hourigan Road air quality monitoring station to continue to gain 'proper' scientific data; short term monitoring is not adequate. EPA commented that the Morwell Hourigan Road station was to model and look at anomaly in the area for PM_{2.5}.
 - o New baseline data will need to be established as new open cuts and technologies are installed. Companies proposing new power stations/activities are required to undertake 12 months background modelling prior to building and after establishment.
 - o EPA has performed predictive air quality modelling to 2030, considering population growth.
 - o The EPA does not have a presence regarding air quality monitoring in the Latrobe Valley. If there was a good network of monitoring stations in the Latrobe Valley, and access to the data, then the community would have information.
 - o Councillors feel the EPA communication with the community is not good, example of the Morwell River collapse into the Yallourn mine and subsequent water pumping into the Morwell/Latrobe River. Proponents give the community very little information, stated information was confidential. The proponents need to be held accountable by the EPA to the community. EPA acknowledged that the communication with the community could have been better.

EPA committed to return and present to Councillors on air quality PM₁₀ data once it has been tabulated and verified and data modelling of future projections (2030).

EPA will review the number of air quality monitoring stations in the Latrobe Valley in recognition that the area has a unique industry profile.

Time did not permit other topics (landfill, odour buffer) to be discussed.

Notes from discussion with Councillors and EPA Victoria, 2 September 2013

Present:

John Merritt, CEO EPA Vic

Paul Torre, EPA Vic.

Dieter Meltzer, Gippsland Regional Manager EPA Vic.

Cr Christine Sindt, LCC

Cr Sharon Gibson, LCC

Cr Peter Gibbon, LCC

Cr Darrel White, LCC

Paul Buckley, CEO LCC

Deirdre Griepsma, Manager Natural Environment Sustainability LCC.

In April 2013, at the invitation of the Latrobe City Mayor, EPA Victoria CEO and officers met with Latrobe City Councillors to discuss air quality monitoring in the Latrobe Valley. This meeting has followed up on the outstanding issues and actions from the April 2013 meeting;

- *EPA committed to return and present to Councillors on air quality PM₁₀ data once it has been tabulated and verified and data modelling of future projections (2030).*
- *EPA will review the number of air quality monitoring stations in the Latrobe Valley in recognition that the area has a unique industry profile.*

Discussion notes:

- o General discussion commenced regarding issues in regional and rural areas; landfill requirements and responsibilities and ongoing community concerns and perceptions regarding air quality.
- o EPA discussed their recent restructure and resourcing with all officers undergoing internal training and competency assessment against their requirements as authorised officers; knowledge of legislation, industry technical information, investigations, notices and inspection reports. EPA officers generally have a higher education qualification in their field (e.g. science or environmental engineering degree). EPA authorised officer training is specialised.

Air Quality & Monitoring

- o EPA presented data from the Morwell East air quality monitoring station. The presentation will be distributed to Councillors with these notes. The report with this information will be available to the public on the EPA website today.
- o There was a delay in releasing the data as there was some anomalies in the SO_x and PM_{2.5} data that required verification.
- o Since 1975, there have been 27 air monitoring sites in the Latrobe Valley.
- o NO_x and SO_x are the names given to predominantly NO₂ and SO₂ air pollutants. NO_x are usually caused from combustion sources in the urban environment (cars, heaters etc.). SO_x are usually found from coal industry activity. Latrobe Valley brown coal is not high in SO_x. These are a problem in Europe and have been well studied in the UK & Europe with air movement and weather patterns.

- o The ERC's for the coal power stations that Councillor and officer representatives participate on provide data on SO_x and NO_x as major pollutants.
- o The cost for an air quality monitoring station is \$100K – \$200K to monitor for SO_x, NO_x, ozone, PM₁₀ and PM_{2.5}.
- o CO₂ is not considered a pollutant and is not monitored by EPA; it is calculated from industry production generation. The CSIRO does some general atmospheric monitoring for CO₂ but this is not specific, more global.
- o Power stations report CO₂ emissions as part of their NPI data.
- o EPA operate a network of air monitoring stations in the Latrobe Valley at Traralgon, Rosedale South, Jeeralang Hill and the temporary station at Morwell East. The Morwell East station was commissioned as part of the HRL duel gas preliminary works approval due diligence work.
- o A previous air quality monitoring station in Moe gave the same data as the Traralgon air quality monitoring station. The only exception was the particulate data which was due to controlled burning in the area.
- o The data collected in Traralgon when compared across the Latrobe Valley is representative of the area. Prevailing winds may effect dispersion of pollutants.
- o Large sources (industry) have EPA emissions licences; the EPA monitoring supports the licence reporting data.
- o Across 421 days of monitoring, Feb 2012 – May 2013, SO₂ results were between 0 – 10 ppb compared to the standard (80 ppb). SO₂ is a marker pollutant for power stations.
- o Air quality monitoring is continuous and recorded by electronic telemetry.
- o Currently the time of the day where data may spike is not reported, although this is possible. Weather impacts are significant, such as sessional inversion, vertical and horizontal dispersion. Modelling is used to assist in understanding the impact of these weather effects.
- o EPA will come and speak with Council before setting up another temporary air quality monitoring station to work together with the community.
- o NO₂ are urban air pollutants (cars, heaters etc.) and levels in the Latrobe Valley are less than those in Melbourne.
- o Across 421 days of monitoring, Feb 2012 – May 2013, NO₂ results were between 0 – 30 ppb compared to the standard (80 ppb).
- o PM₁₀ is a particle size of 0.01mm (dust). PM_{2.5} is a health concern (smoke). Spikes above 50mg/m³ in the monitoring data (Feb 2012 – May 2013) are directly due to bushfires and planned burns.
- o The NO_x and PM₁₀ wind rose is the same, showing the same pattern of dispersion, indicating the cause is urban pollution rather than industrial activity. In recent years air quality results in Latrobe Valley have not exceeded the standard. This is assisted by wetter (high rainfall) years, hence less dust.
- o PM_{2.5} monitoring is not currently occurring at the Traralgon air quality monitoring station. This is proposed to commence in the near future; next year. There is a national agreement coming regarding the monitoring of PM_{2.5}. The PM_{2.5} levels at the Traralgon air monitoring station were calculated by correlation with the Morwell East monitoring station PM_{2.5} levels. The same data spikes were seen in both data sets for the PM_{2.5} and PM₁₀ data. These were due to bushfires and planned burns.
- o The wind rose patterns for PM_{2.5}, NO_x and PM₁₀ were very similar, almost the same.
- o DEPI are considering conducting health impacts and social surveys with the timing of planned burns in Moe and Traralgon to improve management practises. Research using Smart-meters in major Gippsland towns. It is

unknown at this stage how this will work and how useful it will be; its research.

- o Air quality monitoring in areas with coal dust are difficult to monitor as the particulate matter is not just coal dust. Practical analysis of dust is very complex analysis and required hundreds of samples.
- o The cost of an air quality monitoring station is \$100K - \$200K each and one station placed correctly informs of the air quality in an entire area; more stations do not mean new information. The Traralgon air quality monitoring station is representative of the Latrobe Valley area.
- o EPA modelling will need to occur with population growth in the area.
- o The air quality monitoring station at Powerworks is not operational. There was discussion and disagreement regarding how representative the Traralgon air quality station is for the Latrobe Valley. The temporary Morwell East air monitoring station did not provide any new data compared to the Traralgon station. Concerns regarding health impacts and clusters studies were discussed. Cluster studies have not confirmed health concerns of the community (e.g. telsta building).
- o Future industries, such as coal drying, will require a management plan and trigger the protocol for an Environment Management Plan (EMP). Monitoring will need to take place as part of a licence application and works approval process for combustion technology. Non combustion technologies are PEM issued by DEPI.
- o Within a works approval application, section 20B requires community consultation. EPA would request this be done with Council for good relationship management and joint responsibility with the community.
- o The report for the air monitoring at Morwell East is being released today and EPA have put out a media release.
- o EPA do not see the necessity to install any other air monitoring stations at this stage in the Latrobe Valley, they consider Traralgon to be representative of the area.

Follow up actions:

- ***EPA to email information regarding Latrobe Valley air quality compared to Melbourne.***
- ***A link is to be placed on the Latrobe City Council website to the EPA air quality report.***
- ***Next meeting to be held in approximately 6 months and will cover community perceptions of Latrobe Valley air quality, community engagement, a joint community forum/open house and odour issues from industry (e.g. APM, Gippsland Water Factory).***

