

Alcoa of Australia Limited

Submission in relation to: Guidance Statement, Setting Conditions Part V, Environmental Protection Act 1986

General

Alcoa of Australia Limited (Alcoa) welcomes the release of the draft *Guidance Statement 'Setting Conditions: Part V, Environmental Protection Act 1986'* (Guidance Statement) issued by the Department of Environmental Regulation (DER).

Alcoa believes the Guidance Statement will be of significance to many industries and that the DER's aim to increase in transparency will be beneficial **given that in the past there is a view that the setting of licence conditions has been too open to unreasonable influence from socio-political pressures.** There is a pressing need for a more consistent and risk-based approach to condition setting. The Guidance Statement should help to address this issue. .

Please find below, Alcoa's response to aspects of the guidance statement:

Background - Pollution and Environmental Harm

Consistent with the key objective of the *Environmental Protection Act (1986)* (WA) (Act), the Guidance Statement states that the purpose of licence and works approval conditions is to **"prevent, control, abate or mitigate pollution or environmental harm"**. The significance of this statement should not be lost – the proper application of this purpose is critical to the success of the regulatory function and stakeholder confidence in the activities of the DER.

In layman's terms, 'pollution' and 'environmental harm' can be distilled down to an alteration of the environment to its detriment (plus specific prescribed activities). Practically, pollution and environmental harm involve an "alteration" of the environment to its detriment that is non-trivial and where the extent of the detrimental impact can be measured objectively.

Therefore licence and works approval conditions should be science/risk-based, designed to prevent non-trivial alterations to the environment and measurable. They should not be used for any other reason, such as for example, to mollify vested interests or to reduce socio-political pressure on the DER or government.

Unfortunately there are conditions in some of Alcoa's current licences issued by the DER that appear to constitute the latter, rather than the former (e.g. the annual production limit and no visible dust conditions in the DER licence for Alcoa Wagerup refinery). These examples are discussed in more detail later in Alcoa's response. It is acknowledged that amenity can represent a valid environmental factor, however, the key aspects of amenity are measurable (odour, noise, dust, light spill etc) and



amenity related conditions must address a genuine, measurable risk, rather than respond to local community activism.



Alcoa recommendation:

- I. *It is crucial that the DER take the opportunity presented by the current reform initiatives to ensure that all works approval and licence conditions are science/risk-based, designed to prevent non-trivial alterations to the environment and measurable.*

Conditions on works approvals and licences

1. Validity

The Guidance Statement states that conditions must “not be inconsistent with an approved policy or standard” and that the “DER must not grant a works approval or Licence which is contrary to, or otherwise than in accordance with, an implementation agreement or decision under Part IV of the EP Act”. Alcoa believes there are Licence conditions in place that do not satisfy this “consistency” test. For example, Alcoa’s Wagerup refinery has a Part IV Ministerial approval for a alumina production rate of 3.3.Mtpa, with a potential to reach 4.7Mtpa if various Part IV conditions are satisfied. However, the DER licence for the facility currently limits alumina production to 2.65Mtpa.



It is difficult to understand how the DER can justify capping annual alumina production, especially when the Part IV Ministerial approval specifically provides for significantly higher production. In the past the DER has suggested the annual production limit is a “surrogate” for emission limits. However, annual production is completely irrelevant in this regard. Alcoa’s view is that the annual alumina production cap is inconsistent with the Ministerial approval, is superfluous (given that there are emissions-based conditions in the Wagerup refinery licence) and simply act as a point of leverage for persons with a vested interest to constrain or penalise Alcoa through the licensing and appeals processes.



Alcoa recommendation:

- II. *The DER should remove all conditions that provide for a limit on production and any other conditions, that have little or no environmental relevance, or are inconsistent with any existing Part IV approval.*



2. Enforceable

Licence conditions that specify reasonable, unambiguous, measurable limits (or targets) facilitate confidence and increased certainty for all parties. The Guidance Statement requires that conditions “be worded in a clear and certain manner” and where the “outcome” to be achieved is “clear and precise”. Alcoa supports this proposition and notes that there are a number of current Licence conditions which fail this test.

A number of proponents, including Alcoa, have DER licences which contain a condition providing that visible dust must not cross the premises boundary. The DER has prosecuted a number of proponents for breaching such a condition, where the impact on the environment is negligible and the environmental outcome is neither clear nor precise.



Alcoa has a similar concern with the “no fugitive emissions” type of condition found in some current REFIRE licences.

Alcoa recommendations:

- III. *Subjective or impractical conditions should be removed from licences and works approvals and, if necessary, be replaced by reasonable, risk-based measurable conditions.*
- IV. *Conditions should be worded so that the evidence required to establish a breach of condition can be practicably measured or collected (eg using the ‘SMART’ principle of setting targets/limits).*

3. Risk-based

As stated above, an objective, risk-based approach to setting conditions is critical to the proper functioning of the environmental regulation system, including community confidence in the DER. It is also important that the risks are directly related to minimising or preventing pollution or environmental harm. The risk of negative stakeholder perception is not a valid reason.

Examples of conditions that do not have a solid risk-based foundation and a risk-based alternative include:

- No visible dust conditions. If the scientific evidence (such as health risk assessments) supports that dust emissions are not a significant risk then the conditions should reflect the scientific evidence, not the risk of negative stakeholder perception;
- Administrative conditions to report on shut down processes when there is no risk to the environment
- Volatile organic compounds (VOC) limits in Wagerup refinery licence even though emissions from the site have been assessed as not presenting an unacceptable risk to public health; and
- ‘No fugitive emissions’ conditions in some current REFIRE Licences.

Alcoa recommendation:

- V. *‘Risk-based’ conditions should be directly related to potential for environmental impact/harm, not based on the risk of negative stakeholder perception.*



4. Necessary and Convenient

'Necessary' and 'convenient' are ambiguous terms that are open to misuse and Alcoa believes they should not be part of the Guidance Statement. If the other six principles for setting conditions recommended in the Guidance Statement are correctly applied when drafting conditions, then the requirement for conditions to be 'necessary' and 'convenient' is superfluous. For example, if a 'risk-based' approach to setting conditions is actually utilised, then the risk assessment would already have determined whether or not the condition is 'necessary' (i.e. to impose a condition in a Licence for a potential impact that is rated 'negligible' would be unnecessary). Furthermore, if the SMART principle of determining targets/limits is utilised (e.g. 'enforceable'), then the condition would have been developed in consultation with the licensee ('A' in SMART targets is for 'agreed'), and thus would be considered to be 'convenient'.

Alcoa recommendations:

- VI. *If the other six principles for setting conditions recommended in the Guidance Statement are correctly applied when drafting conditions, then the requirement for conditions to be 'necessary' and 'convenient' is superfluous.*



5. Outcome based conditions

Outcome-base conditions should be the default position and be derived from the key tolerances of the environmental value being protected or managed. If there is a valid reason for the facility to perform to a more stringent level it should be formalised in the form of a target, as opposed to a limit, where failure to achieve the target results in a management response rather than prosecution.

This approach is consistent with the proposed principle that "emissions will be limited to levels which have been assessed as not representing an unacceptable risk to public health and the environment". However, what represents an "unacceptable risk" may be open to debate. In Alcoa's experience, some stakeholders claim there is no acceptable level for some emissions such as SO₂ or particulate matter. Accordingly, it is very important that the determination of "unacceptable risk" be science-based and derived from nationally accepted guidelines, such as National Environmental Protection Measures.

Alcoa supports the Guidance Statement's proposition that "emissions from premises will be controlled by emissions limits" (or by a combination of targets and limits). As described above, the imposition of an annual production limit is counter to this principle.

There is also concern that where there are no existing defined levels of 'unacceptable risk' for a specific emission, the cost of developing assessment levels could be imposed on the licensee. This may impose significant and unnecessary cost on licensees should a 'risk-based' approach to condition setting not be applied and hence, the licensees be required to develop assessment levels for low risk emissions.

The imposition of any new reduced limits should be done in consultation with industry to ensure the limit is realistic and relevant and that a sufficient time frame is provided for industry to accommodate the new limits. Exceptions to any new reduced limit may need to be considered for legacy sites.

The Guidance Statement also proposes that “process and management-based conditions will be imposed where it is not reasonable or practical to set outcome-based conditions or where outcome-based conditions do not adequately address the risks to public health or the environment”. Alcoa agrees there may be circumstances where process and management based conditions are appropriate. However, such conditions should be used sparingly. Furthermore, the DER ought to give significant weight to licensee’s view as to what is “reasonable and practical”, as it is the licensee who is in the best position to understand what is practical and reasonable given the numerous other considerations involved in operating a complex industrial facility.

There are past instances where management-based conditions have been used as a means of acknowledging concerns expressed by community opponents or appellants, or appeasing a perceived risk, rather than addressing an objective, science-based risk. This is an inappropriate response to individual or group-based advocacy that unnecessarily imposes considerable cost and compliance risk on a licensee.

Alcoa recommendations:

- VII. *The determination of ‘unacceptable risk’ must be science-based and derived from nationally accepted guidelines, such as National Environmental Protection Measures;*
- VIII. *The imposition of any new reduced limits should be done in consultation with industry to ensure the limit is realistic and relevant, and that a sufficient time frame is provided for industry to accommodate the new limits. Exceptions to any new reduced limit may need to be considered for legacy sites; and*
- IX. *Process and management-based conditions need to be developed in consultation/agreement with the licensee to ensure they are practicable and reasonable.*



6. Site Specific

Alcoa agrees that the “unique elements and requirements of each site” should be considered when setting conditions. Alcoa believes there is merit in seeking a reasonable degree of consistency across similar sites. This approach may assist a licensee operating more than one site and also the DER Licensing Officers who may deal with several sites within a given sector.

It is be important that site specific conditions reflect the other principles provided in the Guidance Statement. For example – site specific conditions proposed in some REFIRE licences require odour emissions ‘not to unreasonably interfere with the health, welfare, convenience, comfort or amenity of any person who is not on the premises’. Such a wide ranging condition is, in the absence of specific odour guidelines or targets in WA, very difficult to measure and is therefore at risk of abuse by some stakeholders with vested interests.

Alcoa recommendations:

- X. *When setting site specific conditions, consideration of consistency across similar sites is needed; and*
- XI. *Site specific conditions must still be set in accordance with the other principles provided in the Guidance Statement.*

7. Documented and Justified

Alcoa supports the commitment of the DER to document the justification of “all conditions”, including those that are ‘process and management-based’ conditions, and those regarding monitoring and reporting as well.

Monitoring and reporting conditions

Alcoa recognises the value of appropriately targeted monitoring. A risk-based approach needs to be applied when setting monitoring and reporting conditions. Monitoring and reporting conditions should only be imposed in relation to those issues that represent a real risk of pollution or environmental harm, or where it is necessary for validation of predictions and key assumptions. There should be no conditions imposed that are ‘monitoring/reporting for the sake of monitoring/reporting’ as these are very time consuming and costly for no net environmental benefit.

Alcoa recommendation:

- XII. *A risk-based approach needs to be taken when setting monitoring and reporting conditions, such that the level of monitoring imposed is commensurate with the risk of pollution or environmental harm.*



Improvement conditions

Alcoa generally agrees with the guidance on setting of improvement conditions. It is however extremely important that the specifics of the improvement condition be developed in consultation and agreement with the licensee so that the licensee’s expertise and knowledge of the site processes are taken into consideration to develop a reasonable and practicable approach and time frame for the required improvement.

Alcoa recommendation:

- XIII. *Improvement conditions should be developed in consultation and agreement with the licensee to ensure they are reasonable and practicable in both approach and timeframe.*

