



**environment  
SOUTHLAND**

*Te Taiaro Tonga*

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## Memorandum

### **For Your Consideration**

**To:** Ken Swinney  
Policy & Planning Manager

**From:** Stephen West  
Consents Officer

**Date:** 19 April 2011

**File Reference:** S094-027

**Subject:** **Notification Consideration**

Please consider whether application S094-027 lodged by Solid Energy Ltd, should be processed non-notified, processed by service of notice (limited notification), or if it has to be publicly notified.

### **Application**

The application is for resource consents to:

- discharge contaminants to air from a 9MW boiler, and the baking or drying of minerals; and
  - discharge approximately 0.56 l/s (49,000 l/day) of washwater and boiler blow-down water to water in a former mine pit; and
  - take up to 0.67 l/s (58,000 l/day) of water from a former mine pit for washdown and boiler use<sup>1</sup>.
- The discharge of contaminants to air is a discretionary activity under Rule 5.5.2 of the Regional Air Quality Plan
- The discharge of washwater and boiler blowdown water is a discretionary activity under Rule 3 of the Regional Water Plan
- The water take is a restricted discretionary activity under Rule 18(d)(iii) of the Regional Water Plan. *Note: the discharge will occur near the abstraction point, but the system is partly consumptive. However losses are less than 10,000 l/day, the permitted activity level under Rule 18(a).*

### **Notification Consideration**

The application may be publicly notified only if:

- the adverse effects are more than minor,
- at the request of the applicant or
- if special circumstances exist that warrant notification.

<sup>1</sup> Losses due to evaporation occur, so the abstraction is higher than the discharge.

In determining whether or not to publicly notify an application, the adverse effects on the owner(s) or occupier(s) of the property where the activity will occur, and the adjoining landowners/occupiers, must be disregarded.

If the application is not publicly notified, then the application should be proceed non-notified, or be processed by service of notice (limited notification) if the applicant has not obtained the approvals of the affected parties.

### **Adverse effects**

The adverse effects should be no more than minor.

The most controversial aspect of the application is the discharge of contaminants to air, but the effects on the environment are assessed as minor. The modelling used by the applicant took into account cumulative effects with emissions from the nearby Dongwha Patinna NZ Ltd mdf plant and Alliance Group Ltd's Matura plant. John Iseli, of Specialist Environmental Services Ltd, has reviewed the application and confirmed the applicant's assessment that the effects of the proposed discharge to air will be minor. Mr Iseli had earlier provided an opinion about the potentially affected parties, which is discussed below.

Contaminant	Ground Level Concentrations			
	Highest (on applicant's site)	Highest (at neighbour's dwellings)	<b>NZ standard/guideline</b>	% of guideline
PM <sub>10</sub>	15 µg/m <sup>3</sup> (24-hour average)	20 µg/m <sup>3</sup> (24-hour average) <sup>2</sup>	<b>50</b> µg/m <sup>3</sup> (24-hour average) <sup>3</sup>	40
	10.3 µg/m <sup>3</sup> (annual average)		<b>20</b> µg/m <sup>3</sup> (annual average)	51.5
SO <sub>2</sub>	115 µg/m <sup>3</sup> (1-hour average)	60 µg/m <sup>3</sup> (1-hour average)	<b>350</b> µg/m <sup>3</sup> (1-hour average) <sup>4</sup>	32.8
	44 µg/m <sup>3</sup> (24-hour average)	25 µg/m <sup>3</sup> (24-hour average)	<b>120</b> µg/m <sup>3</sup> (24-hour average)	36.7
	2.5 µg/m <sup>3</sup> (annual average)		<b>10</b> µg/m <sup>3</sup> (annual average)	25

Notes:

- The predicted ground level concentrations shown are for cumulative effects from both the applicant's plant and the nearby Dongwha Patinna NZ Ltd plant.
- The predicted PM<sub>10</sub> ground level concentrations are based on total suspended particulate, which will overstate inhalable particulate (PM<sub>10</sub>) concentrations, especially close to the Dongwha plant.
- Mr Iseli has noted that the Ministry for the Environment refers to background PM<sub>10</sub> concentrations in rural areas of 15 µg/m<sup>3</sup> (24-hour average). Even with that included, predicted concentrations will comply with the National Environmental Standards.

I note that J Fitzsimons has referred to carbon sinks in her letter to the Council, but that Section 104E of the RMA prevents the consideration of the effects on climate change. Section 104E does not automatically extend to the determination of effects for the purposes of notification. However Section 95D(b) does exclude consideration of an adverse effect permitted by a rule or NES. In effect, Section 104E permits effects on climate change from the emission of

<sup>2</sup> The modelling predicts 58.6 µg/m<sup>3</sup> at the Dongwha plant. However this is total particulate, not just PM<sub>10</sub>, and will be dominated by local emissions from Dongwha of both PM<sub>10</sub> and larger particulate.

<sup>3</sup> The National Environmental Standards provide for this limit to be exceeded once per year.

<sup>4</sup> The National Environmental Standards provide for this limit to be exceeded up to 9 hours per year. However no 1-hour average concentration may exceed 570 µg/m<sup>3</sup>.

greenhouse gases, so it is consistent with Section 95D(b) to exclude that effect from the consideration of this application.

The washwater and boiler blowdown water discharges are not expected to have more than minor effects on water quality after mixing in the former mine pits, let alone in the surface water bodies downstream. Table 4 of the application shows the natural and predicted pit water qualities and there will be minimal changes. The boiler blowdown discharge has some elevated contaminant levels, but it is such a small volume that the concentrations will be heavily diluted in the pit lake.

The water take and washdown discharge nearly cancel out in terms of water volume in the pond system. The net amount of water lost from the pond system is about 10,000 l/day, about the scale of the permitted activity to take surface water.

### **Special Circumstances**

There has been a degree of public interest and concern with Solid Energy Ltd's proposed briquetting operation, as evidenced by enquiries/letters on file (M Dumbar, J Nowak and Coal Action Network, J Fitzsimons and A&R Johnston), and by letters to the editor of the Southland Times over the last 6 months (I don't have a specific number). This interest/concern from some parties (most of which dwell outside the area likely to be directly affected by the discharge to air) may contribute to a special circumstance that would warrant notification of this application.

Case law defines 'special circumstances' as those that are "unusual or exceptional but may be less than extraordinary or unique"<sup>5</sup>. Public concern and interest is not necessarily a special circumstance that requires notification. However, where such interest suggests that notification may be desirable for "balancing competing factors to arrive at a resource use which is in the overall public interest"<sup>6</sup>, a special circumstance for notification may exist. In this case (unlike *Murray v Whakatane DC*[1997] CP20/96 CP38/96 page 49) there are operative regional plans, although the Air Quality Plan is over 10 years old and so is past due for review. Therefore it may be that, as described in the *Murray* case, the "public interest is not able to be sufficiently informed by the ...Plan".

I note that the presumption of notification has changed since the *Murray* case, and that notification is now the exception rather than the default. I believe that this would also change the weighting regarding the degree of public interest or concern required to constitute a special circumstance requiring notification. Therefore the degree of interest would have to be significant to warrant notification.

In short, it is not clear that a special circumstance exists that warrants notification; that is a matter for your discretion.

### **Written Approvals**

John Iseli has provided some indication of the spatial extent of air quality effects for the purposes of determining affected parties. He has estimated that general dust effects could extend about 500m from the plant, and that the 12.5 µg/m<sup>3</sup> contour for PM<sub>10</sub> and the 20 µg/m<sup>3</sup> contour for

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<sup>5</sup> Brookersonline.co.nz/databases/modus/cnvironmentallib/rmresman/ACT-A95.A.05(2) Peninsula Watchdog Group (Inc.) v Ministry of Energy [1996] 2 NZLR529 at 536CA.

<sup>6</sup> *Murray v Whakatane DC*(1997) CP20/96 CP38/96 page 49.

SO<sub>2</sub> (where it affects a dwelling), could identify affected parties. These are the contours for cumulative effects with the nearby Dongwha Patinna plant emissions.

Mr Iseli has linked his recommendation about affected parties to the predicted 20 µg/m<sup>3</sup> (24-hour average) sulphur dioxide ground level concentration, which is the World Health Organisation guideline. However, he notes in his review that the WHO guideline is one-sixth of the New Zealand guideline and there are concerns that its application in a New Zealand setting is questionable. The applicant has provided further information on this issue, including a copy of a review by Kelly & Cudmore of use of the WHO guideline in the New Zealand context and a comment by Ron Pilgrim of SKM. These reports suggest that the WHO guideline is not suitable for assessment purposes and Mr Pilgrim notes that, if it was, he would suggest using contour based on at least three exceedances (similar to the NES regime).

The applicant has provided a total particulate plot, rather than a PM<sub>10</sub> contour plot. This will overstate PM10 (which is only a fraction of total particulate) and is heavily dominated by Dongwha emissions. By themselves, the total particulate emission effects from Solid Energy are less than 10 µg/m<sup>3</sup> (24-hour average) beyond the site boundary. Therefore I have preferred the SO<sub>2</sub> contour and 500m area for nuisance dust effects to identify affected parties.

I believe that the following people are affected by the proposal

- Te Ao Marama Inc.
- Te Rūnanga o Ngāi Tahu
- Public Health South
- Gore District Council
- Fish & Game New Zealand, Southland Region
- Department of Conservation
- Neighbours within 500m:
  - Ardle Farms Ltd, C/- D J Falconer, 43 Ribbonwood Road, RD 21, GERALDINE 7991
  - Dongwha Patinna NZ Ltd, PO Box 189, GORE 9740
- Neighbours with dwellings within (or nearly within) the >20 ug/m<sup>3</sup> SO<sub>2</sub> (24-hour) contour
  - N W Beattie, C/- Mrs K Beattie, 40 Main Street, MATAURA 9712
  - K A & E I Whitehead, PO Box 156, GORE 9740
  - Clint Cummings, 67 Craig Road, RD 4, Gore 9774
  - James North, 26 Terrace Road, RD 4, Gore 9774
- Neighbours within the >20 ug/m<sup>3</sup> SO<sub>2</sub> (24-hour) contour, but with no dwellings within the contour
  - A Riepma, PO Box 36, MATAURA 9356
  - A G & L J Perkins, 80 Perkins Road, RD 2, GORE 9772

(There is a property shown as Maori land in this area, but Gore District Council has identified itself as the contact for the property.)

I have included Public Health South because health effects are one of the primary concerns for the emission of air quality contaminants from combustion sources.

I have included DOC and F&G because of the water take and discharge. It could be argued that the effects on their interests are less than minor, and so they would not be affected parties under S95E(1) of the RMA, but I can't be certain that the effects on their interests are that minimal and think that including DOC and F&G is the conservative option.

Ultimately the ponds discharge to the Mataura River, and I have sent a statutory acknowledgement to Te Rūnanga o Ngāi Tahu. I don't know that they will have received it due to disruption from the recent earthquake.

Te Ao Marama Inc. is included to address Sections 8 and 6(e) of the RMA, and because of existing agreements between ES and TAMI regarding when they are and are not affected parties.

As stated, Mr Iseli has suggested that only those landowners with dwellings within the  $20 \mu\text{g}/\text{m}^3$  contour for  $\text{SO}_2$  should be considered affected parties, with regard to the  $\text{SO}_2$  effects. However, it is difficult to distinguish between farm buildings and dwellings on the aerial photographs. I also note that Section 3 of the RMA refers to any past, present or future effect, which is relevant because landowners can build dwellings on their land without a land use consent from the District Council (they would require a building consent, but that is under separate legislation, and controls construction for the purposes other than those specified in the RMA). The applicant has provided legal advice that this approach is incorrect – potential future dwellings should not be considered. Mr Pilgrim of SKM Ltd has suggested  $26.4 \mu\text{g}/\text{m}^3$ , 33% of the ORC air quality target, or the  $20 \mu\text{g}/\text{m}^3$ , but with a contour based on 3 (or 5) exceedances. I note that the MfE ambient air quality guideline is  $120 \mu\text{g}/\text{m}^3$ , roughly 4-6 times more than the model predictions beyond the boundaries of the Solid Energy and Dongwha properties.

The applicant has provided a number of plots. The plot on page 51 of the application is suitable for identifying the  $20 \mu\text{g}/\text{m}^3$  contour for  $\text{SO}_2$  to the flat area to the west of the site, and has produced a wider plot to show the contour on the hilly area to the east. This last plot also marks and labels dwellings within the  $20 \mu\text{g}/\text{m}^3$  contour.

### **Conclusion**

I believe that the adverse effects on the environment are minor. The air quality experts for the applicant and ES both agree that air quality effects will be well below New Zealand guideline and standard levels. The water take and discharge are unlikely to have more than minor effect.

I don't believe that a special circumstance exists that warrants notification of this application. There is a degree of public interest, but I don't believe that it is sufficient to warrant notification.

That leaves the question of affected parties. Mr Pilgrim, the applicant's air quality consultant proposes selection using the  $26.4 \mu\text{g}/\text{m}^3$  (24-hour average) contour for  $\text{SO}_2$ , based on one third of the ORC target. Mr Iseli proposed identifying affected parties by the following criteria:

- dwellings within the  $20 \mu\text{g}/\text{m}^3$   $\text{SO}_2$  contour, based on the WHO guideline,
- those within the  $12.5 \mu\text{g}/\text{m}^3$  contour for  $\text{PM}_{10}$
- 500m from the plant (for nuisance dust effects)

I have largely gone with Mr Iseli's recommendations, but included a couple of properties (Riepma and Perkins) that do not currently have dwellings within the  $\text{SO}_2$  contour, and not relied on the total particulate contour.

You may wish to speak directly with the applicant's contact, Phil Lindsay, of Solid Energy Ltd, for clarification.

Tel: 03 345 6086

Cell: 027 291 1075

### **Recommendation**



I recommend that this application be processed non-notified, subject to the receipt of approvals from the affected parties.



Stephen West                      20/04/2011  
Consents Officer

**Application S094-027:**

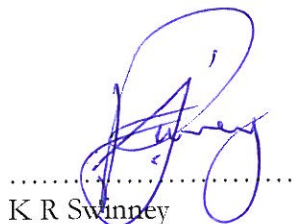
- Must be publicly notified because:
  - I am not satisfied that the adverse effects on the environment will only be minor;
  - Special circumstances exist that warrant notification of the application, namely.....

May be processed non-notified, provided the following approvals are obtained from:

- Te Ao Marama Inc.
- Te Rūnanga o Ngāi Tahu
- Public Health South
- Gore District Council
- Fish & Game New Zealand, Southland Region
- Department of Conservation
- Ardle Farms Ltd, C/- D J Falconer, 43 Ribbonwood Road, RD 21, GERALDINE 7991
- Dongwha Patinna NZ Ltd, PO Box 189, GORE 9740
- N W Beattie, C/- Mrs K Beattie, 40 Main Street, MATAURA 9712
- K A & E I Whitehead, PO Box 156, GORE 9740
- Clint Cummings, 67 Craig Road, RD 4, Gore 9774
- James North, 26 Terrace Road, RD 4, Gore 9774
- A Riepma, PO Box 36, MATAURA 9356
- A G & L J Perkins, 80 Perkins Road, RD 2, GORE 9772
- .....
- .....

If one of more of these approvals cannot be obtained, the application must be processed by limited notification.

The decision for this application will be made: under delegated authority / by the Consents Committee.



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K R Swinney  
Policy & Planning Manager

21/4/11  
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*because of nature & scale of operation & the level of public interest.*