under:	the Resource Management Act 1991
in the matter of:	appeals under clause 14 of the First Schedule to the Resource Management Act 1991 concerning proposed One Plan for the Manawatu-Wanganui Region
between:	Federated Farmers of New Zealand (ENV-2010-WLG-000148)
and:	Minister of Conservation (ENV-2010-WLG-000150)
and:	Horticulture New Zealand (ENV-2010-WLG-000155)
and:	Wellington Fish and Game Council (ENV-2010-WLG-000157)
and:	Andrew Day (ENV-2010-WLG-000158) Appellants
and:	Manawatu-Wanganui Regional Council Respondent
and:	<b>Fonterra Co-operative Group Limited</b> Section 274 party

Supplementary statement of evidence of **Gerard Matthew Willis** for Fonterra Co-operative Group Limited

Dated: 18 May 2012

REFERENCE:

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## SUPPLEMENTARY STATEMENT OF EVIDENCE OF GERARD MATTHEW WILLIS FOR FONTERRA CO-OPERATIVE GROUP LIMITED

# Further comments on the design and effect of Gerard Willis's proposed planning approach

- 1 It has become apparent from the comments of some witnesses during the proceedings that there are significant misunderstandings of the planning approach I propose to address nitrogen leaching from dairy farms in accordance with Chapter 13 of POP.
- 2 This statement, and the attached refined drafting, seeks to correct that misunderstanding by removing any ambiguity that might exist within the relevant rules as I had redrafted them.
- 3 However, the intent of my proposed rules, as described in Policy 13-2C, is unchanged from that put forward in my evidence in chief (EIC). I have attempted to make a number of key points more clear.

## Management threshold

- 4 The first point to note is that I propose 27 kg N /ha/yr as a <u>management threshold</u>. It would not apply as a minimum standard that farmers can "leach up to". It would operate as an upper limit on farms that are eligible to have their N leaching frozen or "capped" at existing levels.
- 5 In other words, if a farm is currently losing 20 kgs N/ha/yr (determined on the basis of N-leaching from the 2007-2010 years) then it is below the threshold and subject to the circumstances described at paragraph 8 below will be capped at 20kgs/ha/yr. It would not be able (under the controlled activity rule) to increase to 27kgs N ha/yr. It is therefore not correct to imply that all farms can lose up to 27 kgs N/ha/yr.

## Ability to increase N leaching

6 The inability for existing farms to increase their N leaching under my controlled activity rule contrasts with the approach of Ms Barton. Under Ms Barton's approach, farms currently operating below her Table 13.1 LUC limits would be allowed to increase their N leaching to those limits. That is the case regardless of the state of water quality in the catchment or the sensitivity of the waterways in that catchment. In some catchments (where existing farms have low leaching rates) my approach of capping farms at their existing rate represents a materially more stringent planning approach.

## Capped leaching rate

7 It was suggested by Ms Barton in her response to questions during cross examination, that under my proposal, council would be forced to "grand parent" whatever leaching rate a farmer claimed to have had in its application for resource consent. That is not how my provisions are designed to work. It is important to note that my Rule 13-1 includes, as a matter or control, the determination of the N leaching cap ("grand parented limit"). Thus the Council does not have to accept the applicant's proposed limit, but has discretion to recalculate the rate as it deems appropriate (i.e. if it is unhappy with the approach taken by the applicant). That puts significant control in the hands of council officers and is would be typical of a controlled activity criteria in any given plan.

## Obligations of farms operating below 27 kgs N/ha/yr

8 There has been some suggestion (in the context of the water quality modelling that has been undertaken) that those farms operating below 27 kgs N/ha/yr are not obliged to decrease their N leaching from current levels. Under my regime, that would not always be the position. It is important to understand that there will be some further reductions from the 'grandparented' rate of those "*under 27 kg*" farms if they have, until now, been operating without full stock exclusion, without culverts/bridges and/or under poor effluent management practice. All these will be now required under Rule 13-1 and, once implemented, will lead to some N leaching reduction.

## The proportion of farms above the threshold

9 It has been suggested in evidence of other witnesses that my approach focuses on reducing N leaching from only the "worst 25%". That is not correct. The figure of 27 kgs N/ha/yr was derived as the 75<sup>th</sup> percentile of all dairy farms in the Manawatu Region. However, using Dr Roygard's figures (from his 9 May statement), when the threshold of 27 kgs N/ha/yr is applied in the specified water management zones (WMZs) of Table 13.1 the proportion of farms that is "caught" under the more stringent provisions of approach is in the range of 33-54% (depending on exactly which water management zone is considered). This is because farms in the specified catchments (and, in particular, the "Upper Manawatu" and "Manawatu above the Gorge WMZs") are currently high N leachers compared to the regional average. On the basis of the best information to hand (Dr Roygard's information), 49% of farms in the Upper Manawatu would, for example, exceed the management threshold and fall to be addressed under the more stringent regime.

#### What the more stringent regime requires

Some witnesses have suggested that those farms over the management threshold (27kgs N/ha/yr) are simply subject to a "reasonably practicable" test with all the difficulties of interpretation that that test allegedly presents. That is an oversimplification. I do propose, in policy terms, to impose a "reasonable practicable" test but, having heard the criticisms of that approach by other parties throughout mediation, I have defined, in quite precise terms, what I intend that "reasonable practicable" means for farms over the management threshold. I have done so by including a list of mitigation measures that are deemed to be reasonably practicable (using Dr Ledgard's evidence) and required those practices to be adopted by all farms that exceed the management threshold. There is some limited ability for an applicant to argue that in the context of the specific case, the measures are not practicable. But scope for that argument has been constrained. In particular the ability to argue financial hardship is removed. The expectation is, therefore, that all farms with leaching rates over 27 kgs N/ha/year will adopt the Tier 1 measures specified, and will have their entitlement to leach N determined on the basis that those measures can and will be implemented. Importantly, the Council retains discretion over both the mitigation measures to be adopted and the N leaching loss limit that applies. It is *not*, as Alison Dewes suggested, a voluntary approach (paragraph 24, 15 May Dewes statement of rebuttal evidence).

#### Relevance of modelling 27kg N single number scenario

11 In commenting on my approach during cross examination questions, Ms Barton referenced Dr Roygard's modelling and in particular the scenario of a flat rate of 27 kg N/ha/year. For of all the reasons set out above, the modelling results of the single number (27) scenario are not applicable or relevant.

## **Convergence with LUC leaching rates**

- 12 My planning proposal does provide a pathway for some low leaching farms to increase up to the LUC rates of Table 13.2. I propose that this be provided for as a restricted discretionary activity (RDA). This entitlement is qualified by the need for such farms to show that that they intend to increase their N-loss while maintaining or improving their "nutrient use efficiency" (a measure of how much N they are leaching per unit of output). I considered that dimension important to avoid previously un-used N leaching entitlement to be taken up by a slackening off in on-farm practices.
- 13 This provision for increases from the capped rates is necessary to ensure equity with the rules for new conversions.
- 14 Similarly, because the number of 27 is near the top of the LUC leaching rate scale, there will be a convergence towards the LUC numbers as farms currently leaching above that threshold reduce leaching through the adoption of tier 1 mitigation measures.

#### Characterisation of the approach

15 The planning approach I put forward has been characterised by many witnesses as "grand parenting". That is not, in my opinion an accurate characterisation. My approach contains an element of capping some farmers at their current leaching rate ("grand parenting"); requiring (and defining) the adoption of reasonably practicable measures (best practical option); and use of LUCrelated N loss entitlements (the natural capital approach). In short, it is a hybrid approach that attempts to acknowledge and apply the best attributes of each approach while overcoming the worst of the negative attributes.

### Provenance of my proposed approach

- 16 Whether my proposed approach is within scope has been questioned by some parties. I have consistently promoted the approach proposed in this evidence (or some variation of it) through mediation and in planning caucusing undertaken during mediation. At no stage during that process did any party challenge whether the approach was "in scope". The validity of my statement is demonstrated by the figure "x" attached to Mr Maassen's opening submissions. I developed that figure during planning caucusing as a means of communicating my proposed approach. It was then adopted during the mediation as a useful way of communicating (at a conceptual level) the general approach agreed between the parties.
- 17 I attach the figure for ease of reference (Attachment 1). The Court will note that the term "grandparent" is used twice on that figure. The concept is clearly set out in the memorandum dated 28 October 2011. Under my proposal, the "x" is 27 kg N/ha/yr. Farmer A reduces over time as Tier 1 mitigation measures are implemented on-farm. Farmer B is grand parented below the "x" but can come up to the "x" (in my proposal as a RDA). In short, my proposed planning approach is entirely consistent with the figure recorded in the 28 October memorandum arising out of mediation.

#### Attached provisions

I have sought to provide greater clarity to my proposed regime by splitting proposed Rule 13-1 into two controlled activity rules. Rule 13-1 applies to existing dairy farms that have a leaching rate below 27 kg N/ha/yr. Rule 13-1AA applies to existing dairy farms that have a leaching rate of or above 27 kgs N/ha/yr. The proposed wording is provided as **Attachment 2**.

Gerard Matthew Willis 18 May 2012



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Attachment 1

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## Attachment 2

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion
				Non-Notification
13-1 Existing dairy farming* land^ use activities (< 27 kg N/ha/yr)	<ul> <li>The use of <i>land</i><sup>^</sup> pursuant to s9(2) RMA for <i>dairy farming</i><sup>*</sup> that was existing as at 1 July 2010 in <i>the Water Management Sub-zones</i><sup>*</sup> listed in Table 13.1 that has an annual nitrogen leaching loss less than 27 kg/ha/year and any of the following <i>discharges</i><sup>^</sup> pursuant to ss15(1) or 15(2A) RMA associated with <i>dairy farming</i><sup>*</sup>:</li> <li>(a) the <i>discharge</i><sup>^</sup> of <i>fertiliser</i><sup>*</sup> onto or into <i>land</i><sup>^</sup></li> <li>(b) the <i>discharge</i><sup>^</sup> of <i>contaminants</i><sup>^</sup> onto or into <i>land</i><sup>^</sup> from <ul> <li>(i) the preparation, storage, use or transportation of stock feed on <i>production land</i><sup>^</sup></li> <li>(c) the <i>discharge</i><sup>^</sup> of grade Aa, <i>biosolids</i><sup>^</sup>, <i>soil conditioners</i><sup>*</sup> or <i>compost</i><sup>*</sup> onto or into <i>production land</i><sup>^</sup></li> <li>(d) the <i>discharge</i><sup>^</sup> of farm <i>animal effluent</i><sup>*</sup> onto or into <i>production land</i><sup>^</sup></li> </ul> </li> </ul>	Controlled	<ul> <li>(a) A <i>nutrient management plan*</i> must be prepared from the date specified in Table 13.1 and provided annually to the Regional Council.</li> <li>(b) The annual nitrogen leaching shall not exceed the highest annual nitrogen leaching loss that can be demonstrated to have occurred from the <i>land</i> over the period 2007-2010 (or such shorter period for which there is available information).</li> <li>(c) The <i>nutrient management plan*</i> referred to in condition (a) above must demonstrate that the nitrogen leaching loss will not exceed the nitrogen leaching loss calculated in accordance with (b) above and the activity must be undertaken in general accordance with the nutrient management plan*.</li> <li>(d) Cattle must be excluded from: <ul> <li>(<i>i</i>) wetlands^ and lakes^ that are a rare habitat* or threatened habitat*, and</li> <li>(<i>ii</i>) the beds^ of rivers^ that are permanently flowing or have an active bed* width greater than 1 m, other than at any specific location where access is required for cattle to cross the river^ in which case (g) applies.</li> </ul> </li> <li>(e) Where there will be more than 1350 cattle movements per week across any river that is permanently flowing or has an active bed width</li> </ul>	<ul> <li>Control is reserved over</li> <li>(a) the determination nitrogen leaching loss limit in accordance with condition (b).</li> <li>(b) reporting requirements against the nutrient management plan</li> <li>(c) compliance with the specified requirements referred to in the conditions of Rule 13-6 and the matters over which control is reserved in Rule 13-6 including a requirement to seal effluent storage and treatment facilities (including sumps and ponds)</li> <li>(d) compliance with the specified requirements referred to in the conditions of Rules 13-2, 13-3, 13-4 and 13-4B</li> <li>(e) avoiding, remedying or mitigating the effects of odour, dust, <i>fertiliser*</i> drift or effluent drift</li> <li>(f) provision of information including the <i>nutrient management plan*</i></li> <li>(g) duration of consent</li> <li>(h) review of consent <i>conditions</i>^</li> <li>(i) compliance monitoring.</li> </ul>

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion
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	<ul> <li>any existing consent for that <i>discharge^</i>) including:</li> <li>(i) effluent from dairy sheds and <i>feedpads*</i></li> <li>(ii) effluent received from piggeries</li> <li>(iii) sludge from farm effluent ponds</li> <li>(iv) poultry farm effluent</li> <li>and any ancillary <i>discharge^</i> of <i>contaminants^</i> into air pursuant to ss15(1) or 15(2A) RMA.</li> <li>Where the existing <i>dairy farming *</i> land use is located partly on land within one or more of the <i>Water Management Sub-zones *</i> listed in Table 13.1 and partly on other <i>land^</i> this rule only applies:</li> <li>(a) if at least 20% of the <i>dairy</i></li> </ul>		<ul> <li>greater than 1m, the cattle must cross via a bridge or culvert, and run-off originating from the carriageway of the bridge or culvert must be <i>discharged</i>^ onto or into <i>land</i>^.</li> <li>(f) The <i>discharge</i>^ of <i>fertiliser</i>* onto or into <i>land</i>^ and any ancillary <i>discharge</i>^ of <i>contaminants</i>^ into air must comply with the <i>conditions</i>^ of Rule 13-2.</li> <li>(g) The <i>discharge</i>^ of <i>contaminants</i>^ onto or into <i>land</i>^ from:</li> <li>(i) the preparation, storage, use or transportation of stock feed on <i>production land</i>^, or</li> <li>(ii) the use of a <i>feedpad</i>* and any ancillary <i>discharge</i>^ of <i>contaminants</i>^ into air must comply with the <i>conditions</i>^ of Rule 13-3.</li> <li>(h) The <i>discharge</i>^ of grade Aa <i>biosolids</i>*, <i>soil conditioners</i>* or <i>compost</i>* onto or into <i>production land</i>^ and any ancillary <i>discharge</i>^ of <i>contaminants</i>^ into air must comply with the <i>conditioners</i>* or <i>compost</i>* onto or into <i>production land</i>^ and any ancillary <i>discharge</i>^ of <i>contaminants</i>^ into air must comply with the <i>conditioners</i>* or <i>compost</i>* onto or into <i>production land</i>^ and any ancillary <i>discharge</i>^ of <i>contaminants</i>^ into air must comply with the <i>conditioners</i>* or <i>compost</i>* onto or into <i>production land</i>^ and any ancillary <i>discharge</i>^ of <i>contaminants</i>^ into air must comply with the <i>conditions</i>^ of Rule 13-4.</li> </ul>	<ul> <li>will not be notified and written approval of affected persons will not be required (notice of applications need not be <i>served</i><sup>A</sup> on affected persons).</li> <li>Advice notes:</li> <li>a) The purpose of the Nutrient Management Plan is to satisfy the Regional Council that the consent holder can operate in a way that will achieve compliance with the nitrogen leaching maximum specified as a condition of consent. It is not intended that there will be enforcement of any specific <i>nitrogen leaching mitigation measures</i> as it is acknowledged these can vary depending on, particularly, climatic conditions.</li> </ul>
	<ul> <li>(b) farming* land use is located on land^ within the listed Water Management Sub-zones*; and</li> <li>(b) to the portion of the existing dairy farming land use that is located within the Water Management Sub-zone* listed in Table 13.1</li> </ul>		<ul> <li>(i) The discharge^ of poultry farm litter* onto or into production land^ and any ancillary discharge^ of contaminants^ into air must comply with the conditions^ of Rule 13-4B.</li> <li>(j) The discharge^ of farm animal effluent* onto or into production land^ including:</li> <li>(i) effluent from dairy sheds and feedpads*</li> <li>(ii) effluent received from piggeries</li> <li>(iii) sludge from farm effluent ponds</li> </ul>	<ul> <li>b) A nutrient management plan will be required as part of the application to demonstrate compliance with the claimed nitrogen leaching maxmium entlement calculated under this rule. In addition, prior to mid June each year; and beginning after the first full dairy season of operation under the consent, the consent holder will generally be required to complete and submit to the Regional</li> </ul>

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			(iv) poultry farm effluent and any ancillary <i>discharge</i> <sup>A</sup> of <i>contaminants</i> <sup>A</sup> into air must comply with the <i>conditions</i> <sup>A</sup> , standards and terms of Rule 13-6.	Council's Environmental Protection Manager, a new nutrient management plan which details the farm management practices undertaken over the previous 12 month period and which demonstrates compliance with the nitrogen leaching maximum specified as a condition of consent.
13-1AA Existing <i>dairy farming* land</i> ^ use activities (≥27 kg N/ha/year)	<ul> <li>The use of <i>land</i><sup>^</sup> pursuant to s9(2) RMA for <i>dairy farming</i><sup>*</sup> that was existing as at 1 July 2010 in <i>the Water Management Sub-zones</i><sup>*</sup> listed in Table 13.1 <u>that has an annual nitrogen leaching loss 27</u></li> <li><u>kg/ha/year</u> or more and any of the following <i>discharges</i><sup>^</sup> pursuant to ss15(1) or 15(2A) RMA associated with <i>dairy farming</i><sup>*</sup>:</li> <li>(f) the <i>discharge</i><sup>^</sup> of <i>fertiliser</i><sup>*</sup> onto or into <i>land</i><sup>^</sup></li> <li>(g) the <i>discharge</i><sup>^</sup> of <i>contaminants</i><sup>^</sup> onto or into <i>land</i><sup>^</sup> from <ul> <li>(i) the preparation, storage, use or transportation of stock feed on <i>production land</i><sup>^</sup></li> <li>(h) the <i>discharge</i><sup>^</sup> of grade Aa, <i>biosolids</i><sup>^</sup>, <i>soil conditioners</i><sup>*</sup> or <i>compost</i><sup>*</sup> onto or into <i>production</i></li> </ul> </li> </ul>	Controlled	<ul> <li>(a) A nutrient management plan* must be prepared from the date specified in Table 13.1 and provided annually to the Regional Council.</li> <li>(b) The nutrient management plan* referred to in condition (a) above shall specify: <ul> <li>(i) <u>Tier 1 nitrogen leaching mitigation measures*</u> to be implemented.</li> <li>(ii) <u>The maximum nitrogen leaching loss that is to be achieved following implementation of the Tier 1 nitrogen leaching mitigation measures proposed to be implemented.</u></li> </ul> </li> <li>(c) The annual nitrogen leaching loss that occurred from the land over the period 2007-2010 (or such shorter period for which there is available information) less the N leaching reduction that can be achieved following the adoption of Tier 1 nitrogen leaching mitigation measures</li> </ul>	<ul> <li>Control is reserved over:</li> <li>(a) the determination of nitrogen leaching loss in accordance with conditions (b) and (c)</li> <li>(b) the Tier 1 nitrogen leaching mitigation measures to be implemented</li> <li>(c) the maximum nitrogen leaching loss that is to occur from the land.</li> <li>(d) the reporting requirements against the nutrient management plan</li> <li>(e) compliance with the specified requirements referred to in the conditions of Rule 13-6 and the matters over which control is reserved in Rule 13-6 including a requirement to seal effluent storage and treatment facilities (including sumps and ponds)</li> <li>(f) compliance with the specified requirements referred to in the conditions of Rules 13-2, 13-3, 13-4 and 13-4B</li> </ul>

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion
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	<ul> <li>land<sup>^</sup></li> <li>(i) the discharge<sup>^</sup> of poultry farm litter<sup>*</sup> onto or into production land<sup>^</sup></li> <li>(j) the discharge<sup>^</sup> of farm animal effluent<sup>*</sup> onto or into production land<sup>^</sup> (or upon expiry or surrender of any existing consent for that discharge<sup>^</sup>) including: <ul> <li>(i) effluent from dairy sheds and feedpads<sup>*</sup></li> <li>(ii) effluent received from piggeries</li> <li>(iii) sludge from farm effluent ponds</li> <li>(iv) poultry farm effluent</li> </ul> </li> <li>and any ancillary discharge<sup>^</sup> of contaminants<sup>^</sup> into air pursuant to ss15(1) or 15(2A) RMA.</li> <li>Where the existing dairy farming * land use is located partly on land within one or more of the Water Management Subzones * listed in Table 13.1 and partly on other land<sup>^</sup> this rule only applies:</li> <li>(a) if at least 20% of the dairy farming * land use is located on land<sup>^</sup> within the listed Water</li> </ul>		<ul> <li>accordance with the nutrient management plan*.</li> <li>(e) Cattle must be excluded from: <ul> <li>(i) wetlands^ and lakes^ that are a rare habitat* or threatened habitat*, and</li> <li>(ii) the beds^ of rivers^ that are permanently flowing or have an active bed* width greater than 1 m, other than at any specific location where access is required for cattle to cross the river^ in which case (g) applies.</li> </ul> </li> <li>(f) Where there will be more than 1350 cattle movements per week across any river that is permanently flowing or has an active bed width greater than 1 m, the cattle must cross via a bridge or culvert, and run-off originating from the carriageway of the bridge or culvert must be discharged^ onto or into land^.</li> <li>(g) The discharge^ of fertiliser* onto or into land^ and any ancillary discharge^ of contaminants^ into air must comply with the conditions^ of Rule 13-2.</li> <li>(h) The discharge^ of contaminants^ into air must comply with the conditions^ of Rule 13-2.</li> <li>(i) the preparation, storage, use or transportation of stock feed on production land^, or</li> <li>(ii) the use of a feedpad* and any ancillary discharge^ of contaminants^ into air must comply with the conditions^ of Rule 13-3.</li> </ul>	<ul> <li>(g) avoiding, remedying or mitigating the effects of odour, dust, <i>fertiliser</i>* drift or effluent drift</li> <li>(h) provision of information including the <i>nutrient management plan</i>*</li> <li>(i) duration of consent</li> <li>(j) review of consent <i>conditions</i>^</li> <li>(k) compliance monitoring.</li> </ul> <i>Resource consent</i> ^ applications under this <i>rule</i> ^ will not be notified and written approval of affected persons will not be required (notice of applications need not be <i>served</i> ^ on affected persons). <i>Advice notes: The advise notes applicable to Rule 13-1 apply also to this rule. In addition, in relation to consent conditions imposed under this rule nitrogen leaching maximum may be specified so as to reduce over time where that is necessary to ensure the Tier 1 nitrogen leaching mitigation measures can be implemented in a reasonably</i>

Rule	Activity	Classification	Conditions/Standards/Terms	Control/Discretion
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	<ul> <li>Management Sub-zones*; and</li> <li>(b) to the portion of the existing dairy farming land use that is located within the Water Management Sub-zone* listed in Table 13.1</li> </ul>		<ul> <li>(i) The discharge<sup>^</sup> of grade Aa biosolids<sup>*</sup>, soil conditioners<sup>*</sup> or compost<sup>*</sup> onto or into production land<sup>^</sup> and any ancillary discharge<sup>^</sup> of contaminants<sup>^</sup> into air must comply with the conditions<sup>^</sup> of Rule 13-4.</li> <li>(j) The discharge<sup>^</sup> of poultry farm litter<sup>*</sup> onto or into production land<sup>^</sup> and any ancillary discharge<sup>^</sup> of contaminants<sup>^</sup> into air must comply with the conditions<sup>^</sup> of Rule 13-4B.</li> <li>(k) The discharge<sup>^</sup> of farm animal effluent<sup>*</sup> onto or into production land<sup>^</sup> including: <ul> <li>(i) effluent from dairy sheds and feedpads<sup>*</sup></li> <li>(ii) effluent received from piggeries</li> <li>(iii) sludge from farm effluent ponds</li> <li>(iv) poultry farm effluent</li> </ul> </li> <li>and any ancillary discharge<sup>^</sup> of contaminants<sup>^</sup> into air must comply with the conditions<sup>^</sup>, standards and terms of Rule 13-6.</li> </ul>	practicable manner.