



Meeting of the Environmental Management Committee

Date: Wednesday 12 October 2011
Time: 9.00am
Venue: Council Chamber
Hawke's Bay Regional Council
159 Dalton Street
NAPIER

Agenda

ITEM	SUBJECT	PAGE
1.	Welcome/Notices/Apologies	
2.	Conflict of Interest Declarations	
3.	Confirmation of Minutes of the Environmental Management Committee held on 10 August 2011	
4.	Matters Arising from Minutes of the Environmental Management Committee held on 10 August 2011	
5.	Call for General Business Items	
6.	Action Items From Environmental Management Committee Meetings	3
Decision Items		
7.	Hawke's Bay Land and Water Strategy	7
8.	Update on Taharua Strategy Feedback and Project Review	13
9.	Regional Policy Statement "Built Environment" Plan Change Update	31
10.	Air Quality Plan Change	35
11.	Plan Change Process for Heretaunga Zone - Integrated Catchment Management	83
Information or Performance Monitoring		
12.	Water Quality Trends in Hawke's Bay 1998-2011	87
13.	Statutory Advocacy Matters	91
14.	General Business	101

**HAWKE'S BAY REGIONAL COUNCIL
ENVIRONMENTAL MANAGEMENT COMMITTEE**

Wednesday 12 October 2011

**SUBJECT: ACTION ITEMS FROM ENVIRONMENTAL MANAGEMENT
COMMITTEE MEETINGS**

INTRODUCTION:

1. On the list **attached** are items raised at Council meetings that require actions or follow-ups. All action items indicate who is responsible for each action, when it is expected to be completed and a brief status comment for each action. Once the items have been completed and reported to Council they will be removed from the list.

DECISION MAKING PROCESS:

Council is required to make a decision in accordance with Part 6 Sub-Part 1, of the Local Government Act 2002 (the Act). Staff have assessed the requirements contained within this section of the Act in relation to this item and have concluded that as this report is for information only and no decision is required in terms of the Local Government Act's provisions, the decision making procedures set out in the Act do not apply.

RECOMMENDATION:

1. That the Environmental Management Committee receives the report "Action Items from Previous Meetings".



**Helen Codlin
GROUP MANAGER
STRATEGIC DEVELOPMENT**



**Graham Sevicke-Jones
ACTING GROUP MANAGER
RESOURCE DEVELOPMENT**

Attachment/s

- 1 Action Items from Environmental Management Committee

Actions from Environmental Management Meetings

The following is a list of items raised at Environmental Committee meetings that require actions or follow-ups. All action items indicate who is responsible for each action, when it is expected to be completed and a brief status comment for each action. Once the items have been completed and reported back to the Committee they will be removed from the list.

10 August 2011

Agenda Item	Action	Person Responsible	Due Date	Status Comment
8	Draft Growth and Infrastructure RPS Change	HC	Oct	An update on this plan change is on the agenda, proposing adoption of plan change for notification at an EMC meeting to follow the AMB meeting in November
8	Draft Wastewater Plan Change This item was left to lie on the table. Councillors wanted more detailed information about what the options and the costs of those options might be before giving any indication of the direction they want staff to pursue.	HC		No further work has taken place with respect to the draft change for strategic management of onsite wastewater. Will review policy team workloads following notification of RPS Growth and Infrastructure plan change and receipt of submissions. Report of April EMC
13	Dairy Inspections – National Audit Media release to be prepared to report Council's 100% audit compliance	DL/GSJ/BL	Immed	Completed and released on 15 August 2011

15 June 2011

Agenda Item	Action	Person Responsible	Due Date	Status Comment
14	General Business Membership of the Ruataniwha Stakeholder group There is an apparent gap in the Tukituki representation on the group, particularly irrigators from the lower catchment (mid and lower reaches of the river).	Graeme Hansen		This issue is now on the Ruataniwha project stakeholder agenda and will be addressed through this process. Shortlisted names are being considered.

HAWKE'S BAY REGIONAL COUNCIL
ENVIRONMENTAL MANAGEMENT COMMITTEE

Wednesday 12 October 2011

SUBJECT: HAWKE'S BAY LAND AND WATER STRATEGY

Item 7

Reason for Report

1. The purpose of this report is to present the Hawke's Bay Land and Water Strategy to the Committee for its consideration and comment.
2. The Strategy document evolved following feedback from the External Reference Group on a first draft. Because the Reference Group are only meeting on the day before the Committee meeting to review the final document, it has not yet been distributed publicly.
3. Copies will be available for interested members of the public at the meeting and a media briefing will also be held during the morning tea break following the Committee's consideration of the item.

Strategic Context

4. The Hawke's Bay Land and Water Strategy is a document which outlines the strategic direction for the management of land and water in the region. It is a non-statutory document which means that it is not required to be prepared by law. However, it enables the region's strategic approach to land and water management to be documented in a way that is not regimented by statutory process.
5. It sets out a range of actions that are necessary to implement it and while many of the actions fall under HBRC's legal responsibilities, there are many other actions which fit under the mandate of other industry and statutory sector organisations
6. Many of the actions will need to be implemented through the planning provisions under the Resource Management Act. This document gives the community an early indication of how the land and water management framework might change.

Strategy Development Process

7. The Regional Water Symposium held in November 2010 began a process of community engagement on water issues in Hawke's Bay. The symposium primarily dealt with current and emerging water quantity issues: allocation (and over-allocation); demand and supply (mismatches); and competing values – particularly environmental and economic. Future scenarios for water management and participants' visions for Hawke's Bay were discussed. Land use and water quality was a concern on many participants' minds. A Symposium Report documents the outcomes of the two days.
8. At the symposium, nominations were sought for an external reference group to work with Council on the development of policy and directions for a regional water strategy. 92 nominations were received and from this 21 people were selected. The selection process aimed to ensure fair representation from industry, tangata whenua, environmental advocacy groups and statutory authorities. On 25 February 2011, Council agreed on the Terms of Reference for the group.
9. The Hawke's Bay Regional Water Strategy External Reference Group held its first meeting on February 28th and has had five further meetings. The initial intention was to develop a high level strategy to tackle matters related water quantity in order to deal with water management issues in manageable chunks. Water quantity was the focus of the first four meetings.
10. However, land use and water quality remained a concern and was the topic of discussions during each of the meetings. In April, the National Policy Statement for Freshwater Management was released by Government which included a requirement for Regional Councils to establish water quality targets and limits.

11. By the end of the fourth meeting, the group was ready to consider a draft strategy document and given the group's concern that water quality and land use needed to be addressed, staff indicated that the draft strategy would cover land use, water quality and water quantity.

External Reference Group Review

12. The Reference Group has acted as a sounding board for policy direction and impacts of the policy changes suggested in the Strategy. They have also advised on the actions needed to implement the strategy. The reference group is a key building block in obtaining cross-sector agreement on future water management direction in the wider Hawke's Bay community.
13. The Reference Group will be meeting again on Tuesday 11 October to review this final strategy document. Comments from that meeting will be given verbally to the Committee at its meeting the following date.
14. In addition, all members of the Reference Group have been invited to attend the Committee meeting and make any further comments that they may like. It will also give an opportunity for the Committee to ask any questions of the Group.
15. Staff are confident that we will be in a position that the reference group will collectively endorse the strategy and will assist Council in taking it to their respective sectors for discussion.

Contents of the Land and Water Strategy

16. The contents of the Land and Water Strategy include:
- Introduction, Purpose, Strategy Development Process
 - Drivers of change
 - Essential elements of managing land and water use
 - Values, Guiding Principles and Evaluation Criteria
 - Implementing the Strategy – Roles
 - Vision
 - Six themes relating to:
 - Planning and Governance
 - Sustainable Land Use
 - Sustainable Water Use
 - Information and Communication
 - Priority actions
 - Strategy Outcome and Performance Monitoring
 - Summary of Catchment Values (in Appendix 2)
17. The objectives for each theme are:

Theme	Objective	Summary of approach
Planning and Governance	Government Agencies, land owners, tangata whenua and stakeholders work together towards a unified goal of sustainable land and water management	The development, implementation (with partners) monitoring and review of this strategy, partnering with tangata whenua, prioritisation of catchments, self empowering catchment groups, alignment of investments, transparent and equity in costs of water management, and appropriate transitional provisions.

Theme	Objective	Summary of approach
Sustainable Land Use	The future viability and resilience of the wider Hawke's Bay landscape is enhanced through improved management and land use practices	Focus on increasing the forest cover on erosion prone hill country, and improving site specific farming systems to avoid and reduce environmental effects of intensive farming. Encouraging riparian planting and fencing where appropriate and recognising the services provided by wetlands.
Sustainable Water Use	Long term prosperity of the region is provided through sustainable and efficient water use while maintaining and/or improving the overall quality of the freshwater ecosystems for agreed management objectives	<p>Identifies the need for forward thinking and long term decision making then focuses on water allocation framework, water use, potential water demand and water quality. The water allocation framework includes recognising interconnected water bodies, high flow harvesting, promoting flexible allocation regimes, recognising efficient water use, promoting shared consents and audited self management for increased efficiency gains and recognising large scale community storage infrastructure as a critical element of sustainable solutions in constrained environments.</p> <p>For water use the approach focuses on efficient irrigation systems, conservation and demand strategies for urban and industrial use, measuring water use in a public transparent way and recognising efficient users.</p> <p>Water quality focuses on setting water quality for agreed management objectives, and targeting action where water quality is poor. Land management and riparian initiatives are repeated here from the Sustainable Use of Land section. In addition, exclusion of stock from water ways is actively sought.</p>
Information and Communication	Relevant and timely resource information is collected and communicated in a transparent manner to all interested parties	<p>Science and monitoring data of resource data is available in the public domain and research is available to land managers</p> <p>Action plans to increase community awareness of the value and importance of water</p>
Priority actions	Actions are prioritised to areas where sustainable land management, security of water supply and water quality issues and pressures are most significant or potential economic gains can be enabled	Key issues are identified on a catchment basis, along with current work programmes
Strategy outcome and performance monitoring	Implementation of the Strategy is monitored and reported on a regular basis.	A number of indicators have been identified in the following outcome areas – land management practices, water use, water quality and ecological health, planning instruments and economic development. The implementation structure of an HBRC team / technical advisory group and the continuation of an external reference group is proposed to develop action plans, prepare monitoring reports and review the strategy.

Committee's Review

18. Three Councillors (Crs Wilson, Scott and Remmerswaal) are members of the Reference Group and have a good understanding of how this strategy has been developed.
19. The strategy complements the Council's Strategic Plan so it does not present new directions for the Council.
20. Councillors are encouraged to provide staff with early feedback on the strategy prior to the Reference Group meeting so that these can be discussed by the Reference Group as part of their review.
21. In addition, if there are any significant amendments that the Committee would like to suggest, it would be worthwhile that these are discussed with the members of the Reference Group who are at the meeting to get their feedback on them.

Next Steps

22. It is proposed that the Hawke's Bay Land and Water Strategy, with any amendments following discussions, is presented to the Council at the 26 October meeting for adoption.
23. It is proposed that the Land and Water Strategy will be printed and available in early November.
24. Community engagement will take the form of a 2nd Symposium (one day) to be hosted by HBRC on Wednesday 30th November 2011 at the War Memorial Centre. This will be almost a year to the day from the 1st two day symposium.
25. While specific invitations will be sent to the invitees and participants of the first symposium, this event will be open to the public. However, to manage costs, it will be limited to 150 people.
26. Given the collaborative process that has been used to develop this Strategy and the level of consensus achieved between the stakeholders, the Strategy as adopted will be in its final form. However, the actions are high level and there is still further work required to identify appropriate mechanisms in many areas and discussion and feedback from the stakeholders and community in these areas will ongoing.

Financial and Resource Implications

27. The development of the Land and Water Strategy falls under Project 192 Strategy and Implementation. Budget is available for the design and printing of the Strategy (quoted \$18,900 - \$20,500 excl GST) and holding the 2nd Symposium (approx \$10,000.00) based on 150 participants.

Decision Making Process

28. Council is required to make a decision in accordance with the requirements of the Local Government Act 2002 (the Act). Staff have assessed the requirements contained in Part 6 Sub Part 1 of the Act in relation to this item and have concluded the following:
 - 28.1. The decision does not significantly alter the service provision or affect a strategic asset.
 - 28.2. The use of the special consultative procedure is not prescribed by legislation. The Reference Group represented a wide range of sectors and interests and have been involved in the development of this Strategy.
 - 28.3. The decision does not fall within the definition of Council's policy on significance.
 - 28.4. The persons affected by this decision include all the regional community as they all rely on the region's land and water for their general wellbeing. However, the primary sector community and irrigation water users are particularly affected by the strategic direction outlined in the strategy, hence the use of the Reference Group as assist in its development.
 - 28.5. Options that have been considered include not preparing a Strategy. However, there are many benefits in preparing a land and water strategy. In particular, it

provides an opportunity for early input into policy approaches that are likely to be reflected in statutory regional planning documents.

- 28.6. The decision is not inconsistent with an existing policy or plan.
- 28.7. Given the nature and significance of the issue to be considered and decided, and also the persons likely to be affected by, or have an interest in the decisions made, Council can exercise its discretion and make a decision without consulting directly with the community or others having an interest in the decision.

RECOMMENDATIONS

The Environmental Management Committee recommends that Council:

1. Agrees that the decisions to be made are not significant under the criteria contained in Council's adopted policy on significance and that Council can exercise its discretion under Sections 79(1)(a) and 82(3) of the Local Government Act 2002 and make decisions on this issue without conferring directly with the community and persons likely to be affected by or to have an interest in the decision due to the nature and significance of the issue to be considered and decided.
2. Adopts the Hawke's Bay Land and Water Strategy, subject to any amendments.
3. Endorses the 2nd Regional Land and Water Symposium event to be held on Wednesday 30 November 2011 as the key engagement event.
4. Conveys its appreciation to the members of the External Reference Group for the time and energy they have committed to the development of the Strategy over the last 12 months.



Tim Sharp
STRATEGIC POLICY ADVISOR

Helen Codlin
GROUP MANAGER
STRATEGIC DEVELOPMENT

Attachment/s

- 1 Draft-Embargoed Land & Water Strategy Under Separate Cover
FOR COMMITTEE INFORMATION ONLY

HAWKE'S BAY REGIONAL COUNCIL
ENVIRONMENTAL MANAGEMENT COMMITTEE

Item 8

Wednesday 12 October 2011

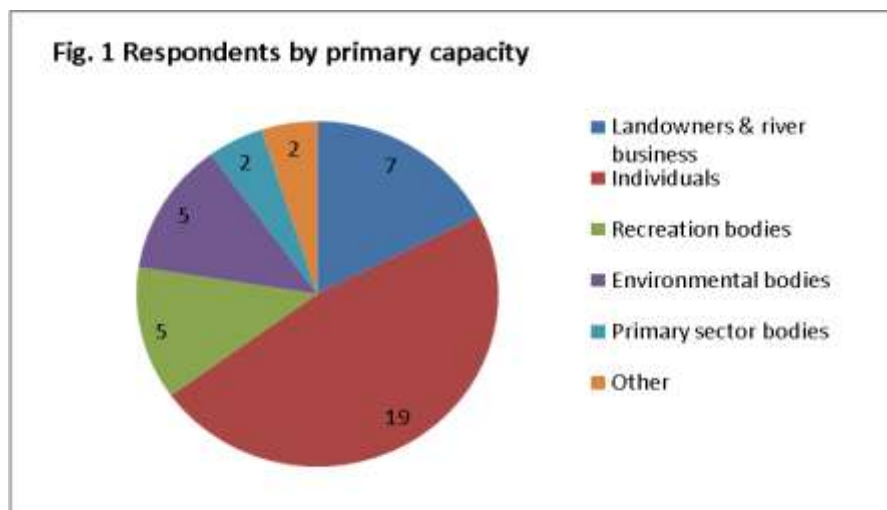
SUBJECT: UPDATE ON TAHARUA STRATEGY FEEDBACK AND PROJECT REVIEW

Reason For Report

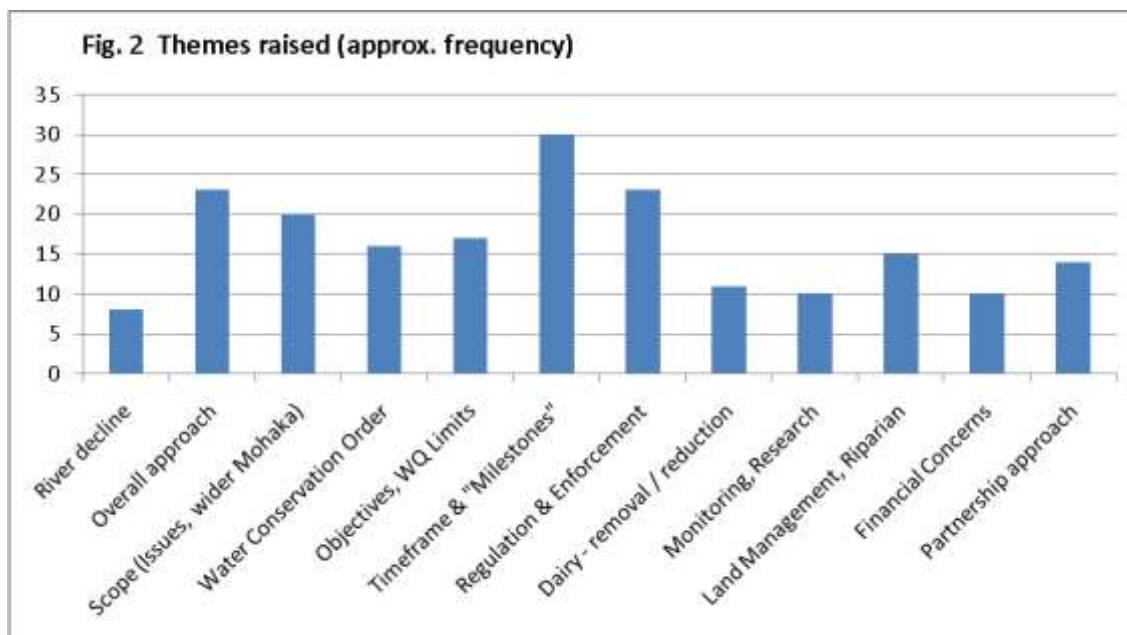
1. This paper provides a progress update on the preparation of a non-statutory Strategy and subsequent plan change to the Regional Resource Management Plan (RRMP) to restore and maintain the health of the upper Mohaka River and its Taharua headwater tributary.
2. Specifically, the report discusses:
 - 2.1. Public comments on the 'Taharua and Upper Mohaka Draft Strategy'
 - 2.2. A Preliminary Review of the Council's process
 - 2.3. A way forward.

Public Feedback On The Taharua And Upper Mohaka Draft Strategy

3. On Council's April instruction, widespread stakeholder and general public consultation was carried out on the Taharua and Upper Mohaka Draft Strategy over the period 20 July to 22 August. The Draft Strategy encapsulates Council's proposed approach to future management and builds on discussions with the Taharua Stakeholder Group (TSG). The consultation was designed to provide a good indication of community reaction (in and beyond Hawke's Bay) prior to detailed policy development. The Draft Strategy is available on www.hbrc.govt.nz (search "Taharua").
4. Staff have collated and summarised the feedback received on the Draft Strategy. A fuller draft report summarising the consultation and public comments has been pre-circulated to Councillors and members of the Council's Maori Committee. The report will soon be published on the Council's website.
5. Forty written responses were received from a range of respondents (Figure 1).



6. The range and frequency of issues raised is indicated in Figure 2 below.



7. An overview of comments received on each of these issues is provided below.
- 7.1. **River decline.** River users with first-hand experience of the water quality decline express frustration that anecdotal evidence appears to have been given little weight in Council's decision-making to date.
- 7.2. **Overall approach.** Concerns are raised that the proposed "balanced approach" for healthy rivers *and* future viability of Taharua farms could compromise the primary objective of restoring and maintaining the integrity of the outstanding upper Mohaka river system for environmental, social, cultural and wider economic benefits. Council's approach to limits and timeframes should embody the "precautionary principle", given the value of rivers and scientific uncertainty.
- 7.3. **Scope of provisions.** The Strategy should take a more holistic approach to:
- 7.3.1. **Issues.** Fish and Game, the Wellington Hawke's Bay Conservation Board (DOC Board) and others consider the Draft Strategy overly focuses on nitrogen (the existing contaminant of concern) instead of the range of factors that can impact river and riparian ecosystem health and biodiversity. This relates particularly to management objectives and water quality limits.
- 7.3.2. **Geographical extent.** There is concern the Draft Strategy does not adequately address land use and intensification risks in the neighbouring Ripia and Waipunga sub-catchments and therefore cannot protect the outstanding characteristics and features of the Water Conservation Order (WCO).
- 7.4. **Water Conservation Order.** The ambiguity of the WCO raises concern that Council is failing its statutory obligations (legal advice has clarified these complex legal obligations). Regardless of legal intricacies, the public clearly attach very high value to protection of the outstanding Mohaka River system and view the WCO as a clear expression of its value.
- 7.5. **Management Objectives and Water Quality Limits.** An ecosystem health and biodiversity approach should be made explicit in clearer, more certain objectives. Proposed limits receive less public attention than timeframes, but this may reflect their technicality. The proposed limits are critiqued by a Fish and Game commissioned report, which questions their current "fitness for purpose".
- 7.6. **Timeframe and progress "milestones".** The 10 year timeframe for landowner action to meet 15 year water quality targets is widely opposed as too long (note: economic assessment of the likely difficulty of meeting targets was not available to inform discussion). More frequent landowner progress "milestones" should be considered to prevent slippage.

- 7.7. **Regulation and enforcement.** Use of regulation to manage Taharua and other sensitive catchments is strongly supported. Opinion is divided on the form this should take. Many support a strong and prescriptive regulatory approach, focussed inputs (e.g. cow numbers, fertiliser), but others advocate a more flexible, “outputs” approach. Regulation must be backed by effective compliance monitoring and enforcement, which is considered too weak to date.
- 7.8. **Dairy restriction or removal.** Many respondents consider dairy an inappropriate Taharua land use due to the catchment’s physical characteristics. Suggested responses range from limiting future dairying to complete removal over time.
- 7.9. **Monitoring and research.** Effective monitoring programmes must be developed upfront to inform progress and timely review (ecosystem health/water quality, farm systems adaptation, dairy compliance, plan effectiveness).
- 7.10. **Land and riparian management.** Land management should address a range of catchment issues, not just nitrogen. This should include phosphorus management, soil health and retention, biodiversity and riparian/wetland enhancement.
- 7.11. **Financial concerns.** Many support a strong “polluter pays” approach, with the onus on dairy farms to pay for river clean-up. Others suggest financial assistance may be appropriate and necessary, given the potential scale of the task and Council’s role in the catchment’s development history.
- 7.12. **Partnership approach.** Council’s partnership with the TSG is widely, if not unanimously, supported providing there is sufficient evidence of progress in restoring river health and adequate opportunity for public and other stakeholder input.
8. In summary, the public consultation highlights important issues for the Council to consider in finalising its Taharua and Upper Mohaka Strategy and developing the statutory plan change. Three key questions are discussed below:
- 8.1. **Should plan change provisions be extended to the Ripia and Waipunga catchments?**
- Extension of plan change provisions to the neighbouring Ripia catchment has merit. The outstanding trout fishery cannot be adequately restored and maintained without this. Developing a Ripia framework may not be too complicated as: proposed limits would be met (current water quality is good); key landowners (not all) are on the TSG; and possible regulation of land use change/intensification could be limited to permitted activity, subject to conditions, or controlled activity status.
- Addressing the Waipunga catchment, which impacts mid-Mohaka water quality¹, is problematic. Issues and values in the middle reach are currently not well understood and differ from the upper Mohaka. Sediment/clarity issues are likely linked with natural vegetation and forestry. An increasing nitrogen trend may be linked with dairy in Bay of Plenty region. A full “Taharua-style” stakeholder process may be required to establish water quality targets and an inter-regional management framework.
- 8.2. **What is an effective suite of management objectives and water quality limits?**
- Improved objectives will be developed with key stakeholders (e.g. Fish and Game, DOC) and the TSG that reflect Council’s intended “ecosystem approach.” Suites of water quality limits will be investigated, with appropriate independent review (note: establishing phosphorus limits may be problematic). Staff agree that nitrogen management alone (albeit the key elevated nutrient) will not ensure future health of the rivers. There is merit in developing a strategy and plan change which ensures effective phosphorus, soil, riparian and wetland management.
- 8.3. **What is an appropriate timeframe for action?**

¹ WCO recognises outstanding value of mid-Mohaka for water-based recreation

Any decision on the timeframe needs to be informed by assessment of on-farm costs of meeting targets and wider cost-benefits. On-farm assessment to date indicates a shorter timeframe may be achievable, but considerable uncertainties have arisen (15.1 below). A shorter timeframe may require financial assistance or see a shift back to a typical adversarial plan change process with parties being more entrenched in their respective interests and positions. Furthermore, eroding existing use rights could be deemed unreasonable under s.85 of the Resource Management Act (RMA).

9. Staff will need to systematically work through these complex issues with key parties and the TSG and report back to Council. This essential work has implications for the plan change timeframe, particularly if the scope of the plan change is to be significantly extended.

Review Of Policy Development Process To Date

10. In light of issues raised by the public and with plan change notification targeted for end 2011, staff commissioned Rob van Voorthuysen to undertake a preliminary review of Council's progress toward systematic policy development. Rob van Voorthuysen is very experienced in this area of land use planning having acted as Hearings Commissioner for the Horizons' One Plan and provided expert planning evidence on Environment Waikato's Variation 5 (Lake Taupo). He is currently providing similar advice to ECan's Commissioners on managing diffuse nutrient discharges. Rob van Voorthuysen's report is included as Attachment 1.
11. Issues highlighted by the public consultation are confirmed by the van Voorthuysen review. The review also confirms that Council still needs to undertake a significant body of work if a systematic policy development process is to be followed. This is particularly the case for policy development Step 3: identifying the full range of potential solutions; codifying the preferred solution within a draft plan change; and justifying it in an accompanying RMA s.32 report.
12. Progress with some critical "Step 3" work streams identified by the review are examined below.
13. **Determining the required reduction in catchment nitrogen load.** NIWA's Mohaka nitrogen model is critical, but substantial delivery delays and checking of model inputs, assumptions and limitations have delayed policy discussions. This time-consuming model building work has been necessary as model outputs will inform the plan change and must withstand scrutiny in the Environment Court. Staff are now confident that the model provides a satisfactory starting point (to be refined over time) and the final report is available. The van Voorthuysen report's recommended steps in section 5(f) can now be carried out as priority work to inform TSG discussion. If required, the model can inform policy development in other upper Mohaka sub-catchments.
14. **Allocation of nitrogen discharge allowances.** This is an essential component of the plan change, but discussions with landowners have been delayed by the NIWA model (above). Meaningful discussion also requires understanding of the financial implications of the task for individual landowners. This major area of uncertainty is discussed below, but could hold up policy development for considerable time.
15. **Economic analysis of benefits and costs of restoring river health.** The van Voorthuysen report confirms that this work is essential to justify a preferred plan change approach. Inadequate analysis risks Environment Court challenge and potential plan modification, deletion or replacement, particularly if any controls render existing uses of land incapable of reasonable use (RMA s85). Staff are progressing the two components required for robust economic analysis:
 - 15.1. **Understanding on-farm costs.** Staff are working with consultants, landowners and DairyNZ to evaluate options to reduce nitrogen leaching on two of the three dairy farms (meaningful assessment of the farm in receivership is not possible). The consultants are examining additional options and a report is likely in November. Reducing nitrogen leaching could theoretically take two paths, but each appear to have some obstacles:

- Approach 1: Reduce intensity of farm system: modelling indicates that by reducing stocking rates, fertiliser inputs and production, farmers may be able to significantly reduce nitrogen leaching while maintaining profitability. However, key uncertainties need addressing: the viability of pasture under low/zero fertiliser regimes (the physical characteristics of the catchment may result in system crash); confidence in Overseer leaching estimates; and lending institutions' acceptance of this approach (see below).
 - Approach 2: Investing in farm infrastructure: use of stand-off pads and herd homes to reduce leaching is being modelled. Investment of this magnitude would mean productivity and profitability would need to increase, therefore more stock. Again, initial discussions suggest banks may not support such additional investment under their current lending regimes.
- 15.1.2. Bank lending policy. Two rural banking managers (one involved with the farms) have indicated bank lending policies may restrict farmers from reducing nitrogen losses by either of the above approaches. This has potentially far reaching implications. It is intended that the Chief Executive will initiate high-level dialogue with the banks. Local bank representatives will also need to be invited to be part of Taharua farm system discussions.
- 15.1.3. Viability of alternative land uses. Consultants have been engaged to examine forestry as an alternative land use within the Taharua catchment. This will inform future catchment management options. The relative merits of forestry and extensive pasture (beef/deer) needs to be investigated as Westervelt (Poronui), are seeking flexibility to replace existing, unviable eucalypt forest. This complicates landowner negotiations and could substantially increase the reduction task for dairy farmers. If alternative forestry is attractive, this may assist negotiations.
- 15.1.4. Clean-up Fund. It is possible that landowners could be assisted in making necessary changes by the Government's recently announced 'Fresh Start for Fresh Water Clean-up Fund.' Staff will apply to the Ministry for the Environment by the 31 October deadline for a share of the currently unallocated national "pot" of \$9 million over 2 years. MfE officials advise that successful regional councils will be notified late January/early February 2012.
- 15.2. **Understanding wider benefits/costs.** If improving water quality results in a significant cost for the landowners, then Council needs to understand the cost-benefit relationship on a wider catchment and regional level. That is, what are the benefits (tangible and intangible) to other landowners, businesses and the community, and do they outweigh the costs? This is important Environment Court evidence, but is a complex and potentially costly task. Initial discussion with specialised resource economists suggests between 3-6 months and \$30-60k+, may be required, although a "bare minimum" approach may be possible.
16. **Development of plan objectives, policies, rules and other methods.** The van Voorthuysen report advises that for a systematic policy development process, Council must address issues highlighted in Step 1 (management objectives) and Step 2 (problem definition) before Step 3 (policy selection) and this needs to be further progressed before staff can meaningfully start developing the policy framework.
17. In the meantime staff have been examining plan change options, the format it might take within the RRMP, including possible wording of objectives and policies consistent with the Draft Strategy.

Taking Stock And Way Forward

18. Until recently, staff had an optimistic view that with the benefits of a relatively small catchment area and a small number of stakeholders, collaboration would see progress made quicker than a traditional, typically adversarial approach to changing regional plans. But the van Voorthuysen report clearly confirms the complexities of dealing with catchment-based responses to diffuse nutrient leaching and resultant water quality problems.
19. Despite Taharua's size, technical complexities are similar to those encountered with the Taupo, Rotorua Lakes and Horizons-Manawatu (OnePlan) regimes. In important respects, the challenge is even greater and precedent setting insofar as:
 - 19.1. it could be the first regulatory regime in the country requiring existing farmers to reduce nutrient loadings to meet water quality targets (ie: not just a 'cap' on nutrients);
 - 19.2. there is currently no multi-million dollar government-approved fund allocated to facilitating nutrient reductions (unlike that available for Lake Taupo and Rotorua lakes); and
 - 19.3. Council is looking for upfront agreement to such a framework, through the TSG partnership, to minimise potentially substantial Environment Court delays and enable real ongoing catchment improvements.
20. The van Voorthuysen report comments that a more feasible timeframe for notification of a plan change than the current deadline of end-2011 could be mid-2012, if sufficient Council resources are available to undertake the remaining work identified in that report. However, given the complexity of the issues and possible policy responses, together with Council's commitment to a collaborative process with the TSG, staff are reluctant to commit to a new date without a comprehensive review.
21. Staff consider there to be no obvious 'shortcuts' to the policy development process. Basically, all work underway is critical to informing finalising the Strategy and preparing a plan change for the Taharua and upper Mohaka Rivers.
22. Given the complexity of the resource management issue to be resolved and the significant implications of the options available, staff propose seeking more comprehensive advice on policy development steps, assessment of resource requirements (both within existing budgets and if any new resources would be necessary), assessment of realistic timeframes for notification and legal advice on implications of RMA s.85 (compensation). The advice would build upon the preliminary van Voorthuysen report, together with this report, particularly in terms of assessing resource requirements and resultant timeframes.
23. Staff also propose regular progress reporting during the remaining phases of finalising the 'Taharua and Upper Mohaka Strategy' and preparation of a change to the Regional Resource Management Plan for this catchment. Staff propose presenting progress report summaries to future meetings of the Environmental Management Committee (and then the Regional Planning Committee once operational). On this basis, the next progress summary is proposed to be presented to the Committee's meeting in February 2012.

Decision Making Process

24. Council is required to make a decision in accordance with the requirements of the Local Government Act 2002 (the Act). Staff have assessed the requirements contained in Part 6 Sub Part 1 of the Act in relation to this item and have concluded the following:
 - 24.1 The decision does not significantly alter the service provision or affect a strategic asset.
 - 24.2 Consultation requirements are set out in the Resource Management Act and are being followed for the process.
 - 24.3 The decision does not fall within the definition of Council's policy on significance.

- 24.4 The persons affected by this decision are the Hawke's Bay regional community.
- 24.5 Options that have been considered in relation to the public comment on Taharua and Upper Mohaka Strategy relate to: (a) refining management objectives and water quality limits; (b) extension of geographical scope to Ripia and Waipunga sub-catchments; and (c) the timeframe for action to meet water quality limits and progress milestones.
- 24.6 Options that have been considered in relation to the Taharua plan change relate to: (a) timing of notification by the end of 2011; and deferral of notification pending fuller assessment of issue complexities, resourcing requirements; realistic timeframes for notification and availability of crucial information to inform collaborative policy development with the TSG.
- 24.7 The decision is not inconsistent with an existing policy or plan.
- 24.8 Given the nature and significance of the issue to be considered and decided, and also the persons likely to be affected by, or have an interest in the decisions made, Council can exercise its discretion and make a decision without consulting directly with the community or others having an interest in the decision.

RECOMMENDATIONS

The Environmental Management Committee recommends that Council:

1. Agrees that the decisions to be made are not significant under the criteria contained in Council's adopted policy on significance and that Council can exercise its discretion under Sections 79(1)(a) and 82(3) of the Local Government Act 2002 and make decisions on this issue without conferring directly with the community and persons likely to be affected by or to have an interest in the decision due to the nature and significance of the issue to be considered and decided.
2. Notes public feedback received on the 'Taharua and Upper Mohaka Draft Strategy'.
3. Receives the van Voorthuysen report (Attachment 1) and notes its conclusion that notification of a Taharua-upper Mohaka plan change by end 2011 is unrealistic.
4. Notes the complexity of the planning environment with respect to managing land uses for water quality enhancement purposes.
5. Agrees that staff continue to compile the information required in order to prepare a robust statutory plan change and associated section 32 evaluation.
6. Agrees that for future Environmental Management Committee meetings, staff present updates outlining progress on significant work streams and that at the February 2012 meeting a comprehensive programme for completion of a robust statutory plan change is prepared for the Committee's consideration.



Chris Reed
SENIOR PLANNER



Brendan Powell
LAND MANAGEMENT OFFICER
INTENSIVE LAND USE



Helen Codlin
GROUP MANAGER

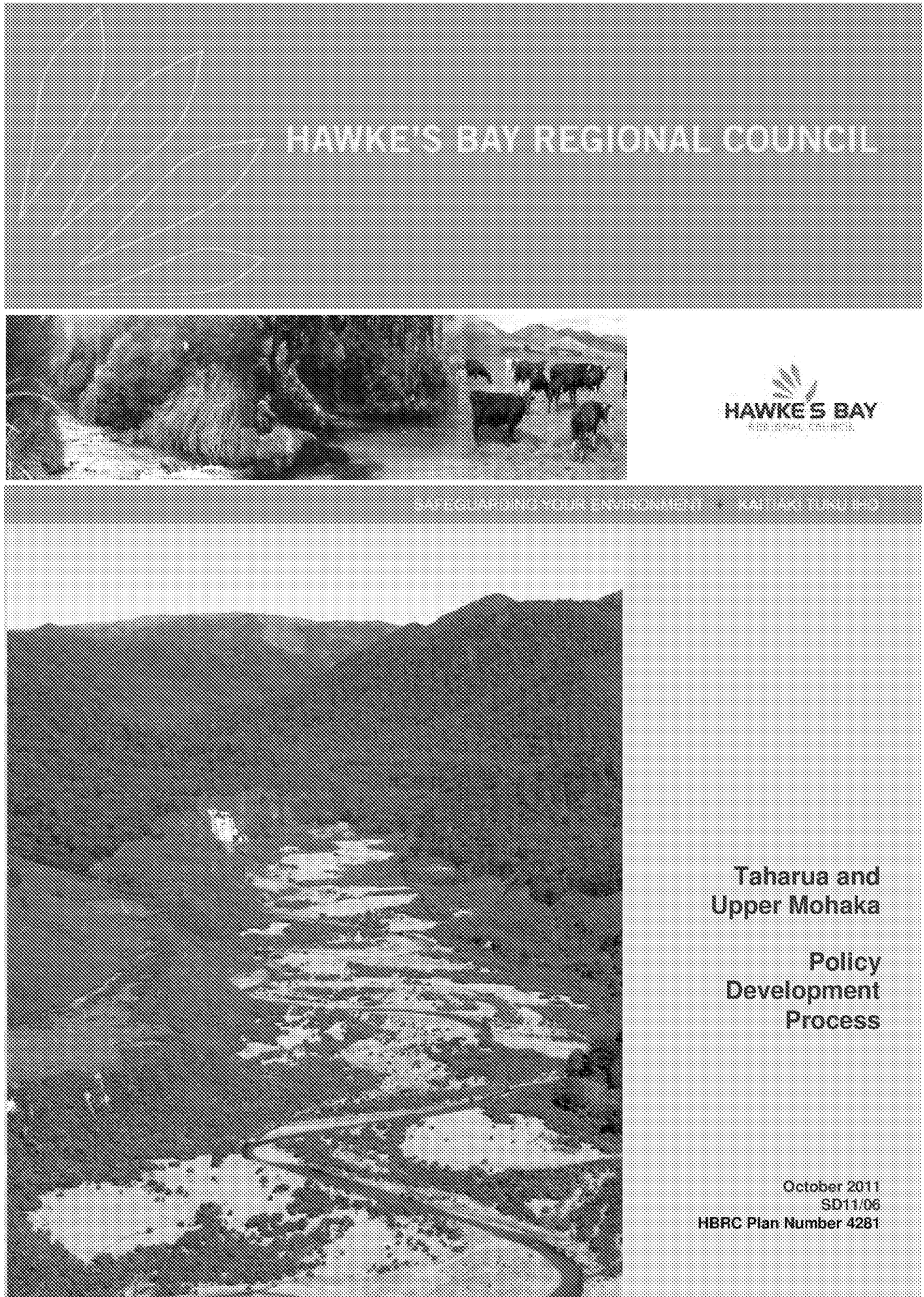


Mike Adye
GROUP MANAGER
ASSET MANAGEMENT

STRATEGIC DEVELOPMENT

Attachment/s

- 1 Taharua Upper Mohaka Policy Development Process





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Strategic Development Group

Taharua and Upper Mohaka Policy Development Process

Prepared by:
Rob van Voorthuysen (Director: van Voorthuysen Environmental Ltd)

October 2011
SD11/06
HBRC Plan Number 4281

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Contents

Executive Summary 1

1 Introduction 1

2 Clear objectives 1

4 Problem definition 3

5 Range of solutions and solution selection 3

6 Implementation and monitoring 5

EXECUTIVE SUMMARY

This report assesses the Hawke's Bay Regional Council's (Council) progress in addressing the land use and water quality issues for the Taharua and Upper Mohaka catchments. The progress that has occurred to date has been undertaken in collaboration with the Taharua Stakeholder Group (TSG). This report is based on contents of the 'Taharua and Upper Mohaka Draft Strategy' which was prepared for the purposes of public consultation, rather than an in depth review across all of Council's work programmes. This report follows on from a report prepared for Council in July 2009¹ dealing with generic policy development considerations for land use intensification. The July 2009 report identified a number of sequential policy development steps:

- (i) Having **clear management objectives** for the natural resources
- (ii) Properly **defining the problem** that pertains to those resources
- (iii) Identifying the full range of **potential solutions** to resolve the problem and **selecting** the most appropriate solution based on an objective comparison of the advantages and disadvantages of each
- (iv) **Implementing** the selected solution and **monitoring** its performance in terms of resolving the actual defined problem

Council has substantial further work to do to on each of these steps for the Taharua and Upper Mohaka catchments, particularly in terms of step (iii) – identifying the solutions. The current deadline of plan change notification by the end of 2011 is unrealistic. A more feasible timeframe could be mid-2012 if sufficient Council resources are available to undertake the remaining work identified in this report. However, the complexity of the issues and possible policy responses, together with Council's commitment to a collaborative process with the TSG, adds uncertainty to the timeframe.

1 INTRODUCTION

In recognition of its statutory function under section 30(1)(c)(ii)² of the Resource Management Act (RMA) the Council has been considering an appropriate response to the identified effects of land use intensification on water quality in the Taharua and Upper Mohaka catchments. Council has chosen to follow a collaborative policy development process with the TSG, as the main multi-stakeholder working party. Council's progress to date is encapsulated in its July 2011 Draft Strategy report.³ Council has received submissions on that document and these have been summarised by Council staff.

This report discusses Council's progress to date in terms of each of the four steps set out above. As set out in the Draft Strategy, a key component is the notification of a specific Change to the Regional Resource Management Plan (RRMP).

2 CLEAR OBJECTIVES

It is impossible to identify whether or not a resource management problem exists unless the management objectives for the resource in question are clear and certain. In simple terms, unless there are clear management objectives there is no 'yardstick' against which to judge whether or not a problem exists. Council's science monitoring and investigations have

¹ Regional Resource Management Plan Land Use Intensification Policy Development Process Considerations, July 2009

² Every regional council shall have the following functions for the purpose of giving effect to this Act in its region:

(c) the control of the use of land for the purpose of – ...

(ii) the maintenance and enhancement of the quality of water in water bodies and coastal water:

³ Taharua and Upper Mohaka Draft Strategy, A Discussion for Future Management, July 2011

shown that the region-wide water quality objectives of the Regional Policy Statement are not being achieved in the Taharua and upper Mohaka catchments. Accordingly, Council's Draft Strategy proposes specific management objectives for the future health of the Taharua and upper Mohaka rivers.

The objectives derived to date are set out on page 8 of the Draft Strategy. They are:

Taharua

- Promote biodiversity values
- Provide suitable conditions for a high-value trout fishery and healthy native fishery

Upper Mohaka

- Protect the high natural character
- Reduce downstream impacts to a level acceptable to the Hawke's Bay community

If we ask ourselves the key question "are these objectives clear and certain," the objectives are adequate for a public consultation document (which it is understood the Draft Strategy was), but it is obvious that the proposed management objectives would benefit from further refinement prior to them being promulgated in a regional plan change. This would include:

- a) The term "Promote biodiversity values" is vague and uncertain. What does this actually mean? Does it relate to terrestrial biodiversity or just instream biodiversity? Does it apply to the main stem of the Taharua and Upper Mohaka rivers or to their tributaries as well? It is also arguably redundant given the second objective.
- b) The term "Provide suitable conditions for a high-value trout fishery and healthy native fishery" is reasonably clear and certain but it could usefully refer to "Restore and maintain" instead of "Provide", recognising that existing water quality degradation needs to be remedied. Also the term "conditions" should be clarified – what does it mean? Is it water quality only (and if so which water quality parameters) or does it include matters such as riparian vegetation and the facilitation of public access to the rivers?
- c) The term "Protect the high natural character" suggests that the existing level of natural character is to be maintained. Is this the case or is remediation to some former state (pre-dairy farming) desired? Also natural character is a subjective term. It would be better to define measurable characteristics of natural character such as water quality, riparian vegetation and acceptable levels of periphyton growth.
- d) The term "Reduce downstream impacts to a level acceptable to the Hawke's Bay community" is vague and uncertain. What does "downstream" mean – downstream from where to where? What "impacts" are referred to? These should be specified (such as water quality and levels of periphyton growth). The phrase "to a level acceptable to the Hawke's Bay community" is meaningless. It is up to Council to set that level (following appropriate consultation) and test that through the RMA First Schedule process, taking account of public feedback on the Draft Strategy. In that regard it is clear from the submissions received that there is a desire to restore the Upper Mohaka water quality to the state it was in prior to dairy farm development in the Taharua.
- e) Council should also include objectives for land use that will enable the achievement of the water quality objectives. For example, does Council wish to maintain current land use or see it change? Does it wish to preclude further dairy conversions in the Taharua, Ripia and Waipunga catchments? Does it wish existing farms to remain financially viable?

Until Council addresses these matters it is arguable that Council has not yet completed the essential first step in the policy development process – having clear management objectives for the natural resources to be managed.

4 PROBLEM DEFINITION

Once clear and certain objectives are formulated the fundamental next step is to identify the problem(s) with the natural resources under consideration. Namely, the identification of where the Plan objectives are not being met. This necessitates the obtaining of hard data, namely verifiable monitoring data, as opposed to anecdotal evidence or simple assumptions based on community consultation or lay person observations.

In this case it appears that the problem has been well defined (excessive nitrogen leaching leading to nitrogen toxicity in the Taharua and unacceptable periphyton growth in the upper Mohaka) and the cause of the problem has also been identified (the four farms in the catchment as there are no point source discharges to the rivers). Council should however ensure its body of evidence is clearly documented and address any remaining gaps it may be aware of.

5 RANGE OF SOLUTIONS AND SOLUTION SELECTION

Having adequately achieved the problem definition step, and assuming that the management objectives will be refined as discussed above, the Council can now proceed to selecting a solution. It is in this area that the Council has yet to undertake a large body of work. It appears that a number of matters still need to be addressed as follows:

- a) It is unclear what the geographic scope of the intended plan change is. If it is to cover the Upper Mohaka catchment above Glenfalls then the plan change will need to include the Ripia River. If it is to extend further down the Mohaka River then it will need to include other catchments such as the Waipunga River.
- b) The veracity of the water quality targets specified in the Draft Strategy needs to be verified as the proposed targets have been challenged by submitters on technical grounds. A scientific report needs to be prepared that addresses the technical concerns raised by the submitters and either confirms the nitrate toxicity target and the total nitrogen targets or derives alternative numerical values.
- c) The scientific report discussed above should also justify the focus on nitrogen and explain why water quality targets are not being set for sediment, phosphorous and perhaps faecal coliforms.
- d) It seems more logical to set the Taharua nitrate toxicity target immediately downstream of the existing dairy farms so that it 'captures' the contributing land uses of concern. The Twin Culverts site may be inadequate for that purpose, as identified by submitters.
- e) A total nitrogen water quality target (instantaneous water quality concentration measured in mg/l or ppm) may need to be set for the Taharua River just above its confluence with the Mohaka River. This would be based on both toxicity for fish in the Taharua and acceptable periphyton growth levels in the Upper Mohaka. Until this is done there is no way of determining what the allowable nutrient load for the Taharua catchment should be. In addition, a total nitrogen load (kgN/year) needs to be set for the Taharua catchment at that same location. The total nitrogen load should be determined to ensure that the above water quality targets can be met.
- f) Using the Mohaka catchment nutrient model developed by NIWA, the following steps are advised:
 - i. The existing total nitrogen load generated by existing land uses in the Taharua catchment needs to be determined. It should be based on modelled Overseer leaching rates for the four farms and estimated nitrogen leaching rates for the forestry and non-productive land⁴. It should also include nitrogen inputs from

⁴ Such land generally leaches at the rate of 3kgN/ha/year

other sources such as rainfall and atmospheric deposition. It is understood that the catchment nitrogen load can be modelled by NIWA.

- ii. The existing total nitrogen load needs to be split into a 'manageable' component (namely that deriving from the four farms) and an 'unmanageable' component (namely that deriving from forestry, unproductive land, rainfall and atmospheric deposition). It is the 'manageable' load that will be the focus of the plan change's policies and rules.
- iii. The allowable total nitrogen load required in order to meet the total nitrogen target for the Taharua River catchment needs to be determined and compared to the existing total 'manageable' load. This will confirm the nitrogen reduction target in the Draft Strategy which is understood to be around 30,000 kgN/year.
- g) The confirmed nitrogen reduction target needs to be allocated across the existing land uses (namely the four farms). It should be assumed that forestry and non-productive land cannot further reduce their nitrogen leaching.
- h) As a reduction in catchment nitrogen leaching will be required, the plan change should preclude any increase in existing property nitrogen leaching levels. Offsetting increases by decreases elsewhere in the catchment would only achieve the status-quo which is not adequate in this case.
- i) If the existing land uses primarily causing the water quality degradation (the dairy farms) will be required to reduce their leaching, then an initial leaching rate (or nitrogen discharge allowance) needs to be assigned to each property. This can be achieved by averaging (each farm is allowed to leach the same amount per hectare – being the allowable catchment load attributed to the productive land divided by the total number of hectares farmed) or grand-parenting (whereby each property is allowed to leach the amount of nitrogen leached in a selected base year – probably 2011 in this case). The Lake Taupo plan variation evidence clearly established that grand-parenting is the global norm in situations like this and is the more equitable approach.
- j) Nitrogen reduction targets would then be set for each dairy farm. These can be derived in several ways including:
 - Pro-rata reductions from existing leaching rates to achieve the catchment wide nitrogen reduction target (for example everyone reduces by 20%)
 - Reductions to what can be economically achieved on each property using all available best management practices
 - Reducing leaching to what the 'natural capital' of the land can support based on LUC⁵
- k) Each of the possible scenarios should be modelled to see if the catchment wide nitrogen reduction target can be met (the first option above would clearly meet that aim if the percentage reduction mirrored the catchment nitrogen leaching reduction target). If it cannot, then more intrusive regulatory measures will be required such as land retirement or a reduction in stock numbers. Reducing nitrogen leaching in this way is problematic as it erodes existing use rights. While this is not precluded by the RMA, care needs to be taken that the land in question is not rendered incapable of reasonable use. If it is, then s85 of the RMA comes into play and the Environment Court can direct the relevant plan to be modified, deleted or replaced. The need to avoid this pitfall is one of the reasons why the Waikato Regional Council has elected to cap existing leaching levels by ways of rules and then achieve nitrogen reductions in the Lake Taupo catchment voluntarily⁶ through the use of a \$81.5⁷ million fund

⁵ This is the Horizons Regional Council One Plan approach

⁶ The Public Fund will be used to purchase nitrogen – mainly by buying and retiring farms.

⁷ It was estimated that 13,500 hectares of pasture (assuming average pasture leaching of 13.75 kilograms of nitrogen per hectare per year) or 26 percent of the pasture land in the catchment (13500/52500), would be required to be converted from

administered by the Lake Taupo Protection Trust.⁸ Namely, if the community desires legitimate farming activities to cease trading or even reduce their financial returns, then the community should pay.

- l) A decision would need to be made on whether to base the necessary rules on s9 (relating to controls on use of land) or s15 (relating to discharges of contaminants) of the RMA. Work in other regions suggests that s9 is more appropriate with a 'catch-all' s15 rule for point source discharges such as farm dairy effluent.⁹ It is assumed that s14 (restrictions relating to water) is not an option as there is not widespread clean water irrigation occurring on the farms.
- m) A realistic timeframe for achieving the catchment nitrogen reduction target should be set. The submissions on the Draft Strategy suggest a shorter timeframe than 10 years should be considered.
- n) The plan change rules would need to specify how the nitrogen leaching reductions are to be achieved for each farm (such as in annual steps over five years).
- o) The plan change should also consider compulsory fencing and planting of riparian margins on the four farms, as was suggested by a number of submissions. This would extend the voluntary commitments of the Clean Streams Accord (for the three dairy farms) and would assist with reducing the output of other contaminants of concern to submitters including sediment, phosphorous and faecal coliforms.
- p) To add a further level of complication to this matter, the identification of the possible solutions and the selection of the desired solution must occur in a manner that is consistent with the requirements of s32 of the RMA. This will necessitate an economic analysis of the costs of change for the four farms and the cumulative costs across the catchment, including multiplier effects on the wider regional economy¹⁰. These real and tangible costs would need to be matched by a quantifiable environmental benefit. In the case of Lake Taupo, the assumed benefit was the avoidance of a multi-million dollar loss of recreation sector derived revenue should the Lake water quality become degraded. In the case of the Taharua and upper Mohaka Rivers, the adverse effects of degraded water quality on downstream users (commercial rafters and kayakers, commercial angling guides, other tourism operators, and private recreational users – including many of the submitters) should be estimated by a suitably qualified and experienced resource economist.
- q) If the plan change is to include the neighbouring Ripia and Waipunga catchments, then the steps outlined above must also be completed for those catchments. Council should not simply extrapolate data from one catchment to another or one aquifer to another as this will inevitably be exposed under cross-examination when the plan change proposal is tested in Council and Court hearings.
- r) The 'solution' needs to be codified into objectives, policies, rules and other methods.

6 IMPLEMENTATION AND MONITORING

Once a solution to the problem has been selected then Council must implement the solution and monitor its effectiveness (ongoing monitoring is essential). An effective implementation and monitoring framework needs to be developed upfront but it does not need to be contained in the plan change. That would lack flexibility (changes to the monitoring framework would need to occur by way of a First Schedule process) and the monitoring framework would be better included in a non-statutory monitoring plan.

pasture to forestry at a cost of \$5000 per hectare. Thus the actual cost of the reduction was estimated to be \$67.5 million plus \$14 million for research and administration costs (total \$81.5 million).

⁸ Jointly funded by Central Government, EW and the Taupo District Council.

⁹ The author has recently prepared a report on this matter for Environment Canterbury.

¹⁰ For example, Horizons RC did not do this prior to the notification of the One Plan, but it subsequently commissioned PGG Wrightson Consulting to prepare such a report.

Water quality needs to be intensively monitored at each of the sites where in-stream nitrogen water quality targets are set. Periphyton levels in the upper Mohaka should be monitored at the water quality target sites.

Land use change should also be monitored (the area of the catchment(s) in various land uses) as should the extent of riparian retirement and planting.

On-farm leaching rates will need to be assessed annually to ensure compliance with the individual farm nitrogen leaching reduction requirements. This can be achieved by undertaking annual Overseer modelling for each farm. Council will need to ensure auditing of any Overseer modelling undertaken by the farmers themselves is effective and consistent.

HAWKE'S BAY REGIONAL COUNCIL
ENVIRONMENTAL MANAGEMENT COMMITTEE

Item 9

Wednesday 12 October 2011

**SUBJECT: REGIONAL POLICY STATEMENT "BUILT ENVIRONMENT" PLAN
CHANGE UPDATE**

Reason For Report

1. This report provides an update on preparation of the 'Built Environment' Change to the Regional Policy Statement (RPS). Staff had previously indicated that a final draft plan change could be presented to this Committee meeting, but staff now consider it premature to do so until additional work is undertaken.

Update

2. This report follows on from a report presented to the Environmental Management Committee in August 2011. The Committee had endorsed a draft proposal changing the RPS to address management of the built environment.
3. Since the August meeting, several actions have occurred, most notably:
 - 3.1. Staff revised the Draft Change to accommodate matters arising at the Committee meeting;
 - 3.2. Draft Change was circulated to a range of key stakeholders inviting their feedback (originally by 30 September which was a tight timeframe), now extended to 20 October;
 - 3.3. Draft Change and explanatory material posted on Council website;
 - 3.4. Advisory notice given to submitters on HPUDS referring to material on website;
 - 3.5. Draft Change presented to HPUDS Implementation Committee meeting on 13 September;
 - 3.6. Drafting underway to prepare a s32 Evaluation summary report on the RPS Change; and
 - 3.7. Legal review of Draft Change commissioned and underway.
4. An initial deadline of 30 September for stakeholder and public feedback was tight and has since been extended to 20 October. This consequently meant feedback would not 'fit' timing to finalise a Draft Change and present a 'Final Draft Change' to the Committee's 12 October 2011 meeting. However follow-up actions as a result of the HPUDS Implementation Committee also meant a need to extend the timeframes for notification.

Hastings District Council's intensification assessment

5. Hastings District Council expect that its urban intensification assessment² will be completed shortly. This will complement the assessment and identification of future greenfield growth areas nominated in HPUDS and embedded in the Draft RPS Change.

HPUDS Implementation Committee (IC)

6. The Draft RPS Change was presented to the HPUDS IC on 13 September. The matter urban limits being defined in the RPS was discussed at length. The HPUDS IC

² NOTE: Hastings District Council have nearly completed Stage 1 of their Medium Density Development Strategy (which addresses Action 9 section 5.16 of HPUDS) "to undertake further work on the intensification targets in order to 'ground truth' capacity of existing urban areas to accommodate the levels envisaged. This may involve some refinement of the settlement pattern and needs to occur before specific lines on a map are included in the Regional Policy Statement."

requested that the HPUDS TAG³ (technical advisory group) to look at how urban limits could be mapped/represented in a way that provided clear direction in the face of private plan change requests and resource consent applications etc, while also providing flexibility in relation to district plan changes. Regional Council staff have requested specific legal advice on the implications associated with mapping and/or defining urban limits in the RPS. Advice has also been sought now on any legal implications for territorial authorities and district plans if the RPS were to map greenfield growth areas using one of several styles (ie: with same approximation as mapped in HPUDS; with indicative location 'X' markers only; or a hybrid style).

7. Given the importance of getting this right in the RPS, the HPUDS TAG have taken a 'make haste slowly' approach. Regional Council staff support this approach and now propose to bring the plan change back to the Council for consideration and adoption in November.

Steps to Notification

8. The steps to be taken before content of a draft RPS Change can be finalised and adopted include:
 - 8.1. incorporation of comments and recommendations arising from the legal review by Simpson Grierson;
 - 8.2. incorporation of feedback from key stakeholders and wider public;
 - 8.3. clarification of how the RPS Change can define future greenfield growth areas and urban limits for the Heretaunga Plains sub-region;
 - 8.4. completion of project by Hastings District Council on intensification to complement RPS Change's provisions that relate to urban intensification, greenfield growth in limited circumstances, limited rural lifestyle developments, and provision of appropriate infrastructural services; and
 - 8.5. finalising s32 evaluation summary report, particularly accommodating any revisions arising from feedback and legal review.
9. Staff anticipate that a final draft change and supporting section 32 report for the Committee's consideration (incorporating public feedback and legal reviews) will be finalised in time to present to the last scheduled committee meeting day of 2011 – the Asset Management and Biosecurity Committee meeting on 16 November. This timing would mean the Council could choose to adopt the Change and notify it prior to Christmas.

Decision Making Process

10. Council is required to make a decision in accordance with the requirements of the Local Government Act 2002 (the Act). Staff have assessed the requirements contained in Part 6 Sub Part 1 of the Act in relation to this item and have concluded the following:
 - 10.1. The decision does not significantly alter the service provision or affect a strategic asset.
 - 10.2. Consultation requirements for plan changes are set out in the Resource Management Act and those are being followed for this Draft RPS Change.
 - 10.3. The decision does not fall within the definition of Council's policy on significance.
 - 10.4. The persons affected by this decision are the Hawke's Bay regional community.
 - 10.5. Options that have been considered include to postpone consideration of documents to Change the RPS for managing the built environment; or to adopt the documents in their current state before feedback and legal reviews are complete.
 - 10.6. The decision is not inconsistent with an existing policy or plan.

³ HPUDS TAG comprises Helen Codlin (Regional Council), Alastair Thompson (Napier City Council), Mark Clews (Hastings District Council) and their respective policy team leaders/managers.

- 10.7. Given the nature and significance of the issue to be considered and decided, and also the persons likely to be affected by, or have an interest in the decisions made, Council can exercise its discretion and make a decision without consulting directly with the community or others having an interest in the decision.

Recommendations

The Environmental Management Committee recommends that Council:

1. Agrees that the decisions to be made are not significant under the criteria contained in Council's adopted policy on significance and that Council can exercise its discretion under Sections 79(1)(a) and 82(3) of the Local Government Act 2002 and make decisions on this issue without conferring directly with the community and persons likely to be affected by or to have an interest in the decision due to the nature and significance of the issue to be considered and decided.
2. Agrees to defer the adoption of a 'Built Environment' Change to the RPS until a meeting of the Environmental Management Committee to be scheduled following the Asset Management and Biosecurity Committee meeting on 16 November 2011.



Gavin Ide
TEAM LEADER POLICY



Helen Codlin
GROUP MANAGER
STRATEGIC DEVELOPMENT

Attachment/s

There are no attachments for this report.

HAWKE'S BAY REGIONAL COUNCIL
ENVIRONMENTAL MANAGEMENT COMMITTEE

Wednesday 12 October 2011

Item 10

SUBJECT: AIR QUALITY PLAN CHANGE

Reason For Report

1. Appeals against Council's decisions on Change 2 to the Regional Resource Management Plan have virtually all been settled without the need for an Environment Court hearing. This report seeks Council's in-principle agreement that Change 2 should be declared operative from 1 January 2012, providing appeals are settled within the next few weeks.
2. Once operative, Change 2 will give impetus to Council's efforts to improve air quality in the Napier and Hastings Airsheds. Results of monitoring PM₁₀ concentrations during the past winter show some positive aspects compared to previous years but a downward trend in concentrations needs to be firmly established to meet the National Environmental Standards (NES) in 2016 in Napier and 2020 in Hastings.

Background

3. Change 2 and Variation 2 were proposed so that measures could be introduced to help residents of Hawke's Bay enjoy good air quality throughout the year. Monitoring shows that on occasions during winter air quality in the Napier and Hastings Airsheds reach levels that breach the NES and the primary cause is the burning of wood for domestic heating.
4. Three appeals were lodged against Council's decisions on Change 2 and Variation 2. The appeal by Horticulture NZ was settled earlier this year. Napier City Council withdrew its appeal in August 2011 resulting in no amendments to Change 2 or Variation 2.
5. At the time of writing, an agreement signed by Solid Energy NZ Limited and all relevant parties was about to be presented to the Court. The Environment Court will process that agreement before issuing its approval (known as a 'Consent Order') to settle the appeal by Solid Energy NZ Limited.
6. Appeals on Variation 2 to the proposed Regional Coastal Environment Plan have also been similarly settled. However, the same steps do not apply to Variation 2 because Variation 2 amends a proposed plan that itself is not yet operative.
7. Assuming the Court does approve the signed Solid Energy appeal agreement, all matters in appeals will be settled in a matter of weeks. This means all provisions in Change 2 will be 'beyond challenge' and then deemed operative. The last remaining procedural step requires Council to "approve" Change 2 and declare the Change "operative" from a specific date.
8. A copy of Change 2 is attached. The attachment highlights the last few provisions pending settlement of the appeal by Solid Energy NZ Limited.

Making The Plan Operative

9. A Council resolution is required to make Change 2 operative. For Change 2 to become operative, the Council must first formally 'approve' the change and then decide on a date from when the Change is operative. The Council must then give public notice of the date from which Change 2 will become operative.
10. This decision is merely a procedural step. It is not an opportunity to re debate the content of Change 2. If Council is inclined to now modify some or all of the content of Change 2, then that must follow due process as a separate plan change – not an add on at this step in the process.

Rule 18h - Time Of Sale Rule

11. Some parts of Change 2 are already 'beyond challenge' such as Rule 18h (commonly referred to as the 'time of sale rule'). However, the wording of Rule 18h means that it will not come into force until the Council declares Change 2 operative and specifies a date from which provisions in Change 2 become operative.
12. Rule 18h applies to properties only within the Napier Airshed or Hastings Airshed. Rule 18h prohibits the use of any non-compliant burner on a property after that property has been transferred (sold), effectively meaning new occupants can only use alternative cleaner home heating options.
13. Rule 18h comes into force after the rule is made operative. In order for this to happen, the Council needs to resolve that Change 2 is to be made 'operative' and must give notice of a date when the Change becomes operative.

Setting An Operative Date

14. Staff recommend that Council agree in-principle that the operative date for Change 2 (so Rule 18h consequently comes into force) be set at 1 January 2012, given uncertainty over exactly how long it may take the Court to approve the signed Solid Energy appeal agreement. Agreeing an in-principle date will provide a lead in time of nearly three months (October – December) before Rule 18h potentially comes into force.
15. Setting the operative date at 1 January 2012 will mean that Rule 18h, the open fire phase-out date; and the operative date for Change 2 will all occur on the same day.
16. Staff propose that this in-principle date of 1 January 2012 will be confirmed at a scheduled Council meeting in November or December once the Court approves the Solid Energy appeal agreement. Equally, the date can be revisited in the unlikely event that the Court does not accept the signed agreement.
17. A communications strategy has recently been prepared for the purposes of communicating the implications and timing of Rule 18h ahead of the prohibition coming into force. The communications strategy features details of Rule 18h being sent out with rates notices (but not any details of precisely when the rule comes into force); a story published in the Council's newsletter; and a media release informing media readers/listeners of the burner phase-out rules no longer being subject to appeals. The communications strategy also identifies staff having targeted discussions with branch representatives of real estate agents, Hawke's Bay valuers and conveyancing lawyers after Council adopts in-principle a specific operative date.

Trends In Pm₁₀ Concentrations

18. The Council has two sites that are dedicated to permanent and continuous monitoring of PM₁₀ concentrations, one at St John's College in the Hastings Airshed and the other at Marewa Park in the Napier Airshed. Both have been operating since 2006 and both have recorded 24 hour averaged PM₁₀ concentrations in excess of the NES (50µgm⁻³) every year during winter months. Repeated failure to meet the NES reinforces the need for Change 2 (and Variation 2) to work alongside the financial assistance offered by Council for conversions to clean heating.
19. Figure 1 shows the number of times the NES has been exceeded in Hastings each winter since 2006. In 2011 there were 12 such occasions. This equals the previous lowest total recorded in 2009 despite there being a greater prevalence of cool, calm conditions (or 'characteristic days') which are conducive to high PM₁₀ concentrations. The maximum and average concentrations across the winter were below those recorded in the previous five years.

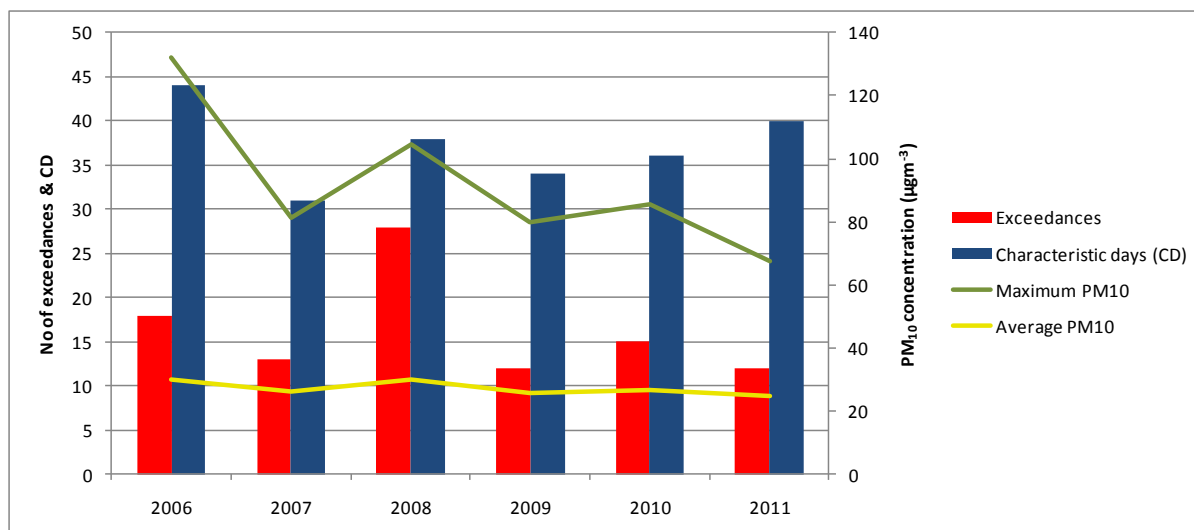


Figure 1: Hastings Airshed PM₁₀ trends

20. In Figure 2, PM₁₀ concentrations in Napier exceeded the NES on four occasions this year (see graph below), which is one more than occurred in the previous two years however cool, calm days were more common. The maximum concentration was the second lowest since 2006 and the winter average concentration fell below all other years.

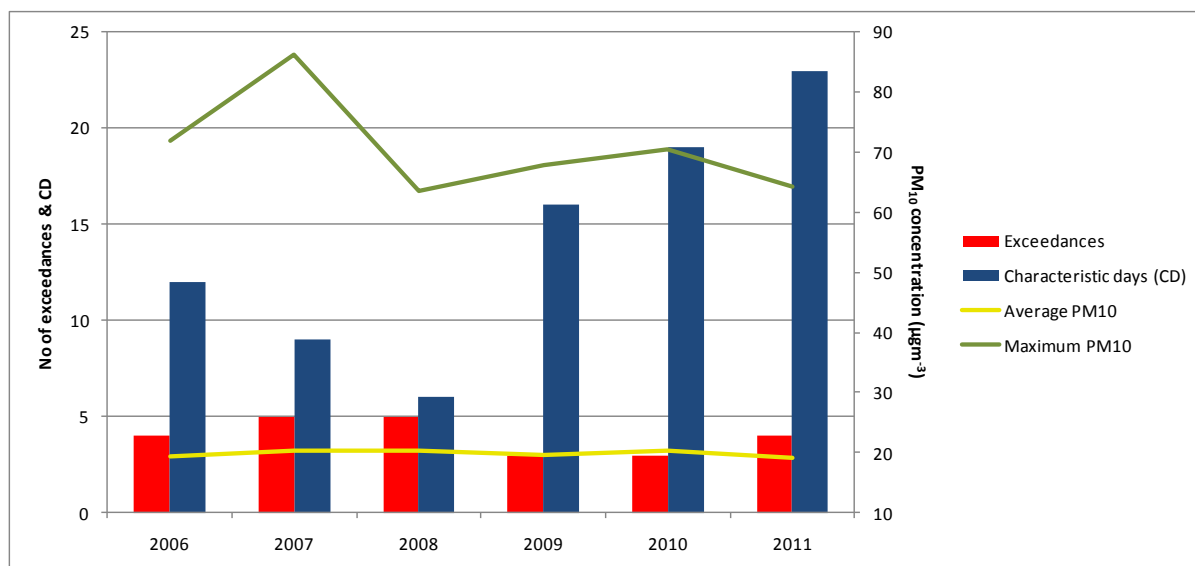


Figure 2: Napier Airshed PM₁₀ trends

21. Normalised PM₁₀ concentrations, adjusted to account for varying meteorological conditions, are trending downward in Hastings while Napier's results this year were very similar to last year.
22. PM₁₀ monitoring this year shows some encouraging signs that Council's initiatives to date to improve air quality may be having some effect, particularly in Hastings, but significant decreases in ambient concentrations of PM₁₀ are needed to meet the NES. Any downward trend in concentrations should gain more traction once rules in Change 2 become operative.

Summary

23. Agreement in-principle is sought to adopt Change 2 and the date at which the Change will become operative so that an appropriate lead-in time can be given to residents and property advisors regarding the 'time of sale' rule (Rule 18h). Once the last appeal has been settled, the Change and the operative date will be submitted directly to a Council meeting for adoption.

Decision Making Process

24. Council is required to make a decision in accordance with the requirements of the Local Government Act 2002 (the Act). Staff have assessed the requirements contained in Part 6 Sub Part 1 of the Act in relation to this item and have concluded the following:
 - 24.1. The decision does not significantly alter the service provision or affect a strategic asset.
 - 24.2. Consultation requirements for plan changes are set out in the Resource Management Act and have been followed for Change 2.
 - 24.3. The decision does not fall within the definition of Council's policy on significance.
 - 24.4. The persons affected by this decision are the Hawke's Bay regional community.
 - 24.5. Options that have been considered include to approve Change 2; not approve Change 2; and to approve in-principle pending confirmation of signed appeal agreements from the Environment Court; and selection of various possible operative dates.
 - 24.6. The decision is not inconsistent with an existing policy or plan.
 - 24.7. Given the nature and significance of the issue to be considered and decided, and also the persons likely to be affected by, or have an interest in the decisions made, Council can exercise its discretion and make a decision without consulting directly with the community or others having an interest in the decision.

Recommendations

The Environmental Management Committee recommends that Council:

1. Agrees that the decisions to be made are not significant under the criteria contained in Council's adopted policy on significance and that Council can exercise its discretion under Sections 79(1)(a) and 82(3) of the Local Government Act 2002 and make decisions on this issue without conferring directly with the community and persons likely to be affected by or to have an interest in the decision due to the nature and significance of the issue to be considered and decided.
2. Subject to the Environment Court issuing a Consent Order settling the appeal by Solid Energy NZ Limited:
 - 2.1. Agree in-principle to approve Change 2 (Air Quality) to the Regional Resource Management Plan in accordance with Clause 17 Schedule 1 of RMA; and
 - 2.2. Agree in-principle that Change 2 become operative from 1 January 2012.
3. Receives the information about PM₁₀ concentration trends within the Napier and Hastings Airsheds.



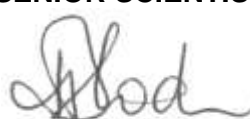
Belinda Riley
SENIOR PLANNER



Graham Sevicke-Jones
ACTING GROUP MANAGER
RESOURCE MANAGEMENT



Kathleen Kozyniak
SENIOR SCIENTIST CLIMATE & AIR



Helen Codlin
GROUP MANAGER
STRATEGIC DEVELOPMENT

Attachment/s

- 1 Change 2 for In-Principle Approval as Operative

HAWKE'S BAY
SUPPORTING YOUR ENVIRONMENT + ECONOMIC THRIVAL

SUPPORTING YOUR ENVIRONMENT + ECONOMIC THRIVAL

Regional Resource Management Plan

Proposed Plan
Change 2: Air Quality

as at 12 Oct 2011



155 Duffon Street • Private Bag 6006 • Napier
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Regional Resource Management Plan – Proposed Change 2: Air Quality

Adopted by Council: 26 November 2008

Public Notification Date: 10 December 2008

for in-principle 'approval'
as operative
12 Oct 2011



-i-

5.3 Air Quality

OBJECTIVE

OBJ 39 A standard of ambient air quality is maintained at, or enhanced to, a level that is not detrimental to human health, amenity values or the life supporting capacity of air, and meets National Environmental Standards.

OBJ 39a A standard of local air quality is maintained that is not detrimental to human health, amenity values or the life supporting capacity of air.

OBJ 39b In the Napier, Hastings, Awatoto and Whirinaki Airsheds, improve ambient air quality so that by 1 September 2020 the concentration of PM₁₀ does not exceed 50 µg/m³ (24 hour average), more than once in any 12 month period.

OBJ 39c In the balance of the region outside the Napier, Hastings, Awatoto and Whirinaki Airsheds, the ambient air quality shall be managed to ensure the concentration of PM₁₀ does not exceed 50 µg/m³ (24 hour average), more than once in any 12 month period.

Refer section 2.2 of this Plan

POLICY

POL 69 ENVIRONMENTAL GUIDELINES & STANDARDS – AIR QUALITY

5.3.1 To manage the effects of activities affecting air quality in accordance with the environmental guidelines and standards set out in Table 6 below.

Table 6. Environmental Guidelines & Standards – Air Quality

Issue	Guideline/Standard
1. Odour	There should be no offensive or objectionable odour beyond the boundary of the subject property ¹⁴ .
2. Gases, airborne liquid & other noxious or dangerous contaminants	There should be no noxious or dangerous levels of gases or airborne liquid or other airborne contaminants beyond the boundary of the subject property, in concentrations and at locations that are likely to cause adverse effects on human health, ecosystems or property.
3. Smoke & water vapour	The discharge should not result in any smoke, water vapour or other contaminant that adversely affects traffic safety, or reduces horizontal visibility within 5m of ground level beyond the boundary of the subject property.
4. Dust	Any dust deposition should not raise the ambient dust deposition rate by more than 4 g/m ² per 30 days at any point beyond the boundary of the subject property.
5. Particulate matter	There should be no objectionable deposition of particulate matter on any land or structure beyond the boundary of the subject property.

¹⁴ "Subject property" means the legally defined property, whether private land or public land, within which the subject activity occurs and includes all land that is under common ownership.

6. Ambient air quality	<p>a. The ambient air quality must remain within the standards stated within the Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins, and Other Toxics) Regulations 2004¹⁵.</p> <p>b. Where no national environmental standards exist the ambient air quality should remain within the New Zealand Ambient Air Quality Guidelines MfE 2002.^{15a}</p> <p>c. Where the existing ambient air quality is better than the concentrations specified in the standards and guidelines in (a) and (b), there should be no significant degradation of ambient air quality.</p>
7. Decision making - Offsets	<p>The matters to be taken into account when assessing offsets in accordance with Policy 69a - 5.3.1A(iii), shall include, but not be limited to:</p> <p>a. The amount of offset required shall be estimated in kilograms of PM₁₀ per day based on the likely worst case daily PM₁₀ emissions from the new activity during the months May to August. If there is no discharge from the new activity during the months May to August then no offset is required.</p> <p>b. The measurement of the "offset" discharge must take place at the same time of day as the new discharge or occur at a time of the day when meteorological conditions are more conducive to elevated PM₁₀. The onus is on the applicant to demonstrate this.</p> <p>c. The "offset" discharge must be similar to the new discharge in terms of particle mode (fine or coarse) and composition except that it may differ if the applicant demonstrates that the "offset" discharge is more harmful.</p> <p>d. The "offset" discharge must not already be accounted for in air quality improvement programmes. In the Hastings and Napier Airsheds the following activities cannot be used for offsets:</p> <ul style="list-style-type: none"> - removal of open fires - removal of solid fuel burners not complying with the requirements of Schedule XII^{15b} - outdoor burning. <p>e. The "offset" must be legally binding and must be effective from the first day of discharge from the new activity and for the duration of the consent for the new activity.</p> <p>f. The "offset" can be from a discharge within the same site. For example, an applicant may choose to install control technology such as a bagfilter on an existing discharge to "make room" for a new discharge.</p> <p>g. If the new discharge point is at a lower height than the "offset" discharge the applicant must demonstrate that the "offset" results in an equal or greater reduction in the</p>

¹⁵ Ministry for the Environment (2005) Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins, and other Toxics) Regulations 2004.

^{15a} Ministry for the Environment (2002) Ambient Air Quality Guidelines.

^{15b} An exception to this could occur if the "offset" were only required for a short duration which does not extend beyond the period for which the appliance group is prohibited as per Rule 18g.



	<p>maximum ground level concentrations of PM₁₀ (24-hour average).</p> <p>h. The applicant must demonstrate that the location of the "offset" discharge/s will have an equal or no greater impact on concentrations of PM₁₀ under meteorological conditions most conducive to elevated concentrations.</p> <p>i. The National Environmental Standards for Air Quality must be considered in relation to all 'offsets' as in some situations the National Environmental Standards for Air Quality may restrict their use.</p> <p>Note: For clarification, the "offset" discharge is the one that is being removed and the "new" discharge is the one that is new. The offset discharge must be therefore equal or "worse than the new discharge so there is an environmental improvement.</p>
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POL 69a PARTICULATE MATTER - PM₁₀ LEVELS

5.3.1A Concentrations of PM₁₀ in the Hastings Airshed and Napier Airshed shall be reduced using the following strategies:

- (i) control discharges to air from dwelling houses, and industrial or trade premises producing particulate matter
- (ii) prevent outdoor burning practices contributing any significant PM₁₀ during the time when Objective 39b and 39c might not be met
- (iii) minimise an overall increase in PM₁₀ emissions from other discharge sources, including large scale fuel burning equipment, unless:
 - 1. the PM₁₀ emissions are offset by reductions from other sources of similar emissions, beyond the reductions achieved through the implementation of this Policy; or
 - 2. the PM₁₀ emissions will not contribute to the ambient PM₁₀ concentrations during the time when an ambient air quality concentration of PM₁₀ is likely to exceed 50 µg/m³ (24 hour average) in any airshed.
- (iv) ensure a reduction in emissions from small scale solid fuel burners by the amount that is sufficient to achieve the National Environmental Standard for PM₁₀
- (v) ensure that the concentration of PM₁₀ emissions in the Napier Airshed and Hastings Airshed do not increase, and are reduced over time.

Explanation and Reasons

5.3.2 Prior to this Plan being prepared, the Hawke's Bay Regional Council had already established an approach for air management in its former Regional Air Plan. Objective 39 and 39a continue the direction set by the objectives of this former Plan. In particular, they recognise the need to focus on both ambient air quality and local air quality. Similarly, the environmental guidelines set out in Policy 69 follow the direction set in the former Regional Air Plan for regulating discharges of contaminants into air. This policy seeks to manage the range of effects that can be caused by discharges of contaminants into air, drawing on common conditions contained in rules in the former Regional Air Plan and in resource consents granted by the Hawke's Bay Regional Council.

5.3.3 Guidelines 1 to 5 largely address localised effects, recognising that these are the most common air quality problems. By comparison, Guideline/Standard 6 addresses ambient air quality. The Ministry for the Environment has produced Ambient Air Quality Guidelines for a range of key air contaminants, which detail the minimum requirements that outdoor air quality should meet in order to protect human health and the environment. Five of these guidelines have been implemented as mandatory standards in the form of National Environmental Standards, which are regulations under the Resource Management Act. The guideline and standard values are applied as a 'bottom line', and where existing air quality is better than the Ambient Air Quality Guidelines and Standards (which is the case for most areas in Hawke's Bay), the present air quality should be maintained. In other words, the existing air quality should not be allowed to degrade to the level of contamination



- 3 -

Chapter 5.3 Air Quality
Incorporating Change 2 – Air Quality
(For in-principle 'approval' as operative - 12 October 2011)

specified in the New Zealand Ambient Air Quality Guidelines and National Environmental Standards for Air Quality (NESAQ).

- 5.3.3A PM₁₀ ambient air quality in Hastings and Napier can be poor in winter and in 2008 did not meet the National Environmental Standards for PM₁₀, with the main contribution coming from domestic heating sources; air quality within the Whirinaki and Awatoto Airsheds is also poor. However, the main contributor within these relatively small and focussed airsheds is industry. Excessive concentrations of PM₁₀ are associated with numerous health problems ranging from minor irritation of the eyes and nose to exacerbating existing respiratory problems among small children and the elderly in particular.
- 5.3.3B Objective 39b defines the ambient air quality PM₁₀ concentration to be achieved in the Napier, Hastings, Awatoto and Whirinaki Airsheds by 1 September 2020. Objective 39c covers the rest of the region and ensures the existing ambient air quality PM₁₀ concentration remains less than 50 µg/m³ (24 hour average), with no more than one annual exceedance. Policy 69a outlines strategies to reduce particulate matter concentrations in the Hastings and Napier Airsheds to a level which complies with the NESAQ for PM₁₀.
- 5.3.3C Objectives 39b, 39c and Policy 69a have been adopted in response to the National Environmental Standards for Air Quality set by the Ministry for the Environment in 2004. The Hawke's Bay Regional Council has adopted a regional compliance date of 1 September 2020 to meet the NESAQ for PM₁₀. This avoids unintended health and logistical consequences and will enable a more affordable transition for the community. In accordance with the NESAQ, failure to achieve the NESAQ for PM₁₀ by 2013 means that after this date no new resource consents for the discharge of PM₁₀ within any of the specified airsheds can be granted for new or renewal consents until the specific airshed is compliant. This has potentially significant socio-economic implications for the community through loss of employment and local industry as consented activities are generally industrial and trade premises. The Hawke's Bay Regional Council will endeavour to protect existing industry through a combination of regulation and alternative methods between 1 September 2013 and 1 September 2020.
- 5.3.3D The Hawke's Bay Regional Council will monitor changes in PM₁₀ concentrations in these airsheds. If monitoring indicates that Objective 39b will not be met by 2020, or that Objective 39c is at risk of being compromised, the Hawke's Bay Regional Council will initiate further measures, in addition to those outlined in the Plan. These measures may be regulatory, non-regulatory, or a combination of both.

POL 70 IMPLEMENTATION OF ENVIRONMENTAL GUIDELINES AND STANDARDS – AIR QUALITY

- 5.3.4 To implement Policies 69 and 69a predominantly in the following manner:
- (a) **Regional rules** – The environmental guidelines and standards for air quality have been incorporated primarily in conditions, standards and terms in the rules set out in Chapter 6 of this Plan as appropriate. The environmental guidelines for air quality that refer to 'noxious', 'dangerous', 'offensive' or 'objectionable' effects will be interpreted in the manner described in section 6.1.4 of this Plan, and in accordance with any relevant case law.
 - (b) **Resource consents** – The environmental guidelines and standards for air quality will also be used in the process of making decisions on resource consents, in accordance with the Resource Management Act.
 - (c) **Enforcement** – Enforcement action will be used, where necessary, to aid in implementing the standards and terms of the rules set out in Chapter 6 of this Plan. Any enforcement action will be undertaken in accordance with the enforcement provisions of the Resource Management Act.
 - (d) **Resource Management Regulations** – National Environmental Standards apply across New Zealand. Some of these national standards prohibit or restrict certain types of activities affecting air quality. The Hawke's Bay Regional Council will enforce these standards in accordance with (c) above.



(e) **Non-regulatory methods** – Non-regulatory methods will also be used, where appropriate, to assist in achieving the objectives and implementing policies within Section 5.3 of this Plan including:

- i liaising with territorial authorities to seek the inclusion of appropriate land use policies, rules and methods within district plans, and building codes, as necessary to meet the objectives and policies within Section 5.3 of this Plan.
- ii the Hawke's Bay Regional Council will influence and inform the community through the development of an appropriate communications and marketing strategy. Information will be provided to assist the community (including industrial and horticultural operators) understand the types of effects that can occur as a result of discharges of contaminants into air and the overall effects of such discharges on ambient air quality. Information will be provided advising appropriate methods to avoid, remedy or mitigate any adverse effects of discharging contaminants into air.
- iii the Hawke's Bay Regional Council will encourage the use of dry wood through education.
- iv the Hawke's Bay Regional Council will develop a best practice guide for the sale of wood by accredited dry wood merchants.
- v provision of financial incentives. The Hawke's Bay Regional Council may choose to provide incentives and financial assistance to assist the Council in achieving Objective 39b and thereby comply with the NESAQ for PM₁₀.
- vi development of a best practice guide for outdoor burning to ensure that those undertaking the activity are aware of what steps need to be taken to minimise the effects from outdoor burning.

vii encouraging people currently using open fires and small scale solid fuel burners that are not NESAQ compliant burners to install cleaner forms of heating.

Comment [1]: Addition subject to approval by Environment Court

Explanation and Reasons

5.3.5 Policy 70 establishes that, unlike the environmental guidelines for land (which will largely be used in a non-regulatory manner), the environmental guidelines for air quality have been used to guide regulation as the principal means of meeting the air quality objectives. The Guidelines have been used in rules, and will be used in resource consent processes. Policy 70(a) cross-references Section 6.1.4 of this Plan, which provides some guidance on interpretation of the terms 'noxious', 'dangerous', 'offensive' or 'objectionable'. These terms are commonly used in the regulation of discharges of contaminants into air.

5.3.5A Regulatory and non regulatory methods will play a significant part in meeting Objective 39b. Policy 70 5.3.4(e)(i) will help integrate decision making under the Resource Management Act and Building Act and ensure that Regional Council and Territorial Authority requirements are considered at the same time; Policy 70 5.3.4(e)(ii),(iii),(iv) recognises that awareness about effects can lead to people adopting practices which can bring about changes in the quality of the air resource, and that information transfer can be an effective alternative to enforcement as a means of changing people's behaviour. In particular, Policy 70 5.3.4(e)(ii),(iii),(iv) can focus on educating people about the adverse effects associated with the discharges from domestic fuel burners, open fires and outdoor rubbish burning. Many of the problems associated with domestic heating are caused or exacerbated by ongoing use of open fires and small scale solid fuel burners that do not meet the NESAQ emission standards, incorrect use of appliances, and the use of poor quality fuels. While the use of NESAQ compliant burners will improve environmental outcomes and assist the Council in meeting Objective 39b, it is acknowledged that the use of heating appliances which reduce or minimise incorrect operation and can only use clean energy sources or dry fuels, will further improve air quality within Napier and Hastings. Similarly, problems associated with vegetation burning often relate to when and how burning is undertaken. Both these issues can be addressed through education of the public about their burning and heating practices. Policy 70 5.3.4(e)(v) states that the Hawke's Bay Regional Council may choose to provide financial packages to encourage the maximum uptake by households of NESAQ compliant burners and/or clean heating systems.

Comment [2]: Addition subject to approval by Environment Court



ANTICIPATED ENVIRONMENTAL RESULTS

Anticipated Environmental Result	Indicator	Data Source
No offensive or objectionable odour beyond the boundary of any subject property	Number, nature and type of resource consent, and reported incidents of odour	Compliance monitoring Incident monitoring
No noxious or dangerous gases or airborne liquid or other airborne contaminants beyond the boundary of any subject property	Number, nature, type and location of resource consent, and reported incidents of spray drift and other contaminants	Compliance monitoring Incident monitoring
Reduction in number of incidents where smoke, water vapour or other contaminants reduce visibility or affect traffic safety	Visibility monitoring	5 yearly monitoring for input into State of the Environment Report (SER) Incident monitoring
Reduction in occurrences of dust deposition which exceed guidelines beyond subject property boundary	Dust deposition should not exceed the guidelines value of 4 g/m ² per 30 days	Annual SER update reporting Incident monitoring
Reduction in occurrences of objectionable deposition of particulate matter beyond subject property boundary	The accumulation of particulate matter	Annual SER update reporting Incident monitoring
Ambient Air Quality	NO ₂ , SO ₂ , CO	Four yearly monitoring
By 1 September 2020 the concentration of PM ₁₀ in any airshed is not exceeding 50 µg/m ³ (24 hour average), more than once in any year	PM ₁₀	Compliance monitoring in accordance with Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins and Other Toxics) Regulations 2004



6.5 DISCHARGES TO AIR

For information requirements refer to section 7.4

6.5.1 COMBUSTION OF FUEL - DISCHARGES TO AIR

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
17 Combustion of specified fuels <i>Refer PCL 69, 69a</i>	The discharge of any contaminant into air from any industrial or trade premises or any other source ³⁸ , excluding any moveable source ³⁹ and any dwellinghouse, arising from the combustion of:	Permitted	<p>a. The maximum heat output shall not exceed:</p> <ul style="list-style-type: none"> i. 5 MW for natural or liquefied petroleum gas, or ii. 100 kW for coal, light fuel oil, heavy fuel oil, or untreated wood, or iii. 200 kW for wood pellet fuel iv. 2 MW for diesel or kerosene (external combustion) v. 100 kW for diesel or kerosene (internal combustion) vi. Where more than one fuel type is used on the site the combined heat output shall not exceed the lowest MW threshold of the fuel types used. <p>b. The fuel shall be burned using fuel burning equipment, and the discharge shall be from a chimney or exhaust structure designed so that the emission is effectively dispersed upwards.</p> <p>c. At any point beyond the boundary of the subject property or on public land:</p> <ul style="list-style-type: none"> i. the discharge shall not result in any smoke that adversely affects traffic safety, or reduces visibility within 5 metres of ground level; ii. The discharge shall not result in any objectionable deposition of particulate matter on land or structure; iii. The discharge shall not result in any offensive or objectionable odour, or any noxious or dangerous levels of gases. <p>d. The fuel shall not comprise any of the waste materials specified in the activity description of Rule 20.</p> <p>e. For external combustion sources the stack shall comply with the requirements of Schedule IX.</p>		

³⁸ Includes the discharge of contaminants into air from any small scale solid fuel burner and open fire on industrial or trade or commercial premises where the small scale solid fuel burner or open fire is used exclusively for the smoking or cooking of food for wholesale or retail sale.

³⁹ Discharges of contaminants into air arising from the combustion of fuels in moveable sources (including motor vehicles and aircraft but excluding moveable asphalt plants and road burners which are regulated under Section 6.5.4), are not regulated by this Plan and therefore do not require resource consents.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
18 Combustion of specified fuels <i>Refer PCL 8, 69 69a</i>	Except as provided for by Rules 17 and 18a, the discharge of any contaminant into air from any industrial or trade premises or any other source, excluding any moveable source and any dwellinghouse, arising from the combustion of: <ul style="list-style-type: none">• natural or liquefied petroleum gas, and/or• diesel or wood pellet fuel.	Controlled	<p>a. The maximum heat output shall not exceed:</p> <p>i. 50 MW for natural or liquefied petroleum gas, or</p> <p>ii. 600 kW for wood pellet fuel in a modified pellet boiler</p> <p>iii. 1.2 MW for wood pellet fuel in a custom designed pellet boiler</p> <p>iv. 5 MW for diesel (external combustion).</p> <p>v. Where more than one fuel type is used on the site the combined heat output shall not exceed the lowest MW threshold of the fuel types used.</p> <p>b. The fuel shall not comprise any of the waste materials specified in the activity description of Rule 20.</p> <p>c. At any point beyond the boundary of the subject property, or on public land:</p> <p>i. The discharge shall not result in any objectionable deposition of particulate matter on any land or structure;</p> <p>ii. The discharge shall not result in any offensive or objectionable odour, or any noxious or dangerous levels of gases;</p> <p>iii. The discharge shall not result in any smoke that adversely affects traffic safety or reduces visibility within a height of 5 metres above ground level.</p>	<p>a. Methods used to disperse contaminants, including chimney height, chimney design and emission velocity and direction of exhaust gases. Chimney height will be determined generally in accordance with Schedule IX.</p> <p>b. Duration of consent.</p> <p>c. Lapsing of consent.</p> <p>d. Review of consent conditions.</p> <p>e. Compliance monitoring.</p> <p>f. Contaminant emission rate.</p> <p>g. Any measures necessary to: ensure maintenance of fuel burning equipment, the carrying out of measurements, samples, analysis, surveys, investigations or inspections, including the monitoring of: contaminant concentrations and emission rates, the opacity of the discharge, quantity of fuel used, the cumulative effects of the discharge in combination with discharges from other sources, the provision of information to the consent authority at specified times.</p> <p>h. Administrative changes.</p> <p>i. Effects on flight paths and the roading network.</p> <p>j. New technologies available to minimise any discharges or their effects.</p>	Applications will generally be considered without notification, without the need to obtain the written approval of affected persons.
18a	Number not used		[Rule is intentionally blank]		

Comment 11: Amendments subject to approval by Environment Court

6.5.1A

SMALL SCALE SOLID FUEL BURNERS - DISCHARGES TO AIR

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
<p>18b</p> <p>Discharge to air from open fires</p> <p>Napier & Hastings Airsheds</p> <p><i>Refer PCL 69, 69a</i></p>	<p>Except as provided for by Rule 18f, the discharge of contaminants into air from a building located within the Hastings or Napier Airsheds resulting from the burning of any solid fuel in any open fire from 1 January 2012, unless:</p> <ul style="list-style-type: none"> the open fire was installed before 10 December 2008, and is located on a property over 2 hectares in size or is located in Airzone 2 of the Hastings or Napier Airsheds. 	Prohibited			
<p>18c</p> <p>Discharge to air from any small scale solid fuel burner -</p> <p>Hastings Airshed</p> <p><i>Refer PCL 69, 69a</i></p>	<p>The discharge of contaminants into air from a small scale solid fuel burner in a building located within the Hastings Airshed.</p>	Permitted	<p>a. Any solid fuel burner located on a property less than 2 hectares in size in Airzone 1 of the Hastings Airshed must comply with the requirements in Part A Schedule XII, except where the solid fuel burner:</p> <ul style="list-style-type: none"> was installed before the operative date of this Rule, and meets the requirements of Part B Schedule XII or Part C Schedule XII, or complies with the definition of 'wood fired cooker' in this Plan. <p>b. Any solid fuel burner located in Airzone 2 of the Hastings Airshed or in Airzone 1 of the Hastings Airshed on a property over 2 hectares in size must comply with the requirements in Part B Schedule XII, except where the solid fuel burner was installed before the operative date of this Rule.</p> <p>c. At any point beyond the boundary of the subject property, or on public land:</p> <ol style="list-style-type: none"> The discharge shall not result in any objectionable deposition of particulate matter on any land or structure; The discharge shall not result in any offensive or objectionable odour; or any noxious or dangerous levels of gases. <p>d. Contaminants discharged may only be derived from the combustion of fuel approved by the manufacturer for use in the solid fuel burner.</p>		

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
18d Discharge to air from any small scale solid fuel burner - Napier Airshed Refer POL 69, 69a	The discharge of contaminants into air from a small scale solid fuel burner in a building located within the Napier Airshed.	Permitted	<p>a. Any solid fuel burner located on a property less than 2 hectares in size in Airzone 1 of the Napier Airshed must comply with the requirements in Part B Schedule XII or Part C Schedule XII, except where the solid fuel burner was installed before the operative date of this rule and complies with the definition of wood fired cooker in this plan.</p> <p>b. Any solid fuel burner located in Airzone 2 of the Napier Airshed or in Airzone 1 of the Napier Airshed on a property over 2 hectares in size must comply with the requirements in Part B Schedule XII, except where the solid fuel burner was installed before the operative date of this Rule.</p> <p>c. At any point beyond the boundary of the subject property, or on public land:</p> <p>i. The discharge shall not result in any objectionable deposition of particulate matter on any land or structure;</p> <p>ii. The discharge shall not result in any offensive or objectionable odour; or any noxious or dangerous levels of gases.</p> <p>d. Contaminants discharged may only be derived from the combustion of fuel approved by the manufacturer for use in the solid fuel burner.</p>		
18e	Number not used		[Rule is intentionally blank]		
18f Discharge to air from any existing small scale solid fuel burner or open fire that is located within a registered historic building located in the Napier or Hastings Airsheds. Napier & Hastings Airsheds Refer POL 69, 69a	The discharge of contaminants into air from any existing small scale solid fuel burner or open fire that is located within a registered historic building located in the Napier or Hastings Airsheds.	Permitted	<p>a. The small scale solid fuel burner or open fire must be located within a registered historic building.^{37b}</p> <p>b. Any wood burner installed after 1 September 2005, or any small scale solid fuel burner installed after 10 December 2008, in a building on a property with an allotment size of less than 2 hectares, must comply with the requirements in Schedule XII.</p> <p>c. At any point beyond the boundary of the subject property, or on public land:</p> <p>i. The discharge shall not result in any objectionable deposition of particulate matter on any land or structure;</p> <p>ii. The discharge shall not result in any offensive or objectionable odour; or any noxious or dangerous levels of gases.</p>		

^{37b} For the purposes of Rule 18f registered historic buildings are buildings that are individually registered on the Historic Places Register and/or in the District Plan.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
18g Discharge to air from any small scale solid fuel burner Napier & Hastings Airsheds <i>Refer POL 69, 69a</i>	Except as provided for by Rules 18c, 18d and 18f the discharge of contaminants into air from any small scale solid fuel burner in a building located in Airzone 1 of the Napier or Hastings Airsheds is prohibited from the following dates: <ul style="list-style-type: none"> small scale solid fuel burners installed prior to 31 December 1995 are prohibited from use after 1 January 2014; small scale solid fuel burners installed between 1 January 1996 and 31 August 2005 are prohibited from use after 1 January 2016. small scale solid fuel burners installed after 1 September 2005 that do not comply with the requirements in Schedule XII are prohibited from use after 1 January 2018 in Airzone 1 of the Hastings Airshed, and after 1 January 2020 in Airzone 1 of the Napier Airshed. 	Prohibited			
18h Discharge to air from any small scale solid fuel burner or open fire at property ownership transfer ^{37c} – Napier & Hastings Airsheds <i>Refer POL 69, 69a</i>	Except as provided for by Rules 18c, 18d and 18f, the discharge of contaminants into air from any existing small scale solid fuel burner or open fire, located within Airzone 1 of the Napier or Hastings Airsheds that: <ul style="list-style-type: none"> is occurring at any time after the date from which there is a registered transfer of ownership of the property, following this rule becoming operative. 	Prohibited			

ADVISORY NOTES:

1. Non-compliance with rules – If Rules 17, 18, and Conditions b, c and d of Rules 18c and 18d cannot be complied with, then the activity is a restricted discretionary activity under Rule 30. If Condition a of Rules 18c and 18d cannot be complied with then the activity is prohibited under Rule 18g.
2. Emission rates - Schedule IX sets out estimated emission rates of contaminants from the activities provided for by Rules 17 and 18.
3. Rule 18h - For the purposes of Rule 18h the Hawke's Bay Regional Council may require evidence that the small scale solid fuel burner complies with the standards specified in Rules 18c and 18d. Approved models are listed on the website for the Ministry for the Environment (www.mfe.govt.nz).

^{37c} Rule 18h does not apply to a transfer in title in consequence of death of an owner when the title is transferred to the surviving partner, or where the surviving partner continues to occupy the dwelling.

6.5.2 BURNING OF WASTE - DISCHARGES TO AIR

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
19 Burning of waste <i>Refer POL 69, 69a</i>	Except as provided for in Rule 20a, the discharge of contaminants into air arising from the burning of waste. ³⁸	Permitted	<p>a. The waste shall have been generated on the same property, or on another property under the same ownership, as that used for combustion, except for:</p> <p>i. Waste originating from ships, or road or rail reserves, or park reserves</p> <p>ii. Waste originating from river control works</p> <p>iii. Waste to be burned for fire training purposes.</p> <p>b. Except for burning undertaken in accordance with (c) below, any material burnt on, or originating from, industrial or trade premises shall be burned using fuel burning equipment, and the discharge shall be from a chimney or exhaust structure designed so that the emission is effectively dispersed upwards.</p> <p>c. The material to be burned shall not contain any animal waste (except animal waste generated on production land), tyres or other rubber, waste oil, any waste products containing hydrocarbons, wood treated with chemicals, painted wood, chip board, plastic, asbestos, medical waste, chemical waste, or any combination of metals and combustible materials or any of the other waste materials specified in the activity description of Rule 20, except where the burning is for the purpose of training fire fighting personnel.</p> <p>d. At any point beyond the boundary of the subject property, or on public land:</p> <p>i. The discharge shall not result in any smoke that adversely affects traffic safety, or reduces visibility within a height of 5 metres above ground level, or reduces visibility within recognised flight paths in the vicinity of airports.</p> <p>ii. The discharge shall not result in any objectionable deposition of particulate matter on any land or structure.</p> <p>iii. The discharge shall not result in any offensive or objectionable odour, or any noxious or dangerous levels of gases.</p> <p>e. At any point within or beyond the subject property, the discharge shall not result in any objectionable deposition of particulate matter on National Electricity Transmission Network lines.</p>		

³⁸ Where discharges of contaminants occur as a result of Local Authorities carrying out their functions by burning waste on public land the above conditions (a) to (e) apply.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
19a Burning of vegetative matter, paper, cardboard and untreated wood <i>Refer POL 69, 69a</i>	Except as provided for by Rule 19e and Rule 20a, the discharge of contaminants into air arising from the burning in the open of vegetative matter, paper, cardboard and untreated wood.	Permitted	<p>a. Burning shall only consist of vegetative matter, paper, cardboard and untreated wood generated on the same property, or a property under the same ownership.</p> <p>b. If the property is located within the Hastings or Napier Airsheds the discharge shall not occur during the months of May, June, July or August.^{38a}</p> <p>c. At any point beyond the boundary of the subject property, or on public land:</p> <ol style="list-style-type: none"> The discharge shall not result in any objectionable deposition of particulate matter on any land or structure; The discharge shall not result in any offensive or objectionable odour, or any noxious or dangerous levels of gases. <p>ii. The discharge shall not result in any offensive or objectionable odour, or any noxious or dangerous levels of gases.</p> <p>d. At any point within or beyond the subject property, the discharge shall not result in any objectionable deposition of particulate matter on National Electricity Transmission Network lines.</p>		
19b Outdoor burning for specified purposes <i>Refer POL 69, 69a</i>	The discharge of contaminants into air from outdoor burning of materials for any of the following purposes:	Permitted	<p>a. At any point beyond the boundary of the subject property, or on public land:</p> <ol style="list-style-type: none"> The discharge shall not result in any objectionable deposition of particulate matter on any land or structure; The discharge shall not result in any offensive or objectionable odour, or any noxious or dangerous levels of gases. <p>b. At any point within or beyond the subject property, the discharge shall not result in any objectionable deposition of particulate matter on National Electricity Transmission Network lines.</p> <p>c. Any discharge for the purposes of research or training people to put out fires must take place under the control of the New Zealand Fire Service or other nationally recognised body authorised to undertake the fire fighting research or fire fighting activities.</p> <p>d. Any discharge for the purposes of fire fighting research or training purposes, or for the creation of special smoke or fire effects for producing films:</p> <ol style="list-style-type: none"> Must not occur during the months of May, June, July or August.^{38b} If the property is located within the Hastings or Napier Airsheds, and Must be notified to the Council at least 2 working days prior to the activity commencing. 		

ADVISORY NOTES:

1. Non-compliance with rule – If Rule 19 cannot be complied with (and the activity is not prohibited by Rule 20), then the activity is a restricted discretionary activity under Rule 30.

^{38a} If condition b of Rule 19a cannot be complied with then the activity is non-complying under Rule 19c.

^{38b} If condition d(i) of Rule 19b cannot be complied with then the activity is non-complying under Rule 19c.

13

Hawke's Bay Regional Resource Management Plan
Rules incorporating Change 2: Air Quality
(For in-principle approval as operative - 12 October 2011)

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
19c Outdoor burning during certain times of the year <i>Refer POL 69, 69a</i>	Except as provided for in Rules 19, 19d, 19e, 20 and 20a the discharge of contaminants into air in the Hastings and Napier Airsheds from outdoor burning during the months of May, June, July or August. ^{38c}	Non complying			
19d Discharge to air from frost protection heaters <i>Refer POL 69, 69a</i>	The discharge of contaminants into air from the burning of fuel in any frost protection heater. ^{38c}	Permitted	<p>a. The discharge shall only take place to prevent frost damage to horticultural production crops.</p> <p>b. The burning of oil^{38d} shall only take place in fuel burning equipment that operates with a stack or chimney.</p> <p>c. The fuel shall not comprise any of the specific fuels or waste specified in Rule 20.</p>		
19e Outdoor burning on horticultural land during certain times of the year Napier & Hastings Airsheds <i>Refer POL 69, 69a</i>	The discharge of contaminants into air from outdoor burning of vegetative matter on horticultural production land located within the Napier and Hastings Airsheds during the months of May, June, July or August.	Permitted	<p>a. Burning shall only be undertaken to dispose of vegetative material that has been generated on the property^{38e} containing the horticultural production land.</p> <p>b. Burning shall only be undertaken to dispose of diseased vegetative material, or to dispose of remaining vegetative material from orchard/vineyard redevelopment^{38f} where there is no other reasonable or practicable on-site alternative disposal technique (e.g. mulching).</p> <p>c. The discharge shall not occur when the wind or forecast wind is likely to cause smoke to move towards the urban area (Airzone 1) of the Napier or Hastings Airsheds.</p> <p>d. The discharge shall not occur if the wind speed measured at 1 metre above the ground is less than 3 metres per second.</p> <p>e. The burn shall only take place between the months of May – August (inclusive)^{38g}</p> <p>f. At any point beyond the boundary of the subject property or on public land:</p> <p>i. The discharge shall not result in any smoke that adversely affects</p>		

^{38c} Rules 19c and 19d do not override Regulation 10 of the Resource Management (National Environmental Standards) Relating to Certain Air Pollutants (Dioxins and other Toxics) Regulations 2005 which prohibits burning of oil in the open.

^{38d} For the purposes of Rule 19d(b) oil is defined as petroleum in any form other than gas, including crude oil, and refined oil products (e.g. diesel fuel, kerosene, motor gasoline), but excludes waste oil which is prohibited from being burnt in the open under Rule 20.

^{38e} For the purposes of Rule 19e 'property' shall include any land under the same ownership or lease.

^{38f} For the purposes of Rule 19e orchard/vineyard redevelopment means the replacement of commercial food production trees with other commercial food production trees, or where shelterbelts need to be removed for redevelopment purposes.

^{38g} If the activity is taking place outside of the months of May – August (inclusive) then it is permitted under Rule 19a subject to conditions, standards and terms being met.

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
20 Burning of specified waste in the open & in small scale fuel burning appliances Refer PQL 69.69a	<p>Except as provided for in Rules 19 and 20a the discharge of contaminants into air arising from the burning in the open, and/or in a small scale fuel burner of:</p> <ul style="list-style-type: none"> any combination of metals and combustible materials, including coated or covered cables, or animal waste (excluding animal waste generated on production land), tyres and other rubber, waste oil, wood treated with chemicals (except wood pellets which comply with the definition of wood pellets in this Plan), oiled, painted or stained wood, chip board, asbestos, medical waste, pacemakers, biomechanical devices, or chemical waste, or synthetic material, including but not limited to, motor vehicle parts, foams, fibreglass, batteries, surface coating materials, tar, or any type of plastic, or peat. 	Prohibited	<p>traffic safety, or reduces visibility within 5 metres of ground level;</p> <p>ii The discharge shall not result in any objectionable deposition of particulate matter on land or structure;</p> <p>iii The discharge shall not result in any offensive or objectionable smoke or odour;</p> <p>g. The burn shall be supervised at all times.</p> <p>h. At any point within or beyond the subject property, the discharge shall not result in any objectionable deposition of particulate matter on National Electricity Transmission Network lines.</p>		

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
20a Burning of waste for purposes of disease control or quarantine control <i>Refer POL 69, 69a</i>	The discharge of contaminants into air arising from the burning of waste for the purposes of disease control or quarantine control in accordance with Section 7A and Part VII of the Biosecurity Act 1993, or where the Hawke's Bay Regional Council has declared a Biosecurity risk.	Permitted	<p>a. At any point beyond the boundary of the subject property, or on public land:</p> <p>i. The discharge shall not result in any objectionable deposition of particulate matter on any land or structure;</p> <p>ii. The discharge shall not result in any offensive or objectionable odour, or any noxious or dangerous levels of gases;</p> <p>iii. The discharge shall not result in any smoke that adversely affects traffic safety, or reduces visibility within a height of 5 metres above ground level, or reduces visibility within recognised flight paths in the vicinity of airports.</p> <p>b. At any point within or beyond the subject property, the discharge shall not result in any objectionable deposition of particulate matter on National Electricity Transmission Network lines.</p>		

- ADVISORY NOTES:
1. Territorial authority bylaws – It is important to note that the rules above do not replace territorial local authority bylaws controlling burning. Persons burning any waste or other materials should ensure that they comply with any relevant bylaws, included prohibited or restricted fire seasons.
 2. Disease control and quarantine control – The Ministry of Agriculture administers disease control and quarantine control requirements.

6.5.2 MANAGEMENT OF WASTE & OTHER MATTER, EXCLUDING INDUSTRIAL & TRADE PREMISES - DISCHARGES TO AIR

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
21 Waste & other matter, excluding industrial & trade premises <i>Refer RCL 69, 69a</i>	The discharge of contaminants into air arising from the storage, use, transfer, treatment or disposal of waste and other matter, excluding: • discharges into air from any industrial or trade premises • discharges into air addressed by other Rules in this Plan • discharges into air from moveable sources.	Permitted	a. Any waste which is disposed of shall have been generated on the subject property or on another property under the same ownership as that used for disposal. b. The discharge shall not result in any airborne liquid contaminant being carried beyond the boundary of the subject property. c. At any point beyond the boundary of the subject property, or on public land: i. The discharge shall not result in any visible discharge of any material, including dust; ii. The discharge shall not result in any offensive or objectionable odour, or any noxious or dangerous levels of gases. d. For any discharge into air arising from material sourced from industrial and trade premises, a management plan shall be prepared which sets out how conditions (b) to (d) will be met. A copy of this management plan shall be provided to the Hawke's Bay Regional Council upon request.		

ADVISORY NOTES:

1. Non-compliance with rule - If Rule 21 cannot be complied with, then the activity is a restricted discretionary activity under Rule 30.
2. Rule 21, condition (a) – Note that condition (a) only restricts the source of waste to be disposed of. The source of waste or other matter that is stored, used, transferred or treated is not restricted.
3. Industrial and trade premises – The discharge of contaminants into air from industrial or trade premises, arising from the management of waste and other matter, is addressed under Rules 28 and 29.
4. Combustion of waste – The discharge of contaminants into air arising from the burning of waste and other matter, is addressed under Rules 19 and 20.

6.5.3 ABRASIVE BLASTING - DISCHARGES TO AIR

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
22 Wet abrasive blasting <i>Refer POL 69, 69a</i>	The discharge of contaminants into air from abrasive blasting, using wet abrasive blasting techniques.	Permitted	<p>a. The operator shall so far as is practicable collect and remove all debris and used blasting materials on a daily basis, and when operations are completed.</p> <p>b. At any point beyond the boundary of the subject property, or in relation to public land, the lesser of beyond the boundary of the public land or beyond 50 metres from the discharge:</p> <p>i. There shall be no discharge of water spray or dust;</p> <p>ii. The discharge shall not result in any noxious or dangerous levels of airborne contaminants.</p>		
23 Dry abrasive blasting – fixed source <i>Refer POL 69, 69a</i>	The discharge of contaminants into air from dry abrasive blasting, other than from the use of a moveable source.	Permitted	<p>a. All items shall be blasted within an abrasive blasting enclosure.</p> <p>b. There shall be no visible discharge of dust beyond the abrasive blasting enclosure.</p> <p>c. At any point beyond the boundary of the subject property, or any public land:</p> <p>i. There shall be no discharge of water spray or dust;</p> <p>ii. The discharge shall not result in any noxious or dangerous levels of airborne contaminants.</p>		
24 Dry abrasive blasting – moveable source <i>Refer POL 69, 69a</i>	The discharge of contaminants into air from abrasive blasting, using both dry abrasive blasting techniques and a moveable source.	Discretionary			

ADVISORY NOTES:

1. Non-compliance with rules - If Rules 22 or 23 cannot be complied with, then the activity is a restricted discretionary activity under Rule 30.
2. Hazardous substances - For the purpose of condition (a) of Rules 22 and 23, the surface to be blasted should not contain any significant levels of hazardous substances, including lead, zinc, arsenic, chromium, copper, mercury, asbestos, tributyl tin, thorium-based compounds, other heavy metals, and anti-fouling substances. The document 'Guidelines for the Management of Lead-based Paint' (Occupational Safety and Health Service and Public Health Commission, 1995) provides comprehensive guidance for the removal of lead-based paints.
3. Resource consents for multiple locations - Nothing in Rule 24 precludes persons from applying for a single permit to cover multiple locations in the Hawke's Bay region.
4. Where discharges may enter water then the activity must also meet the requirements of Rule 49, or the requirements of the Operative Regional Coastal Plan (HRBC, 1999) where the discharge enters coastal waters.

6.5.4 MOVEABLE SOURCES - DISCHARGES TO AIR

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
25 Moveable aggregate crushing & screening plants <i>Refer POL 69, 69a</i>	The discharge of contaminants into air from the operation of a moveable aggregate crushing and screening plant.	Permitted	a. At any point beyond the boundary of the subject property, or in relation to public land, the lesser of beyond the boundary of the public land or beyond 50 metres from the discharge, there shall be no visible discharge of water spray or dust. b. At any point within or beyond the subject property, the discharge shall not result in any objectionable deposition of particulate matter on National Electricity Transmission Network lines.		
26 Moveable asphalt plants <i>Refer POL 69, 69a</i>	The discharge of contaminants into air arising from the operation of a moveable asphalt plant.	Discretionary			
27 Moveable road burners <i>Refer POL 69</i>	The discharge of contaminants into air arising from the operation of moveable equipment used to treat road surfaces with heat. ³⁹⁹	Non-complying			

ADVISORY NOTES:

1. Non-compliance with rule - If Rule 25 cannot be complied with, then the activity is a restricted discretionary activity under Rule 30.
2. Resource consents for multiple locations - Nothing in Rules 26 and 27 above precludes persons from applying for a single permit to cover multiple locations in the Hawke's Bay region.

³⁹⁹ Rule 27 does not override Regulation 8 of the Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Doxins and other Toxics) Regulations 2005 which prohibits burning of bitumen on a road.

6.5.5 INDUSTRIAL & TRADE PREMISES - DISCHARGES TO AIR

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
28 Miscellaneous industrial & trade premises <i>Refer POL 8, 13, 14, 69, 69a</i>	<p>The discharge of contaminants into air from any industrial or trade premises arising from any of the following activities, that is not specifically regulated by any other rule within this Plan:</p> <ul style="list-style-type: none">• waste disposal• composting, where more than 100m³ (in total) of raw material, composting material and compost is held per premises at any one time• combustion of natural or liquefied petroleum gas with a maximum heat output that exceeds 50 MW• combustion of coal, light fuel oil, heavy fuel oil or untreated wood with a maximum heat output that exceeds 100 kW• the manufacture of cement, fertiliser, milk powder, other dried milk derived products, or rubber goods• the manufacture of fibre board, pulp or paper• the mechanical drying of treated timber• rendering, tanning, tallowing, skin or hide processing, or pet food processing• fumigation processes, except for biosecurity purposes• the manufacture of organic or inorganic chemicals, including pharmaceuticals or crematoria• asphalt plants• hot dip galvanising• manufacture or disposal of radioactive substances• manufacture of soaps or detergents• use of di-isocyanates or organic plasticisers• manufacture of aluminium, steel, fibreglass, glass or frit• sintering, calcining, or roasting of metal ores• smelting of any metal or metal alloy, including scrap metal• carbonisation, gasification, refining, purification, or reforming of natural gas, petroleum oil, shale, coal, wood, or other carbonaceous materials• smelting or burning of calcium or calcium-magnesium carbonates to produce calcium or magnesium oxides or hydroxides• combustion of diesel with a maximum heat output that exceeds 5 MW (external combustion)• Combustion of diesel and kerosene with a maximum heat output that exceeds 100 kW (internal combustion)• Combustion of kerosene with a maximum heat output that exceeds 2 MW (external combustion)• <u>Combustion of wood pellets with a maximum heat output that exceeds 600 kW (modified pellet boilers)</u>• <u>Combustion of wood pellets with a maximum heat output that exceeds 1.2 MW (custom pellet boilers)</u> <p>materials being burned in fuel burning equipment comprising any of the waste materials specified in the activity description of Rule 20</p>	Discretionary			

Comment [21: Amendments subject to approval by Environment Court.

Hawke's Bay Regional Resource Management Plan
Rules incorporating Change 2: Air Quality
(For in-principle approval as operative - 12 October 2011)

20

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
29 Minor discharges from industrial & trade premises <i>Refer PQI 69, 69a</i>	The discharge of contaminants into air from any industrial or trade premises that is not specifically regulated by any other rule within this Plan, including: <ul style="list-style-type: none"> discharges of heat to air discharges of energy to air, including release of energy from sources of electromagnetic radiation, including radio transmitter, television, or cell phones; or release of X-rays from a radioactive source discharges for the purposes of ventilation or vapour displacements discharges arising from the use of luminants for biosecurity purposes discharges of dust arising from the loading, unloading, and conveyance of goods and materials (including aggregates). 	Permitted	<p>a. The opacity of any discharge of smoke when measured at the point of discharge shall not exceed 20%, except that a discharge in excess of this shall be permitted for a period of not more than two minutes continuously or for an aggregate of four minutes in any 60 minute period.</p> <p>b. The discharge shall not result in any airborne liquid contaminant excluding water vapour being carried beyond the boundary of the subject property.</p> <p>c. The discharge shall be located and designed to avoid cross contamination of air intake used for ventilation purposes.</p> <p>d. At any point beyond the boundary of the subject property, or on public land:</p> <p>i. The discharge shall not result in any noxious or dangerous levels of airborne contaminants;</p> <p>ii. There shall be no visible discharge of any contaminant, other than smoke from fuel burning equipment or water vapour;</p> <p>iii. Any discharge of water vapour shall not result in any plume which adversely affects traffic safety, or reduces visibility within a height of 5 metres above ground level, or reduces visibility within recognised flight paths in the vicinity of airports;</p> <p>iv. The discharge shall not result in any offensive or objectionable odour;</p> <p>v. The dust deposition rate resulting from the discharge shall not raise the ambient dust deposition rate by more than 4g /m² per 30 days;</p> <p>vi. The discharge shall not result in any objectionable deposition of particulate matter on any land or structure.</p> <p>e. At any point within or beyond the subject property, the discharge shall not result in any objectionable deposition of particulate matter on National Electricity Transmission Network lines.</p>		

ADVISORY NOTES:

1. Non-compliance with rule - If Rule 29 cannot be complied with, then the activity is a restricted discretionary activity under Rule 30.

21

*Hawke's Bay Regional Resource Management Plan
Rules incorporating Change 2: Air Quality
(For in-principle approval as operative - 12 October 2011)*

6.5.6 NON-COMPLIANCE WITH/NOT REGULATED BY OTHER RULES - DISCHARGES TO AIR

Rule	Activity	Classification	Conditions/Standards/Terms	Matters for Control/Discretion	Non-notification
30 Discharges of contaminants to air not regulated by ^{30b} , or that cannot comply with rules 11-19e, 20a-29 <i>Refer POL 8, 12, 13, 14, 16, 17, 19, 20, 69, 69a, 71, 75</i>	The discharge of contaminants into the air that: <ul style="list-style-type: none">is from an industrial and trade premises and is not specifically classified by any other rule in this Plan as a discretionary, non-complying or prohibited activity, ordoes not comply with all relevant conditions on a permitted activity rule, ordoes not comply with all relevant standards and terms on a controlled activity rule or restricted discretionary activity rule.	Restricted discretionary		a. The conditions, standards or terms which the activity cannot comply with, and related environmental effects. b. For activities that would otherwise be permitted or controlled activities (if they complied with all standards and terms of the relevant rule), the conditions/standards/terms or "matters for control" set out in the relevant rule. c. Duration of consent. d. Lapsing of consent. e. Review of consent conditions. f. Compliance monitoring. g. Contaminant emission limits. h. Any measures necessary to ensure maintenance of fuel burning equipment, the carrying out of measurements, samples, analysis, surveys, investigations or inspections including the monitoring of contaminant concentrations and emission rates, the opacity of the discharge, quantity of fuel used, the cumulative effects of the discharge in combination with discharges from other sources, and the provision of information to the consent authority at specified times. i. Administrative changes. j. Effects on flight paths and the roading network. k. New technologies available to minimise any discharges or their effects. l. Methods used to disperse contaminants, including chimney height, chimney design and emission velocity. Chimney height will be determined generally in accordance with Schedule IX.	Applications will generally be considered without notification, without the need to obtain the written approval of affected persons.

^{30b} All other discharges to air (e.g. from residential properties) which are not specifically regulated by rules in this Plan are regulated by Section 15 of the RMA. NOTE: The Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins and Other Toxics) Regulations 2004 regulate the installation of woodburners on properties less than 2 hectares in size.

Schedule IX– Chimney Design Guide and Combustion of Fuels

PART A - CHIMNEY HEIGHT REQUIREMENTS

IXA-1 CHIMNEY HEIGHT REQUIREMENTS – FOR DISCHARGE FROM THE EXTERNAL COMBUSTION OF NATURAL OR LIQUEFIED PETROLEUM GAS¹

METHODOLOGY

- 1.1 In terrain where the land does not rise to more than half, and buildings do not rise to more than 0.4 times, the indicative height of the chimney within a ground distance of five times the indicative height, and where there are no other significant sources or air-borne contaminants, the height of any chimney discharging the products of combustion from fuel burning equipment will be determined generally in accordance with the following guidelines:
- (a) **For any discharge from the combustion of natural gas or liquefied gas where the release of nitrogen oxides is less than 0.5 kg/h or the rate of heat release is less than 2 MW:** The minimum chimney height should be the higher of either 8 metres above finished ground level or 3 metres above the highest substantial part of any building located within 40 metres of the chimney, or any part of the building to which the chimney may be attached.
 - (b) **For any discharge from the combustion of natural gas or liquefied gas where the release of nitrogen oxides is equal to or exceeds 0.5 kg/h but is less than 20 kg/h and the rate of heat release is less than 50 MW:** The height of the chimney should be calculated in accordance with Table i (with the minimum height being whichever is the greater height of those corresponding to the heat input (MW) and the nitrogen oxides discharge (kg/h)), or be 3.3 metres above the highest substantial part of any building located within 40 metres of the chimney, or any part of the building to which the chimney may be attached, whichever is the higher.

¹ These criteria only apply to permitted and controlled activities. This includes large scale fuel burning appliances with combined heat outputs of less than 50 MW for natural gas and liquefied petroleum gas. Discretionary activities require a site specific evaluation which takes into account the impact of the chimney height on ground level concentrations of contaminants as a part of the resource consent application.

Table i. Natural gas or liquefied gas used as a fuel

Heat input (MW)	Nitrogen oxides (kg/h)	Chimney height above ground (m)
2	0.5	8.3
2.5	0.6	8.5
3.0	0.8	8.7
4.0	1.1	9.1
5.0	1.7	9.4
6.0	1.7	9.7
7.0	2.0	10.0
8.0	2.4	10.3
9.0	2.7	10.6
10.0	3.0	10.8
11.0	3.4	11.0
12.0	3.7	11.3
13.0	4.1	11.5
14.0	4.5	11.7
15.0	4.8	11.9
16.0	5.2	12.1
17.0	5.6	12.3
18.0	5.9	12.5
19.0	6.3	12.7
20.0	6.7	12.8
25.0	8.6	13.7
30.0	10.6	14.5
35.0	12.7	15.2
40.0	16.9	16.4
45.0	16.9	16.4
50.0	19	17.0

- 1.2 In the following circumstances, the height of the chimney should generally be determined so that the discharge will not give rise to sulphur dioxide and nitrogen oxides levels in excess of an indicator level based on 40% of the 'New Zealand Ambient Air Quality Guidelines' (Ministry for the Environment, 2002), using the 99.9% modelled percentile:
- (a) In terrain where the land rises to more than half, or buildings rise to more than 0.4 times, the indicative height of the chimney, within a ground distance of five times the indicative height.

IXA-2 CHIMNEY HEIGHT REQUIREMENTS – FOR DISCHARGE FROM THE EXTERNAL COMBUSTION OF KEROSENE, DIESEL, COAL, HEAVY FUEL OIL, LIGHT FUEL OIL, UNTREATED WOOD OR PELLET FUEL².

- 1.3 In relation to any large scale fuel burning appliance burning diesel, kerosene, coal, heavy fuel oil, light fuel oil, untreated wood, or pellet fuel, discharges into air from external combustion after the notification date of Plan Change 2, must be via an emission stack where:
- (a) the discharge point is at least 12.5 metres above ground level, or
 - (b) the discharge point is 2.5 metres higher than the apex of any building, tree, slope or other structure within a horizontal radius of 2.5 times the stack height (whichever discharge point a) or b) is the higher), and
 - (c) the exhaust gases are directed vertically into air and are not impeded by any obstruction that would lower the velocity of the exhaust gases.

Explanatory Note

- 1.4 To ensure that the plume released from the stack is not affected by building downwash effects, therefore creating high ground level concentrations, the stack must be at least 2.5 metres higher than the tallest building or obstacle within the vicinity of the stack (meaning within a circle drawn around the stack with a radius 2.5 times the height of the stack). For example, in a building that has a stack 10 metres high relative to ground level, there would be a 25 metre radius drawn around the stack for potential downwash effects. The discharge point would have to be 2.5 metres higher than any obstacle within this circle in order to achieve good dispersion of emissions from the stack.

IXA-3 EXPLANATION

- 1.5 The combustion of any fuel will generate airborne contaminants. The most accepted method of managing discharges of these contaminants is by remaining within desired maximum ground level concentrations. The 'New Zealand Ambient Air Quality' Guidelines (Ministry for the Environment, 2002) set out the desired maximum ground level concentrations for pollutants, and the National Environmental Standards for Air Quality [Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins, and other Toxins) Regulations 2004] set out ambient air quality standards that maximum ground level concentrations must remain within. To give effect to these standards and guidelines, it is necessary to have a chimney of sufficient height to disperse contaminants effectively by diluting the combustion gases to a level where the adverse effects are no more than minor.
- 1.6 In flat terrain and in the absence of high buildings, simple formulae (e.g. Table i) can be used to calculate the height of the chimney required for various fuels. If these guidelines cannot be met the Council will have the ability to apply more general guidelines when determining adequate heights for chimneys, or if considered necessary require modelling to be carried out.

² These criteria only apply to permitted and controlled activities. This includes large scale fuel burning appliances with combined heat outputs of less than 100 kW for coal, heavy fuel oil, light fuel oil and untreated wood, less than 5MW for diesel, less than 2 MW for kerosene, and less than 600 kW for wood pellet fuel being burned in modified pellet boilers, and less than 1.2 MW for wood pellet fuel being burned in custom designed boilers. Discretionary activities require a site specific evaluation which takes into account the impact of the chimney height on ground level concentrations of contaminants as a part of the resource consent application.

Amendment
subject to
approval by
Environment
Court

PART B – EMISSIONS FROM COMBUSTION

IXB-1 INTRODUCTION

- 1.7 The rules in this Plan regulate the discharge of contaminants into air from combustion processes. For ease of implementation, the rules regulate heat release rates rather than emission rates of contaminants. However, it is important to consider what contaminants are emitted from combustion processes. This Schedule provides guidance on the nature of emissions that can be expected from the combustion processes regulated by the rules in this Plan.
- 1.8 Emission rates can vary enormously, depending on fuel specification/composition, fuel quality, process of combustion, load, equipment age and technical sophistication maintenance and operating practice, use of control systems and filters, and ambient conditions (temperature and humidity of feed air). It is very difficult to assign a particular emission to a particular activity, and the only way to determine this properly is by measurement. Table iii in this Schedule shows a **Worst** case, a **Typical** case, and a **Best** case.

IXB-2 FUEL USE

- 1.9 A first step in estimating emissions is to estimate the fuel used in the various processes (shown in Table ii). Assuming continuous operation of a process for one year, the fuel used can be calculated as follows:

$$\text{Annual fuel consumption (kg/y)} = \frac{\text{Process size (J/s)}}{\text{Fuel calorific value (J/kg)}} \times 3.1536 \times 10^7 \text{ s/y}$$

where:

- Fuel calorific value is the energy released per unit fuel:

Natural Gas	36 MJ/m ³
LPG	46 MJ/kg
Oil	41 MJ/kg
Coal	25 MJ/kg
Wood	10 MJ/kg
- $3.1536 \times 10^7 \text{ s/y}$ is the factor needed to scale the process to one year.

Table ii. Typical fuel use for combustion processes

Process	Size	Fuel use per Year	Rate per MW
Natural gas	5 MW	4,400,000 m ³	880,000 m ³
	50 MW	44,000,000 m ³	
LPG	5 MW	3,400 tonnes	680 tonnes
	50 MW	34,000 tonnes	
Oil	40 kW	31 tonnes	770 tonnes
	10 MW	7,700 tonnes	
Coal	40 kW	50 tonnes	1,300 tonnes
	10 MW	12,600 tonnes	
Wood	40 kW	130 tonnes	3,200 tonnes
	10 MW	31,500 tonnes	

IXB-2 KEY CONTAMINANTS

1.10 The key contaminants from combustion processes are as follows:

PM₁₀	The fraction of particulate matter in the air of size less than 10 micrometres. 24 hour standard: 50 µg/m ³ . Annual guideline : 20 µg/m ³ .
CO	Carbon monoxide. 8 hour standard: 10 mg/m ³ . 1 hour guideline: 30 mg/m ³ .
NO_x	Oxides of nitrogen, mainly NO, NO ₂ and small amounts of NO ₃ . Standards and Guidelines for NO ₂ only: 24 hour standard: 100 µg/m ³ . 1 hour guideline: 200 µg/m ³ .
SO_x	Oxides of sulphur, mostly SO ₂ . Standards and Guidelines for SO ₂ only: 24 hour guideline: 120 µg/m ³ . 1 hour standard: 350 µg/m ³ . 1 hour standard 570 µg/m ³ (no exceedences)
O₃	Ozone 1 hour standard: 150 µg/m ³ . 8 hour guideline: 100 µg/m ³ .
VOC	Volatile organic compounds, usually light hydrocarbons, sometimes with small amounts of hazardous contaminants. Guideline levels for these are currently under review.

IXB-3 CALCULATION DETAILS & EMISSION RATES

1.11 Taking the fuel consumption data (from Table ii) and standard emissions factors from the literature (USEPA (AP-42), WHO, IPCC or the Air Pollution Engineering Manual – see “Bibliography”) for each of the key contaminants, the annual emissions can then be calculated according to:

$$\text{Annual emissions} = \text{Annual fuel consumption} \times \text{Standard emission factor}$$

1.12 The resultant emissions are reported in Table iii for three cases - worst, typical and best - based on the following assumptions:

- Sulphur content of coal = 1.0% by weight (range 0.4 to 2.0).
- Ash content of coal = 4.0% by weight (range 3.0 to 5.0).
- Density of LPG = 0.5 kg/l.
- Density of fuel oil = 0.845 kg/l.

1.13 The ranges given are subjective estimates. At the extremes, it may be possible to find either very poorly operated equipment, or conversely highly efficient equipment that may lie outside these limits.

Table iii. Typical Emission Rates for Combustion Processes

PROCESS	SIZE	EMISSION RATE BY CONTAMINANT				
		PM ₁₀ (kg/y)	CO (kg/y)	NO _x (kg/y)	SO _x (kg/y)	VOC (kg/y)
Gas/LPG	5MW worst	870	4,300	10,000	42	790
	5MW typical	370	2,400	5,700	33	440
	5MW best	210	1,400	2,500	24	180
	50MW worst	6,700	81,000	390,000	420	29,000
	50MW typical	2,100	28,000	200,000	330	4,000
	50MW best	700	25,000	37,000	240	1,300
Oil	40kW worst	22	22	260	120	12
	40kW typical	9	20	86	120	6
	40kW best	2	19	22	9	1
	10MW worst	5,400	5,500	65,000	31,000	3,100
	10MW typical	2,200	4,900	21,000	31,000	1,400
	10MW best	540	4,700	5,400	2,300	310
Coal	40kW worst	350	280	930	2,000	53
	40kW typical	250	120	410	880	3
	40kW best	25	15	170	400	3
	10MW worst	88,000	110,000	270,000	490,000	13,000
	10MW typical	63,000	32,000	110,000	220,000	760
	10MW best	6,300	3,200	81,000	81,000	630
Wood	40kW worst	440	1,400	180	13	110
	40kW typical	160	250	42	5	19
	40kW best	10	38	42	1	11
	10MW worst	110,000	760,000	57,000	3,200	27,000
	10MW typical	41,000	410,000	36,000	1,200	4,700
	10MW best	2,500	63,000	950	160	2,800

IXB-4 BIBLIOGRAPHY

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Schedule X– Air Quality Guidelines 2002

(and comparison with guideline values 1994)

CONTAMINANT	1994 GUIDELINE VALUES		2002 GUIDELINE VALUES	
	Value	Averaging time	Value	Averaging time
Carbon Monoxide	30 mg/m ³	1 hour	30 mg/m ³	1 hour
	10 mg/m ³	8 hour	10 mg/m ³	8 hour
Particles: PM₁₀	120 µg/m ³	24 hour	50 µg/m ³	24 hour
	40 µg/m ³	Annual	20 µg/m ³	Annual
Nitrogen dioxide	300 µg/m ³	1 hour	200 µg/m ³	1 hour
	100 µg/m ³	24 hour	100 µg/m ³	24 hour
Sulphur dioxide ¹	500 µg/m ³	10 min	Withdrawn	
	350 µg/m ³	1 hour	350 µg/m ³	1 hour
	125 µg/m ³	24 hour	120 µg/m ³	24 hour
	50 µg/m ³	Annual	Withdrawn	
Ozone	150 µg/m ³	1 hour	150 µg/m ³	1 hour
	100 µg/m ³	8 hour	100 µg/m ³	8 hour
Hydrogen sulphide	7 µg/m ³	30 min	7 µg/m ³	1 hour
Lead ²	0.5 - 1.0 µg/m ³	3 month	0.2 µg/m ³ (lead content of PM ₁₀)	3-month moving average (calculated monthly)

Notes

1. The sulphur dioxide guideline values do not apply to sulphur acid mist.
2. The guideline values for metals are for inhalation exposure only; they do not include exposure from other routes. These other routes should be considered in assessments.

Ambient Air Quality Standards 2004 – Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins, and other Toxins) Regulations 2004

Contaminant	Standard	Time Average	Allowable exceedences per year
Carbon monoxide (CO)	10 mg/m ³	8 hours	1
Nitrogen dioxide (NO ₂)	200 µg/m ³	1 hour	9
Ozone (O ₃)	150 µg/m ³	1 hour	0
Particles (PM ₁₀)	50 µg/m ³	24 hours	1
Sulphur dioxide (SO ₂)	350 µg/m ³	1 hour	9
	570 µg/m ³	1 hour	0

Schedule XII – Emission Requirements: Small scale solid fuel burners

PART A SMALL SCALE SOLID FUEL BURNERS- AIRZONE 1 - HASTINGS AIRSHED

A-1 SOLID FUEL BURNER REQUIREMENTS (FREE STANDING BURNERS, NEW BURNERS¹ (WITH OR WITHOUT A WETBACK) & INSERT BURNERS (WITHOUT A WETBACK))

A-1.1 a small scale solid fuel burner must:

- emit no more than 1.0 gram of total suspended particulate matter per kilogram of fuel burned, calculated by averaging the total suspended particulate emissions for high, medium and low burn rates, when tested in accordance with AS/NZS4012:1999 and AS/NZS4013:1999, or AS/NZS4014.6:2007, AS/NZS4886:2007 and AS/NZS5078:2007 when testing pellet burners, or the functional equivalent for other non batch-fed appliances. Where the nominated test fuel is wood then the test shall be carried out using softwood in accordance with the requirements of AS/NZS 4014.2:1999
- have a thermal efficiency, for space heating only, as described in AS/NZS4013:1999, of 65% or greater
- comply with the definition of 'NESAQ compliant burner' in this Plan
- not be modified in any way so as to alter the specifications of the burner from those tested and stated by the manufacturer
- be maintained in good operational order and operated in accordance with the manufacturer's instructions and
- be capable of being operated on a high, medium and low burn rate.

A-2 SOLID FUEL BURNER REQUIREMENTS (INSERT BURNERS WITH A WETBACK)

A-2.1 a small scale solid fuel burner must:

- emit no more than 1.5 grams of total suspended particulate matter per kilogram of fuel burned, calculated by averaging the total suspended particulate emissions for high, medium and low burn rates, when tested in accordance with AS/NZS4012:1999 and AS/NZS4013:1999, or AS/NZS4014.6:2007, AS/NZS4886:2007 and AS/NZS5078:2007 when testing pellet burners, or the functional equivalent for other non batch-fed appliances. Where the nominated test fuel is wood then the test shall be carried out using softwood in accordance with the requirements of AS/NZS 4014.2:1999
- have a thermal efficiency, for space heating only, as described in AS/NZS4013:1999, of 65% or greater
- comply with the definition of 'NESAQ compliant burner' in this Plan
- not be modified in any way so as to alter the specifications of the burner from those tested and stated by the manufacturer
- be maintained in good operational order and operated in accordance with the manufacturer's instructions
- be capable of being operated on a high, medium and low burn rate, and
- be connected to the hot water supply system within a residential dwelling.

PART B SMALLSCALE SOLID FUEL BURNERS - AIRZONES 1 & 2 - NAPIER AIRSHED AND AIRZONE 2 - HASTINGS AIRSHED

B-1 SOLID FUEL BURNER REQUIREMENTS

B-1.1 a small scale solid-fuel burner must:

- emit no more than 1.5 grams of total suspended particulate matter per kilogram of fuel burned, calculated by averaging the total suspended particulate emissions for high, medium and low burn rates, when tested in accordance with AS/NZS4012:1999 and AS/NZS4013:1999, or AS/NZS4014.6:2007, AS/NZS4886:2007 and AS/NZS5078:2007 when testing pellet burners, or the functional equivalent for other non batch-fed appliances. Where the nominated test fuel is wood then the test shall be carried out using softwood in accordance with the requirements of AS/NZS 4014.2:1999
- have a thermal efficiency, for space heating only, as described in AS/NZS4013:1999 of 65% or greater
- comply with the definition of 'NESAQ compliant burner' in this Plan
- not be modified in any way so as to alter the specifications of the burner from those tested and stated by the manufacturer
- be maintained in good operational order and operated in accordance with the manufacturer's instructions and
- be capable of being operated on a high, medium and low burn rate.

¹ A new burner is classed as a burner not replacing an existing burner located within the same building.

PART C SMALL SCALE SOLID FUEL BURNERS- NAPIER AIRSHED AND HASTINGS AIRSHED

C-1 MODIFIED SOLID FUEL BURNER & INFORMATION REQUIREMENTS

C-1.1 the modified small scale solid-fuel burner must:

- a) emit no more than 1.5 grams of total suspended particulate matter per kilogram of fuel burned, calculated by averaging the total suspended particulate emissions for high, medium and low burn rates, when tested in accordance with AS/NZS4012:1999 and AS/NZS4013:1999, or AS/NZS4014.6:2007, AS/NZS4886:2007 and AS/NZS5078:2007 when testing pellet burners, or the functional equivalent for other non batch-fed appliances. Where the nominated test fuel is wood then the test shall be carried out using softwood in accordance with the requirements of AS/NZS 4014.2:1999
- b) have a thermal efficiency, for space heating only, as described in AS/NZS4013:1999 of 65% or greater
- c) comply with the definition of 'modified NESAQ compliant burner' in this Plan
- d) be maintained in good operational order and operated in accordance with the manufacturer's instructions and
- e) be capable of being operated on a high, medium and low burn rate.

C-1.2 all modifications shall be undertaken by an independent suitably qualified person² approved by the burner manufacturer and notified to the Hawke's Bay Regional Council.

C-1.3 the following information shall be provided to the Hawke's Bay Regional Council prior to the modification taking place:

- a) name, address and phone number of property owner
- b) description of the type of device, year of manufacture and installation, and tested particulate emission rates for that device at the time of installation (if available)
- c) a description of the modifications that need to take place to make the existing burner NESAQ compliant
- d) confirmation by the burner manufacturer or their agent that the existing burner is in good working order, and complies with the technical specifications of the particular NESAQ compliant burner model, or provision of a list of remedial work necessary to make it NESAQ compliant, and/or to restore the burner to good working order
- e) technical specifications of the old appliance and the equivalent NESAQ authorised appliance, and confirmation by the burner manufacturer that the technical specifications and overall dimensions of both burners, after modification are the same
- f) a list of measures that can be undertaken to ensure the existing burner cannot be easily tampered with after the modification has occurred.

C-1.4 the following information must be provided to the Hawke's Bay Regional Council after the modification has occurred:

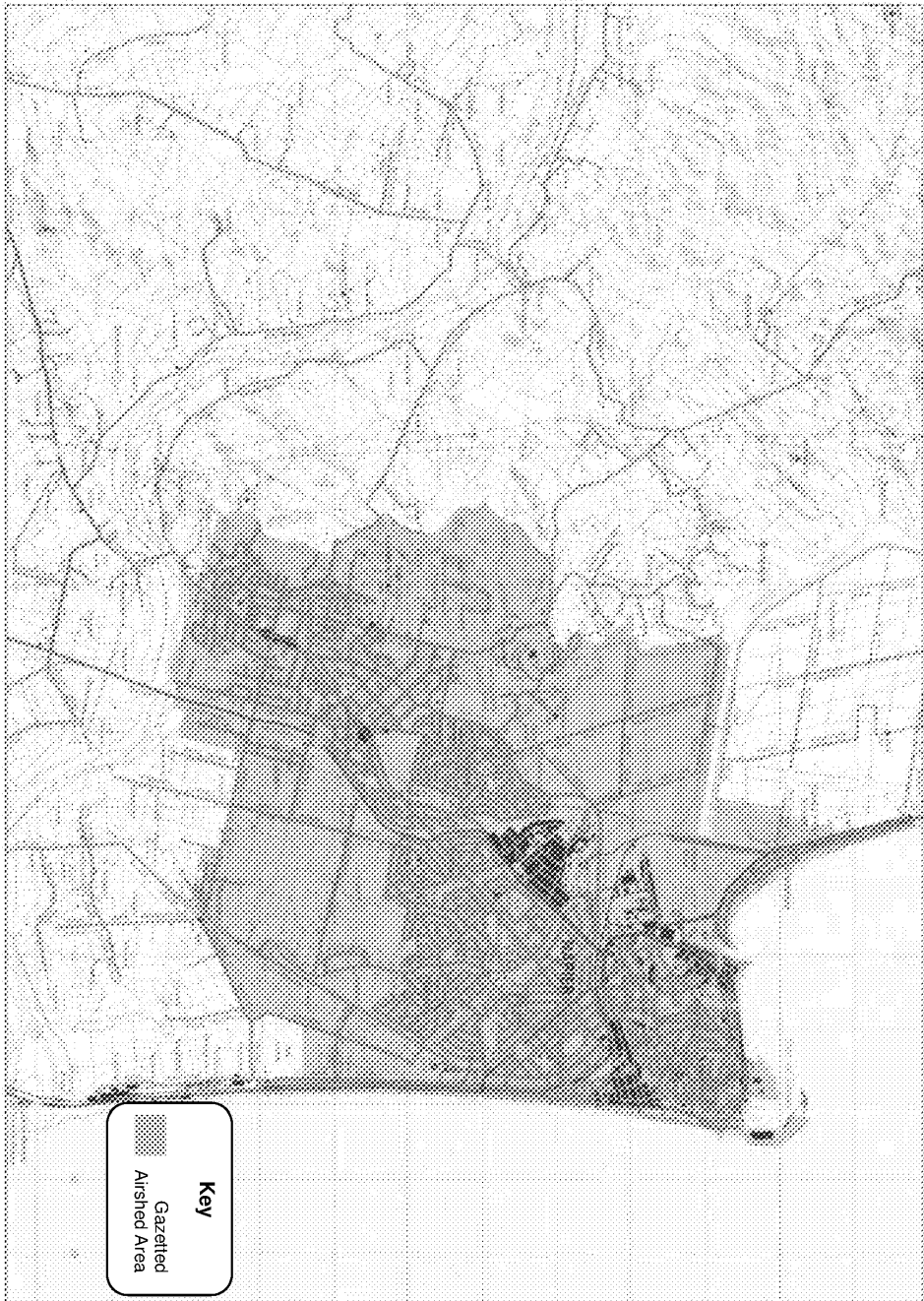
- a) confirmation by the burner manufacturer that the technical specifications of the existing burner and the equivalent NESAQ compliant burner, after modification are the same
- b) confirmation by the burner manufacturer that the list of remedial work identified in condition C-1.3(d) above (if any), has been undertaken
- c) name and phone number of the approved 'independent suitably qualified person' who carried out the modification
- d) confirmation that the list of measures referred to in C-1.3(f) above have been carried out.

C-1.5 the Hawke's Bay Regional Council may require information provided in accordance with C-1.3 above to be technically peer reviewed.

² An independent suitably qualified person is deemed to include the manufacturer of the burner, or a nominated representative of the manufacturer, or staff employed by the manufacturer.

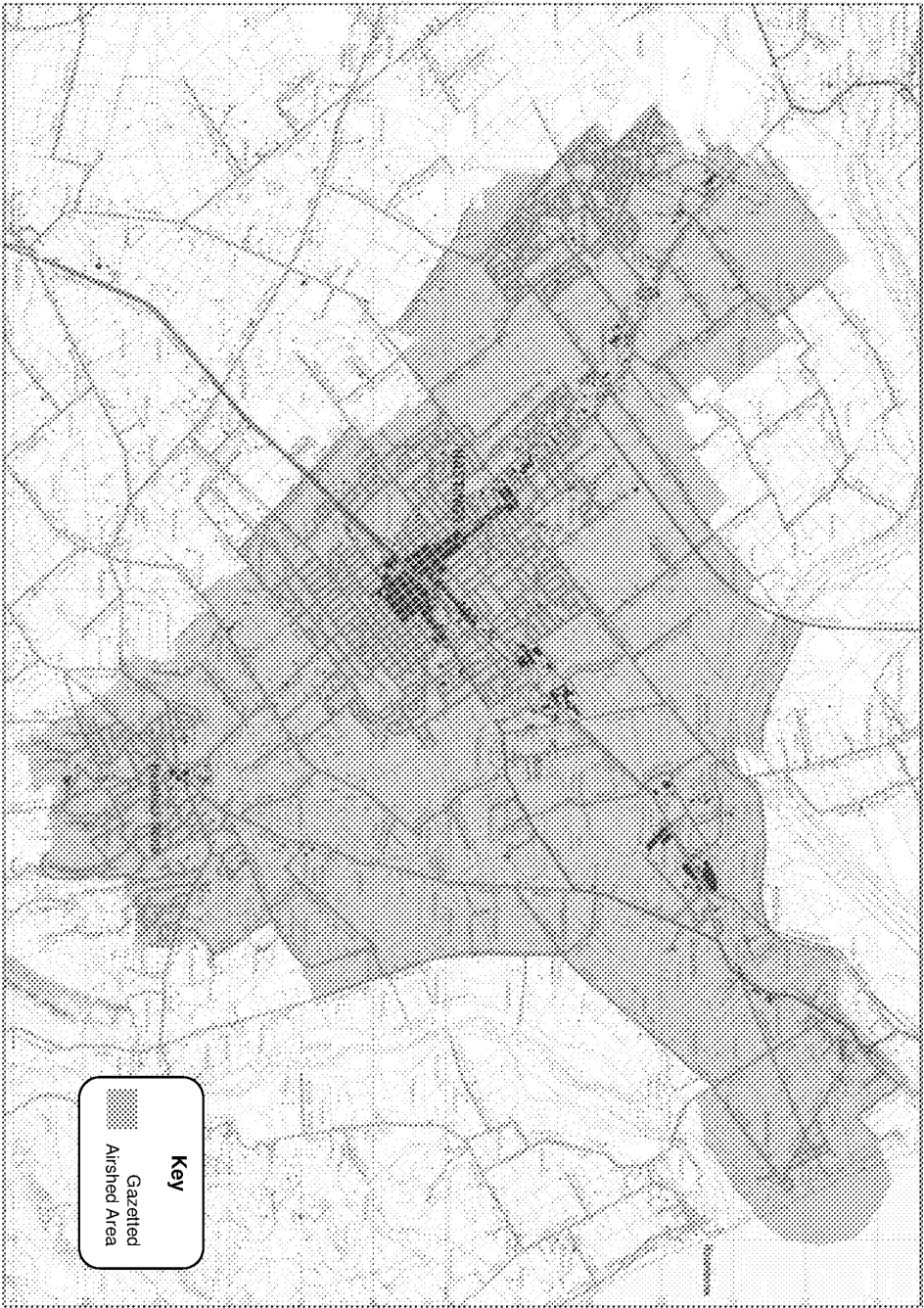
Schedule XIII – Airshed boundaries and Airzone Boundaries

Napier Airshed



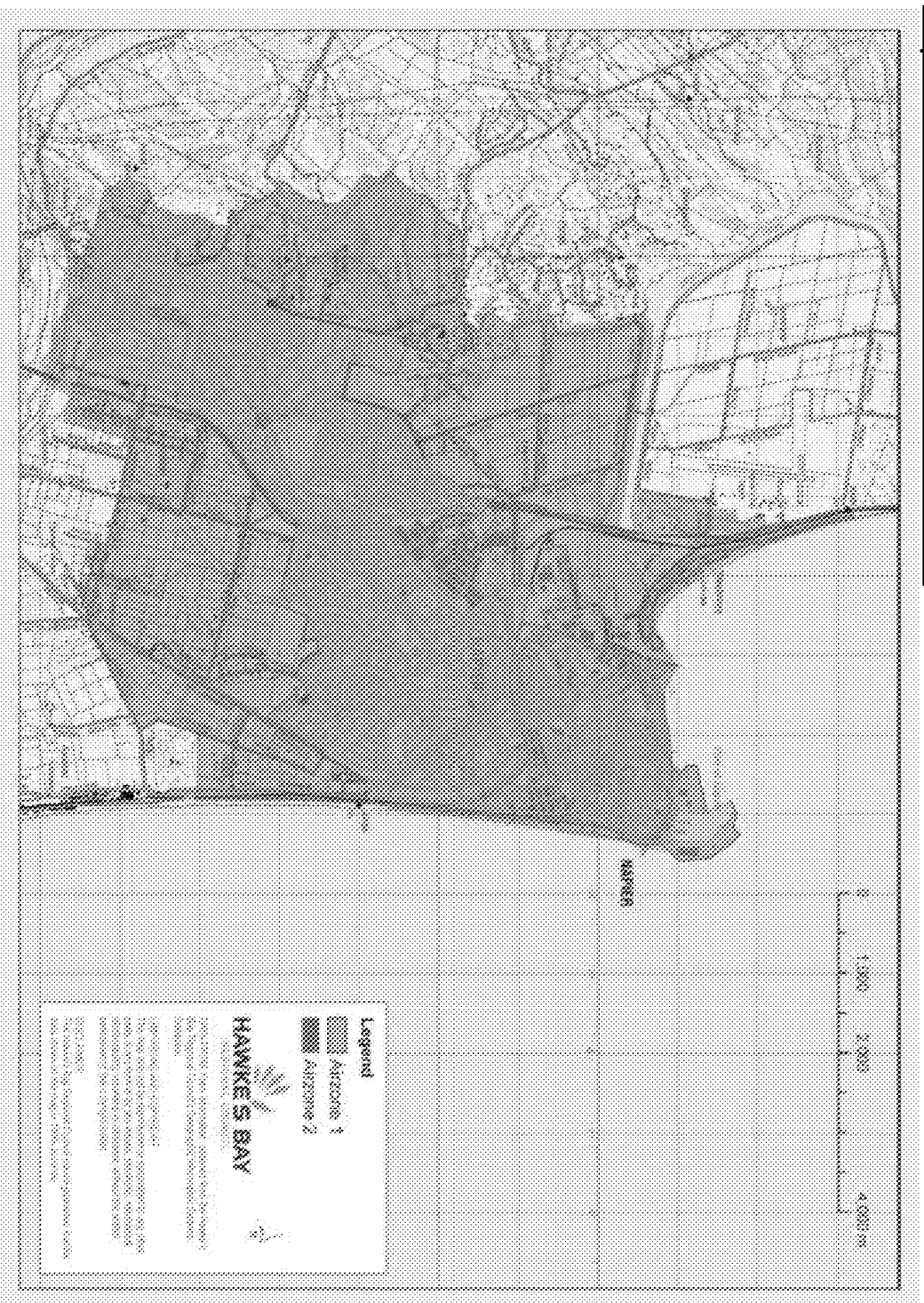
Regional Resource Management Plan Schedule XIII
Incorporating Change 2: Air Quality
(For in-principle 'approval' as operative – 12 October 2011)

Hastings Airshed

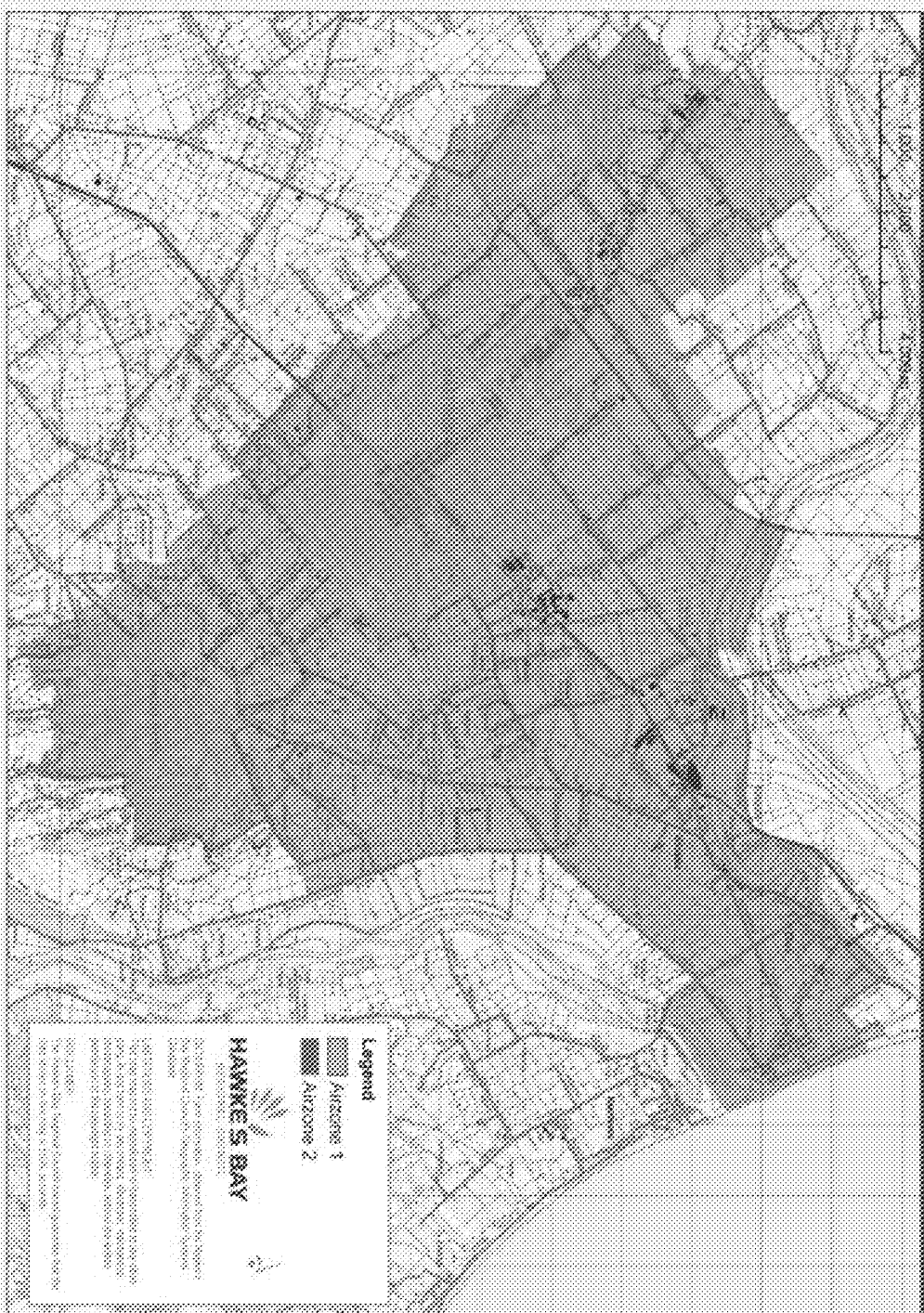


Regional Resource Management Plan Schedule XIII
Incorporating Change 2: Air Quality
(For in-principle 'approval' as operative – 12 October 2011)

Napier Airshed: Airzone Boundaries



Hastings Airshed: Airzone Boundaries



MAKING IS BAY

*Regional Resource Management Plan Schedule XIII
Incorporating Change 2: Air Quality
(For in-principle 'approval' as operative – 12 October 2011)*

Add or amend the following definitions in RRMP Chapter 9 (Glossary):

- 9.9A Airshed
means
a) the region of a regional council excluding any area specified in a notice under (b)
b) a part of the region of a regional council specified by the Minister for the Environment by a notice in the Gazette to be a separate airshed.
Maps of airsheds gazetted under (b) are incorporated by reference in Schedule XIII.
- 9.53A Custom designed pellet boiler
means solid fuel burning equipment that is specifically designed and manufactured as a boiler fuelled by wood pellets and where the pellets and air are mechanically delivered to an enclosed combustion chamber at a controlled rate. This does not include solid fuel burning equipment that has been modified or customised after its manufacture
- 9.56A Diesel
means a refined petroleum distillate having a viscosity and distillation range intermediate between those of kerosene and light fuel oil, whether or not it contains additives, intended for use as fuel in internal combustion equipment and external combustion equipment, but excludes re-refined oil and used oil or waste oil. Diesel must have properties that conform to the limits specified in Schedule 3 of the Petroleum Products Specifications Regulations 1988, when tested by the methods specified in that Schedule.
- 9.84A External combustion
means a fuel combustion process that is not internal combustion, but utilises a heat furnace primarily to generate thermal energy. External combustion typically involves fully aspirated burning of the fuel to heat another fluid such as water (for steam), other exchange liquids or gases, air directly, or any component or part of a process that requires thermal energy. Unlike internal combustion, mechanical energy from external combustion can only be generated indirectly, by the furnace heating a fluid within a closed circuit – typically utilising phase change of the heated fluid between liquid and gas to generate physical motion, such as via a steam turbine driven by a boiler/cooler circuit.
- 9.92A Freestanding Burner
means an appliance designed to be installed as a solid fuel burner in all areas of a residential dwelling except in a concrete or masonry fireplace or recessed into a building structure or fitting.
- 9.95A Greater Region Airshed
means an airshed covering those parts of the region which have not been specified by the Minister for the Environment in a notice in the Gazette to be a separate airshed.
- 9.103A Hastings Airshed
means an airshed specified by the Minister for the Environment by a notice in the Gazette over the Hastings urban area and surrounds for the purposes of managing local ambient air quality. The area covered by the Hastings Airshed is incorporated by reference in Schedule XIII, and comprises Airzone 1 and Airzone 2.
- 9.103B Hastings Airshed Airzone 1
means the area of the Hastings Airshed covered by Airzone 1 as shown in Schedule XIII.
- 9.103C Hastings Airshed Airzone 2
means the area of the Hastings Airshed covered by Airzone 2 as shown in Schedule XIII.
- 9.106A Heavy fuel oil
means the residual fuel oil remaining after light fuel oil and the lighter fractions have been removed from crude oil during the refining process. Heavy fuel oil is more dense and viscous and has a higher sulphur content than light fuel oil.
- 9.110A Incinerator
means a device that is capable of burning solid fuel and waste, but the combustion is not able to be controlled and is not totally enclosed.
- 9.115A Insert burner – no wetback
means a solid fuel burning appliance designed to be installed in a fireplace or a suitably flued masonry enclosure, but not connected to the hot water supply system within a residential dwelling.

Comment [1]: Amendment subject to approval by Environment Court.

- 9.115B Insert burner – wetback
means a solid fuel burning appliance designed to be installed in a fireplace or a suitably flued masonry enclosure and is connected to the hot water supply system within a residential dwelling.
- 9.118A Internal combustion
means a fuel combustion process within an engine in which *mechanical* energy is produced by the explosion of a fuel-and-air mixture within the engine (either within cylinders in the case of engines powered by fuels like petrol or diesel, or within gas turbines in the case of jet engines). While the primary purpose of an internal combustion process is to convert the energy from combustion of the fuel directly into mechanical energy, note that a significant proportion of the energy is also converted to waste heat.
- 9.129A Kerosene
means a highly refined fuel, also known as paraffin oil, used whenever a pure, low contamination liquid fuel is required, as in certain types of lamps, and domestic heating devices and industrial fuel burning equipment. Kerosene fuels are a clear, colourless hydrocarbon liquid and are characterised by low volatility and moderately high flash points which make them difficult to ignite and burn cleanly without preheating.
- 9.130A kW (kilowatt)
means a measure of power (the rate at which work is being done) where 1 kW = 10³ (1000) Joules per second.
- 9.137A Light fuel oil
means residual oil of grade No. 5 or less (as described in USEPA Chapter 1 of the Compilation of Air Pollutant Emission Factors, AP-42, (January 1995) Fifth Edition, Volume I: Stationary Point and Area Sources), and contains less than 2% sulphur by weight. This does not include distillate oils such as kerosene and diesel.
- 9.137B Liquefied petroleum gas (LPG)
means butane, propane or a mixture of the two.
- 9.155A Multi-fuel burner
means a small scale fuel burner designed to burn more than one type of solid fuel.
- 9.155B MW (megawatt)
means a measure of power (the rate at which work is being done) where 1 MW = 10⁶ (1 million) Joules per second, or 1000 kW.
- 9.154A Modified NESAQ compliant burner:
means a small scale solid fuel burner that meets the requirements of Part C Schedule XII after modification, and is specifically included on an approved modified burner list¹.
- 9.154B Modified pellet boiler
means solid fuel burning equipment that has been modified after manufacture and/or installation to convert it to a boiler fuelled by wood pellets and where the pellets and air are mechanically delivered to an enclosed combustion chamber at a controlled rate.”
- 9.155C Napier Airshed
means an airshed specified by the Minister for the Environment by a notice in the Gazette over the Napier urban area and surrounds for the purposes of managing local ambient air quality. The area covered by the Napier Airshed is incorporated by reference in Schedule XIII, and comprises Airzone 1 and Airzone 2.
- 9.155D Napier Airshed Airzone 1
means the area of the Napier Airshed covered by Airzone 1 as shown in Schedule XIII.
- 9.155E Napier Airshed Airzone 2
means the area of the Napier Airshed covered by Airzone 2 as shown in Schedule XIII.
- 9.155F National Ambient Air Quality Standard
means a standard specified under the Resource Management (National Environmental Standards Relating to Certain Air Pollutants, Dioxins, and Other Toxics) Regulations 2004.

¹ A list of approved modified burners (i.e. those burning appliances that have been modified to comply with the NESAQ) is available from the Hawke's Bay Regional Council on request.



Comment [2] : Amendment subject to approval by Environment Court.

- 9.158A Natural gas
means a mixture of naturally occurring hydrocarbons that are gaseous under normal conditions of temperature and pressure, comprising methane and small amounts of ethane, propane and other gases.
- 9.158B NESAQ
refer to National Ambient Air Quality Standard.
- 9.158C NESAQ compliant burner
means a small scale solid fuel burner that meets the requirements in Schedule XII, and is specifically stated on an approved burner list.²
- 9.170A Open fire
means a fireplace or similar device installed in, or attached to, any building which is capable of burning solid fuel, but where the combustion is not totally enclosed.
- 9.171A Outdoor burning
means the combustion of any material in the open air, other than in purpose-built fuel burning equipment designed to control the combustion process. Outdoor burning includes the use of any fire, or bonfire or burning in drums and backyard rubbish incinerators, but does not include the burning of fuels in hangi and barbeques for food cooking purposes.³
- 9.172A Particulate matter
means solid and aerosol matter that exists in the atmosphere. For the purposes of this Plan, it includes smoke, deposited particulates, suspended particulates, respirable particulates and visibility-reducing particulates. Particles range in size from 100 microns down to aggregation of molecules. Particulate matter that is less than 10 microns in aerodynamic diameter is referred to as PM₁₀.
- 9.172B Pellet burner
means any small-scale solid fuel burning appliance that burns only wood pellets where the pellets and air are mechanically delivered to an enclosed combustion chamber at a controlled rate.
- 9.176A PM₁₀
means particulate matter that is less than 10 microns in aerodynamic diameter (ie: less than 0.01mm diameter).
- 9.216A Small scale fuel burner
means any fuel burning equipment which burns solid fuel, diesel, oil or other liquid fuels for cooking, space or water heating or other purposes, where the net heat output from the combustion is not greater than 70 kilowatts (kW) for any gaseous or liquefied gaseous fuel, or not greater than 40 kW for any other fuel.
- 9.216B Small scale pellet burner
refer to pellet burner.
- 9.216C Small scale solid fuel burner
means fuel burning equipment with a heat generation of up to 40 kilowatts (kW), in which solid fuel is burnt for heating or cooking, and is primarily used in dwelling houses. It includes (but is not limited to) appliances for interior space heating in buildings, such as wood burners, pellet burners, pot belly and domestic ranges and stoves, water heaters or central heating units, multi-fuel burners, and similar appliances, but excludes small-scale devices used for smoking food. For the purposes of this Plan, a small scale solid fuel burner does not include an incinerator or an open fire.
- 9.219A Solid fuel
means a solid substance that releases useable energy when burnt (e.g. wood, manufactured fuel pellets, coal and its derivatives).
- 9.222A Stack
refer to Chimney.
- 9.245A Thermal efficiency
means the ratio of useable heat energy output to energy input.

² A list of approved burners (i.e.: those burning appliances that comply with the NESAQ) is available from the Hawke's Bay Regional Council on request.

³ NOTE: The NESAQ contains clauses prohibiting the burning of certain materials in the open and overrides rules contained elsewhere in this Plan.



- 9.253A Vegetative matter
means any tree branches, roots, leaves, grass cuttings, seed pods, stalks and stubble (stems), prunings, wood and similar organic plant material.
- 9.260 Waste oil
means oil that has been utilised for a process (typically lubrication, either in internal combustion engines or moving parts to minimise component wear) that results in contaminants building up in the oil. Contaminants may include heavy metal particles, combustion by-products, fuel and used additives. Note: while some 'purification' processes may result in the removal of a number of these contaminants, the oil even though described as 'processed waste oil' is still defined to be waste oil because the removal is often only partial.
- 9.272A Wood burner
means a small-scale solid fuel burner that burns wood, but does not include:
(a) an open fire; or
(b) a multi-fuel burner, a pellet burner, or a coal burner; or
(c) wood fired cooker
- 9.272B Wood pellets
means individual pellets of between 6mm and 8mm in diameter and a maximum length of 38mm made from wood shavings or sawdust bonded together by the woods natural resins through the process of pelleting. Wood pellets made using wood, wood shavings or sawdust that has been treated with preservatives or impregnated with chemicals are excluded from this definition, except for negligible amounts of antisapstain where, in the pellets⁴, the concentration of copper does not exceed ≤ 10 mg/kg dry, and the concentration of chlorine does not exceed ≤ 0.02 w-% dry⁵.
- 9.273 Wood fired cooker
means a wood fuelled cooking appliance containing an oven of not less than 20 L capacity and a hot plate and is specifically included on an approved wood fired cooker list⁶. A 'wood fired cooker' does not include a pot belly, chip heater or a wood burner.

Comment [3] : Amendments subject to approval by Environment Court.

⁴ Concentrations of copper and chlorine in a pellet shall be sampled, tested and reported in accordance with DIN51731:1996 or a similar method. DIN51731:1996 is a standard accepted in the European Union, where a 120kg sample is taken in irregular amounts over 5 consecutive working days; then that sample is split into thirds, leaving 1x40kg sample; then that 40kg sample is further split in 2 leaving 1x20kg sample; then that 20kg sample is split in 2 leaving 1x10kg sample for copper and chlorine concentration testing.

⁵ ie: ≤ 200 mg/kg of dry pellets.

⁶ A list of approved wood fired cookers (i.e. those appliances that comply with the definition of 'wood fired cooker'); is available from the Hawke's Bay Regional Council on request.



HAWKE'S BAY REGIONAL COUNCIL
ENVIRONMENTAL MANAGEMENT COMMITTEE

Wednesday 12 October 2011

Item 11

**SUBJECT: PLAN CHANGE PROCESS FOR HERETAUNGA ZONE -
INTEGRATED CATCHMENT MANAGEMENT**

Reason For Report

1. The purpose of this report is to bring to the Committee's early attention the proposal to address the scheduled review of the minimum flow and allocation limits of the Karamu Stream as part of an integrated catchment approach for the wider Heretaunga Zone.
2. This report gives an overview of the issues only. As part of an integrated catchment management approach, a more detailed project programme needs to be developed.
3. This report also provides useful background to the Council's Long Term Plan workshop on Thursday 13th October 2011.

The Heretaunga Zone

4. Figure 1 defines the Heretaunga Zone used for the section 36 charges and it generally includes the catchment and areas that, from a surface water and groundwater management perspective, need to be managed in a holistic and integrated way.
5. It includes the Heretaunga Plains aquifer system which extends from the southern edges of Napier to Te Awanga and inland to the hills. This is a large highly productive complex aquifer system with confined, unconfined and artesian conditions.
6. The map includes the Ahuriri Estuary and Poraiti Hills aquifer and further analysis is required to determine whether that area should be included from an integrated water management perspective.
7. There are a number of rivers that flow over the plains and may lose water to the aquifer system or may gain water from the aquifer via springs. Some of these rivers have their headwaters in the ranges (Tutaekuri and Ngaruroro), some from the surrounding lowland hills (Tutaekuri-Waimate and the Karamu/Clive).
8. The name Heretaunga also reflects the association that tangata whenua with the name of Heretaunga when it referred to a much larger area than it does now



Figure 1: Heretaunga Zone in green

Resource Consents and Expiry Dates

9. There are a total of 3679 current consents in the Heretaunga zone representing approximately half of the region consented activity. Of these, 2561 (approx. 70%) relate to taking, use damming and diverting of surface water and groundwater.
10. Of the 2561, the bulk of the Ngaruroro River and Maraekakaho takes expire in 2015 along with the Twyford groundwater takes that are considered to be stream depleters, with the vast majority of the groundwater takes from the unconfined part of the Heretaunga Plains expiring in 2019. The majority of the surface and groundwater takes in the Tutaekuri River catchment expire in 2018.
11. Only some 30 consents expire in 2013. These are in the Karamu river catchment (excluding the Poukawa catchment) and have been the driver for the scheduled Karamu Plan change. These consents were granted with a five year term to allow for further scientific investigations to be undertaken in regard to reviewing the minimum flow and allocatable volumes.
12. Since then, the Twyford consent renewal process has further highlighted the interconnectedness of the surface water and groundwater systems. How this interconnectedness is managed across the Heretaunga Plains aquifer system and the surface waterbodies that are linked with it (ie the Upper Karamu (Paritua, Karewarewa, Irongate), Ngaruroro, Tutaekuri-Waimate and Tutaekuri Rivers) will be a key element to address and requires an integrated approach.

Water Use Information

13. The Twyford consent process also highlighted the lack of real time data about how much water is used and needed particularly by irrigators across the Heretaunga Plains. Better knowledge is required in order to better inform scientific investigations, policy development and the implications of policy decisions.

Storage Prefeasibility Study

14. Council has undertaken a prefeasibility study for storage in the Ngaruroro and Karamu catchments. As yet it is unclear how storage or water augmentation may fit into the overall water management for the Heretaunga zone, but further exploration is required in this area.

Groundwater Science

15. A robust groundwater model will be critical tool in understanding how the resources work together and for developing appropriate policy. Staff have reviewed the current steady state and transient model and have identified some issues with it which means that in its current form, it is not a reliable tool for policy setting (or water management) and would not withstand scrutiny in the Environment Court.
16. Based on the development of the Ruataniwha model, it could take some 3 years to bring the groundwater model to the point where it would withstand Environment Court challenge. An interim option, which would require correction of recharge data and boundary conditions, would mean that a better output could be produced in terms of water budget and groundwater levels but this would not assist with understanding the groundwater and surface water interaction and the values that may be affected by water level changes.
17. More detail on the work programme for the groundwater model will form part of the Long Term Plan process.

Surface Water Hydrology

18. Currently, there is no accepted scientific methodology for assessing in-stream flow requirements of aquatic species in lowland springfed streams such as the Karamu Stream. Work is being done as part of a national project and the Karamu Stream is part of that project. It is also being looked at as part of the Twyford appeal process.

19. In addition, as part of a regional quality assurance programme for HBRC's flow monitoring sites, audits are required for key Heretaunga flow sites. These cost in the order of \$32,000 per site.

Planning Issues

20. At this point, there is a lack of scientifically based data on which to base a review of the minimum flow and allocation limits with any certainty that it would improve the environmental or value outcome.
21. There is a risk that proceeding with a plan change which sets a revised allocation limit and minimum flow might impact on or undermine future integrated water management regimes.
22. The workload associated with plan change processes for science staff should not be under-estimated. Now that work has started on the technical elements of policy development for the Tukituki River catchment plan change, it is clear that there is significant follow-up reporting required of science staff, particularly if they will be presenting evidence at hearings. Given the similar nature of the plan change, it is the same staff that would be required to produce supporting scientific documentation for a Karamu plan change.
23. The implication of not proceeding with a plan change in time for 2013 renewals is that the consents will need to be renewed based on current plan provisions. In order to avoid a repeat of the last process which involved notification and hearings, we will need to work with consent holders and key stakeholders to agree on a streamlined approach to reconsenting those consents without undue costs.

Submitters to the Karamu Consents

24. Te Taiwhenua O Heretaunga was the only submitter to the consent applications which resulted in short term consents being granted. Staff have spoken with the Taiwhenua (Marei Apatu) about the planning issues associated with notifying a plan change in time for these consent renewals. Staff have also spoken with the Department of Conservation and Fish and Game NZ.
25. These stakeholders are accepting of the issues and the tight timeframes associated with a plan change for the Karamu Catchment. They also recognise the work Council is doing through the Land and Water Strategy to set out the strategic direction for managing land and water use. There is a willingness to work through a process for streamlining the consent renewal process.

Integrated Catchment Management for the Heretaunga Zone

26. A scoping exercise needs to be undertaken for the development of an Integrated Catchment Management programme of the Heretaunga Zone. This workshop would involve Council staff and councillors and external stakeholders. It would usefully be facilitated by someone with experience in Integrated Catchment Management. This would assist in our understanding of the scope of such a project, the timeframe, who needs to be involved and in what role and so on.

Financial and Resource Implications

27. Further detail of the financial and resource implications associated with Integrated Catchment management for the Heretaunga Zone will be provided as part of the Long Term Plan process.

Decision Making Process

28. Council is required to make a decision in accordance with the requirements of the Local Government Act 2002 (the Act). Staff have assessed the requirements contained in Part 6 Sub Part 1 of the Act in relation to this item and have concluded the following:
 - 28.1. The decision does not significantly alter the service provision or affect a strategic asset.
 - 28.2. The use of the special consultative procedure is not prescribed by legislation.

- 28.3. The decision does not fall within the definition of Council's policy on significance.
- 28.4. The persons affected by this decision are the Heretaunga zone communities, specifically land managers and water users.
- 28.5. Options that have been considered include proceeding with the Karamu stream plan change separately, or considering the Karamu plan change as part of an integrated catchment management approach.
- 28.6. The decision is not inconsistent with an existing policy or plan.
- 28.7. Given the nature and significance of the issue to be considered and decided, and also the persons likely to be affected by, or have an interest in the decisions made, Council can exercise its discretion and make a decision without consulting directly with the community or others having an interest in the decision.

Recommendations

The Environmental Management Committee recommends that Council:

1. Agrees that the decisions to be made are not significant under the criteria contained in Council's adopted policy on significance and that Council can exercise its discretion under Sections 79(1)(a) and 82(3) of the Local Government Act 2002 and make decisions on this issue without conferring directly with the community and persons likely to be affected by or to have an interest in the decision due to the nature and significance of the issue to be considered and decided.
2. Agrees that a plan change to review the allocation limits and minimum flows for the Karamu Stream be delayed to enable an integrated catchment approach to the Heretaunga Zone.
3. Instructs staff to work with stakeholders and consent holders of consents which expire on 2013 to find a mutually acceptable arrangement that would enable the consents to be processed on a non-notified basis.
4. Instructs staff to hold a scoping workshop for Integrated Management of the Heretaunga Zone.



Helen Codlin
GROUP MANAGER STRATEGIC
DEVELOPMENT

Attachment/s

There are no attachments for this report.

HAWKE'S BAY REGIONAL COUNCIL
ENVIRONMENTAL MANAGEMENT COMMITTEE

Wednesday 12 October 2011

Item 12

SUBJECT: WATER QUALITY TRENDS IN HAWKE'S BAY 1998-2011

Reason For Report

1. The purpose of this report is:
 - 1.1. To inform Council on the current state and trends of key surface water quality parameters using the examples of nitrate-nitrogen (NO₃) and soluble reactive phosphorus (SRP).
 - 1.2. To highlight some weaknesses in the existing water quality monitoring programme that limit Council's ability to deliver on their strategic goals.
 - 1.3. To highlight the importance of the State of the Environment (SoE) programme in supporting Council's Regional Goals and Strategic Direction.

Background

2. The current Hawke's Bay Regional Council's SoE river monitoring programme consists of 72 sites monitored routinely throughout the region. The standard sampling regime is quarterly water quality measurements. Analysis and reporting of the results follows a 5 yearly cycle. The next detailed regional SoE review of surface water quality is due in 2014.
3. The programme reflects recommendations from the 2006 SoE review and NIWA commissioned frequency analysis.
4. An interim, region wide analysis of state and trends was undertaken to inform Council to support strategic development and to assist in providing information to operational activities e.g. land services for prioritisation and effectiveness of programmes. Preliminary results will be part of the presentation.

Methods

Trend and State Analysis

5. Key water quality variables were analysed for state and trends based on the following:
 - 5.1. Summaries of state, based on percentage of compliance with Regional Resource Management Plan (RRMP) and Australian and New Zealand Guidelines for Fresh and Marine Water Quality (2000) (ANZECC) guideline levels, were assessed for the period September 2008 to September 2011 (last 3 years approximating current state).
 - 5.2. Trends were analysed for SoE sites (54 in total, including 6 sites sampled by NIWA) containing data spanning the period 1998-2010. At least ten years of data is generally required for a robust trend analysis in light of the historic and current quarterly sampling frequency (discussed in more detail shortly).

Data Display

6. Sites were classified into "increasing", "decreasing" and "stable trend" classes, when significant trends were determined. Symbols were assigned for each trend class (displayed as: arrow up, arrow down and square respectively). Remaining sites were defined with "no significant trend" and displayed as a circle.
7. Water quality 'state' classes were defined using the percentage of compliance (as described under 5.1) in line with the following: >80% compliance, 80-50% compliance, <50% compliance (displayed in green, amber and red respectively).

8. Classes described in 6 and 7 were merged and displayed in ArcGIS for each variable. One coloured symbol being displayed for each site (e.g. green arrow up, upward trend, but >80% compliance with guidelines). Maps were generated for each variable and selected examples will be shown as part of the presentation.

Results

In the Case of NO₃ and SRP

9. In the case of NO₃ and SRP, the trend analysis resulted in “no significant trend” for a large number of the SoE sites. This reflects an indeterminate result with no capacity to conclude an increasing, decreasing or stable trend over the time period analysed.
10. Nine sites showed a significant increasing trend for NO₃ and four sites a significant decreasing trend; seven sites showed a significant increasing trend for SRP and seven sites a significant decreasing trend. No sites returned a significant stable trend.
11. Four NO₃-sites and five SRP-sites that returned significant trends were sampled by NIWA at a higher (monthly) frequency returning roughly 4 times more data points than HBRC sampled sites. HBRC sites at which trends could be determined were generally sites where data was also collected monthly (e.g Taharua).
12. The lack of statistically significant trends (increasing, decreasing or stable) is largely an artefact of the frequency of sampling. Increasing sampling frequency from quarterly to monthly for key SoE sites would greatly improve Council’s capacity to report on trends, and in turn plan effectiveness.
13. The current standard SoE surface water sampling routine, based on quarterly sampling, does not provide sufficient data for sound statistical analysis over the five yearly reporting cycle. Monthly sampling is more likely to provide for robust data aligned with the regional reporting period and enable consistency with national monitoring.
14. Increased sampling frequency and subsequently robust trends and state analysis would provide for:
 - 14.1. The opportunity to report “changing state and trend”, based on a fixed (defined) time period to inform Council and the public of the most recent state and trends of their water resources.
 - 14.2. Iterative decision-making: Evaluating **results** of actions (e.g. land management) and adjusting **actions** on the basis of state and trend analysis. This could be coupled with historic and current landuse information to ensure legacy effects were appropriately characterised.
 - 14.3. Improved capacity to assess trends over the SoE reporting period (5 years).
 - 14.4. Stronger statistical conclusions.
 - 14.5. Sound data for decision making process (strategic development, operational activities and statutory processes).
 - 14.6. Straightforward cause-effect evaluation (e.g land management).

Strategic Context

15. The Council has confirmed its proposed strategic directions with soon to be released Strategic Plan. Land and Water Quality are focus areas under the strategic goals of Resilient Ecosystems.
16. The Strategic Plan’s proposed outcome is a proactive integrated management of Land and Water through ‘Better understand(ing) trends and risks for each catchment’. ‘Keeping communities well informed’ is one of the proposed approaches in the focus area of people and communities.
17. Proposed Science Programme Objectives to support these strategic goals include:
 - 17.1 To support sound strategic decisions in identifying areas for enhancement and improvement of water quality.

- 17.2 To provide catchment based robust information to support management and policy decisions, promoting integrated management.
- 17.3 To identify potential for efficient land management actions and report on effects of land use changes.
- 17.4 To identify potential WQ changes due to climate change and to assess likely effects of climate change on aquatic ecosystems.
- 17.5 To provide support to effectively deliver on Council's statutory responsibilities, projects and services as approved by Council through its Long Term Plan (LTP).
- 17.6 To implement routine reporting on "Water Quality - State and Trends" in the Hawke's Bay region.
- 17.7 To introduce targeted reporting on plan effectiveness to communities and focus groups with sound data to enhance community support.
- 17.8 To inform and guide the setting of priorities in relation to the activity of a local authority and other organisations.
- 17.9 To increase and improve stakeholder engagement through better reporting and defined outcomes.

Decision Making Process

- 18. Council is required to make a decision in accordance with Part 6 Sub-Part 1, of the Local Government Act 2002 (the Act). Staff have assessed the requirements contained within this section of the Act in relation to this item and have concluded that, as this report is for information only and no decision is to be made, the decision making provisions of the Local Government Act 2002 do not apply.

Recommendations

- 1. That the Environmental Management Committee receives the report.
- 2. Agrees to support an increase of sampling frequency of the current SoE sites for the ongoing management and investment into the Hawke's Bay region's water quality and that financial implications be brought to the 2012-2022 LTP process for consideration.

Nina von Westernhagen
ENVIRONMENTAL SCIENTIST
FRESHWATER QUALITY AND ECOLOGY

Adam Uytendaal
PRINCIPAL SCIENTIST, WATER QUALITY
& ECOLOGY



Graham Sevicke-Jones
ACTING GROUP MANAGER
RESOURCE MANAGEMENT

Attachment/s

There are no attachments for this report.

**HAWKE'S BAY REGIONAL COUNCIL
ENVIRONMENTAL MANAGEMENT COMMITTEE**

Wednesday 12 October 2011

Item 13

SUBJECT: STATUTORY ADVOCACY MATTERS

Reason For Report

1. This paper reports on proposals considered under Council's statutory advocacy project and the Resource Management Act 1991 for the period 10 August to 12 October 2011.

Background

2. The proposals on which Council has an opportunity to make comments or lodge a submission include, but are limited to:
 - 2.1 Notified Resource Consent Applications
 - 2.2 Plan Changes
 - 2.3 Private Plan Change Requests
 - 2.4 Notice of Requirement
 - 2.5 Non-statutory Strategies and Structure Plans.
3. The summary attached includes an actual list and description of the proposals, whether submissions were lodged in support or opposition, and the reasons for lodging a submission. A location map is also attached.

DECISION MAKING PROCESS

Council is required to make a decision in accordance with Part 6 Sub-Part 1, of the Local Government Act 2002 (the Act). Staff have assessed the requirements contained within this section of the Act in relation to this item and have concluded that, as this report is for information only and no decision is to be made, the decision making provisions of the Local Government Act 2002 do not apply.

Recommendation

1. That the Committee receives the Statutory Advocacy Update report.



**Esther-Amy Bate
PLANNER**



**Gavin Ide
TEAM LEADER POLICY**



**Helen Codlin
GROUP MANAGER
STRATEGIC DEVELOPMENT**

Attachment/s

Item 13

- 1 Statutory Advocacy Update
- 2 20111012 Statutory Advocacy Map

Statutory Advocacy Update

Received	TLA	Map Ref	Activity	Applicant/ Agency	Status	Current Situation
12 Aug 2011	NCC	5	DRAFT Plan Change 7 - Jervoistown Zone Draft proposal for rezoning an area to be known as the 'Jervoistown Zone' within Napier City. Area to be rezoned is currently zoned as 'Rural Settlement' and 'Main Rural' in Napier District Plan. Draft Change also proposes various new rules and policies that would be applicable within the new Jervoistown Zone (including prohibiting subdivision of lots less than 2,500m ²).	NCC	DRAFT Plan Change released by NapierCC	19 September 2011 <ul style="list-style-type: none"> Council provided comments on Draft Change 7. Comments noted: <ol style="list-style-type: none"> Conditional support for draft Change; Need for careful management of further development in Jervoistown and surrounds that could upset proper implementation of settlement pattern as adopted in 2010 Heretaunga Plains Urban Development Strategy. Council's role as drainage asset manager of the Jervois Drain and present limited capacity of Jervois Drain to accommodate additional runoff from further development. Any further limited development must still comply with regional rules for wastewater treatment and disposal. Incidents of cross-contamination of wastewater and stormwater within existing settlement was also noted. Merit in investigating a wider range of options for provision of wastewater services – more than just the one option referred to in Draft Change documents. Offer made for HBRC and NCC to have further discussions on this wider options, particularly if more cost-effective than reticulated disposal via NCC wastewater system at Awatoto.
5 November 2010	NCC	4	Notice of Requirement – Te Awa Structure Plan Notice of requirement for designation to allow for the construction of public works in the Te Awa Structure Plan area by Napier City Council.	NCC	Notified by NCC	1 October 2011 <ul style="list-style-type: none"> No further progress to report. 6 December 2010 <ul style="list-style-type: none"> The Council's Engineering Team has provided comment. The Engineering Team believes that the proposed second pump station is unnecessary due to sufficient infrastructure already available in that there is scope to utilise infrastructure previously built for the Cross Country drain. Council submitted in general support but provide further comments as stated below.

Received	TLA	Map Ref	Activity	Applicant/ Agency	Status	Current Situation
5 November 2010	NCC	4	<p>Plan Change 6 – Te Awa Structure Plan</p> <p>The purpose of the plan change is to rezone the area from Main Rural to Main Residential and incorporate the outcomes sought in the Te Awa Structure Plan into the District Plan.</p>	NCC	Notified by NCC	<p>1 October 2011</p> <ul style="list-style-type: none"> No further progress to report. <p>20 June 2011</p> <ul style="list-style-type: none"> Council has received a Summary of Submissions from NCC. No action is required at this time. <p>6 December 2010</p> <ul style="list-style-type: none"> The Engineering Team has provided comments. The proposed stormwater solution does not consider the principles of Low Impact Urban Design. Council will submit in support of the application in principle but suggest some design principles that NCC could take into account when further developing the proposal. In particular the Council has recommended: <ol style="list-style-type: none"> That decision making criteria and/or guidance be added that supports and encourages the principles of Low Impact Urban Design, and That NCC develop a landscape plan that includes aspects to enhance the ecology, culture, recreation. Health and safety along Willowbank Avenue and the Serpentine Drain drainage corridor.

Received	TLA	Map Ref	Activity	Applicant/ Agency	Status	Current Situation
9 September 2010	NCC	3	Resource Consent - Subdivision The applicant seeks to undertake a 2 Lot subdivision to create one (1) 0.178 hectare residential Lot (being proposed Lot 1) and a balance Lot which will be 3.31 hectares (being proposed Lot 2). The address for the subdivision is 45 Rogers Road, Bay View, legal description Lot 4 DP 7344.	Cindy McKinnie Consultant – Consult Plus	Notified Restricted Discretionary	3 October 2011 <ul style="list-style-type: none"> Appellant withdraws appeal. No further action/input required. 24 May 2011 <ul style="list-style-type: none"> Environment Court-assisted mediation held amongst parties. Appellant to do further homework and reconvene mediation in late 2011. 21 February 2011 <ul style="list-style-type: none"> Council joined appeal proceedings as interested party. 31 January 2011 <ul style="list-style-type: none"> Received notice of an appeal by applicant against NCC decision seeking that the NCC decision to decline the application be overturned. 7 December 2010 <ul style="list-style-type: none"> Application Hearing held on 24th November, Application declined by NCC. 8 October 2010 <ul style="list-style-type: none"> HBRC lodged submission opposing application. Consent should be declined unless the proposed 2 residential lots are fully serviced or sufficient information is provided to show that adverse effects of on-site wastewater discharges (particularly in combination with the proposed soak-pit means of stormwater disposal), will be adequately avoided, remedied or mitigated. Submission stated installation of a reticulated sewage system for the Bay View community to be a sustainable long-term solution for the treatment and disposal of wastewater. Submission also seeks clarification of floor level for flooding risk also requested.

Received	TLA	Map Ref	Activity	Applicant/ Agency	Status	Current Situation
23 August 2010	NCC	2	Resource Consent – Subdivision The application seeks to subdivide 58 McElwee Street, Jervoistown Certificate of Title HBM2/1351 into two separate lots.	Mr B. Joseph Consultant – Consult Plus	Notified Restricted Discretionary	1 October 2011 <ul style="list-style-type: none"> No further progress to report. 24 May 2011 <ul style="list-style-type: none"> Mediation with the applicant and NCC to be held. Council staff will maintain the position that: <ul style="list-style-type: none"> No further discharge of stormwater will be accepted into the Jervois Drain, and The option of discharging stormwater via the Claudatos scheme is only viable if a number of conditions are met. Appellant to do further 'homework' and hold discussions with NapierCC. 27 January 2011 <ul style="list-style-type: none"> Council joined appeal as an interested party, particularly interested in issues relating to the effects of increased site coverage and stormwater collection, treatment and disposal. 17 November 2010 <ul style="list-style-type: none"> Application was declined at NCC Hearing held 17 November 2010. NCC decision subsequently appealed by applicant. 20 September 2010 <ul style="list-style-type: none"> HBRC lodged submission opposing application. Reasons include: <ul style="list-style-type: none"> No provision for stormwater disposal and will likely result in adverse conditions in terms of flood levels and duration of flooding at a local level and the wider Jervoistown community. Proposal to increase maximum site coverage from 10% to 25%. Concern that this will also increase adverse conditions in terms of flood levels and duration of flooding. A 2009 report prepared by this Council (<i>Jervoistown Drainage Analysis</i>, Hawke's Bay Regional Council, April 2009) outlines the drainage issues and provides the conclusion that incremental development at Jervoistown will continue to result in reduced drainage standard for the existing houses. A copy of this report was provided to Napier CC shortly after its publication.

Received	TLA	Map Ref	Activity	Applicant/ Agency	Status	Current Situation
24 May 2010	NCC	1	Resource Consent - Subdivision The application seeks to subdivide an area of land currently zoned as main rural on 66 Franklin Road, Bay View into 6 lots and undertake earthworks.	Gerald Howe Consultant – Alan Petersen	Notified Restricted Discretionary	1 October 2011 <ul style="list-style-type: none"> No further progress to report. 26 July 2011 <ul style="list-style-type: none"> NCC Planning staff have informed HBRC that they are waiting on further information from the applicant. 2 August 2010 <ul style="list-style-type: none"> Policy staff have met with the applicant's consultant. Options and scenarios for wastewater consenting and servicing are under consideration. 14 July 2010 <ul style="list-style-type: none"> Council submitted in opposition to the application seeking that the application be declined unless all of the 6 Lots were fully serviced. 12 June 2010 <ul style="list-style-type: none"> Comment has been sought from the Regulation and Engineering teams. The stormwater solutions for the site are acceptable due to the free draining nature of the soils. The same soil types present an issue with on-site wastewater disposal and insufficient treatment. Coupled with the proximity of the subdivision to the coastal marine environmental it is likely that the Council will submit against the application. Submissions close 24 June 2010.



Statutory Advocacy

1. Subdivision – Gerald Howe
2. Subdivision – Mr B. Joseph
3. Subdivision – Cindy McKinnie
4. Notice of Requirement & Plan Change 6 – Te Awa Structure Plan
5. Plan Change 7 – Jervoistown Zone

HAWKE'S BAY REGIONAL COUNCIL
ENVIRONMENTAL MANAGEMENT COMMITTEE

Wednesday 12 October 2011

Item 14

SUBJECT: GENERAL BUSINESS

Reason for Report

This document has been prepared to assist Councillors note the General Business to be discussed as determined earlier in Agenda Item 6.

ITEM	TOPIC	COUNCILLOR / STAFF
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