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# Firstgas®

**Submission by First Gas Ltd**

Bay of Plenty Regional Council – Proposed Plan Change 13 (Air Quality)

18 April 2018

## FORM 5

### SUBMISSION ON A PUBLICLY NOTIFIED PROPOSAL FOR A PLAN UNDER CLAUSE 6 OF THE FIRST SCHEDULE, RESOURCE MANAGEMENT ACT 1991

**To:** The Chief Executive, Bay of Plenty Regional Council

**Submission on:** Proposed Plan Change 13 (Air Quality), Regional Natural Resources Plan

**Name of submitter:** First Gas Limited

**Address for service:** c/o Beca Ltd  
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Wellesley Street  
Auckland

**Attention:** Erin Whooley

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**Phone:** 09 336 5927

First Gas seek amendments to the Proposed Plan Change 13 (Air Quality), from Bay of Plenty Regional Council as specifically set out in Attachment 1.

First Gas wish to be heard in support of its submission.

First Gas could not gain an advantage in trade competition through this submission.

If others make a similar submission, First Gas will consider presenting a joint case at the hearing.



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Erin Whooley – Senior Planner

Beca Ltd

(Signature of person authorised to sign on behalf of  
Client name)

18 April 2018

# 1 Introduction to First Gas

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This is a submission on the Proposed Plan Change 13 (Air Quality) of the Regional Natural Resources Plan ('Proposed Plan Change') made on behalf of First Gas Limited ("First Gas"). First Gas is the owner and operator of approximately 2500km of high pressure natural gas transmission pipelines throughout the North Island.

The below ground gas transmission pipelines deliver gas from production stations in Taranaki through to various towns and locations throughout the North Island. The gas transmission system delivers gas to distribution networks via 'Delivery Points'. Delivery Points are above ground pressure regulating station sites which transition between gas in the high pressure system to the medium to low pressure distribution pipeline network.

The gas transmission and distribution system is regionally (and nationally) significant infrastructure and delivers significant social and economic benefits to this region. Within the Bay of Plenty region, First Gas owns and operates approximately 250 km of high pressure gas pipeline, including 13 Delivery Points. The network includes both transmission pipelines and distribution pipelines, which are centred around Rotorua, Kawerau, Whakatāne, Te Teko, Edgecumbe, Opotiki, Mt Maunganui, Papamoa, Te Puke and Tauranga in this region. The major industries/activities/businesses that use natural gas within the Bay of Plenty region include;

- Forestry;
- Residential;
- Training Institutions;
- Hotels / Accommodation providers;
- Cultural / Tourism centres;
- Recreational facilities;
- Childcare centres;
- Waste water treatment;
- Pack houses;
- Schools;
- Hospitals;
- Aged Care;
- Horticulture;
- Dairy processing; and
- The Port

A location of the gas transmission and distribution system is provided in Attachment 2.

## 2 Typical First Gas Operations and Activities

Many activities and operations related to maintaining, replacing, upgrading, removing or developing the First Gas network are potentially regulated by regional plans. These typical activities are summarised in the table below:

Activity	Description
<b>Large scale Land Use Activities or near/in waterbodies</b>	
Open trenching / earthworks	To access an existing pipe or in preparation for a replacement or new pipe to be laid (and back-filling / compaction upon completion of the works).
Horizontal Directional Drilling	A trenchless construction method used to install pipelines where conventional construction (open trenching) are not feasible or practicable, or will potentially cause unacceptable adverse effects in First Gas's opinion.
Geotechnical investigation	Borehole investigations are undertaken in response to geo-hazards and land movement.
Earthworks and vegetation clearance	To enable and provide access to First Gas's assets through roading and tracking activities and also potentially to establish construction yards.
Reinstatement	Reinstatement of disturbed soil and vegetation post construction works.
<b>Discharges to Air</b>	
Gas venting	Venting is the discharge of natural gas. Activities associated with gas venting include: Safety mechanisms, operational maintenance (e.g. pigging of the pipeline, valve replacement etc) and tie-in works <sup>1</sup> whereby pressure in the pipeline is reduced and delivery staging venting. Minor venting is also undertaken in day to day operations (e.g. compressor station blow down when pressurisation cycle is complete). Natural gas is odourless therefore an odorant is added to vented gas to enable detection for purging purposes.
Gas flaring	Flaring is the controlled combustion of natural gas via specialised equipment. Flaring of gas is an effective and efficient method to dispose of gas, and to provide for network upgrades to be undertaken safely and quickly. It is undertaken for activities including emergency isolation, infrastructure realignment and pipeline repairs and maintenance. Flaring can be used in place of venting where applicable.
<b>Discharges to land and water, dewatering and diversions</b>	
Drilling fluid	This typically comprises water and bentonite, a naturally occurring and environmentally safe clay mineral containing no polymer additives or chemical treatments. Fluid is largely re-used in drilling operations but some residual (minimal) fluid recovered at the end of the project is often dispersed onto land.
Dewatering	In areas with a high water table, de-watering of open trenches is required to enable pipe works, prevent land

<sup>1</sup> Connecting new / replacement and existing pipe sections

Activity	Description
	movement towards the pipeline and for health and safety reasons.
Temporary stream diversions	This requires the diversion of the flow of small waterbodies while a section of pipeline below the stream bed is repaired. Diversion typically involves a small dam and pipe work.
Hydro-testing	Hydro-testing are often required when commissioning new pipelines which require a discharge of potable water to receiving environments.
<b>Works in waterbodies</b>	
Pipe(s) traversing or running parallel to the beds of waterways	The gas pipeline traverses and runs parallel to many waterbodies, including wetlands. Works in, on, over and under the beds of waterways is often required.
Further detail or explanations as to the nature and scale of these operations and activities can be supplied on request.	

## 2.1 Protection from third party works

The high pressure gas transmission pipelines are required to meet the safety and operational requirements of the Health and Safety in Employment (Pipelines) Regulations 1999 and the operating code Standard AS2885 Pipelines – Gas and Liquid Petroleum (AS2885). First Gas is required to ensure the protection and integrity of the pipeline is maintained to ensure the safety of the public, property, and the environment.

Third party interference is one of the main risks to the safety and integrity of the underground pipelines. Activities which may affect the gas pipelines should take into account the location and protection requirements of the pipelines. Activities, such as large scale earthworks, in the vicinity of gas transmission pipeline should be carried out, as far as practicable, in such a way so as not to compromise the safe and efficient operation of the pipeline.

## 3 Bay of Plenty Regional Policy Statement

The operative Bay of Plenty Regional Policy Statement 2016 (RPS) (last updated July 2016), identifies the regionally significant issues around the management of regional resources. It sets out what needs to be achieved (objectives) and the way in which the objectives will be achieved (policies and methods).

Plan Change 13 must 'give effect' to the RPS<sup>2</sup>, or in other words must actively implement them. The following objectives and policies of the RPS are of particular relevance:

- Objective 6 Provide for the social, economic, cultural and environmental benefits of, and the use and development of nationally and regionally significant infrastructure and renewable energy
  - Policy EI 3B: Protecting nationally and regionally significant infrastructure
  - Policy EI 4B: Recognising the benefits from nationally and regionally significant infrastructure and the use and development of renewable energy

<sup>2</sup> Section 67(3) of the RMA

- Policy EI 5B: Managing adverse effects of regionally significant infrastructure on matters of national importance
- Objective 7 Provide for the appropriate management of: (a) any adverse environmental effects (including effects on existing lawfully established land uses) created by the development and use of infrastructure and associated resources; (b) any reverse sensitivity effects on established, consented or designated infrastructure.
- Policy EI 7B: Managing the effects of infrastructure development and use
- Objective 11 An integrated approach to resource management issues is adopted by resource users and decision makers
- Policy IR 3B: Adopting an integrated approach
- Objective 23 A compact, well designed and sustainable urban form that effectively and efficiently accommodates the region's urban growth
- Policy UG 9B: Co-ordinating new urban development with infrastructure
  - Policy UG 11B: Managing the effects of subdivision, use and development on infrastructure

The gas pipeline is defined in the RPS as regionally significant infrastructure. The definition includes:

- *Pipelines for the distribution or transmission of natural or manufactured gas or petroleum and other energy sources;*

In broad terms, these key RPS provisions set a framework for ensuring:

- The First Gas network is able to be safely, effectively and efficiently operated, maintained and developed in order to deliver the significant benefits it provides for;
- Effects generated by the First Gas network on matters of national importance are managed; and
- The First Gas network is protected from other's activities.

## 4 General Submission

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Without limiting the generality of this submission, First Gas seeks decisions as sought in Attachment 1, and any consequential relief required to achieve the relief sought. The submissions pertain to enabling the safe, efficient and effective operation, maintenance, upgrade and development of high pressure natural gas transmission and distribution pipelines through the Bay of Plenty region.

In summary, First Gas's submission seeks that:

- The Plan Change 13: Air Quality recognises that the gas transmission system is regionally (and nationally) significant infrastructure and delivers significant social and economic benefits to the region;
- The gas transmission and distribution system is enabled to be safely, effectively and efficiently operated, maintained, upgraded and developed, including through an enabling activity status where there is a need for resource consent (i.e. discretionary activity status as opposed to non-complying);
- Gas venting and flaring are provided as key methods for the safe discharge of gas to atmosphere. Venting and flaring have different methodologies and offer different advantages depending on the environment (e.g. residential, rural) they are used in, and the difference in quantity of gas to be released.

- The discharge of gas (via venting or flaring) does not result in offensive, noxious nor dangerous effects when appropriately managed.
- The gas transmission and distribution system is recognised as having functional and operational requirements and constraints, including in respect of its location; and
- That the adverse effects of third party development or activities in close proximity to the gas transmission and distribution system are managed to the extent that adverse effects on the network are reduced or avoided.

## 5 Typical First Gas Operations and Activities

Many activities and operations related to maintaining, replacing, upgrading, removing or developing the First Gas network are potentially regulated by regional plans. These typical activities are summarised in the table below:

Activity	Description
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Reinstatement	Reinstatement of disturbed soil and vegetation post construction works.
<b>Discharges to Air</b>	
Gas venting	Venting is the discharge of natural gas. Activities associated with gas venting include: Safety mechanisms, operational maintenance (e.g. pigging of the pipeline, valve replacement etc) and tie-in works <sup>3</sup> whereby pressure in the pipeline is reduced and delivery staging venting. Minor venting is also undertaken in day to day operations (e.g. compressor station blow down when pressurisation cycle is complete). Natural gas is odourless therefore an odorant is added to vented gas to enable detection for purging purposes.
Gas flaring	Flaring is the controlled combustion of natural gas via specialised equipment. Flaring of gas is an effective and efficient method to dispose of gas, and to provide for network upgrades to be undertaken safely and quickly. It is undertaken for activities including emergency isolation, infrastructure realignment and pipeline repairs and

<sup>3</sup> Connecting new / replacement and existing pipe sections

<b>Activity</b>	<b>Description</b>
	maintenance. Flaring can be used in place of venting where applicable.
<b>Discharges to land and water, dewatering and diversions</b>	
Drilling fluid	This typically comprises water and bentonite, a naturally occurring and environmentally safe clay mineral containing no polymer additives or chemical treatments. Fluid is largely re-used in drilling operations but some residual (minimal) fluid recovered at the end of the project is often dispersed onto land.
Dewatering	In areas with a high water table, de-watering of open trenches is required to enable pipe works, prevent land movement towards the pipeline and for health and safety reasons.
Temporary stream diversions	This requires the diversion of the flow of small waterbodies while a section of pipeline below the stream bed is repaired. Diversion typically involves a small dam and pipe work.
Hydro-testing	Hydro-testing are often required when commissioning new pipelines which require a discharge of potable water to receiving environments.

#### **Works in waterbodies**

Pipe(s) traversing or running parallel to the beds of waterways	The gas pipeline traverses and runs parallel to many waterbodies, including wetlands. Works in, on, over and under the beds of waterways is often required.
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## **5.1 Protection from third party works**

The high pressure gas transmission pipelines are required to meet the safety and operational requirements of the Health and Safety in Employment (Pipelines) Regulations 1999 and the operating code Standard AS2885 Pipelines – Gas and Liquid Petroleum (AS2885). First Gas is required to ensure the protection and integrity of the pipeline is maintained to ensure the safety of the public, property, and the environment.

Third party interference is one of the main risks to the safety and integrity of the underground pipelines. Activities which may affect the gas pipelines should take into account the location and protection requirements of the pipelines. Activities, such as large scale earthworks, in the vicinity of gas transmission pipeline should be carried out, as far as practicable, in such a way so as not to compromise the safe and efficient operation of the pipeline.

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Plan Change 13 must 'give effect' to the RPS<sup>4</sup>, or in other words must actively implement them. The following objectives and policies of the RPS are of particular relevance:

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## 7 General Submission

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<sup>4</sup> Section 67(3) of the RMA

In summary, First Gas's submission seeks that:

- The Plan Change 13: Air Quality recognises that the gas transmission system is regionally (and nationally) significant infrastructure and delivers significant social and economic benefits to the region;
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- Gas venting and flaring are provided as key methods for the safe discharge of gas to atmosphere. Venting and flaring have different methodologies and offer different advantages depending on the environment (e.g. residential, rural) they are used in, and the difference in quantity of gas to be released.
- The discharge of gas (via venting or flaring) does not result in offensive, noxious nor dangerous effects when appropriately managed.
- The gas transmission and distribution system is recognised as having functional and operational requirements and constraints, including in respect of its location; and
- That the adverse effects of third party development or activities in close proximity to the gas transmission and distribution system are managed to the extent that adverse effects on the network are reduced or avoided.

## Attachment 1: Detailed Submission by First Gas Ltd

### Proposed Plan Change 13 (Air Quality) of the Regional Natural Resources Plan, Bay of Plenty Regional Council

Plan Provision	Support/Oppose/ Amend	Submission/Reasons	Relief/Decision Sought
Objectives			
<b>AQ 01</b> <i>Protect air from adverse effects — Te tiaki i te hau mai i ngā pānga kino</i>	Support	First Gas considers it appropriate and necessary to embed an improving focus to the objective where air quality is degraded but has reservations about seeking a protective focus which could be interpreted as an absolute provision, and use of the word 'degraded'. In First Gas' view, the focus of the objective should be to maintain air quality.	Amend objective O1; <i>The adverse effects from anthropogenic contaminants discharges to air on the mauri of air and human health are managed so that air quality is maintained or enhanced where degraded.</i>
<b>AQ 03</b> <i>Local air quality - Te pai o te hau o te rohe</i>	Support	First Gas consider that if the word 'degraded' is to be used, the way to reduce air quality degradation, is to definition the 'quality' and quantity of discharge using the ambient air quality guidelines.	<del>Protect the mauri of air and human health from adverse effects of anthropogenic contaminants discharges to air, and enhance air quality where degraded.</del>
Policies			Support objective O2
<b>AQ P1</b> <i>Classification of activities — Te wehewehenga o ngā mahinga</i>	Support	First Gas support the division of how the discharge of contaminants to air is managed and the willingness to	Support policy P1

<i>Plan Provision</i>	<i>Support/Oppose/ Amend</i>	<i>Submission/Reasons</i>	<i>Relief/Decision Sought</i>
<b>AQ P3</b> <i>Management of discharges — Te whakahaere i ngā tukunga</i>	Support with amendment	<p>First Gas generally support this policy, however seek a focus on management through (d). The term 'avoid' requires effects to be prevented from happening which is not the apparent intent of P3. First Gas discharges of natural gas (via gas flaring and gas venting) are carefully managed.</p> <p>First Gas question the relationship between considering the best practicable option for discharges in the P3 framework of managing, avoiding and minimising discharges.</p> <p>In terms of discharges that may cause adverse effects on regionally significant infrastructure, First Gas note that the venting to atmosphere presents an opportunity for natural gas to mix with oxygen presenting ignition potential; during large scale venting the Civil Aviation Authority are notified and air traffic is diverted. These risks are avoided via flaring.</p> <p>Where First Gas cannot avoid discharges in proximity to other regionally significant infrastructure due to the fixed location of existing gas infrastructure; accordingly effects are managed. An amendment is sought to P3.</p>	<p>Amend policy P3:</p> <p>Activities that discharge contaminants to air must be managed, including by use of the best practicable option, to:</p> <p>..</p> <p>(d) avoid the discharge of contaminants that may cause <u>significant</u> adverse effects on regionally significant infrastructure</p>
<b>AQ P4</b> <i>Matters to consider — Ngā take hei whirihiri</i>	Support		<p>Amend policy P4:</p> <p>First Gas generally support this policy, although note the similarities in the outcomes sought by (a) and (g) and suggest (g) is redundant. Additionally, two matters</p>

Plan Provision	Support/Oppose/ Amend	Submission/Reasons	Relief/Decision Sought
		<p>have been added to provide for benefits created by the discharge and any technical or locational constraints associated with the discharge.</p> <p>The existing First Gas infrastructure through the Bay of Plenty region is located in proximity to emission discharge points of other sites/operators. First Gas activities such as asset replacement, realignments and emergency repairs could be expected to occur nearby. First Gas is required to ensure the protection and integrity of the pipeline is maintained to ensure the safety of the public, property, and the environment. Addressing cumulative effects (f), which may have implications on the gas system, is important.</p>	<p>When considering the acceptability of any discharge of contaminants to air, regional plan users must have particular regard to the following matters:</p> <ul style="list-style-type: none"> <li>(a) The proximity of sensitive activities to the discharge.</li> <li>(b) The location of any Gazetted airsheds, or areas where the discharge may cause an exceedance or breach of the ambient air quality standards of the NESAQ or exceed the health-based values of the AAQGs.</li> <li>(c) Adverse effects on air quality values identified in the relevant iwi and hapū resource management plans.</li> <li>(d) The effect of the prevailing weather conditions, including rainfall, wind speed and wind direction.</li> <li>(e) The effect of the discharge on human health, cultural values, amenity values, the environment, and regionally significant infrastructure.</li> <li>(f) Cumulative effects.</li> </ul> <p><i>(g) Benefits created by the discharge.</i></p> <p><i>(h) Any technical or locational constraints associated with the discharge.</i></p> <p><i>(i) The effect of new activities discharging emissions into air near established sensitive activities.</i></p>

<i>Plan Provision</i>	<i>Support/Oppose/ Amend</i>	<i>Submission/Reasons</i>	<i>Relief/Decision Sought</i>
<b>AQ R1</b> <i>General activities – Permitted — Ngā mahinga noa – E whakaaehia ana</i>	Conditional support	<p>First Gas discharges of natural gas (via gas flaring and gas venting) are undertaken in a careful manner to manage any effects. Rule R1 requires the discharge of contaminants into air not to be noxious or dangerous etc. First Gas support rule R1 on the basis of the following test of the discharge of natural gas not being categorised as 'noxious or dangerous' as defined by Plan Change 13.</p> <p>First Gas consider that the discharges undertaken by the company for the safe and effective operation, maintenance, upgrade and development of the transmission and distribution gas network not to be noxious, dangerous, nor objectionable or offensive.</p> <p>The constituents of natural gas are odourless and colourless. The Gas Act 1992 requires operators to add an odorant to gas that has a distinctive and unpleasant odour to ensure that the presence of natural gas can be detected. The odorant, mercaptan, is generally considered to have an unpleasant odour. However when added to natural gas at the prescribed quantity, the concentration of the mercaptan is not considered to be noxious nor dangerous. At the quantities mercaptan is used in natural gas, while the odorant may still be detectable in ambient air, there is no hazard presented by natural gas.</p> <p>The process of flaring destroys both the mercaptan odorant and natural gas, and therefore mitigates odour concerns. Accordingly, there are no noxious or</p>	Conditional support of R1 (a) relating to 'noxious or dangerous'

<i>Plan Provision</i>	<i>Support/Oppose/ Amend</i>	<i>Submission/Reasons</i>	<i>Relief/Decision Sought</i>
		dangerous effects to humans. Venting is used for smaller discharges and the amount of gas odour is not considered to be offensive or objectionable.	
<b>AQ R2</b> <i>General activities – Discretionary — Ngā mahinga noa – Ka whirihiria</i>	Support	First Gas support a catch-all discretionary activity status. An enabling consenting framework is critical for infrastructure of regional significance and supports the constant supply of gas to the Bay of Plenty region.	Support R2
<b>AQ RX</b>	New rule	<p>This new proposed rule is the first preference of First Gas. If this is not adopted by Council, then as a second tier option, First Gas propose amendment to R18 (below).</p> <p>Gas flaring is the preferred method of disposing of gas because it offers several environmental and safety benefits including:</p> <ul style="list-style-type: none"> <li>- The process of flaring destroys the mercaptan odorant removing odour and therefore mitigates odour concerns.</li> <li>- The venting of natural gas to atmosphere creates a potential ignition risk; during large scale venting the Civil Aviation Authority are notified and air traffic is diverted. These risks are avoided via flaring.</li> <li>- Flaring has a reduced impact on local populations; venting has risks from local ignition sources e.g. overhead power lines</li> <li>- Flaring reduces greenhouse gas potential of the emissions released during gas release</li> </ul>	<p><i>The combustion of natural gas by temporary flaring, to facilitate the safe and effective operation, maintenance, upgrade and development of the transmission and distribution network, is a permitted activity provided the following conditions are complied with:</i></p> <p>(a) <i>The discharge shall not cause noxious, dangerous, offensive or objectionable odour, dust, particulate smoke, vapours, droplets or ash beyond the boundary of the property.</i></p> <p>(b) <i>Has an average maximum 10MW gross heat energy output from the combustion of natural gas unless under emergency situations.</i></p> <p>(c) <i>The discharge shall be directed vertically into air, and shall not be impeded by any obstruction above the chimney stack or chimney that</i></p>

Plan Provision	Support/Oppose/ Amend	Submission/Reasons	Relief/Decision Sought
		<ul style="list-style-type: none"> <li>- Venting of gas through valves produces significant temporary noise. Flaring significantly reduces the noise emitted from the discharge.</li> </ul>	<p><i>decreases the vertical efflux velocity, and</i></p> <p><i>(d) Rain excluders shall not impede the vertical discharge of combustion gases, and</i></p> <p><i>(e) The fuel burning equipment is maintained by a suitably qualified person at least once per annum, with a copy of the maintenance report held by the operator and presented to the Bay of Plenty Regional Council on request, and</i></p> <p><i>(f) —The fuel burning equipment is designed specifically for flaring purpose.</i></p> <p>Amend R18:</p> <p>AQ R18 Fuel burning equipment (Boilers and flaring of natural gas) – Permitted — Ngā taonga ngingihia kora (Ngā kōhua nūui) – E whakaaehia ana</p> <p>First Gas consider that this permitted activity rule suitably provides for the discharge of natural gas by way of flaring and accordingly seek an amendment to the rule. This corresponds with the amendment sought relating to the definition of fuel burning equipment.</p> <p>As explained in AQ P3, aircraft safety during gas discharges is of paramount concern to First Gas. Venting of significant quantities of gas require notification to the Civil Aviation Authority to prevent interference with flight routes. Attachment three shows</p> <p><i>The combustion of natural gas by temporary flaring to facilitate the safe and effective operation, maintenance, upgrade and development of the transmission and distribution network, is a permitted activity provided the following conditions are complied with:</i></p>
<b>AQ R18</b> <i>Fuel burning equipment (Boilers) – Permitted — Ngā taonga ngingihia kora (Ngā kōhua nūui) – E whakaaehia ana</i>	Support with amendment		

<i>Plan Provision</i>	<i>Support/Oppose/ Amend</i>	<i>Submission/Reasons</i>	<i>Relief/Decision Sought</i>
		<p>the termination points of the transmission pipeline network in Tauranga, both are in close proximity to the Tauranga Airport. In the highly unlikely event of needing to discharge gas simultaneously from both termination points (via venting), there would be a potential impact on flights. Flaring from these sites would negate possible impacts on flights.</p> <p>As explained in AQ R1 First Gas do not consider that the discharge of gas is offensive or objectionable. First Gas support R18(e) on the condition that the feedback on the definition of 'noxious or dangerous' is accepted that the discharge of natural gas is not noxious or dangerous.</p>	<p>(a) <u>The discharge shall not cause noxious, dangerous, offensive or objectionable odour, dust, particulate, smoke, vapours, droplets or ash beyond the boundary of the property.</u></p> <p>(b) <u>Has an average maximum 10MW gross heat energy output from the combustion of natural gas unless under emergency situations.</u></p> <p>(c) <u>The discharge shall be directed vertically into air, and shall not be impeded by any obstruction above the chimney stack or chimney that decreases the vertical efflux velocity.</u> and</p> <p>(d) <u>Rain excluders shall not impede the vertical discharge of combustion gases, and</u></p> <p>(e) <u>The fuel burning equipment is maintained by a suitably qualified person at least once per annum, with a copy of the maintenance report held by the operator and presented to the Bay of Plenty Regional Council on request, and</u></p> <p>(f) <u>The fuel burning equipment is designed specifically for flaring purpose.</u></p>

#### **Definitions**

<i>Plan Provision</i>	<i>Support/Oppose/ Amend</i>	<i>Submission/Reasons</i>	<i>Relief/Decision Sought</i>
<b>Noxious or dangerous</b>	Conditional support	Gas discharge and flaring are clean discharge/burn activities and First Gas do not consider that natural gas discharges cause noxious or dangerous effects on property and/or the environment in the quantities in which First Gas discharge gas. As per the First Gas submission on Rules R1, R18 and RX, we seek Council confirmation on whether they agree. Support for the wording of this definition is dependent on Council's response.	Conditional support 'noxious or dangerous' definition
	Amend	First Gas support the excluded equipment/methods and suggest that flaring of natural gas, being the combustion of natural gas in the open air, undertaken to safely dispose of gas, be included in this list to make the interpretation of the Plan straightforward. Provision for open burning to exclude flaring is appropriate given the drafting of the open burning rules.	Amend 'open burning' definition:  Open burning means the combustion of any material in the open air, other than in <i>enclosed burners</i> or purpose built equipment designed to control the combustion process. Includes bonfires, incinerators and recreational/cultural outdoor burning but excludes, enclosed incinerators, solid fuel burners, and fuel burning equipment, smokers, fireworks, candles, lamps, and outdoor patio gas heaters and the flaring of natural gas.
		Support with amendment	Amend 'fuel burning equipment' definition:  Fuel burning equipment often referred to as a "boiler" means a device used for the combustion of fuel within an enclosed combustion chamber in which heat is transferred from the products of combustion directly for the production of useful heat or power. <i>Fuel burning equipment also means</i>

<i>Plan Provision</i>	<i>Support/Oppose/ Amend</i>	<i>Submission/Reasons</i>	<i>Relief/Decision Sought</i>
		<p><i>the purpose built equipment to facilitate the flaring of natural gas.</i></p> <p>For clarity this excludes vehicles, ships, aircraft, solid fuel burners, and enclosed incineration.</p>	
<b>Sensitive activity</b>	Support	First Gas support the definition of sensitive activity.	Support 'sensitive activity' definition
<b>Unimpeded vertical discharge</b>	Support	First Gas support the definition of unimpeded vertical discharge.	Support 'unimpeded vertical discharge' definition
<b>Flaring</b>	New definition	<p>First Gas seek a new definition for gas flaring.</p> <p><i>Combustion method to dispose of gas.</i></p> <p>Flaring is an operational component of natural gas transmission and distribution networks which provides for the gas network to be efficiently and effectively maintained. Flaring is the combustion of gas in an open flame. Flaring is the preferred method of disposing of waste gas because it offers environmental and safety benefits.</p>	<p>Add a new definition for 'flaring':</p> <p><i>Combustion method to dispose of gas.</i></p> <p>Flaring is an operational component of natural gas transmission and distribution networks which provides for the gas network to be efficiently and effectively maintained. Flaring is the combustion of gas in an open flame. Flaring is the preferred method of disposing of waste gas because it offers environmental and safety benefits.</p>

## Attachment Two: Location Plan of the Gas Distribution and Transmission System operated in the Bay of Plenty Region by First Gas



## GAS DISTRIBUTION NETWORKS BAY OF PLENTY REGION

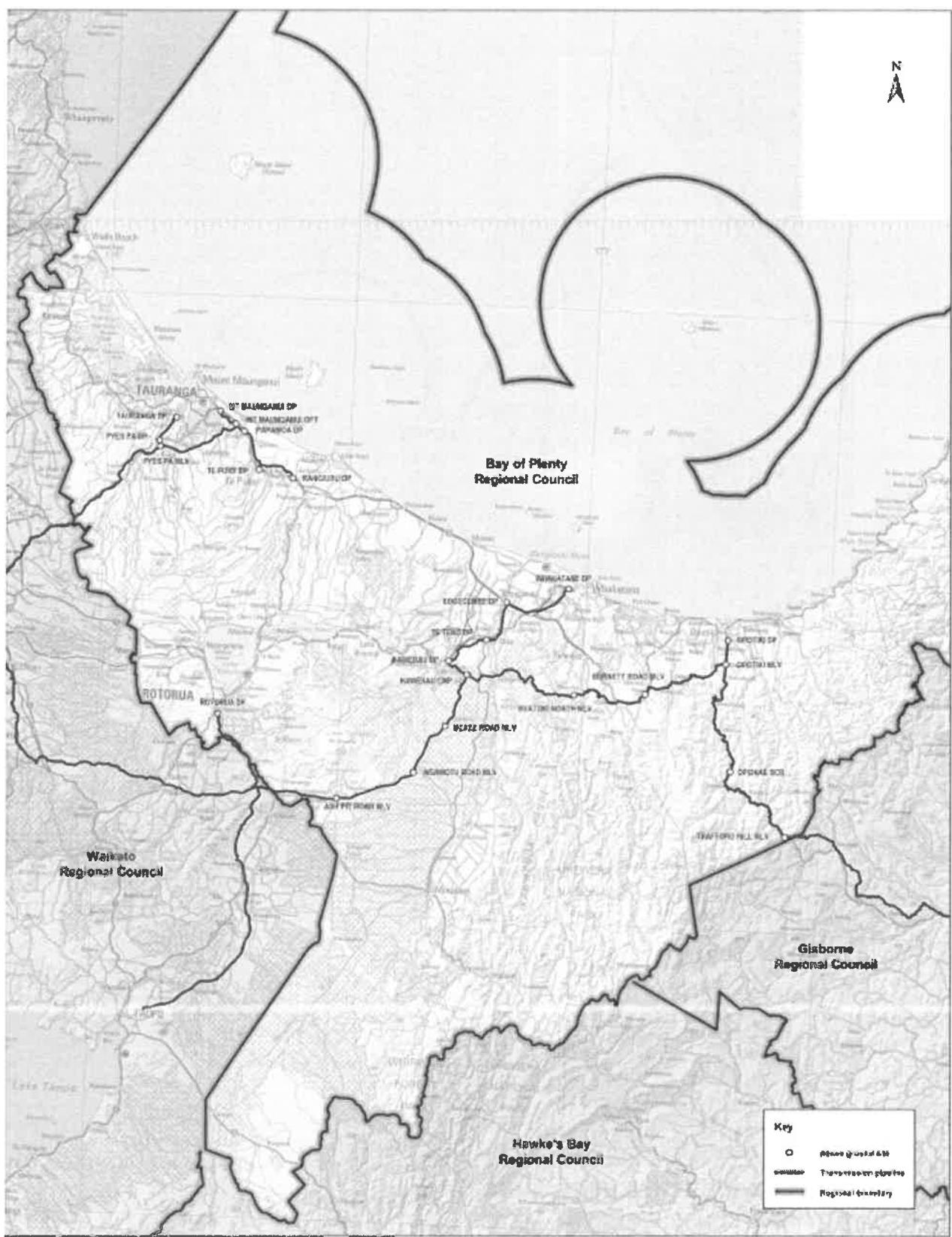
Source: BOPC  
This map is provided for information purposes only.  
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Legend
Distribution Pipes BOP
Regional council boundary

Source: BOPC  
1. Esri Technology NZ Ltd 2016  
2. Regional Council information obtained from Land Information New Zealand  
3. Esri Technology NZ Ltd 2016  
4. Distribution gas in terms of New Zealand's Infrastructure Minister 2016 project  
5. Data of major pipelines and areas sourced from Giscomap

Drawing reference BIE-04210-00E-04





## GAS TRANSMISSION PIPELINES BAY OF PLENTY REGION

**Firstgas**

BECA NZ LTD  
Capital Workforce Solutions Ltd  
The Arrow Group  
EduSafe Solutions NZ Ltd  
First Gas NZ Ltd  
Gisborne District Council  
Hawke's Bay District Council  
Lake Taupo District Council  
Waikato District Council

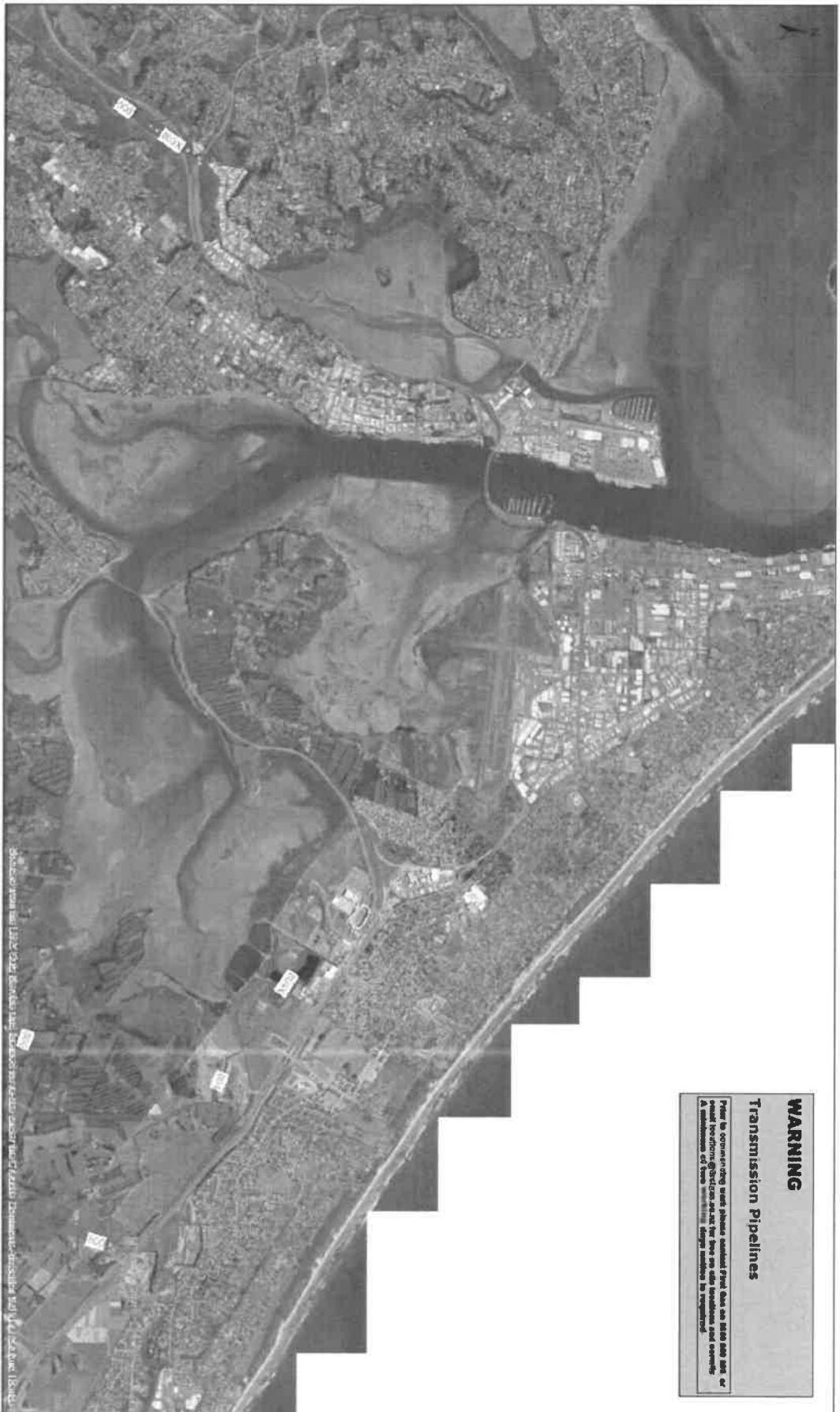
2011 LEADERSHIP TEAM  
The map is provided for information purposes only.  
It has not been peer reviewed or checked against any other source of data and should not be relied upon for any purpose. It is intended, exclusively, for display in relation to the 2010  
Government Procurement Plan for First Gas. It is the responsibility of First Gas to ensure  
accuracy and relevance to First Gas' actual works and activities. A disclaimer of responsibility applies.

Planning Reference: 0800-00010-000-00

Please refer to our website, [www.firstgas.co.nz](http://www.firstgas.co.nz), or email [customer@firstgas.co.nz](mailto:customer@firstgas.co.nz) for more information and details. A disclaimer of responsibility applies.

## Attachment Three: First Gas transmission network in proximity to Tauranga Airport

TRANSMISSION WEB MAP



## **WARNING**

Transmission Pipelines

Please let us know if you would like to receive a copy of our brochure. We have many other locations and currently a minimum of two days advance notice is required.