**Gas Information Exchange Protocol to support Gas Retailer compliance with the Gas (Safety and Measurement Regulations) 2010 and Gas (Downstream Reconciliation) Rules 2008**

Gas Retailers have regulatory obligations under the Gas (Safety and Measurement Regulations) 2010 and Gas (Downstream Reconciliation) Rules 2008 that rely on performance and exchange of information by other participants in the supply chain.

In particular this protocol covers odorisation, gas measurement, gas pressure and gas quality.

This guideline for exchange of information will when implemented provide an assurance to Gas Retailers and inform any audit of Gas Retailer compliance with the relevant regulatory obligations covered in this protocol.

Where a participant is expected to provide information to Gas Retailers it may (as alternative or additionally) publish the information on a secure website and notify Gas Retailers of the existence of the information or change of information.

Where a participant is required to provide an annual update on their processes or procedures if no changes have been made to their processes and/or procedures during the year then an annual confirmation of the existing processes and/or procedures will be provided.

**Odorisation**

Regulation 17 of the Gas (Safety and Measurement Regulations) 2010 makes Gas Retailers responsible for ensuring that gas supplied at a consumer’s point of supply is odorised in accordance with the requirements of regulation 16.

To achieve this Gas Retailers rely on information provided by Network Operators that demonstrates compliance with regulations 16-19 and on its contractual arrangements with Vector Transmission.

Apart from several small delivery points supplied direct from the Maui pipeline which are subject to local odorisation, Network Operators rely on Vector (as transmission system operator) delivering odorised gas to those Vector delivery points which require odorised gas downstream.

**Vector (as Transmission System OPERATOR)**

Vector has contractual obligations under the Vector Transmission Code, Section 13, to inject odorant into the gas flowing on most of its transmission pipelines such that, in normal circumstances, when delivered through a typical distribution network, complies with NZS 5263:2003 Gas Detection and Odorisation.

Reporting and Audits

Vector will still assist Shippers in demonstrating compliance with Regulations 16-19 by providing the following:-

* A report to Shippers each month on the odorant test results carried out during the previous month
* Copies of any relevant audits or relevant sections of any audits, both internal and/or external, covering Vector’s odorisation processes and procedures including confirmation that the equipment used in the above monthly monitoring process is calibrated and accurate.
* Reports of identified incidents of non-compliance with NZS 5263 when they occur, and actions taken or proposed to be taken to address non compliance

**Network Operators**

Operating Procedures

On an annual basis each Network Operator will provide Gas Retailers with a copy of their operating procedures associated with their odorisation measurement and monitoring processes that ensure compliance with regulations 16-19 and NZS 5263. These procedures as a minimum will include:-

* The selection process for test points on each distribution network to comply with section 2.4.3.1 of NZS 5263.
* Policy and procedures to ensure that all persons involved in gas odorisation activities are trained and competent to carry out their duties
* How the Network Operator advises Gas Retailers when it detects or becomes aware that gas within its distribution networks does not comply with NZS 5263
* The Network Operator’s plan for responding to odorisation contingencies and emergencies to comply with section 2.7 of NZS 5263.
* Calibration and maintenance procedure for the Network Operator’s odorisation test equipment.
* When published provide Gas Retailers with the relevant sections on odorisation within the Network Operator’s Safety Management System documentation

Reporting and Audits

* Each month provide to Gas Retailers a report on the odorant test results carried out during the previous month on each distribution network
* Provide copies of any relevant audits or relevant sections of any audits, both internal or external, covering the Network Operator’s odorisation work processes and procedures
* When published provide Gas Retailers with the relevant odorisation sections of the Network Operator’s Safety Management System documentation
* Provide a copy of any documentation additional to that provided above that a Network Operator has in place to demonstrate compliance with regulation 19 of the Gas (Safety and Measurement) Regulations 2010
* Provide a report of identified incidents of non compliance with NZS 5263 when they occur, and actions taken or proposed to be taken to address non compliance

**GAS MEASUREMENT and GAS PRESSURE**

Regulation 21 of the Gas (Safety and Measurement) Regulations 2010 and rule 28 of the Gas (Downstream Reconciliation) Rules 2008 require Gas Retailers to comply with NZS 5259, including meeting certain accuracy criteria in their conversion of metered volume to standard volume and standard volume to energy.

Regulation 42 of the Gas (Safety and Measurement) Regulations 2010 requires Gas Retailers to ensure that the pressure of gas at a consumer’s point of supply is appropriate to ensure the safe supply, passage and use where the gas is used for its intended purpose in a properly functioning gas installation.

To achieve this Gas Retailers rely on:

* The accuracy and compliance of information provided by Vector (as transmission system operator), Network Operators and GMS Operators;
* The maintenance of appropriate network pressure by Network Operators and meter pressure by GMS Operators.

This information includes gas composition data provided by Vector (as transmission system operator) on the OATIS website, data populated by Network Operators in the gas registry (altitude, network pressure), and data provided by GMS Owners from time to time (meter pressure, number of dials).

Vector (as TRANSMISSION SYSTEM OPERATOR)

Operating Procedures

On an annual basis Vector will provide Shippers with a copy of the operating procedures it has in place to measure and publish on the OATIS website gas composition properties (CV, N2, CO2, S.G.) for each gas type for each day of gas delivered to delivery points. These procedures will as a minimum include:-

* Procedure for measuring the above gas composition properties for each gas type for each day of gas delivered to delivery points.
* Procedure for confirming the competency of the operators measuring the above gas composition properties
* How Vector advises Shippers where the above gas composition properties do not comply with NZS 5442
* Calibration and maintenance program for the equipment used to measure the above gas composition properties, with particular reference to the accuracy requirements in NZS 5259 for determination of calorific value.
* Procedure for uploading the above gas composition results in OATIS.

Reporting and Audits

* Provide copies of any relevant audits or relevant sections of any audits, both internal and/or external, covering Vector’s gas composition measurement procedures.

Network Operators – ICP Altitude

Operating Procedures

On an annual basis each Network Operator will provide Gas Retailers with a copy of their operating procedures associated with the determination of the altitude of each ICP, such determination to be in compliance with section 2.7.4.4 of NZS 5259 (in particular the NOTE to section 2.7.4.4 detailed in Amendment No. 1 dated 27 November 2009), and maintenance of this information on the registry in compliance with rules 42.2, 53 and 58.1 of the Gas (Switching Arrangements) Rules 2008, enabling Gas Retailers who use the data correctly to comply with NZS 5259 and the Gas (Downstream Reconciliation) Rules 2008. These procedures as a minimum will include:-

* The procedures for confirming the altitude of existing gas supplies within the accuracy tolerance expected in NZS 5259 (in particular the NOTE to section 2.7.4.4 detailed in Amendment No. 1 dated 27 November 2009).
* The procedures for determining the altitude of any new gas supplies connected to their networks within the accuracy tolerance expected in NZS 5259 (in particular the NOTE to section 2.7.4.4 detailed in Amendment No. 1 dated 27 November 2009).
* The procedures for including and updating the altitude of a gas supply on the Gas Registry

Reporting and Audits

* Provide copies of any relevant audits or relevant sections of any audits, both internal and/or external, covering the Network Operator’s processes and procedures for accurately measuring the altitude of each ICP and maintaining this information in the registry.

Network Operators – nominal operating pressure (“network pressure”)

Operating Procedures

On an annual basis each Network Operator will provide Gas Retailers with a copy of its operating procedures associated with the monitoring and management of the gas pressure within its networks, and determination of the network pressure relevant to each ICP and its maintenance on the gas registry, enabling Gas Retailers who use the data correctly to comply with NZS 5259, and furthermore enabling Gas Retailers to comply with regulation 41. These procedures as a minimum will include:-

* The procedures for monitoring gas pressures within the networks and ensuring compliance with NZS5258
* Emergency procedures when gas pressure within the networks is found to be outside the maximum and minimum allowable operating pressures, including the communication procedures with Gas Retailers
* The procedures for determining and maintaining network pressure on the registry and ensuring compliance with rule 58.1 of the Gas (Switching Arrangements) Rules 2008, also ensuring that the accuracy of the network pressure on the registry enables Retailers who use the information to comply with NZS 5259 and the Gas (Downstream Reconciliation) Rules 2008.
* The procedures for confirming the competency of the operators managing the pressures within the networks
* The pressure control equipment test and maintenance procedures

Reporting and Audits

* Provide copies of any relevant audits or relevant sections of any audits, both internal and/or external, covering the Network Operator’s compliance with NZ5258 and the Gas (Switching) Rules 2008 with respect to network pressure
* Reports of any incidents of over or under pressure incidents as they occur.
* When published provide Gas Retailers with the relevant sections on pressure control within the Network Operator’s Safety Management System documentation

GMS OPERATORS – meter pressure

Operating Procedures

On an annual basis each GMS Operator will provide Gas Retailers with a copy of its operating procedures associated with the monitoring and management of meter pressure and conversion devices. These procedures as a minimum will include:

* The procedures for monitoring meter pressures at their GMS installations and for recording these results in compliance with NZS 5259
* Procedure for responding to low/high supply [meter] pressure complaints affecting the safe supply to consumers, enabling Gas Retailers to comply with regulation 42
* The maintenance procedures and programs for ensuring that the ongoing performance of its GMS installations is compliant with NZS 5259
* Confirmation of the competency of their operators and contractors working on their GMS installations
* Procedures when the GMS Operator identifies a fault with a GMS installation, including identifying meter interference and/or an incorrect meter pressure and notification to the responsible Gas Retailer of the findings and any corrective action taken
* Procedure for updating the GMS Operator’s database and reporting any changes to meter pressure to the responsible Gas Retailer for the associated ICP, enabling the Gas Retailer using the information to comply with NZS 5259.
* The procedures for testing and recording the accuracy of their GMS installations in compliance with regulations 22 and 23 of the Gas (Safety and Measurement) Regulations

Reporting and Audits

* Provide copies of any relevant audits or relevant sections of any audits, both internal and/or external, covering the GMS Operator’s processes and procedures for accurately measuring and monitoring the meter pressure of their GMS installations and compliance with NZS 5259, and reporting any changes of meter pressure to the responsible Gas Retailer for the associated ICP.
* Provide copies of any relevant audits or relevant sections of any audits, both internal and/or external, covering the Meter Operator’s processes and procedures for ensuring that the meters they install meet the accuracy requirements of NZS 5259
* Reports of any incidents of non compliance with NZS 5259 or regulation 42 as they occur or are identified to the responsible Gas Retailer
* When published provide Gas Retailers with the relevant sections on pressure control within the GMS Operator’s Safety Management System documentation

**Gas Quality**

Regulation 41 of the Gas (Safety and Measurement) Regulations 2010 requires Gas Retailers to comply with NZS 5442 Gas Specification.

To achieve this Gas Retailers rely on information provided by Gas Producers and Gas Wholesalers.

Gas Producers

Procedures

On an annual basis each Gas Producer will provide to Gas Retailers with whom they have gas supply agreements a copy of their operating procedures associated with measuring and ensuring the composition of their gas entering the transmission system is compliant with NZS 5442. These procedures as a minimum will include:-

* The procedure for measuring the composition of the gas they are injecting into the transmission systems, including the frequency of testing
* Confirmation of the competency of the operators testing the composition of their gas
* Maintenance and calibration of the testing equipment
* Emergency arrangements in the event that it detects or becomes aware that that the gas being injected into the transmission system does not comply with NZS 5442, including notifying the Gas Retailer of such an event

Reporting and Audits

* Provide to Gas Retailers (as appropriate) a monthly report on compliance with NZS 5442 of the gas that the Gas Producer has injected into the transmission system over the previous month.
* Provide to Gas Retailers (as appropriate copies of any relevant audits or relevant sections of any audits, both internal and/or external, covering the Gas Producer’s compliance with NZS 5442.
* Provide to Gas Retailers (as appropriate reports of all identified incidents of non-compliance with NZS 5442 as they occur.

Gas Wholesalers

Procedures

On an annual basis each Gas Wholesaler will provide to the Gas Retailers with whom it has gas supply agreements a copy of their operating procedures designed to monitor that the gas they purchase and then sell complies with NZS 5442. These procedures as a minimum will include:-

* The procedure for auditing that their suppliers have adequate facilities, systems and procedures in place to ensure it is able to, and does, comply with its obligation under MPOC and the VTC to inject only gas which complies with NZS 5442 into the transmission system.
* Emergency arrangements in the event that it becomes aware that gas being supplied to Gas Retailers with whom it has gas supply agreements does not comply with NZS 5442 including notifying these Gas Retailers of such an event
* Provide reports of all identified incidents of non-compliance with NZS 5442 as they occur

Reporting and Audits

* Provide to Gas Retailers (as appropriate) a monthly report on compliance with NZS 5442 of the gas that the Gas Wholesaler has had injected into the transmission system over the previous month.
* Provide to Gas Retailers (as appropriate) copies of any relevant audits or relevant sections of any audits, both internal and/or external, covering the Gas Producer’s compliance with NZS 5442 where the Gas Wholesaler purchases gas from the Gas Producer.