

Wesfarmers Kleenheat Gas Pty Ltd

2020 Gas Distribution Licence (GDL9) Asset Management System Review

Report

1 June 2018 to 31 May 2020

Mr Clay Roberts
Reticulation and Standards Manager
Wesfarmers Kleenheat Gas Pty Ltd
Building 161, Murdoch University
Murdoch, WA 6150

27 November 2020

Dear Clay

Wesfarmers Kleenheat Gas Pty Ltd – 2020 Gas Distribution Licence (GDL9) Asset Management System Review

We have completed the limited assurance engagement on the 2020 GDL9 Asset Management System review for Wesfarmers Kleenheat Gas Pty Ltd for the period 1 June 2018 to 31 May 2020 and are pleased to submit our report to you.

I confirm that this report is an accurate presentation of the findings and conclusions from our review procedures.

If you have any questions or wish to discuss anything raised in the report, please contact me on 0456 585 247.

Yours sincerely



DELOITTE TOUCHE TOHMATSU



Vincent Snijders
Partner
Chartered Accountants
Perth

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1 Independent assurance practitioner's report

Conclusion

We have undertaken a limited assurance engagement to report on the effectiveness of Wesfarmers Kleenheat Gas Pty Ltd's (**Kleenheat**) Asset Management System (**AMS**), in all material respects, as evaluated against the effectiveness criteria in relation to its Gas Distribution Licence (GDL9) (the **Licence**) and applicable obligations from the *Audit and Review Guidelines: Electricity and Gas Licences* (the **Guidelines**) released in March 2019, for the period 1 June 2018 to 31 May 2020, for the purpose of assisting Kleenheat comply with its reporting obligations to the Economic Regulation Authority (the **ERA**).

Based on the procedures we have performed and the evidence we have obtained, except for the effects of the matters described in the *Basis for Qualified Conclusion* section below, nothing has come to our attention that causes us to believe Kleenheat has not established and maintained, in all material respects, an effective AMS for assets subject to the Licence, as measured by the effectiveness criteria in the March 2019 Guidelines issued by the ERA, and the systems have not operated effectively for the review period.

Basis for Qualified Conclusion

During the period from 1 June 2018 to 31 May 2020, Kleenheat did not comply with the effectiveness criteria in the following instances:

AMS key process and effectiveness criteria	Issue
<p><i>Asset Operations</i></p> <p>5.3 Assets are documented in an asset register including asset type, location, material, plans of components, and an assessment of assets' physical/structural condition</p>	<p>The asset register did not include all relevant assets or certain required information on the assets to be considered adequate. Kleenheat is aware of this and is in the process of updating the asset register to enable a clear overview of network assets.</p>
<p><i>Asset Operations</i></p> <p>5.6 Staff resources are adequate, and staff receive training commensurate with their responsibilities</p>	<p>While Kleenheat has advised that practical competency assessments for the more routine maintenance tasks has been completed by the Maintenance & Training Specialist, the results of the practical assessments haven't been documented and the theoretical aspect of the training has not been developed. In addition, Kleenheat has not developed a maintenance training package that addresses the more critical maintenance tasks. Kleenheat is currently in the process of finalising a training cluster for Kleenheat staff, which will be accessed from WesCEF's Learning Management System, which is referred to as Elevate, and act as an online training portal and training record repository.</p>
<p><i>Risk Management</i></p> <p>8.1 Risk management policies and procedures exist and are being applied to minimise internal and external risks</p>	<p>Kleenheat policy requires a Job Safety Analysis (JSA) to be completed in the workplace before a non-routine, high risk job commences. One of Kleenheat's three contractors had not adequately followed Kleenheat process and failed to complete JSA's for certain high-risk work orders.</p>
<p><i>Risk Management</i></p> <p>8.3 Probability and consequences of asset failure are regularly assessed</p>	<p>While frequent reviews of the Qualitative Risk Assessment (QRA) occurred throughout 2018, formal documented reviews since November 2018 were unable to be evidenced until the</p>

AMS key process and effectiveness criteria	Issue
	current review which commenced in June 2020. The revised QRA is scheduled to be finalised as part of the internal audit of the Safety Case and QRA, which commences in November 2020 and is expected to be completed in February 2021. Kleenheat subsequently expects the annual QRA to be completed by February each year.
<i>Contingency Planning</i> 9.1 Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks	Contingency testing did not occur at two Kleenheat sites for a period of 18 months during the Review Period. As such the testing frequency is deemed to be insufficient.
<i>Review of AMS</i> 12.2 Independent reviews (e.g. internal audit) are performed of the asset management system	Wesfarmers Internal Audit performs an annual internal audit on the Safety Case, which is reported through to the Department of Mines, Industry, Regulation and Safety (DMIRS). The last audit was submitted to DMIRS in March 2020, however the 2019 audit was not completed.

We conducted our engagement in accordance with Standard on Assurance Engagements ASAE 3500 *Performance Engagements* issued by the Auditing and Assurance Standards Board.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our Qualified Conclusion.

Kleenheat's responsibility for the AMS

Kleenheat is responsible for:

- Ensuring that the AMS has been established and maintained in accordance with Guidelines
- Confirming the measurement or evaluation of the AMS effectiveness criteria against the Guidelines
- Identifying suitable compliance requirements, as specified by the conditions within the Licence
- Identifying suitable AMS effectiveness criteria, as specified by the Guidelines
- Identifying, designing and implementing controls over its operations to enable the conditions of the Licence to be met and to monitor ongoing compliance
- Establishing and maintaining an effective AMS for assets subject to its Licence, as measured by the effectiveness criteria detailed in the Guidelines.

Assurance practitioner's independence and quality control

We have complied with the independence and other relevant ethical requirements relating to assurance engagements, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality, and professional behaviour.

The firm applies Auditing Standard ASQC 1 *Quality Control for Firms that Perform Audits and Reviews of Financial Reports and Other Financial Information Other Assurance and Related Services Engagements*, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Assurance practitioner's responsibilities

Our responsibility is to express a limited assurance conclusion on Kleenheat's AMS for assets subject to its Licence, based on the procedures we have performed and the evidence we have obtained. We conducted our limited assurance engagement in accordance with Australian Standard on Assurance Engagements ASAE 3500 *Performance Engagements*, issued by the Australian Auditing and Assurance Standards Board, in order to express a conclusion whether, based on the procedures performed and the evidence obtained, anything has come to our attention that causes us to believe that Kleenheat's AMS for assets subject to its Licence, have not been established and maintained, in all material respects, in accordance with the Licence as measured by the effectiveness criteria in the Guidelines. That standard requires that we plan and perform this engagement to obtain limited assurance about whether the AMS for assets subject to the Licence is materially ineffective.

A limited assurance engagement conducted in accordance with ASAE 3500 involves identifying areas where the AMS for assets subject to a Licence is likely to be materially ineffective, addressing the areas identified and considering the process used to prepare the AMS for assets subject to the Licence. A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks.

Procedures performed

The procedures we performed were based on our professional judgement and consisted primarily of:

- Inquiries with key staff and review of documents to perform a preliminary controls assessment;
- Interviews with and representations from relevant Kleenheat staff to gain an understanding of the development and maintenance of policies and procedural type documentation (a full list of staff engaged has been provided at Appendix A);
- Examination of documented policies and procedures on a sample basis for key functional requirements and consideration of their relevance to Kleenheat's AMS requirements and standards;
- Consideration of management reports and evidence of operational and maintenance activities; and
- Consideration of activities performed by Kleenheat that relate to operation of the assets.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement. Accordingly, we do not express a reasonable assurance opinion on the effectiveness of Kleenheat's AMS for assets subject to the Licence.

Inherent Limitations

Because of the inherent limitations of an assurance engagement, together with the inherent limitation of any system of controls there is an unavoidable risk that fraud, error or non-compliance with the requirements of the Guidelines may occur and not be detected.

A limited assurance engagement relating to the period from 1 June 2018 to 31 May 2020 does not provide assurance as to whether the effectiveness of Kleenheat's AMS for assets subject to the Licence will continue in the future.

Restricted use

This report has been prepared for use by Kleenheat for the purpose of satisfying its obligation under Section 11Y of the *Energy Coordination Act 1994*. We disclaim any assumption of responsibility for any reliance on this report to any person other than Kleenheat, or for any purpose other than that for which it was prepared. We understand that a copy of the report will be provided to the ERA for the purpose of reporting on the effectiveness of Kleenheat's AMS. We agree that a copy of this report will be given to the ERA in connection with this purpose, however we accept no responsibility to the ERA or to anyone who is provided with or obtains a copy of our report.



DELOITTE TOUCHE TOHMATSU



Vincent Snijders

Partner

Chartered Accountant

Perth , 27 November 2020

2 Executive summary

2.1 Introduction and background

The Economic Regulation Authority (the **ERA**) has, under the provisions of the *Energy Coordination Act 1994* (the **Act**), issued to Wesfarmers Kleenheat Gas Pty Ltd (**Kleenheat**) a Gas Distribution Licence (GDL9) (the **Licence**). The Licence covers four reticulated distribution networks operated by Kleenheat in WA (one in Albany, two in Margaret River and one in Leinster) that supply LP gas to commercial and residential estates.

Section 11Y of the Act requires Kleenheat to provide the ERA with a report by an independent expert acceptable to the ERA not less than once in every 24-month period (or any longer period that the ERA allows) as to the effectiveness of its Asset Management System (**AMS**). With the ERA's approval, Deloitte Touche Tohmatsu (**Deloitte**) has been appointed to conduct the review for the 24-month period 1 June 2018 to 31 May 2020 (**review period**).

The review has been conducted in accordance with the March 2019 issue of the Guidelines.

2.2 Findings

In considering Kleenheat's internal control procedures, structure and environment, its compliance arrangements, and its information systems specifically relevant to those effectiveness criteria subject to review and with a focus on its LP gas reticulated distribution networks, we observed Kleenheat:

- Applies a continuous improvement approach to its asset management practices, with a number of incremental improvements introduced throughout the review period
- Maintained a stable asset management system and applied consistent asset management practices throughout the review period
- Is supported by corporate systems and functions maintained by its parent entity, Wesfarmers Chemicals Energy and Fertilisers (**WesCEF**)
- Kleenheat actioned the 10 recommendations made in the 2018 AMS review, and completed the actions for seven out of the 10 recommendations. The remaining three recommendations were partially completed, and updated recommendations have been provided directly to Kleenheat
- Six recommendations for improvement opportunities have been provided directly to Kleenheat, including the three 2018 recommendations that have been rolled forward.

The following tables summarise the assessments made during the review of Kleenheat's performance and the process and policies in place for Kleenheat to manage its asset management system.

Table 1 sets out the rating scale defined by the ERA in the Guidelines for the assessment of the level of effectiveness of the licensees processes and policies and the licensees performance of the asset management system. For the highest possible effectiveness rating to be achieved, Kleenheat was required to demonstrate it has maintained mature processes and policies, and demonstrated it had performed the effectiveness criteria effectively.

Table 1: Process and policy and performance rating scale

Process and Policy Rating		Performance Rating	
Rating	Description	Rating	Description
A	Adequately defined	1	Performing effectively
B	Requires some improvement	2	Improvement required
C	Requires substantial improvement	3	Corrective action required
D	Inadequate	4	Serious action required
N/P	Not performed	N/R	Not rated

Table 4 at section 3 of this report provides further detail on the process and policy and performance rating scales. The above rating scale is defined by the Guidelines.

Table 2: Summary ratings of process and policy and performance findings

Process and policy	Performance					Total
	1	2	3	4	NR	
A	51	3	-	-	-	54
B	-	3	-	-	-	3
C	-	-	-	-	-	-
D	-	-	-	-	-	-
NP	-	-	-	-	1	1
Total:	51	6	-	-	1	58

Specific assessments for each criterion are summarised at **Table 6** in section 3 “Summary of ratings” of this report. Detailed findings, including relevant observations, recommendations and action plans are located in section 4 “Detailed findings, recommendations and action plans” of this report.

2.3 Kleenheat’s response to previous review recommendations

This review considered Kleenheat’s progress in completing the action plans detailed in the 2018 AMS report.

Based on our examination of relevant documents, discussion with staff and consideration of the results of this review’s testing against the criteria, we determined that seven of the ten 2018 recommendations were fully closed out and required no further action. The remaining three recommendations from the 2018 AMS Review were partially completed and remain valid. These recommendations were rated as improvement opportunities and recommendations have been provided directly to Kleenheat.

Refer to section 5 of this report for further detail.

2.4 Recommendations and action plans

In accordance with section 5.1.8 of the Audit Guidelines, we are only required to detail recommendations and obtain action plans to address:

- Performance rating: asset management process or effectiveness criteria assessed as either 3 or 4
- Process and policy rating: asset management process or effectiveness criteria assessed as either C or D.

All findings detailed in this report do not meet the above criteria. As such, recommendations have been provided directly to Kleenheat.

2.5 Scope and objectives

The objective of the review was to independently examine the effectiveness and performance of the AMS established for assets subject to Kleenheat’s Licence during the review period.

In accordance with the Guidelines, the review considered the effectiveness of Kleenheat’s existing control procedures within the following 12 key processes in the asset management life cycle as outlined below at Table 3.

Table 3 – AMS key processes and effectiveness criteria

#	Key processes	Effectiveness criteria
1	Asset Planning	1.1 Asset management plan covers the processes in this table 1.2 Planning processes and objectives reflect the needs of all stakeholders and are integrated with business planning 1.3 Service levels are defined in the asset management plan 1.4 Non-asset options (e.g. demand management) are considered 1.5 Lifecycle costs of owning and operating assets are assessed 1.6 Funding options are evaluated 1.7 Costs are justified and cost drivers identified 1.8 Likelihood and consequences of asset failure are predicted 1.9 Asset management plan is regularly reviewed and updated.
2	Asset Creation and Acquisition	2.1 Full project evaluations are undertaken for new assets, including comparative assessment of non-asset options 2.2 Evaluations include all life-cycle costs 2.3 Projects reflect sound engineering and business decisions 2.4 Commissioning tests are documented and completed 2.5 Ongoing legal/environmental/safety obligations of the asset owner are assigned and understood.
3	Asset Disposal	3.1 Under-utilised and under-performing assets are identified as part of a regular systematic review process 3.2 The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken 3.3 Disposal alternatives are evaluated 3.4 There is a replacement strategy for assets.
4	Environmental Analysis (all external factors that affect the system)	4.1 Opportunities and threats in the asset management system environment are assessed 4.2 Performance standards (availability of service, capacity, continuity, emergency response, etc.) are measured and achieved 4.3 Compliance with statutory and regulatory requirements 4.4 Service standard (customer service levels etc) are measured and achieved.
5	Asset Operations	5.1 Operational policies and procedures are documented and linked to service levels required 5.2 Risk management is applied to prioritise operations tasks 5.3 Assets are documented in an asset register including asset type, location, material, plans of components, and an assessment of assets' physical/structural condition 5.4 Accounting data is documented for assets 5.5 Operational costs are measured and monitored 5.6 Staff resources are adequate, and staff receive training commensurate with their responsibilities.
6	Asset Maintenance	6.1 Maintenance policies and procedures are documented and linked to service levels required 6.2 Regular inspections are undertaken of asset performance and condition 6.3 Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule 6.4 Failures are analysed and operational/maintenance plans adjusted where necessary 6.5 Risk management is applied to prioritise maintenance tasks 6.6 Maintenance costs are measured and monitored.

#	Key processes	Effectiveness criteria
7	Asset Management Information System	7.1 Adequate system documentation for users and IT operators 7.2 Input controls include suitable verification and validation of data entered into the system 7.3 Security access controls appear adequate, such as passwords 7.4 Physical security access controls appear adequate 7.5 Data backup procedures appear adequate and backups are tested 7.6 Computations for licensee performance reporting are accurate 7.7 Management reports appear adequate for the licensee to monitor licence obligations 7.8 Adequate measures to protect asset management data from unauthorised access or theft by persons outside the organisation.
8	Risk Management	8.1 Risk management policies and procedures exist and are being applied to minimise internal and external risks 8.2 Risks are documented in a risk register and treatment plans are implemented and monitored 8.3 Probability and consequences of asset failure are regularly assessed.
9	Contingency Planning	9.1 Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks.
10	Financial Planning	10.1 The financial plan states the financial objectives and identifies strategies and actions to achieve those 10.2 The financial plan identifies the source of funds for capital expenditure and recurrent costs 10.3 The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets) 10.4 The financial plan provides firm predictions on income for the next five years and reasonable predictions beyond this period 10.5 The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services 10.6 Large variances in actual/budget income and expenses are identified and corrective action taken where necessary.
11	Capital Expenditure Planning	11.1 There is a capital expenditure plan covering works to be undertaken, actions proposed, responsibilities and dates 11.2 The capital expenditure plan provides reasons for capital expenditure and timing of expenditure 11.3 The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan 11.4 There is an adequate process to ensure that the capital expenditure plan is regularly updated and implemented.
12	Review of Asset Management System	12.1 A review process is in place to ensure that the asset management plan and the asset management system described in it remain current 12.2 Independent reviews (e.g. internal audit) are performed of the asset management system.

Each key process and effectiveness criterion is applicable to Kleenheat's Licence and as such was individually considered as part of the review. The Review Plan details the risk assessments made and review priority assigned to each key process and effectiveness criterion.

2.6 Approach

Our approach for this review involved the following activities, which were undertaken during August to October 2020:

- Utilising the Guidelines, development of a risk assessment, which involved discussions with key staff and review of documents to undertake a preliminary assessment of relevant controls
- Development of a Review Plan for approval by the ERA

- Correspondence and interviews with Kleenheat staff to gain an understanding of process controls in place (see **Appendix A** for staff involved)
- Visited the Margaret River distribution operations with a focus on understanding the distribution network assets, their function, normal mode of operation, age and an assessment of the facilities against the AMS review criteria
- Examination of documents, processes and controls to assess the overall effectiveness of Kleenheat's AMS (see **Appendix A** for reference listing)
- Consideration of the resourcing applied to maintaining those controls and processes
- Reporting of findings to Kleenheat for review and response.

3 Summary of ratings

In accordance with the Guidelines, the assessment of both the process and policy definition adequacy rating and the performance rating (refer to **Table 2**) for each of the key AMS processes is performed using the below ratings.

For the avoidance of doubt, these ratings do not provide reasonable assurance.

Table 4: Asset management process and policy definition adequacy ratings

Rating	Description	Criteria
A	Adequately defined	<ul style="list-style-type: none"> Processes and policies are documented. Processes and policies adequately document the required performance of the assets Processes and policies are subject to regular reviews, and updated where necessary The asset management information system(s) are adequate in relation to the assets being managed.
B	Requires some improvement	<ul style="list-style-type: none"> Processes and policies require improvement Processes and policies do not adequately document the required performance of the assets Reviews of processes and policies are not conducted regularly enough The asset management information system(s) requires minor improvements (taking into consideration the assets being managed).
C	Requires substantial improvement	<ul style="list-style-type: none"> Processes and policies are incomplete or require substantial improvement Processes and policies do not document the required performance of the assets Processes and policies are considerably out of date. The asset management information system(s) requires substantial improvements (taking into consideration the assets being managed).
D	Inadequate	<ul style="list-style-type: none"> Processes and policies are not documented The asset management information system(s) is not fit for purpose (taking into consideration the assets being managed).

Table 5: Asset management performance ratings

Rating	Description	Criteria
1	Performing effectively	<ul style="list-style-type: none"> The performance of the process meets or exceeds the required levels of performance Process effectiveness is regularly assessed, and corrective action taken where necessary.
2	Improvement Required	<ul style="list-style-type: none"> The performance of the process requires some improvement to meet the required level Process effectiveness reviews are not performed regularly enough Recommended process improvements are not implemented.
3	Corrective action required	<ul style="list-style-type: none"> The performance of the process requires substantial improvement to meet the required level Process effectiveness reviews are performed irregularly, or not at all Recommended process improvements are not implemented
4	Serious action required	<ul style="list-style-type: none"> Process is not performed, or the performance is so poor the process is considered to be ineffective.

This report provides:

- A breakdown of each function of the AMS into sub-components as described in the Guidelines. This approach is taken to enable a more thorough review of key processes where individual components within a larger process can be of greater risk to the business therefore requiring different review treatment
- A summary of the ratings applied by the review (**Table 6**) for each of:
 - Asset management process and policy definition adequacy (**definition adequacy rating**)
 - Asset management performance (**performance rating**).
- Detailed findings, including relevant observations, recommendations and action plans (Section 4). Descriptions of the effectiveness criteria can be found in section 4 and the Review Plan.

Table 6: AMS effectiveness summary

Ref	Effectiveness criteria	Review Priority	Ratings	
			Definition Adequacy	Performance
1. Asset planning			A	1
1.1	Asset management plan covers the processes in this table	Priority 4	A	1
1.2	Planning processes and objectives reflect the needs of all stakeholders and are integrated with business planning	Priority 5	A	1
1.3	Service levels are defined in the asset management plan	Priority 5	A	1
1.4	Non-asset options (e.g. demand management) are considered	Priority 5	A	1
1.5	Lifecycle costs of owning and operating assets are assessed	Priority 4	A	1
1.6	Funding options are evaluated	Priority 5	A	1
1.7	Costs are justified and cost drivers identified	Priority 4	A	1
1.8	Likelihood and consequences of asset failure are predicted	Priority 2	A	1
1.9	Asset management plan is regularly reviewed and updated	Priority 5	A	1
2. Asset creation and acquisition			A	1
2.1	Full project evaluations are undertaken for new assets, including comparative assessment of non-asset options	Priority 4	A	1
2.2	Evaluations include all life-cycle costs	Priority 4	A	1
2.3	Projects reflect sound engineering and business decisions	Priority 4	A	1
2.4	Commissioning tests are documented and completed	Priority 4	A	1
2.5	Ongoing legal/environmental/ safety obligations of the asset owner are assigned and understood	Priority 2	A	1
3. Asset disposal			A	1
3.1	Under-utilised and under-performing assets are identified as part of a regular systematic review process	Priority 5	A	1
3.2	The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken	Priority 5	A	1
3.3	Disposal alternatives are evaluated	Priority 5	NP	NR
3.4	There is a replacement strategy for assets	Priority 4	A	1
4. Environmental analysis			A	1
4.1	Opportunities and threats in the asset management system environment are assessed	Priority 4	A	1

Ref	Effectiveness criteria	Review Priority	Ratings	
			Definition Adequacy	Performance
4.2	Performance standards (availability of service, capacity, continuity, emergency response, etc.) are measured and achieved	Priority 3	A	1
4.3	Compliance with statutory and regulatory requirements	Priority 3	A	1
4.4	Service standard (customer service levels etc) are measured and achieved	Priority 4	A	1
5. Asset operations			B	2
5.1	Operational policies and procedures are documented and linked to service levels required	Priority 3	A	1
5.2	Risk management is applied to prioritise operations tasks	Priority 4	A	1
5.3	Assets are documented in an asset register including asset type, location, material, plans of components, and an assessment of assets' physical/structural condition	Priority 4	B	2
5.4	Accounting data is documented for assets	Priority 4	A	1
5.5	Operational costs are measured and monitored	Priority 4	A	1
5.6	Staff resources are adequate, and staff receive training commensurate with their responsibilities	Priority 4	B	2
6. Asset maintenance			A	1
6.1	Maintenance policies and procedures are documented and linked to service levels required	Priority 2	A	1
6.2	Regular inspections are undertaken of asset performance and condition	Priority 2	A	1
6.3	Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule	Priority 2	A	1
6.4	Failures are analysed and operational/maintenance plans adjusted where necessary	Priority 2	A	1
6.5	Risk management is applied to prioritise maintenance tasks	Priority 2	A	1
6.6	Maintenance costs are measured and monitored	Priority 4	A	1
7. Asset management information system			A	1
7.1	Adequate system documentation for users and IT operators	Priority 5	A	1
7.2	Input controls include appropriate verification and validation of data entered into the system	Priority 4	A	1
7.3	Security access controls appear adequate, such as passwords	Priority 5	A	1
7.4	Physical security access controls appear adequate	Priority 5	A	1
7.5	Data backup procedures appear adequate and backups are tested	Priority 4	A	1
7.6	Computations for licensee performance reporting are accurate	Priority 5	A	1
7.7	Management reports appear adequate for the licensee to monitor licence obligations	Priority 5	A	1
7.8	Adequate measures to protect asset management data from unauthorised access or theft by persons outside the organisation	Priority 4	A	1
8. Risk management			A	2
8.1	Risk management policies and procedures exist and are being applied to minimise internal and external risks	Priority 2	A	2

Ref	Effectiveness criteria	Review Priority	Ratings	
			Definition Adequacy	Performance
8.2	Risks are documented in a risk register and treatment plans are implemented and monitored	Priority 4	A	1
8.3	Probability and consequences of asset failure are regularly assessed	Priority 2	A	2
9. Contingency planning			B	2
9.1	Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks	Priority 2	B	2
10. Financial planning			A	1
10.1	The financial plan states the financial objectives and identifies strategies and actions to achieve those	Priority 4	A	1
10.2	The financial plan identifies the source of funds for capital expenditure and recurrent costs	Priority 5	A	1
10.3	The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets)	Priority 5	A	1
10.4	The financial plan provides firm predictions on income for the next five years and reasonable predictions beyond this period	Priority 5	A	1
10.5	The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services	Priority 4	A	1
10.6	Large variances in actual/budget income and expenses are identified and corrective action taken where necessary	Priority 4	A	1
11. Capital expenditure planning			A	1
11.1	There is a capital expenditure plan covering works to be undertaken, actions proposed, responsibilities and dates	Priority 4	A	1
11.2	The capital expenditure plan provides reasons for capital expenditure and timing of expenditure	Priority 5	A	1
11.3	The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan	Priority 4	A	1
11.4	There is an adequate process to ensure that the capital expenditure plan is regularly updated and implemented	Priority 5	A	1
12. Review of AMS			A	2
12.1	A review process is in place to ensure that the asset management plan and the asset management system described in it remain current	Priority 5	A	1
12.2	Independent reviews (e.g. internal audit) are performed of the asset management system	Priority 5	A	2

4 Detailed findings, recommendations and action plans

The following tables contain:

- *Findings*: the reviewer's understanding of the process and any issues that have been identified during the review
- *Recommendations (where applicable)*: recommendations for improvement or enhancement of the process or control
- *Action plans (where applicable)*: Kleenheat's formal response to review recommendations, providing details of action to be implemented to address the specific issue raised by the review.

4.1 Asset Planning

Key process: Asset planning strategies are focused on meeting customer needs in the most effective and efficient manner (delivering the right service at the right price).

Expected outcome: Integration of asset strategies into operational or business plans will establish a framework for existing and new assets to be effectively utilised and their service potential optimised.

Overall Adequacy/Performance rating: Adequately defined (A)/ Performing effectively (1)

Effectiveness Criteria	Findings	
1.1 Asset management plan covers the processes in this table	<p>Through discussion with the Reticulation and Standards Manager and examination of Kleenheat’s Distribution Networks Asset Management Plan (AMP), we determined that the AMP (last revised 11 October 2019) contains information regarding:</p> <ul style="list-style-type: none"> • Scope and purpose • Description of operations and assets covered by the Licence • Legislative and other compliance requirements • Lifecycle stages, from acquisition to disposal • Levels of service • Contingency arrangements • Network performance measuring • Asset management information systems • Key risks and risk management arrangements • Asset disposal • Network Growth • Network expenditure • Arrangement for future review • References to supporting documentation. 	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
1.2 Planning processes and objectives reflect the needs of all stakeholders and are integrated with business planning	<p>Through discussion with the Reticulation and Standards Manager and consideration of WesCEFs commercial planning and budgeting process, we determined:</p> <ul style="list-style-type: none"> • WesCEFs budgeting process includes the Kleenheat LPG Distribution networks that comprise the Licence • The annual Corporate Plan articulates the commercial strategy and forecast financial consequences (revenue, capital expenditure, operations and profitability). It also forecasts volume trends and gas prices • The AMP highlights cost reduction is a focus to ensure consumers receive a competitive gas price. Cost reduction efforts largely revolve around the efficient scheduling of maintenance and LPG delivery activities. 	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)

Effectiveness Criteria	Findings	
1.3 Service levels are defined in the asset management plan	<p>Through discussion with the Reticulation and Standards Manager and Maintenance and Training Specialist, and examination of the AMP, we determined that Kleenheat has defined three key service levels in the AMP, these are:</p> <ul style="list-style-type: none"> • Network safety: Kleenheat completes key testing and surveillance activities to ensure its networks can be operated safely and not pose a risk to the consumer, the general public or the Kleenheat staff and contractors who maintain them • Network reliability: Reliability is achieved through ongoing inspection and testing activities aimed to ensure network assets are performing as required to identify emerging issues in the early stages so corrective actions can be developed and implemented • Network profitability: Network profitability is monitored via the annual review of the Corporate Plan. Volume trends, networks costs and Saudi CP (gas cost) are reviewed and retail pricing adjusted accordingly to ensure the ongoing profitability of the networks. Cost reduction is a focus to ensure consumers receive a competitive gas price. 	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
1.4 Non-asset options (e.g. demand management) are considered	<p>Through discussion with the Reticulation and Standards Manager and examination of relevant documents, we determined that Kleenheat's planning process provides for consideration of demand management through:</p> <ul style="list-style-type: none"> • Design Verification and Compliance Check, which considers demand management for new networks, existing network expansions, and development plans • Distribution Network Capacity Check, which is a process for assessing the Tier 1 distribution network's capacity for expansion. It is undertaken when Kleenheat receive expansion plans from the developer. No new expansions occurred on the network during the review period, however we examined the results for the 2019 and 2020 annual network pressure checks for all sites which monitor if expansions have impacted network pressure, and determined they were within recommended pressure levels. 	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
1.5 Lifecycle costs of owning and operating assets are assessed	<p>Through discussion with the Reticulation and Standards Manager and examination of a network lifecycle cost analysis, we determined that Kleenheat has forecasted the lifecycle cost of owning and operating assets in the Tier 1 distribution network until the 2030 financial year. The assessment is reforecast annually, or if there is a major capital expenditure.</p>	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
1.6 Funding options are evaluated	<p>Through discussion with the Reticulation and Standards Manager and LPG Sales Manager, we determined that funding for the LPG business is through the Wesfarmers Central Treasury, based on the capital and operational expense investments forecasted in the annual budget process. Kleenheat would consider government grant funding, however this happens rarely, and has not happened during the review period.</p>	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
1.7 Costs are justified, and cost drivers identified	<p>Through discussion with the Reticulation and Standards Manager and LPG Sales Manager, and examination of relevant documentation, we determined:</p> <ul style="list-style-type: none"> • Forecasted operations and maintenance costs are budgeted annually for a rolling five-year period • The annual budgeting process includes volume and revenue analysis, costs associated with maintenance and capital expenditure, personnel costs and profitability margins 	

Effectiveness Criteria	Findings	
	<ul style="list-style-type: none"> The AMP outlines and justifies the costs and cost drivers (meter replacement, asset improvement, maintenance and contractor retainers) for each of the networks annually for the next three financial years 	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
1.8 Likelihood and consequences of asset failure are predicted	<p>Through discussion with the Reticulation and Standards Manager and Maintenance and Training Specialist, and examination of relevant documentation, we determined that Kleenheat has established the following processes to predict the likelihood and consequence of distribution network asset failure:</p> <ul style="list-style-type: none"> The Kleenheat Distribution Safety Case is a requirement under the <i>Gas Standards (Gas Supply and System Safety) Regulations 2000</i>, which focuses on Kleenheat’s operational and safety management processes and controls within operations to safely deliver (or distribute) gas to the Tier 1 distribution networks covered under this Licence. The Safety Case has a validity period of 5 years. The Safety Case renewal (Version 9) was last reviewed in November 2018 The Kleenheat Distribution Qualitative Risk Assessment outlines the key risks of asset failure for Tier 1 distribution network assets. The risk assessment includes: <ul style="list-style-type: none"> Hazard and risk (i.e. gas leakage, contamination, supply contamination etc) Cause Risk possibility Consequence(s) Risk category Risk control description Control type Residual risk possibility Residual severity Residual risk. The Distribution Network Leak Survey process is undertaken to provide Kleenheat with an operative prediction on the likelihood and frequency of asset failure in maintaining service levels The Distribution Network Capacity Check outlines processes for identifying and addressing concerns with network capacity Asset failures are identified through inspections and maintenance, which are outlined in the AMP Failures detected on assets or parts of one network are reviewed on other networks with similar components. 	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
1.9 Asset management plan is regularly reviewed and updated	<p>Through discussion with the Reticulation and Standards Manager and examination of the AMP, we determined that reviews of the AMP have taken place at least annually (last in October 2019), and an annual system generated alert has been set in Kleenheat's document management system (DOCOVA) for future reviews (which were scheduled to begin September 2020).</p>	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)

4.2 Asset Creation and acquisition

Key process: Asset creation/acquisition means the provision or improvement of an asset where the outlay can be expected to provide benefits beyond the year of outlay

Expected outcome: A more economic, efficient and cost-effective asset acquisition framework which will reduce demand for new assets, lower service costs and improve service delivery.

Overall Adequacy/Performance rating: Adequately defined (A) / Performing effectively (1)

Effectiveness Criteria	Findings	
2.1 Full project evaluations are undertaken for new assets, including comparative assessment of non-asset options	<p>Through discussion with the Reticulation and Standards Manager, Manager for Planning and Analysis and LPG Sales Manager, and examination of relevant documentation, we determined:</p> <ul style="list-style-type: none"> • There was no expansion to Kleenheat’s distribution network during the review period, and no new assets acquired • When initiating projects for new assets, Kleenheat applies the WesCEF Property Plant Equipment and Software Policy, which outlines WesCEF’s Capex process. This Process requires a project evaluation through completion of a Capital Expenditure Authorisation Form, which includes; introduction, background, proposed work, options considered (including non-asset options, breakdown of cost, commercial considerations, risk analysis, timeline, recommendations and forecasted cashflow • The Capital Expenditure Authorisation Form is authorised in accordance with the WesCEF Delegation of Authority (DOA) 	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
2.2 Evaluations include all life-cycle costs	<p>Through discussion with the Reticulation and Standards Manager, Manager for Planning and Analysis and LPG Sales Manager, and examination of relevant documentation, we determined:</p> <ul style="list-style-type: none"> • The WesCEF Property Plant Equipment and Software Policy requires a financial analysis based on the project life • Life-cycle costs are included as part of the evaluation in the Capital Expenditure Authorisation Form. For example, with the Leinster Network Improvement, the lifecycle cost of the improvements for 10 years was factored into the forecasted network cash flows, a period considered to be the expected minimum useful life of the improvements • In addition to project evaluation considerations, Kleenheat has forecasted the lifecycle cost of owning and operating assets in the Tier 1 distribution network until the 2030 financial year. 	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)

Effectiveness Criteria	Findings	
2.3 Projects reflect sound engineering and business decisions	<p>Through discussion with the Reticulation and Standards Manager and examination of relevant documentation, we determined that:</p> <ul style="list-style-type: none"> • The Capex process reflects commercial planning decisions based on reasoned, justified proposals that consider the projected benefits for Kleenheat. DOA issued to enable oversight of the projects • For the Leinster Network Improvement, peer reviews from the Commercial and Business Development department, as well as input from a Commercial Analyst demonstrates commercial involvement considerations. The proposal was developed by the Reticulation and Standards Manager. With an engineering background and considerable experience with the distribution networks, the project was based on engineering decisions to replace the poor performing PVC valves which were the commonly used item at the time of installation, with more modern PE equivalents which Kleenheat have indicated are now the industry standard. The number of isolation valves provided within the network was also increased at this time to facilitate easier and less disruptive isolation during emergency response and maintenance activities. 	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
2.4 Commissioning tests are documented and completed	<p>Through discussion with the Reticulation and Standards Manager and examination of relevant documentation, we determined that:</p> <ul style="list-style-type: none"> • Commissioning tests are completed when a new network has been developed or there is a network expansion. There has been no new developments or expansions during the review period • Installation of the network is completed by estate developers. Kleenheat will oversee key aspects of construction (depth of pipes, fittings, marker tape, backfilling etc) post installation • Prior to handover of the network to Kleenheat, Kleenheat will complete a handover checklist that, amongst other requirements, which consists of: <ul style="list-style-type: none"> ○ Completion by Kleenheat of a 24-hour pressure test of the network to ensure the network is adequate and leak free ○ Commissioning certification ○ Calibration certificates for pressure testing and welding equipment. <p>We understand that during the review period, Kleenheat self-identified an opportunity to improve its commissioning processes. Kleenheat has updated its commissioning process to clarify responsibilities of stakeholders as well as the respective network handover checklist which includes a 24hr pressure test and additional quality requirements that must be met before Kleenheat accepts responsibility for the completed work.</p>	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)

Effectiveness Criteria	Findings	
<p>2.5 Ongoing legal/environmental/ safety obligations of the asset owner are assigned and understood</p>	<p>Through discussion with the Reticulation and Standards Manager and the Maintenance and Training Specialist, and examination of relevant documentation, we determined that:</p> <ul style="list-style-type: none"> • In the AMP, legal/environmental/safety obligations have been assigned to appropriate staff • The GDL9 Performance audit and AMS review, including the performance/compliance reporting is the responsibility of the Reticulation and Standards Manager • Kleenheat's Natural Gas and Regulatory division is responsible for the Gas Trading Licence (GTL10). The Natural Gas and Regulatory division instigates the commencement of data collection for performance and compliance reporting for the GDL9 and GTL10 licences, as well as assigning responsibilities to the various departments within Kleenheat to provide the data required by the reports, set the deadlines for submission of that data, as well as deadlines for responsible officer review • The Safety Case and related Qualitative Risk Assessment (last updated November 2018) that is submitted to Building and Energy, details Kleenheat's safety and environmental obligations and processes to achieve compliance. The responsible officer for the Safety Case and related Qualitative Risk Assessment is the WesCEF Process Safety Superintendent • WesCEF provides Kleenheat with up-to-date legal/environmental/ safety legal updates through: <ul style="list-style-type: none"> ○ A quarterly Wesfarmers Environment and Sustainability Briefing, which is provided to all of Wesfarmers businesses. The briefing identifies legislative, policy and case law changes that occurred throughout the respective quarter. It is broken down into the following sections; Environmental, Industrial, Waste and Recycling, Climate Change and Energy, Human Rights and Equal Opportunity, Intellectual Property and Cyber Security, and Significant Cases that has occurred across Wesfarmers operating industries. Each section is split into Commonwealth and state specific changes or developments ○ WesCEF subscribe to a safety alert, provided by Workplace Safety Australia Pty Ltd, which is reviewed by the HSE team, who pass on information to the businesses, as required ○ WesCEF is a member of Chemistry Australia who also regularly issues updates on legislative changes. 	
	<p>Adequacy Rating: Adequately defined (A)</p>	<p>Performance Rating: Performing effectively (1)</p>

4.3 Asset disposal

Key process: Effective asset disposal frameworks incorporate consideration of alternatives for the disposal of surplus, obsolete, under-performing or unserviceable assets. Alternatives are evaluated in cost-benefit terms.

Expected outcome: Effective management of the disposal process will minimise holdings of surplus and under-performing assets and will lower service costs.

Overall Adequacy/Performance rating: Adequately defined (A) / Performing effectively (1)

Effectiveness Criteria	Findings	
3.1 Under-utilised and under-performing assets are identified as part of a regular systematic review process	<p>Through discussions with the Reticulation and Standards Manager and examination of relevant documentation, we determined that:</p> <ul style="list-style-type: none"> • Kleenheat completes an annual financial performance review of its distribution networks to identify under-performing assets • Under-utilisation can also be detected on a monthly basis through monthly variance reports that are visualised in PowerBI and reviewed by relevant Kleenheat Managers • Kleenheat performs annual pressure monitoring on each of its networks to determine adequate supply pressure is maintained to those customers at the extremity of the network. As networks expand, pressure can be lost due to network length and lead to under performance of the network. Additional network pressure monitoring is completed if the network is being expanded. 	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
3.2 The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken	<p>Through discussions with the Reticulation and Standards Manager and examination of relevant documentation, we determined that:</p> <ul style="list-style-type: none"> • Maintenance and inspection procedures are in place to monitor performance and prevent failures from occurring. Work order information is reviewed upon completion and reported thorough to Distribution Network Manager when further investigation or action is required. Root cause analysis is completed for poor performance such as any failures or safety incidents as part of required Cintellate investigation of such events • For the Leinster valve replacement capex, additional work was scheduled to replace under-performing PVC isolation valves with PE isolation valves. The corrective action was taken as the PVC isolation valves previously installed were assessed as no longer fit for continued use when poor performance was identified and more modern PE equivalents were installed. 	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
3.3 Disposal alternatives are evaluated	<p>Through discussions with the Reticulation and Standards Manager, we determined that due to acceptable financial performance and the approximately 50 years lifespan left on its distribution network assets, Kleenheat has not considered disposal alternatives or replacement strategies for Tier 1 distribution network assets at this point in time given the significant remaining timespan of the network.</p>	
	Adequacy Rating: Not Performed (NP)	Performance Rating: Not rated (NR)
3.4 There is a replacement strategy for assets	<p>Through discussions with the Reticulation and Standards Manager and examination of relevant documentation, we determined that Kleenheat's meter replacement strategy is documented in the AMP and sets a replacement frequency in compliance with the current <i>Gas Standards (Gas Supply and System Safety) Regulations 2000</i>. Replacement monitoring is</p>	

Effectiveness Criteria	Findings	
	performed through the Oracle eAM module. We examined work orders and documentation of a 2019 and 2020 meter replacement and identified no issues.	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)

4.4 Environmental analysis

Key process: Environmental analysis examines the asset system environment and assesses all external factors affecting the asset system.

Expected outcome: The asset management system regularly assesses external opportunities and threats and takes corrective action to maintain performance requirements.

Overall Adequacy/Performance rating: Adequately defined (A) / Performing effectively (1)

Effectiveness Criteria		
4.1 Opportunities and threats in the asset management system environment are assessed	<p>Through discussion with the Reticulation and Standards Manager and examination of the relevant documentation, we determined that:</p> <ul style="list-style-type: none"> • Threats in the asset management system environment for safe delivery of gas is assessed in the Safety Case and Qualitative Risk Assessment • Each threat has a consequence and is assessed by severity and likelihood and categorised (people, supply and environment). Each threat is assigned a control/s (preventative, detective, corrective) to mitigate the risk. A residual risk likelihood and severity is assessed • Strategic threats to the viability of the network are assessed in the Kleenheat Corporate Risk Register • Threats to the asset management system are assessed on probability and impact to the business (safety, reputation, capital and earnings) on an annual basis • Network expansion/creation opportunities are likely only going to occur when existing developments expand, and new developments occur in close proximity to existing networks i.e. Margaret River or Albany. 	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
4.2 Performance standards (availability of service, capacity, continuity, emergency response, etc.) are measured and achieved	<p>Through discussion with the Reticulation and Standards Manager and examination of relevant documentation, we determined that:</p> <ul style="list-style-type: none"> • Kleenheat implemented a set of performance standards (KPI's) on 1 July 2019, which is measured and monitored monthly by the Reticulation and Standards Manager • The Network KPI's report has been expanded to align with AS/NZS 4645.1 Section 10 and Appendix K. The report is to be reviewed during quarterly Distribution Network Management meetings, which involve Manager Commercial & LPG Sales and LPG Sales Manager. The KPI report is shared for review prior to the meeting • Annual performance against KPIs is measured and documented in the AMP as part of the annual AMP review. Performance KPI's include: <ul style="list-style-type: none"> ○ Damages to mains and services ○ Leaks detected on mains and services ○ Supply interruptions per customer 	

Effectiveness Criteria			
	<ul style="list-style-type: none"> ○ Number of emergency calls for the Licence ○ Attendance to emergency calls attended within a two-hour time frame ○ Percentage of unaccounted for gas ○ Gas odour testing and amount of odour corrective actions ○ Propane compliance ○ Training in technical and safety requirements ○ Safety - number of lost time injuries. <ul style="list-style-type: none"> ● While not reported in KPIs, pressure monitoring is undertaken to assess current capacity and capacity to add users ● Kleenheat achieved 11 of 15 KPI's in FY 2019, and 13 of 15 in FY 2020. For the KPI's that are partially achieved, Kleenheat has a process in place to identify root causes and perform corrective actions. 		
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Adequacy Rating: Adequately defined (A)</td> <td style="width: 50%;">Performance Rating: Performing effectively (1)</td> </tr> </table>	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)		
4.3 Compliance with statutory and regulatory requirements	<p>Through discussion with the Reticulation and Standards Manager, and inspection of relevant documentation, we determined that:</p> <ul style="list-style-type: none"> ● The AMP and Safety Case outline the statutory and regulatory obligations for the Licence ● Wesfarmers release a quarterly Environment and Sustainability Briefing that tracks legislative, policy and case law changes, which may affect Wesfarmers or may indicate potential opportunities ● Wesfarmers subscribes to safety and environmental alerts, as well as to Chemistry Australia who regularly provide legislative updates which are reviewed within the HSE team and disseminated throughout the business ● Kleenheat renews its Safety Case and Qualitative Risk Assessment (last updated 7 November 2018) every five years in accordance with <i>The Gas Standards Act 1972</i> and the <i>Gas Standards (Gas Supply and System Safety) Regulations 2000</i> ● Kleenheat performs an internal review of the Safety Case annually in line with Regulation 38 of the <i>Gas Standards (Gas Supply and System Safety) Regulations 2000</i>. This was last performed in March 2020 ● Kleenheat provide an annual Performance Report and Compliance Report to the ERA, which reports on Kleenheat's compliance with regulatory and statutory requirements ● There is compliance training covering joint GTL10/GDL9 obligations for front line staff so they can identify when an issue needs escalating to the appropriate manager for review and classification for reporting purposes. A breach of obligations will be recorded in Cintellate and corrective actions assigned as a result ● During the annual performance and compliance reporting, the Reticulation & Standards Manager meets with front line staff and contractors to review applicable GDL9 obligations to confirm their understanding if a breach may or has occurred during the reporting period. 		
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Adequacy Rating: Adequately defined (A)</td> <td style="width: 50%;">Performance Rating: Performing effectively (1)</td> </tr> </table>	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)		
4.4 Service standard (customer service levels etc) are measured and achieved	<p>Through discussion with the Reticulation and Standards Manager and inspection of relevant documentation, we determined that:</p> <ul style="list-style-type: none"> ● The Kleenheat call centre has set service levels, which are reported monthly and annually by the Customer Service Team. The service levels include: 		

Effectiveness Criteria			
	<ul style="list-style-type: none"> ○ Call response times ○ Calls handled ○ Calls abandoned positively and negatively • From a maintenance perspective, customer service levels focus on the emergency response of Kleenheat personnel arriving on site within two hours of the call being transferred through to the team member responsible for attending the emergency. This is captured and measured in Kleenheat’s KPIs • If service levels are not met, the following actions will occur: <ul style="list-style-type: none"> ○ Safety and compliance issues are communicated to the Reticulation & Standards Manager, entered into Cintellate and corrective actions developed/implemented ○ A work order is raised to address the maintenance issues. 		
	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Adequacy Rating: Adequately defined (A)</td> <td style="width: 50%;">Performance Rating: Performing effectively (1)</td> </tr> </table>	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)		

4.5 Asset operations

Key process: Operational functions relate to the day-to-day running of assets and directly affect service levels and costs.

Expected outcome: Operations plans adequately document the processes and knowledge of staff in the operation of assets so that service levels can be consistently achieved.

Overall Adequacy/Performance rating: Requires some improvement (B) / Improvement required (2)

Effectiveness Criteria	
<p>5.1 Operational policies and procedures are documented and linked to service levels required</p>	<p>Through discussion with the Reticulation and Standards Manager and Maintenance and Training Specialist, examination of relevant documentation, and conduct of a site visit to Kleenheat's Margaret River locations we determined that:</p> <ul style="list-style-type: none"> • The Asset Management Plan provides an outline of the levels of service required for the distribution network operates safely, reliably and profitably, within legislative requirements. The AMP has been updated to incorporate recommendations from the 2018 review, and expanded to outline how the key operating and maintenance activities meet service level requirements • Kleenheat has maintained and updated, as required, the following key documents to oversee the development and implementation of its maintenance policies and procedures relevant to its distribution network assets: <ul style="list-style-type: none"> ○ Systems of Work (last modified 20 July 2018) describes the use of Standard Operating Procedures (SOP) and Permit to Work Systems for the production and operation elements of Kleenheat's gas distribution activities. We examined five Permit to Work documents for non-routine work and identified no issues ○ The Distribution Network Manual operational procedures have been designed to support its management of a safe and reliable distribution system. From an examination of six of the procedural documents, aspects of the three service levels required (e.g. safety, reliability and profitability) are covered and they had been reviewed in the review period. The Distribution Network Manual provides detailed work instructions and procedures. All contractors are provided with the manual and subsequent updates, and follow guidance from the manual in the completion of work orders. <p>Adequacy Rating: Adequately defined (A) Performance Rating: Performing effectively (1)</p>
<p>5.2 Risk management is applied to prioritise operations tasks</p>	<p>Through discussion with the Reticulation and Standards Manager and Maintenance and Training Specialist, examination of relevant documentation, and conduct of site visit to Kleenheat's Margaret River locations, we determined that:</p> <ul style="list-style-type: none"> • Systems of Work (last modified 20 July 2018) provides instructions for maintaining effective control over any potentially negative impacts of operations • The Distribution Network Qualitative Risk Assessment (last modified 7 November 2018 and currently being reviewed) identifies and assesses risks associated with the gas distribution systems that are operated in accordance with GDL9 (and are also detailed in the Kleenheat Distribution Safety Case) • Kleenheat's risk management and assessment approach follows AS/NZS ISO 31000:2009 – Risk Management - Principles and Guidelines as reflected in the WesCEF Hazard and Risk Management procedure. Each hazard is assessed for residual risk (i.e. following application of risk controls) using a likelihood and consequence (e.g. people, environment, and supply) matrix. Kleenheat seeks to reduce risks to "As Low as Reasonably Practicable" (ALARP), with risk reduction strategies and analyses documented for key risk scenarios (e.g. Third-party damage – Tier 1 including Earthworks around mains during development of new estates) • Though the risks identified in the Distribution Network Qualitative Risk Assessment are categorised into five risk levels (negligible, low, intermediate, high, extreme).

Effectiveness Criteria		
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
5.3 Assets are documented in an asset register including asset type, location, material, plans of components, and an assessment of assets' physical/structural condition	<p>Through discussion with the Reticulation and Standards Manager and Maintenance and Training Specialist, examination of relevant documentation and Kleenheat's Oracle e-business system records, we determined that:</p> <ul style="list-style-type: none"> • Kleenheat utilises its Oracle eAM system as its asset register for its network assets. The Oracle eAM system includes provision for information relating to: <ul style="list-style-type: none"> ○ Asset group and accounting class ○ Asset location ○ Serial number. • Kleenheat has not yet fully implemented recommendation 4/2018. However, during this review we noted Kleenheat has started to expand the asset register to include additional assets and show greater detail (based on recommendation 4/2018), including activity and inspection logs with an overview of prior work orders, and upcoming inspection dates. The following asset types are being considered for inclusion into the asset register: <ul style="list-style-type: none"> ○ Storage – Tanks ○ Regulator Set – Regulator, Gauges, Valves, Filters ○ Master Meter Bypass Set – Master Meter, Gauges, Ball Valves ○ Gas Main – Isolation Valves, Tapping Bands, Pipework, Main Tapping Bands ○ Service Line – Pipework ○ Consumer Meter Box – Ball Valves, Regulator, Meter. • We sighted meter information for Oyster Harbour and Riverslea that is planned to be uploaded to eAM that would be relevant to add to the asset register. This information consists of: <ul style="list-style-type: none"> ○ Unique meter identifier code ○ Installation Age ○ Installed location ○ Model Number ○ Meter Regulator Age. 	
	Adequacy Rating: Requires some improvement (B)	Performance Rating: Improvement required (2)
5.4 Accounting data is documented for assets	<p>Through discussion with the Reticulation and Standards Manager and the LPG Sales Manager, and examination of relevant documentation, we determined that for assets included in the Fixed Asset Register relevant accounting data is documented. This information includes asset description, location, capex number, account, creation date, date placed in service, units, cost, depreciation rate, depreciation, and the written-down value.</p>	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)

Effectiveness Criteria	
5.5 Operational costs are measured and monitored	<p>Through discussion with the Reticulation and Standards Manager and the Maintenance and Training Specialist, and examination of documentation, we determined that:</p> <ul style="list-style-type: none"> • An annual review of the expenditure utilised in maintaining the distribution system assets compared to the maintenance budget is undertaken to enable a new budget to be formulated • Work order costs are recorded by the technician within the final submitted work order (material required for the job may be purchased from local plumbing suppliers), with receipts attached to the completed work order and emailed to the Maintenance and Training Specialist • Maintenance costs are monitored constantly using a PowerBI application used to visualise this measured data to provide insights and trend analysis to necessary Kleenheat stakeholders. This is reported on monthly by the LPG Sales Manager. <p>Adequacy Rating: Adequately defined (A) Performance Rating: Performing effectively (1)</p>
5.6 Staff resources are adequate, and staff receive training commensurate with their responsibilities	<p>Through discussion with the Reticulation and Standards Manager and Maintenance and Training Specialist, examination of relevant documentation and conduct of a site visit to Kleenheat’s Margaret River locations we determined:</p> <ul style="list-style-type: none"> • Staff resourcing appears adequate for Kleenheat's current operational activities. Staff and contractors are provided with the instruction and equipment needed to perform the job • Kleenheat provide technicians with gas detection equipment that has valid certification • Technicians are provided with a physical copy of the Distribution Network Manual. Based on discussions during the site visit, new requirements are emailed to the technicians and physical copies are provided by the Kleenheat representatives when updates are made • Kleenheat utilise contractors to respond to emergency response calls and aid in maintenance and inspection work • Kleenheat measure and track the training of its contractors on a monthly basis in the Reticulation Contractor Training Report. This report is managed and updated by the Maintenance and Training Specialist. Technical training is provided to Kleenheat contractors and competency assessment are run by the Maintenance and Training Specialist. Required training is outlined in Retic, Gas Network Staff Competence Framework and Plan • Sighted the most recent, showing current contractor training levels across 31 different technical and skill-based competencies. <p>While Kleenheat has advised that practical competency assessments for the more routine maintenance tasks has been completed by the Maintenance & Training Specialist, the results of the practical assessments haven’t been documented and the theoretical aspect of the training has not been developed. In addition, Kleenheat has not developed a maintenance training package that addresses the more critical maintenance tasks. Kleenheat is currently in the process of finalising a training cluster for staff, which will be accessed from WesCEF’s Learning Management System, Elevate, and act as an online training portal and training record repository. The Maintenance and Training Specialist currently completes the more critical maintenance tasks until this training cluster has been developed and staff have finalised their training.</p> <p>Adequacy Rating: Requires some improvement (B) Performance Rating: Improvement required (2)</p>

4.6 Asset maintenance

Key process: Maintenance functions relate to the upkeep of assets and directly affect service levels and costs.

Expected outcome: Maintenance plans cover the scheduling and resourcing of the maintenance tasks so that work can be done on time and on cost.

Overall Adequacy/Performance rating: Adequately defined (A) / Performing effectively (1)

Effectiveness Criteria	
<p>6.1 Maintenance policies and procedures are documented and linked to service levels required</p>	<p>Through discussion with the Reticulation and Standards Manager and Maintenance and Training Specialist, examination of relevant documentation, and conduct of a site visit to Kleenheat’s Margaret River locations we determined that:</p> <ul style="list-style-type: none"> • Kleenheat has maintained and updated the following key documents to oversee the development and implementation of its maintenance policies and procedures relevant to its distribution network assets, including: the AMP, Systems of Work document, its Safety Case, and the Distribution Systems Asset Maintenance Plan • Elements of the Distribution Network Manual that have been updated since the last review, which is in line with its asset maintenance plan include: <ul style="list-style-type: none"> ○ Barricading Excavating and Reinstatement ○ Commissioning and Purging of PE Gas Mains ○ Commissioning and Purging of PVC Gas Mains ○ Design Verification and Compliance Check ○ Distribution Network Leak Survey ○ Distribution Network Operating Pressure Test ○ Distribution Systems Asset Maintenance Plan ○ Distribution Networks Isolation Valve Inspection ○ Installation of a Gas Service ○ KHO Permit to Work Procedure ○ Kleenheat Reticulation Pipe and Fittings Specification ○ Reticulated Gas Quality Testing. • SOPs are also referenced throughout the current Safety Case and within the training material • The AMP references the Levels of Service and details its three requirements, that the distribution networks operate safely, reliably and profitably. These three aspects are explained and expanded in further sub points • Performance standards are also linked to service level requirements, with monthly tracking of safety statistics (such as emergency response times and safety incidents), and reliability being captured in maintenance, testing and inspection statistics (such as odour and propane testing, damage to mains, leak detections, supply interruptions) • The Distribution Network Manual maintenance procedures have been designed to support its management of a safe, reliable and profitable distribution system. From a review of six of the procedural documents, aspects of the three service levels required (e.g. safety, reliability and profitability) are covered.
	<p>Adequacy Rating: Adequately defined (A) Performance Rating: Performing effectively (1)</p>

Effectiveness Criteria			
<p>6.2 Regular inspections are undertaken of asset performance and condition</p>	<p>Through discussion with the Reticulation and Standards Manager and the Maintenance and Training Specialist, examination of relevant documentation, and conduct of site visits to Kleenheat’s Margaret River locations we:</p> <ul style="list-style-type: none"> • Sighted evidence of asset inspections being planned and completed in Kleenheat’s Oracle eAM system • Sighted evidence that contractor work orders are being completed with supporting documentation (photos, receipts) • Determined that while Kleenheat plans and tracks the inspection of its assets, there is an opportunity to capture a greater level of detail to enable Kleenheat to have detailed information on the activities performed for each asset within the network. For example, we identified and confirmed with the Reticulation and Standards Manager and the Maintenance and Training Specialist that when contractors were performing leak surveys, they were only documenting negative results and locations of leaks. They had not been documenting surveys that had positive results with no findings • Determined inspections were scheduled and undertaken regularly throughout the review period, by testing 2 of 13 differing types of recurring maintenance activities • The Asset Maintenance Plan outlines the key maintenance activities and addresses: <ul style="list-style-type: none"> ○ The basis for inspection strategy, wider asset management decisions and key risks associated with performing the maintenance ○ Inspection frequency ○ References to key procedures ○ Compliance metrics/targets where applicable ○ Technology/tools required to perform the inspection. • Determined Kleenheat assess the effectiveness of the inspections by reviewing results from surveys, inspections and maintenance. As an example, Leinster and Riverslea network leak surveys are performed at twice the frequency of Oyster Harbour and Rapids Landing surveys due to the assessed increased likelihood of leakage in these networks which feature older technology compression type fittings. 		
	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Adequacy Rating: Adequately defined (A)</td> <td style="width: 50%;">Performance Rating: Performing effectively (1)</td> </tr> </table>	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)		
<p>6.3 Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule</p>	<p>Through discussion with the Reticulation and Standards Manager and the Maintenance and Training Specialist, examination of relevant documentation, sampling of maintenance tasks, and conduct of a site visit to Kleenheat’s Margaret River locations we determined that:</p> <ul style="list-style-type: none"> • Kleenheat’s Distribution Systems Asset Maintenance Plan (last revised in July 2019) outlines the emergency, corrective and preventative maintenance requirements for its distribution network assets. The Asset Maintenance Plan was developed to comply with Gas distribution networks - Network management standard AS/NZS 4645.1 • Technicians are provided with a physical copy of the Distribution Network Manual which is located in the network equipment storage container and emergency response vehicle in the Margaret River contractor site location. In addition: <ul style="list-style-type: none"> ○ New procedures are emailed to the technicians and physical copies are provided by Kleenheat representatives when updates are made ○ The procedures in the Distribution Network Manual contain emergency plans where applicable. • Kleenheat’s Oracle eAM system records the completion of work orders and enables any overdue work orders to be monitored by the Maintenance Co-ordinator. Maintenance Planners and Team Leaders meet weekly to review the previous weeks Work Plan. During this meeting, the Team Leaders provide feedback to the Planners on which work 		

Effectiveness Criteria	
	<p>orders were completed, reasons/issues identified preventing a work order's completion or corrective actions of note arising from completed work orders</p> <ul style="list-style-type: none"> • For all overdue work orders, Kleenheat's procedures require justification to be provided and alternative arrangements (i.e. rescheduling) to be arranged and monitored. Priority items (e.g. critical equipment) require immediate action • The types of maintenance (emergency, corrective and preventative) are called out as necessary through the procedures. Documents reviewed include: <ul style="list-style-type: none"> ○ Commissioning and Purging of PVC Gas Mains ○ Distribution Network Leak Survey ○ Distribution Networks Isolation Valve Inspection ○ Distribution Systems Asset Maintenance Plan ○ Installation of a Gas Service ○ Reticulated Gas Quality Testing. • There were 98 maintenance tasks completed over the review period. We sample tested 12 of the 98 work orders and identified two that were not completed within the scheduled time frame. The two work orders not completed on schedule had appropriate justification documented, enabling the work orders to be rescheduled to later dates.
	<p>Adequacy Rating: Adequately defined (A) Performance Rating: Performing effectively (1)</p>
6.4 Failures are analysed, and operational / maintenance plans adjusted, where necessary	<p>Through discussion with the Reticulation and Standards Manager and the Maintenance and Training Specialist, examination of relevant documentation, and conduct of a site visit to Kleenheat's Margaret River locations we determined that:</p> <ul style="list-style-type: none"> • Incidents and failures within the Gas Distribution Systems are reported and investigated in accordance with standardised methods • Kleenheat's Safety Management System (SMS) outlines its incident reporting process, where incidents and near misses are to be investigated to determine what happened, where they happened, how they happened, why they happened and what should be done to prevent them from recurring. The incident investigation system includes: <ul style="list-style-type: none"> ○ Identification of contributing factors ○ Identification of effective controls and their implementation in an agreed or set time frame with nominated persons responsible ○ Identification of other improvements that can be made. • Three notifiable incidents occurred during the review period, which required submitting an incident report with regulators as required by the Regulation 44 (1)(c) of the <i>Gas Standards (Gas Supply and System Safety) Regulations 2000</i>. As part of the incident report, root cause, mis-steps, gaps in process and actions are identified. These incidents that occurred during the review period were: <ul style="list-style-type: none"> ○ Leinster incident June 2018 ○ Rapids Landing supply outage December 2018 ○ Rapids Landing supply outage January 2019. • Past failure learnings have been implemented into the Kleenheat Distribution Network. For example, as an outcome of the December 2018 Rapids Landing supply outage, the over pressure shut off's (OPSO's) at each applicable distribution

Effectiveness Criteria	
	<p>location have been inspected for contaminants and had their operational settings adjusted. The procedural documents for checking and adjusting regulator pressure has been adjusted due to learnings from this incident.</p> <ul style="list-style-type: none"> • Non-compliant odour testing results led to a safety-related Cintellate action being raised to record the instance and assign responsibility for rectification. Review of subsequent tests corroborated information received from management that confirmed follow up actions resolved the issue • While the AMP outlines the emergency, corrective and preventative maintenance requirements for its distribution network assets, the Safety Case and Qualitative Risk Assessment identify major failure modes of assets.
	<p>Adequacy Rating: Adequately defined (A) Performance Rating: Performing effectively (1)</p>
6.5 Risk management is applied to prioritise maintenance tasks	<p>Through discussion with the Reticulation and Standards Manager and the Maintenance and Training Specialist, inspection of relevant documentation, and a site visit to Kleenheat's Margaret River locations, we determined that:</p> <ul style="list-style-type: none"> • Kleenheat's risk management and assessment approach follows AS/NZS ISO 31000:2009 – Risk Management - Principles and Guidelines as reflected in the WesCEF Hazard and Risk Management procedure. Each hazard is assessed for residual risk (i.e. following application of risk controls) using a likelihood and consequence (e.g. people, environment, and supply) matrix. Kleenheat seeks to reduce risks to ALARP, with risk reduction strategies and analyses documented for key risk scenarios (e.g. Third-party damage – Tier 1 including Earthworks around mains during development of new estates) • The AMP and Asset Maintenance Plan has been updated to reference the major risks and hazards and how they drive maintenance tasks, including where maintenance can pose additional risks. For example, the Asset Maintenance Plan explains that when completing a leak survey of network mains, Kleenheat technicians and contractors have the potential to puncture the main or hit other services with the bar hole tool, should the utility not be installed at the correct depth. It is important that the bar hole tool is in good condition and its nonconductive rubber handles are regularly checked throughout the survey process • Due to the size of the network and the relatively low number of maintenance tasks, detailed, formal risk assessments for maintenance are not undertaken. Discussions with personnel during the site visit confirmed risk assessments are performed to prioritise maintenance tasks but are informal. Maintenance tasks are underpinned by risk-based thinking. For example, we understand leak survey frequency has been increased on the Leinster and Riverslea networks due to an increased safety risk due to being installed with mechanical fittings rather than the electrofusion techniques used on the Oyster Harbour and Rapids Landing Network AMP.
	<p>Adequacy Rating: Adequately defined (A) Performance Rating: Performing effectively (1)</p>
6.6 Maintenance costs are measured and monitored	<p>Through discussion with the Reticulation and Standards Manager and the Maintenance and Training Specialist, and examination of documentation, we determined that:</p> <ul style="list-style-type: none"> • An annual review of the expenditure utilised in maintaining the distribution system assets compared to the maintenance budget will be undertaken to enable a new budget to be formulated • Work order costs are recorded by the technician within the final submitted work order (material required for the job may be purchased from local plumbing suppliers), with receipts attached to the completed work order and emailed to the Maintenance and Training Specialist • Maintenance costs are monitored constantly using a PowerBI application used to visualise this measured data to provide insights and trend analysis to necessary Kleenheat stakeholders. This is reported on monthly by the LPG Sales Manager.
	<p>Adequacy Rating: Adequately defined (A) Performance Rating: Performing effectively (1)</p>

4.7 Asset Management Information System

Key process: An asset management information system is a combination of processes, data and software that support the asset management functions.

Expected outcome: The asset management information system provides authorised, complete and accurate information for the day-to-date running of the asset management system. The focus of the review is the accuracy of performance information used by the licensee to monitor and report on service standards.

Overall Adequacy/Performance rating: Adequately defined (A) / Performing effectively (1)

Effectiveness Criteria	Findings	
7.1 Adequate system documentation for users and IT operators	<p>Through discussion with the Reticulation and Standards Manager, Chief Information Officer and Technology Systems Manager, and examination of relevant documentation we determined that:</p> <ul style="list-style-type: none"> • The key systems in place are the: <ul style="list-style-type: none"> ○ Oracle e-business suite (operations, maintenance, commercial, financial, customer) modules ○ Cintellate (incident management and work orders) ○ DOCOVA (document management system) ○ Cisco (communications system). • System documentation and guides are available for all users and IT operators either within the systems themselves or as procedural documents in DOCOVA. 	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
7.2 Input controls include appropriate verification and validation of data entered into the system	<p>Through discussion with the Reticulation and Standards Manager, Chief Information Officer and Technology Systems Manager, and examination of relevant documentation, we determined that:</p> <ul style="list-style-type: none"> • All staff, contractors and authorised third parties with access to WesCEF equipment, systems and resources are required to sign off on the Electronic Usage Policy to at all times, uphold confidentiality for all information and intellectual property of WesCEF • Validations are built into Oracle eAM and Cintellate, with the use of drop-down boxes and entry limitations • Free text fields exist for operational reasons (i.e. where details need to be provided) • All processes that input or process information into the Cintellate and Oracle e-business suite include elements of management oversight and review in relation to verification or validation of data. 	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
7.3 Security access controls appear adequate, such as passwords	<p>Through discussion with the Chief Information Officer and Technology Systems Manager, and examination of relevant documentation, we determined:</p> <ul style="list-style-type: none"> • The security access controls appear adequate, including the application of an IT Password policy which includes controls such as Multi Factor Authentication and periodic password changes • User access is granted by IT request • User access audits occur periodically for all systems • Visitors to Kleenheat facilities can access a visitor Wi-Fi, which only has access to the internet, not Kleenheat servers. 	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)

Effectiveness Criteria	Findings	
7.4 Physical security access controls appear adequate	<p>Through discussion with the Chief Information Officer and Technology Systems Manager, and a tour of Kleenheat's Murdoch location, we determined:</p> <ul style="list-style-type: none"> • Server rooms house the servers for the systems relevant to the AMS (i.e. Cintellate, Oracle eAM and DOCOVA). These server rooms are located in data centres at Kleenheat's Murdoch and Kwinana premises, with the ability to failover between data centres in a disaster scenario • Access to server rooms is restricted via access cards which are issued on an as needs basis requiring approval from the IT Operation Manager • Manual sign in is required for escorted individuals into the server room • There is video and electronic surveillance within the server room • Only Kleenheat laptops can connect to the Kleenheat network • Visitors are required to check in at reception when entering the Kleenheat building and sign out when leaving. 	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
7.5 Data backup procedures appear adequate and backups are tested	<p>Through discussion with the Chief Information Officer and Technology Systems Manager, site visit at Kleenheat's Murdoch location, and examination of relevant documentation, we determined:</p> <ul style="list-style-type: none"> • Server rooms have two hours of UPS back up power and generator back up for longer periods without main power • Generators are tested under load monthly at Murdoch and weekly at Kwinana • Data centres are fitted with fire suppression systems • Automated backup procedures for all relevant systems are scheduled through NetBackup software for Oracle systems and Veeam software for the Cintellate system • Back-ups for all relevant systems are performed either constantly or daily and are encrypted and stored for up to 30 days • Testing of back-ups for different system modules are performed weekly (different modules for testing are scheduled on a cyclical basis), with the full back up test performed annually • Additionally, all data is backed up to cloud storage. 	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
7.6 Computations for licensee performance reporting are accurate	<p>Through discussion with the Reticulation and Standards Manager and examination of relevant documentation we determined that:</p> <ul style="list-style-type: none"> • Kleenheat does not use any designated system to compute information related to licensee performance reporting • Information is compiled using spreadsheets for licensee performance reporting. That information is sourced from information manually input into the Oracle e-business suites, Cintellate systems and CISCO Call system • The Reticulation and Standards Manager is responsible for ensuring the accuracy of information sourced from those systems and input into the annual Gas Distribution Licence Performance Reporting Datasheets submitted to the ERA. 	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)

Effectiveness Criteria	Findings	
7.7 Management reports appear adequate for the licensee to monitor licence obligations	<p>Through discussion with the Reticulation and Standards Manager and examination of relevant documentation, we determined that Kleenheat's existing management reports are used to monitor licence obligations as follows:</p> <ul style="list-style-type: none"> • Call centre performance is monitored through the CISCO Call Statistics Snapshot Report • For complaints, a Discoverer report is run from Oracle diary notes, searching for notes which include type "Complaint". The Complaint Tracker FY is updated by a Customer Advocate accordingly as complaints occur. The Complaint Tracker FY is provided to the Reticulation and Standards Manager for inclusion in the annual Performance Report • Customer and connections are monitored through the Oracle new connections report • Gas Consumption and Unaccounted Gas is monitored through the annual Oracle gas consumption calculations report on a month by month basis and reported annually • If service levels are not met or a breach of obligations occur, it will be recorded in Cintellate and corrective actions will be assigned as a result, with reminders sent to owners of any outstanding actions. 	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
7.8 Adequate measures to protect asset management data from unauthorised access or theft by persons outside the organisation	<p>Through discussion with Chief Information Officer and Technology Systems Manager, and examination of relevant documentation, we determined:</p> <ul style="list-style-type: none"> • The Electronic Usage Policy applies to all employees, contractors and authorised third parties. It states that All WesCEF Information and intellectual property are the property of WesCEF and are at all times to remain confidential to WesCEF • Penetration testing is performed by a professional testing organisation to test the security of the relevant systems • IT track users that remotely access the network, remote access is logged • Access permissions are assigned by IT with explicit approval from the system owner/approver. Inactive accounts are reviewed and deleted after 90 days. 	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)

4.8 Risk management

Key process: Risk management involves the identification of risks and their management within an acceptable level of risk.

Expected outcome: An effective risk management framework is applied to manage risks related to the maintenance of service standards

Overall Adequacy/Performance rating: Adequately defined (A) / Opportunity for improvement (2)

Effectiveness Criteria	
8.1 Risk management policies and procedures exist and are being applied to minimise internal and external risks	<p>Through discussion with the Reticulation and Standards Manager and inspection of relevant documentation, we determined that:</p> <ul style="list-style-type: none"> • The WesCEF Hazard and Risk Management framework, which covers Kleenheat's distribution network asset management system, outlines the process on identifying risks and implementing controls to minimise the risk. The high-level steps are: <ul style="list-style-type: none"> ○ Identify risks ○ Assess the likelihood and consequence of the risk ○ Develop controls to mitigate the risk ○ Monitor the control measures ○ Communicate and consult to ensure responsibilities and actions are understood • The Corporate Risk Register is reviewed annually as part of the WesCEF Risk Report, it can be additionally reviewed at the discretion of the individual teams • The Safety Case and Qualitative Risk Assessment are being applied to minimise internal and external risks to the asset management system. The Safety case is renewed every 5 years and is audited internally on an annual basis to ensure risk and controls are represented accurately and the risk to Kleenheat is minimised • Job Safety Analyses (JSA's) are completed in the workplace before non-routine, high risk jobs commence. The completion of a JSA identifies possible hazards on a worksite and is intended to mitigate the level of risk while performing tasks. Two of five work orders sampled did not have the required JSA form attached. Both work orders that did not have the required JSA were performed by the same contractor.
	<p>Adequacy Rating: Adequately defined (A) Performance Rating: Improvement required (2)</p>
8.2 Risks are documented in a risk register and treatment plans are implemented and monitored	<p>Through discussion with the Reticulation and Standards Manager and the Maintenance and Training Specialist, and examination of relevant risk registers and risk assessments, we determined that:</p> <ul style="list-style-type: none"> • The Kleenheat Corporate Risk Register assesses corporate risks and higher-level strategic risks, such as legislative change, increased operational costs, breach of compliance etc. • Current risk controls (treatments) are documented for each risk, and the residual risk rating is assessed. If the residual risk rating is high or extreme, further mitigating actions are assigned to reduce the risk to a targeted level that is as low as reasonably possible • The Corporate Risk Register is reviewed annually as part of the WesCEF Risk Report. It can be additionally reviewed at the discretion of individual teams • The Distribution Qualitative Risk Assessment focusses on the operational risks that affect the Licence. The risks in the risk assessment are measured in accordance with the AS/NZS 4645.1 Risk Matrix for use in Distribution Networks. Risks must be reduced to a level ALARP through implementation of controls or mitigating actions. Also:

Effectiveness Criteria			
	<ul style="list-style-type: none"> ○ Risks are graded on an ascending scale of negligible, low, intermediate, high and extreme based on probability and consequence ○ Risks rated as high or extreme are considered unacceptable and immediate action are required to reduce the risk ALARP ○ The risks include asset failure as a result of operational, network design, maintenance and commissioning / decommissioning activities ○ The Qualitative Risk Assessment is audited internally in conjunction with the Safety Case. ● Kleenheat monitor treatments through specialist assessments, planned inspections, safe working practice observations, key performance indicators and incident reporting. 		
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Adequacy Rating: Adequately defined (A)</td> <td style="width: 50%;">Performance Rating: Performing effectively (1)</td> </tr> </table>	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)		
<p>8.3 Probability and consequences of asset failure are regularly assessed</p>	<p>Through discussion with the Reticulation and Standards Manager and the Maintenance and Training Specialist, and examination of relevant risk registers and risk assessments, we determined that:</p> <ul style="list-style-type: none"> ● Risks are scheduled to be assessed annually for the probability and consequence that the scenario may occur, this includes asset failure ● The Distribution Qualitative Risk Assessment focusses on the operational risks that affect the Licence ● The risks in the risk assessment are measured in accordance with the AS/NZS 4645.1 Risk Matrix for use in Distribution Networks. Risks must be reduced to a level as low as reasonably possible through implementation of controls or mitigating actions. Also: <ul style="list-style-type: none"> ○ Risks are assigned a severity ascending from trivial, minor, severe, major to catastrophic ○ Risks are assigned a probability ascending from hypothetical, remote, unlikely, occasional to frequent ○ Risks are graded on an ascending scale of negligible, low, intermediate, high and extreme based on probability and consequence. ● Risks rated as high or extreme are considered unacceptable and immediate action are required to reduce the risk ALARP ● The risks include asset failure as a result of operational, network design, maintenance and commissioning / decommissioning activities ● The Qualitative Risk Assessment is audited internally in conjunction with the Safety Case which is required to be submitted to Building and Energy as per Regulation 38 of the <i>Gas Standards (Gas Supply and System Safety) Regulations 2000</i> ● The review of the Qualitative Risk Assessment is performed by the Reticulations and Standards Manager, Maintenance and Training Specialist, and WesCEF Process Safety Superintendent. This process is authorised by the Reticulations and Standards Manager ● There were two incidents at Rapids Landing in late 2018 and early 2019, which lead to changes being made in: <ul style="list-style-type: none"> ○ OPSO Test and Lock up procedures to offset the kPa pressure in the duty and standby regulators ○ Increased physical security onsite due to a 3rd party jumping the fence and switching off the mains ○ Finalisation of the Repairs to a PE Network Mains procedure. 		

Effectiveness Criteria			
	<ul style="list-style-type: none"> • However, these incidents and subsequent reviews did not trigger a review or re-assessment of the relevant risks. While frequent reviews of the risk assessment occurred throughout 2018, formal documented reviews since November 2018 were unable to be evidenced, until the current review which commenced in June 2020. The revised Qualitative Risk Assessment (QRA) is expected to be finalised as part of the internal audit of the Safety Case and Qualitative risk Assessment, which commences in November 2020 and is expected to be completed in February 2021. Kleenheat subsequently expects the annual QRA to be completed by February each year. 		
	<table border="1"> <tr> <td>Adequacy Rating: Adequately defined (A)</td> <td>Performance Rating: Improvement required (2)</td> </tr> </table>	Adequacy Rating: Adequately defined (A)	Performance Rating: Improvement required (2)
Adequacy Rating: Adequately defined (A)	Performance Rating: Improvement required (2)		

4.9 Contingency planning

Key process: Contingency plans document the steps to deal with the unexpected failure of an asset.

Expected outcome: Contingency plans have been developed and tested to minimise any significant disruptions to service standards.

Overall Adequacy/Performance rating: Requires some improvement (B) / Opportunity for improvement (2)

Effectiveness Criteria	Findings
<p>9.1 Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks</p>	<p>Through discussion with the Reticulation and Standards Manager and Maintenance and Training Specialist, examination of relevant documentation, and visit to Kleenheat’s Margaret River locations, we determined that:</p> <ul style="list-style-type: none"> • Kleenheat has three levels of emergency response procedures, these are: <ul style="list-style-type: none"> ○ National Emergency Response Communications Systems (NERCS) ○ Distribution Networks Supply Disruption ○ Site specific Emergency Management Plans. • Emergency responses based on the contingency plans are managed by locality (Margaret River, Leinster and Albany) for the Tier 1 distribution networks. A key element of the emergency response procedures is that a Kleenheat NERCS responder (company representative) must be notified and be onsite for the Emergency Responses as the NERCS responder has received additional emergency response training to enable them to decide the next course of action • To aid coordinated responses between NERCS responders and emergency services, testing of the Margaret River Emergency Plan is to occur at a minimum of three yearly in conjunction with the participation of the local Emergency Services • Emergency response testing occurs annually on all distribution sites and is co-ordinated by the Maintenance Planner and completed by the Senior Emergency Services Co-ordinator and an onsite technician. At a minimum, each site emergency plan is tested on an annual basis. The test is initiated with a call through NERCS, and will test: <ul style="list-style-type: none"> ○ The responsiveness of the Kleenheat call centre staff ○ The Contractors response times ○ The equipment the contractors have with them when arriving at an emergency site ○ How the contractor performs Kleenheat processes ○ If the emergency stock is available. • We sighted evidence that the emergency response tests were run: <ul style="list-style-type: none"> ○ In Margaret River in May 2019, with the next test scheduled for November 2020 ○ In Albany in November 2018 and December 2019, with the next test scheduled for November 2020 ○ In Leinster in May 2019, with the next test scheduled for November 2020. • Although emergency response testing has now been scheduled for a recurring date every November for all sites (to align the timing of emergency response testing to other maintenance processes), there will be an 18-month gap between testing of the emergency plans for Margaret River and Leinster due to testing previously being scheduled to occur every May (i.e. testing did not occur in May 2020 as it had been rescheduled to November 2020 before the May 2020 test was due). Due to the importance of emergency response planning, the resulting frequency of testing over the review period was deemed to be insufficient. The intervening period of 18-months is also not in line with internally defined metrics as per AS/NZS 4645.1 (i.e. being “on a regular basis, not less than once per year”).

Effectiveness Criteria	Findings	
	Adequacy Rating: Requires some improvement (B)	Performance Rating: Improvement required (2)

4.10 Financial planning

Key process: The financial planning component of the asset management plan brings together the financial elements of the service delivery to ensure its financial viability over the long term.

Expected outcome: A financial plan that is reliable and provides for the long-term financial viability of the services.

Overall Adequacy/Performance rating: Adequately defined (A) / Performing effectively (1)

Effectiveness Criteria	Findings	
10.1 The financial plan states the financial objectives and identifies strategies and actions to achieve those	<p>Through discussion with the Reticulation and Standards Manager, LPG Sales Manager and Manager Planning and Analysis, and examination of relevant documents, we determined that:</p> <ul style="list-style-type: none"> • Kleenheat has developed a 5-year Annual Corporate Commercial Plan (Corporate Plan) for the LPG business (including metered gas – for the relevant Tier 1 distribution networks covered under the Licence), to provide an overview of the financial objectives, strategies and actions of Kleenheat’s LPG business • The Corporate Plan document provides strategies, overview and analysis over a period of 5 years for the following areas of Kleenheat’s LPG business: <ul style="list-style-type: none"> ○ Overall volumes and margins ○ Purchasing volumes ○ Strategies and assumptions ○ Western Australia volumes, profit and loss, capital expenditure, operating expenditure, margins, balance sheet assets and balance sheet working capital. 	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
10.2 The financial plan identifies the source of funds for capital expenditure and recurrent costs	<p>Through discussion with the Reticulation and Standards Manager, LPG Sales Manager and Manager Planning and Analysis, and examination of relevant documents, we determined that:</p> <ul style="list-style-type: none"> • Funding for the LPG business is through the Wesfarmers Central Treasury, based on the forecasted annual budget process • Kleenheat uses the Corporate Plan to manage the LPG business (including metered gas – for the relevant Tier 1 distribution networks covered under the Licence) • Capital and recurrent costs are budgeted for during the annual budgeting process • The financial five-year plan within the Corporate Plan is used as assurance that the budget will go ahead. 	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)

Effectiveness Criteria	Findings	
10.3 The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets)	<p>Through discussion with the Reticulation and Standards Manager, LPG Sales Manager and Manager Planning and Analysis, and examination of relevant documents for Kleenheat's LPG business, which includes metered gas – for the relevant Tier 1 distribution networks covered under the Licence, we determined that the Corporate Plan (Dated November 2019 and due for next review November 2020):</p> <ul style="list-style-type: none"> • Provides a rolling five-year projection of the profit and loss statement • Provides a rolling five-year projection of the financial position. 	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
10.4 The financial plan provides firm predictions on income for the next five years and reasonable predictions beyond this period	<p>Through discussion with the Reticulation and Standards Manager, LPG Sales Manager and Manager Planning and Analysis, and examination of relevant documents, we determined that:</p> <ul style="list-style-type: none"> • The Corporate Plan (Dated November 2019 and due for next review November 2020) provides firm predictions on income for five years • Kleenheat has forecasted the lifecycle cost of owning and operating assets in the Tier 1 distribution network until the 2030 financial year. 	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
10.5 The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services	<p>Through discussion with the Reticulation and Standards Manager, LPG Sales Manager and Manager Planning and Analysis, and examination of relevant documents, we determined that:</p> <ul style="list-style-type: none"> • The Corporate Plan (Dated November 2019 and due for next review November 2020) covers the following expenditure requirements for the following five years: <ul style="list-style-type: none"> ○ Sales, sales management and marketing ○ Logistics ○ Operations ○ Maintenance ○ Maintenance internal labour ○ Overheads ○ Capital Expenditure. • The annual budget is prepared and approved in line with Kleenheat's corporate planning process during the second half of each preceding financial year. The budget defines expected revenues, operating expenditures and capital expenditure, assigning them by period to individual accounting codes. 	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
10.6 Large variances in actual/budget income and expenses are identified and corrective action taken where necessary	<p>Through discussion with the Reticulation and Standards Manager, LPG Sales Manager and Manager Planning and Analysis, and examination of relevant documents, we determined:</p> <ul style="list-style-type: none"> • PowerBI is used to monitor real time actual expenditure against the budgeted amount • Monthly reports are generated in PowerBI and reviewed by relevant Managers • A Variance Analysis report is prepared by Finance on a monthly basis and shared with the GM. Senior Managers will investigate variances that are not projected. 	

Effectiveness Criteria		Findings
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)

4.11 Capital expenditure planning

Key process: The capital expenditure plan provides a schedule of new works, rehabilitation and replacement works, together with estimated annual expenditure on each over the next five or more years. Since capital investments tend to be large and lumpy, projections would normally be expected to cover at least 10 years, preferably longer. Projections over the next five years would usually be based on firm estimates

Expected outcome: A capital expenditure plan that provides reliable forward estimates of capital expenditure and asset disposal income, supported by documentation of the reasons for the decisions and evaluation of alternatives and options.

Overall Adequacy/Performance rating: Adequately defined (A) / Performing effectively (1)

Effectiveness Criteria	Findings
<p>11.1 There is a capital expenditure plan covering works to be undertaken, actions proposed, responsibilities and dates</p>	<p>Through discussion with the Reticulation and Standards Manager, LPG Sales Manager and Manager Planning and Analysis, and examination of relevant documentation, we determined that while there is no specific capital expenditure plan that for each relevant Tier 1 distribution network covered under the Licence, the following processes and documents address the criteria:</p> <ul style="list-style-type: none"> • The Corporate Plan is a five-year plan that articulates Business Unit and Divisional commercial strategy and forecasts the financial consequences, including capital expenditure requirements • The annual budget is prepared and approved during the second half of each preceding financial year. The budget defines expected revenues, operating expenditures and capital expenditure, assigning them by period to individual accounting codes • Kleenheat has forecasted the lifecycle cost of owning and operating assets, including capex, in the Tier 1 distribution network until the 2030 financial year • The Capital Expenditure Authorisation Form (e.g. Leinster Network Improvement Capex) as referenced in Section 4.2 (effectiveness criterion 2.1) above, defines project specific details such as responsibilities, dates and timelines, and is used in evaluating and seeking approval for Capex projects. <p>Adequacy Rating: Adequately defined (A) Performance Rating: Performing effectively (1)</p>
<p>11.2 The capital expenditure plan provides reasons for capital expenditure and timing of expenditure</p>	<p>Through discussion with the Reticulation and Standards Manager, LPG Sales Manager and Manager Planning and Analysis, and examination of relevant documentation, we determined that:</p> <ul style="list-style-type: none"> • A summary of capital expenditure is included in the corporate plan and annual budget • The Capital Expenditure Authorisation form provides project specific details for the capital expenditure, authorisations given, analysis of alternative solutions, financial analysis and responsibilities, dates and timelines. <p>Adequacy Rating: Adequately defined (A) Performance Rating: Performing effectively (1)</p>
<p>11.3 The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan</p>	<p>Through discussion with the Reticulation and Standards Manager, LPG Sales Manager and Manager Planning and Analysis, and examination of relevant documentation, we determined that Kleenheat has forecasted the lifecycle cost of owning and operating assets in the Tier 1 distribution network until the 2030 financial year. The AMP forecasts three years of capital and operational expenditure for each Tier 1 asset per site, which is consistent with figures in the budget.</p> <p>Adequacy Rating: Adequately defined (A) Performance Rating: Performing effectively (1)</p>

Effectiveness Criteria	Findings	
11.4 There is an adequate process to ensure that the capital expenditure plan is regularly updated and implemented	<p>Through discussion with the Reticulation and Standards Manager, LPG Sales Manager and Manager Planning and Analysis, and examination of relevant documentation, we determined that:</p> <ul style="list-style-type: none"> • Capex is forecast during the budgeting process, which takes place in May annually • Capex is reforecast in the annual corporate commercial planning (5-year annual corporate plan) process, which is performed on an annual basis each November. 	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)

4.12 Review of AMS

Key process: The asset management system is regularly reviewed and updated.

Expected outcome: Review of the Asset Management System to ensure the effectiveness of the integration of its components and their currency.

Overall Adequacy/Performance rating: Adequately defined (A) / Opportunity for improvement (2)

Effectiveness Criteria	Findings	
12.1 A review process is in place to ensure that the asset management plan and the asset management system described in it remain current	<p>Through discussions with the Reticulation and Standards Manager and the Maintenance and Training Specialist, and examination of relevant documentation, we determined that:</p> <ul style="list-style-type: none"> The Reticulation and Standards Manager has scheduled a Cintellate action to review the AMP on an annual basis (last reviewed October 2019, next review scheduled September 2020) where performance metrics will be updated Kleenheat's Safety Case and Qualitative Risk Assessment are renewed every 5 years and require annual audits to keep them up to date. The reminder for the annual audit is scheduled in Cintellate to begin every November Procedural documentation is scheduled for review every two years in the document management system, evidence of review is referenced in section 6.1. 	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
12.2 Independent reviews (e.g. internal audit) are performed of the asset management system	<p>Through discussions with the Reticulation and Standards Manager and examination of relevant documentation, we determined that Kleenheat engages appropriate third parties to conduct independent reviews on its asset management system to meet Licence obligations. These obligations are outlined in the AMP. The last independent review of the AMS was the 2018 AMS Review.</p> <p>Wesfarmers Internal Audit performs an annual internal audit on the Safety Case, which is reported through to the Department of Mines, Industry, Regulation and Safety (DMIRS). The last audit was submitted to DMIRS in March 2020, however the 2019 audit was not completed.</p>	
	Adequacy Rating: Adequately defined (A)	Performance Rating: Improvement Required (2)

5 Follow-up of previous review action plans

Reference (no./year)	(Asset management effectiveness rating/ AMS Component & Criteria / details of the issue)	Reviewer's recommendation or action planned	Further action required
A. Resolved at end of current review period			
1/2018	<p>Asset Planning</p> <p><i>1.1 Asset management plan covers the processes in this table</i></p> <p><i>1.9 Asset management plan is regularly reviewed and updated</i></p> <p>Environmental analysis</p> <p><i>4.3 Compliance with statutory and regulatory requirements</i></p> <p>Review of AMS</p> <p><i>12.1 A review process is in place to ensure that the asset management plan and the asset management system described in it remain current</i></p> <p><i>12.2 Independent reviews (e.g. internal audit) are performed of the asset management system</i></p> <p>Although Kleenheat's AMP (last revised 15 September 2017) provides some direction on Kleenheat's asset management framework and practices, including an overview of the major elements of the reticulated gas assets within Kleenheat's gas distribution system:</p> <ul style="list-style-type: none"> Kleenheat has recognised the need for its AMP to be further expanded and restructured to accommodate all elements of an effective AMP, tailored to Kleenheat's purposes and commensurate with the relative size and simplicity of Kleenheat's Tier 1 network assets. Where appropriate, clear reference should be made to the role of the Distribution Network Safety Management System and related Safety Case in describing and managing the distribution network assets 	<p>Commensurate with the relative size and simplicity of its network assets, Kleenheat expand and restructure the AMP to accommodate the items raised in the findings throughout the 2018 report. Ideally the AMP would reference Kleenheat's systems, processes and procedures in place to manage each of the 12 key components of the asset management lifecycle.</p> <p>Status</p> <p>Kleenheat has updated the AMP to incorporate all aspects mentioned in the 2018 AMS report, including outline of compliance obligations, reference to the Safety Case and process for regular review.</p>	No further action required

Reference (no./year)	(Asset management effectiveness rating/ AMS Component & Criteria / details of the issue)	Reviewer's recommendation or action planned	Further action required
	<ul style="list-style-type: none"> The AMP does not clearly reference the statutory and regulatory requirements relevant to its distribution network assets (note that those requirements are referenced in Kleenheat's current Safety Case) Regular annual reviews to update the AMP were not in place during the review period <p>The current AMP does not define how other independent reviews in key areas that are not included in the Safety Case will assist Kleenheat in ensuring the effectiveness and continuous improvement of its AMS.</p>		
2/2018	<p>Asset Planning</p> <p><i>4.2 Performance standards (availability of service, capacity, continuity, emergency response, etc.) are measured and achieved</i></p> <p>Although Kleenheat has developed performance measures for its distribution network assets including the effectiveness of distribution control standards, system reliability, system condition, product controls, system damage, contingency management and worker competency, Kleenheat had not reported on its achievement of those performance measures during the review period.</p>	<p>Kleenheat implement a performance measure reporting process, which includes the following elements:</p> <ul style="list-style-type: none"> Reporting templates, including source system information Monitoring templates suitable to the network's activities, such as leak surveys and pressure readings Formal and regular management review and oversight of performance measures. <p>Status</p> <p>Performance measures are reported in the AMP and updated annually. The performance measures are tracked monthly and monitored at quarterly Distribution Network Management meetings.</p>	No further action required
3/2018	<p>Asset operations</p> <p><i>5.1 Operational policies and procedures are documented and linked to service levels required</i></p> <p>Asset maintenance</p> <p><i>6.1 Maintenance policies and procedures are documented and linked to service levels required</i></p> <p>Although it is evident that Kleenheat's procedures have been designed to support its management of a safe and reliable distribution system, the link to specific service levels required (e.g. interruptions, pressure, service connection, emergency (e.g. leak) response time) does not clearly cascade through to specific procedures.</p>	<p>Kleenheat consider updating its key asset operations and maintenance documents (including the AMP and relevant procedures) to ensure required service levels are recognised and accommodated throughout. Note that such updates should occur as part of Kleenheat's normal cycle for reviewing its procedure documents.</p> <p>Status</p> <p>Kleenheat has updated the AMP to include network service levels, provided more context to the Asset Maintenance Plan, and where necessary added links to service levels within the procedural documents.</p>	No further action required

Reference (no./year)	(Asset management effectiveness rating/ AMS Component & Criteria / details of the issue)	Reviewer's recommendation or action planned	Further action required
5/2018	<p>Asset operations <i>5.5 Staff receive training commensurate with their responsibilities</i> Kleenheat's training arrangements can be further strengthened by more specifically aligning staff competence with the asset conditions (current risks) as well as current technology in supporting the execution of the AMP.</p>	<p>Kleenheat consider developing a training framework and plan which addresses:</p> <ul style="list-style-type: none"> • Current staff competence, plus records of assessments of staff competence • Training material update process • Asset technology changes that require new or updated training • Seldom exercised tasks • New skills that need to be added to training • Handling of third-party contractors. <p>Status Kleenheat has addressed recommendation 5/2018 by implementing the Kleenheat LPG Reticulation Competency Management Plan. Further improvements in providing training to staff were identified and a recommendation was provided directly to Kleenheat.</p>	No further action required
6/2018	<p>Asset maintenance <i>6.2 Regular inspections are undertaken of asset performance and condition</i> Kleenheat's requirements for asset inspections can be strengthened to more clearly link with underlying risks and asset condition.</p>	<p>Kleenheat consider further updating its Asset Maintenance Plan to include the following elements in its asset inspections:</p> <ul style="list-style-type: none"> • The basis for inspection strategies, linked with the network risk assessment • The means to assess the effectiveness of inspections • Compliance metrics/targets • Technology required • How inspection results are used to support wider asset management decisions <p>Status The Asset Maintenance Plan was widened to capture the basis for inspection strategies, risks associated with the maintenance activity, compliance metrics/targets and the technology required to complete the tasks. The means to assess the effectiveness of inspections is in place through review of inspections, surveys and maintenance work.</p>	No further action required

Reference (no./year)	(Asset management effectiveness rating/ AMS Component & Criteria / details of the issue)	Reviewer's recommendation or action planned	Further action required
7/2018	<p>Asset maintenance</p> <p><i>6.4 Failures are analysed, and operational/maintenance plans adjusted where necessary</i></p> <p>Kleenheat's Asset Maintenance Plan and its procedures applied in practice do not adequately address the need for demonstrating analyses of any failures (corrective work, leaks, emergency attendance etc.), with conclusions or recommendations on future changes in operation and maintenance, as well as for engineering/asset renewal.</p>	<p>Kleenheat consider a developing an asset and system reliability/availability performance process which addresses the following elements:</p> <ul style="list-style-type: none"> • Major identified failure modes with various assets • How work order information is used to feedback to the operation/maintenance plan and strategy • RACI behind maintenance strategy development/improvement • When root cause analysis is applied • How work (engineering, operation and maintenance) is prioritised by analysing the past occurrences (or non-occurrences) • Assessment of consequences for past failures including near misses. <p>Status</p> <p>Major failure modes are identified in the Safety Case and related Qualitative Risk Assessment. Maintenance and inspection procedures are in place to monitor and prevent failures from occurring. Work order information is reviewed upon completion and reported thorough to Dist. Network Manager when further investigation or action is required. Root cause analysis is completed for any failures or safety incidents as apart of required Cintellate investigation of such events. Work is scheduled and prioritised through our risk assessment and safety case undertakings.</p>	No further action required

Reference (no./year)	(Asset management effectiveness rating/ AMS Component & Criteria / details of the issue)	Reviewer's recommendation or action planned	Further action required
8/2018	<p>Asset maintenance</p> <p><i>6.5 Risk management is applied to prioritise maintenance tasks</i></p> <p>Although there is evidence of relevant risks and hazards being recognised within the Asset Maintenance Plan and associated procedures, Kleenheat has not clearly documented the link between those key risks and hazards, and its asset maintenance strategies, plans and priorities. Kleenheat had recognised this matter through an independent assessment of the adequacy of its Safety Case, conducted in January 2018.</p>	<p>Kleenheat consider including the following elements in its Asset Maintenance Plan:</p> <ul style="list-style-type: none"> Reference to those major risks and hazards that drive maintenance tasks (per examples outlined in the Safety Case), including any prioritisation of tasks to address risks relating to safety, reliability, compliance, environment etc. A mechanism for accommodating instances where maintenance tasks themselves have an impact on risks and hazards (including introducing new risks). <p>Status</p> <p>The AMP and Asset Maintenance Plan has been updated to reference the major risks and hazards and how they drive maintenance tasks and, where applicable, the possibility that maintenance itself can pose additional risks.</p>	No further action required
Unresolved at end of current review period			
4/2018	<p>Asset operations</p> <p><i>5.3 Assets are documented in an Asset Register including asset type, location, material, plans of components, an assessment of assets' physical/structural condition and accounting data</i></p> <p>Although Kleenheat has added to the content of the asset register in response to recommendation 6/2016 of the 2016 AMS review, further improvements can be made to the asset register to assist Kleenheat to understand and manage all key aspects of its asset portfolio. We recognise that there is a cost/benefit balance to achieve in any further expansion asset records to be maintained in Oracle eAM.</p>	<p>Kleenheat consider including the following elements in its asset register:</p> <ul style="list-style-type: none"> Further description of asset type Asset working environment Population sizes Material/technology applied Age/remaining life/shelf life/obsolescence Purchase value/commissioning cost Logistics data. <p>Status</p> <p>Kleenheat has acknowledged that improvements are still required stemming from recommendation 4/2018. Evidence was sighted of correspondence and data that Kleenheat will use to expand the asset register. Kleenheat have signalled that this will be a priority moving forward.</p>	Yes. Recommendations were provided directly to Kleenheat.

Reference (no./year)	(Asset management effectiveness rating/ AMS Component & Criteria / details of the issue)	Reviewer's recommendation or action planned	Further action required
9/2018	<p>Risk management</p> <p><i>8.2 Risks are documented in a risk register and treatment plans are actioned and monitored</i></p> <p><i>8.3 The probability and consequences of asset failure are regularly assessed</i></p> <p>Kleenheat has not developed a process for monitoring the control activities and actions listed in its distribution qualitative risk assessment or the impact of recent events and incidents in order to regularly assess the probability and consequence of asset failure, which impacts the residual risk rating.</p>	<p>Kleenheat consider implementing a regular review process of its distribution qualitative risk assessment to assess and update the residual risk of each threat as at a point in time, including the following considerations:</p> <ul style="list-style-type: none"> Monitoring through updating recent results of the listed treatment plans and actions Recent impact on threats and treatment plans and actions from recent events and incidents Reassessing the probability and consequence of asset failure regularly which impact the low, medium or high residual risk rating. <p>Status</p> <p>Kleenheat has implemented an annual review of its qualitative risk assessment in Cintellate to align with its annual audit of the Distribution Network Safety Case. However, the review was not completed in 2019 due to numerous reviews of the risk assessment in 2018.</p>	<p>Yes. Recommendations were provided directly to Kleenheat.</p>
10/2018	<p>Contingency planning</p> <p><i>9.1 Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks.</i></p> <p>The Kleenheat distribution safety case stipulates frequency of testing of the contingency plans as annual, which does not exactly align with requirements of AS/NZS 4645.1, which requires the frequency of testing of contingency plans to be "on a regular basis, not less than once per year".</p> <p>The Contingency plan for Leinster was tested in May 2016 and November 2017. The frequency of this testing for Leinster was not executed in line with the requirements of AS/NZS 4645.1 of "... not less than once per year".</p>	<p>Kleenheat consider:</p> <ul style="list-style-type: none"> Updating the frequency of testing of the contingency plans within the Kleenheat distribution safety case to be in line with requirements of AS/NZS 4645.1, being "on a regular basis, not less than once per year" Scheduling and executing the testing of the contingency plan for each locality to ensure compliance with the Safety Case. <p>Status</p> <p>Kleenheat:</p> <ul style="list-style-type: none"> Has scheduled annual testing of the contingency/emergency plan to align with other planned maintenance activities Does not intend to update its safety case to align with AS/NZS 4645.1 as it believes current wording achieves the intent of annual testing. <p>There was an 18-month gap between testing the Emergency Response Plans for two of its networks. Future testing has been scheduled on an annual basis to occur in November for all sites.</p>	<p>Yes. Opportunity for improvement provided directly to Kleenheat</p>

Appendix A - References

Kleenheat staff participating in the review

- Reticulation and Standards Manager
- Maintenance and Training Specialist
- LPG Sales Manager
- Chief Information Officer
- Technology Systems Manager
- Manager Planning and Analysis

Deloitte staff participating in the review

		Hours
Vincent Snijders	Partner	11
Ben Fountain	Technical QA Director	1
Amanda Waghorn	Manager	53
Peter Siwek	Technical Senior Analyst	22.5
Morgan Jones	Analyst	160
Peter Rupp	Partner (Quality Assurance Review)	2

Sites visited by the auditor during the review

- Kleenheat's Murdoch Office
- Margaret River contractor workshop and two distribution sites

Key documents and other information sources examined

- Current Asset Management Plan
- Design Verification and Compliance Check form
- Distribution Network Capacity Check form
- Pressure Testing a Gas Main procedure
- Kleenheat Distribution Safety Case
- Kleenheat Distribution Qualitative Risk Assessment
- Network Pressure Rectification Procedure
- Capital Expenditure Policy
- Delegation of Authority
- Kleenheat Distribution Networks – Performance Measures
- Systems of Work
- Distribution Network Manual
- Asset Register and supporting documents
- Retic, Gas Network Staff Competence Framework and Plan
- Gas Distribution Training Flexibility Report
- Gas Test Atmospheres Assessment template
- Permit to Work Assessment template
- Installation of a Gas Service Assessment template
- Commissioning and Purging of a Gas Main Assessment template
- Attending a Report Gas Escape procedure
- Distribution Systems Asset Maintenance Plan
- Attending a Reported Gas Leak procedure
- Group Electronic Usage Policy

- Group Password Policy
- New Connections Report
- Gas Consumption Calculation Report
- Complaints Register
- Group Risk Management Policy and Procedure
- Kleenheat LPG Corporate Risk Register
- National Emergency Response Communications Systems procedure
- Guidelines for Emergency Response LPG
- Supply Disruption procedure
- Quarterly Management performance reports
- Budget Control process
- Safety Management System
- Reports from the Leinster Incident
- Reports from the two Rapids Landing incidents
- Fixed Asset Register
- Maintenance schedule for the review period (1/6/2018 - 31/5/2020)
- Inspection schedule for the review period (1/6/2018 - 31/5/2020)
- HSE plan
- Management of Change process document
- Reticulation Process map
- Distribution Network Handover Checklist
- CISCO Call Statistics Snapshot Report (for monitoring responses to customer calls)
- Capex authorisation form example
- Oyster Harbour reg set inspection post Rapids Landing incident
- Asset Management Plan renewal reminder from DOCOVA
- Leinster LPG vessel internal inspection report
- Regulator and OPSO testing
- Valve Stroking
- Contractor Training Monthly Update - May'19, May'20
- QRA review
- Leinster Valve Replacement Project CAPEX paper
- Emergency Response Testing
- Leinster Inspectors Orders close outs
- Riverslea meter replacements 2019, 2020
- Network LPG Storage Compound Emergency Plans
- Submission of regulatory documentation
- Valve replacement Capex example and post implementation review
- PowerBI snapshot of Actual v budgeted costs for retic / GDL9
- Monthly report of Actual v budgeted costs for retic / GDL9
- Process for developing Corporate Plan
- Spreadsheet with forecasted capital expenditure
- Forecast profit and Loss statement
- Forecast balance sheet
- Data Backup schedule / policy / process / results from testing during review period
- DR testing schedule / process/ policy / results from testing for review period
- Penetration testing schedule
- IT Incident management process
- Process for providing new user access (Jira)
- Meter change out documentation
- Network capacity - pressure monitoring
- Odorant issue addressed
- Monitoring of Regulatory Changes
- OPSO testing
- Work Order sampling
- CST service targets
- Service line installation information.