Wesfarmers Kleenheat Gas Pty Ltd

Gas Distribution Licence (GDL9) 2023 Asset Management System Review

Final report

October 2023



PERTH WA 6000

13 October 2023

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

Dear Mr Dixon

Gas Distribution Licence (GDL9) – 2023 Asset Management System Review report

We have completed the Gas Distribution Licence Asset Management System Review for Wesfarmers Kleenheat Gas Pty Ltd for the period 1 June 2020 to 31 May 2023 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 Andrew Baldwin at abaldwin@assuranceadvisory.com.au or myself at slinden@assuranceadvisory.com.au.

Yours sincerely **Assurance Advisory Group**

Stephen Linden Director

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1. Independent assurance practitioner's report

Modified conclusion

We have undertaken a limited assurance engagement on the effectiveness Wesfarmers Kleenheat Gas Pty Ltd's (Kleenheat) Asset Management System (AMS), relating to its Gas Distribution Licence GDL9 (the Licence) for the period 1 June 2020 to 31 May 2023 (review period).

Based on the procedures we have performed and the evidence we have obtained, except for the effect of the matters described in the 'Basis for modified conclusion/opinion' paragraph below, nothing has come to our attention that causes us to believe that 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 issue of the *Audit and Review Guidelines: Electricity and Gas Licences* (the Guidelines) issued by the Economic Regulation Authority (the ERA) and that the systems have not operated effectively for the review period.

Basis for modified conclusion

During the period from 1 June 2020 to 31 May 2023, Kleenheat's asset management system had the following deficiencies that require correction or improvement in order to address the effectiveness criteria nominated in the Guidelines:

Key process & effectiveness criteria	Description
4. Environmental analysis 4.2 Performance standards (availability of service, capacity, continuity, emergency response, etc.) are measured and achieved	 The following aspects of Kleenheat's emergency preparedness activities require strengthening: The Internal Safety Case Audit conducted in March 2023 reported that FY 2023 (to date) Emergency Response (ER) drills were overdue. We confirmed that overdue ER drills were subsequently actioned ER drills are associated with site assets, site personnel and community safety matters however they are not thorough enough to include local authorities such as Fire Brigade, Medical Centres, Traffic Management, etc. (other than only Kleenheat contractors).

Key process & effectiveness criteria	Description			
5. Asset Operations5.6 Staff resources are adequate and	The following matters indicate an exposure in Kleenheat's training requirements and records:			
staff receive training commensurate with their responsibilities	 Practical competency assessments for the more critical maintenance tasks have been completed by the Maintenance & Training Specialist and the results of the practical assessments have been manually documented, however at the time of our review, those results had not been fully captured in Kleenheat's system/electronic records. In addition, Kleenheat had not yet fully developed a maintenance training package that addresses the more routine maintenance tasks An Internal Safety Case audit undertaken in March 2023 reported that Kleenheat had not completed a review of its current competency compliance matrix to ensure all contractors achieve full compliance with mandatory competency training activities. Kleenheat did not meet its Training KPI metrics in FY21 and FY22, in part due to the recent development of a new automated system, which Kleenheat has recognised While contractor staff were aware of their emergency management obligations and a selection of emergency response scenarios, they were not fully familiar with all specific details of Kleenheat's Emergency Management 			
6. Asset Maintenance	Plan. The following elements of Kleenheat's maintenance plans			
6.3 Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule	 and activity require corrective action: The Maintenance Planner had not been updating Oracle eAM with correct forecasted/scheduled start dates for maintenance tasks per the stated requirements of Kleenheat's Distribution Network Maintenance Process Flow Chart 			
	 An Internal Safety Case Audit Report dated March 2023 reported that a selection of condition monitoring activities (mains leak survey and pressure monitoring) were not completed as scheduled during the audit period. It also identified the need for Kleenheat to develop a process to ensure overdue PM's are escalated to ensure their completion Kleenheat has acknowledged that its current systems do 			
	not perform the function of Work Order management as intended, and is seeking to implement an eAM system that can provide seamless Work Order management.			

We conducted our engagement in accordance with Standard on Assurance Engagements ASAE 3500 *Performance Engagements* (**ASAE 3500**) 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 conclusion.

Kleenheat's responsibility for the AMS

Kleenheat is responsible for ensuring that it has:

- Complied in all material respects with the requirements of the Licence as specified by the Review Guidelines
- Established and maintained an effective AMS for assets subject to the Licence, as measured by the effectiveness criteria detailed in the Guidelines.

Our 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. We applied Auditing Standard ASQC 1 Quality Control for Firms that Perform Audits and Reviews of Financial Reports and Other Financial Information, and Other Assurance Engagements in undertaking this assurance engagement.

Our responsibilities

Our responsibility is to express a limited assurance conclusion on the effectiveness of Kleenheat's AMS for assets subject to the Licence, based on the procedures we have performed and the evidence we have obtained. We conducted our limited assurance engagement in accordance with ASAE 3500, 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 the Licence, have not been established and maintained, in all material respects. 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.

Our procedures included:

- Utilising the Review Guidelines as a guide for development of a risk assessment, which involved discussions with key staff and review of documents to perform a preliminary controls assessment
- Development of a Review Plan for approval by the ERA, and an associated work program
- Interviews with and representations from Kleenheat representatives and key operational and administrative 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 B
- Examination of documented policies and procedures for key functional requirements and consideration of their relevance to Kleenheat's AMS requirements and standards
- Physical visit to operations located in Albany
- Consideration of reports and references evidencing activity
- 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 it is possible 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 2020 to 31 May 2023 does not provide assurance on 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 other 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.

Assurance Advisory Group

Stephen Linden Director

13 October 2023

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**).

Section 11Y of the Act requires Kleenheat to provide to the ERA an asset management system review (the **review**) report conducted by an independent expert acceptable to the ERA not less than once in every 24-month period unless otherwise approved by the ERA. With the ERA's approval, Assurance Advisory Group (AAG) has been appointed to conduct the review for the period 1 June 2020 to 31 May 2023 (**review period**).

The Licence relates to Kleenheat's operations as a supplier of gas from Liquefied Petroleum Gas distribution systems that it owns and operates in Oyster Harbour (Albany), Margaret River and Leinster (Tier 1 systems). Note that Kleenheat's Tier 2 systems were not subject to the Licence requirements for the period subject to review.

The review has been conducted in accordance with the ERA's August 2022 edition of the 2019 Audit and Review Guidelines: Electricity and Gas Licences (Review Guidelines) which set out 12 key processes in the asset management life-cycle.

2.2 Findings

In considering Kleenheat's internal control procedures, structure and environment, compliance arrangements and information systems specifically relevant to those effectiveness criteria subject to review, we observed that:

- Kleenheat has an established asset management framework in place, which has been subject to minimal change during the period subject to review
- Annual internal audits of the distribution network safety case have concluded that in general, key relevant activities have continued to be undertaken, with a small number of exceptions and related corrective actions or continued improvement opportunities identified, tracked and implemented
- Throughout the period subject to review, with the small number of exceptions referenced
 within this report, Kleenheat had maintained an appropriate suite of procedures and controls
 within its AMS and had assigned responsibility for discharging those procedures and controls
- Kleenheat is supported by corporate systems and functions maintained by its parent entity,
 Wesfarmers Chemicals Energy and Fertilisers (WesCEF)
- Kleenheat staff appeared to have a good understanding of their roles, particularly displaying an understanding of the asset management processes within their area of responsibility
- Three elements of Kleenheat's asset management practices require improvement (where the criteria's performance rating is "3"). This review makes three recommendations for Kleenheat to determine and implement the necessary corrective action (refer to Recommendations 1/2023, 2/2023 and 3/2023)
- Kleenheat has a small number of minor improvement opportunities to strengthen aspects of its asset management practices, as described throughout this report (where criteria are rated as "B" or "2").

This review assessed that, of the 58 elements of Kleenheat's AMS:

- For the asset management process and policy definition ratings:
 - 52 are rated as "Adequately defined"
 - 6 are rated as "Requires some improvement".
- For the asset management performance ratings:
 - 49 are rated as "Performing effectively"
 - 5 are rated as "Improvement required"
 - 3 are rated as "Corrective action required"
 - 1 is not rated.

2.3 Kleenheat's response to previous review recommendations

Not applicable - the previous review did not make any recommendations requiring corrective action.

2.4 Recommendations to address current asset system deficiencies

- A. Resolved during current review period Not applicable.
- B. <u>Unresolved at end of current review period</u>

Reference (no./year)	Process and policy deficiency / Performance deficiency (Rating / Reference number, Asset management process & effectiveness criterion / Details of deficiency)	Auditor's recommendation	Action taken	
1/2023	 4. Environmental Analysis 4.2 Performance standards (availability of service, capacity, continuity, emergency response, etc.) are measured and achieved The following aspects of Kleenheat's emergency preparedness activities require strengthening: The Internal Safety Case Audit conducted in March 2023 reported that FY 2023 (to date) Emergency Response (ER) drills were overdue. We confirmed that overdue ER drills were subsequently actioned ER drills are associated with site assets, site personnel and community safety matters however they are not thorough enough to include local authorities such as Fire Brigade, Medical Centres, Traffic Management, etc. (other than only Kleenheat contractors). 	Kleenheat add further rigor to its emergency preparedness by: (a) Assigning priority to ER drills, particularly where there is a recent history of delays (b) Expand its ER drills to include local authorities such as Fire Brigade, Medical Centres, Traffic Management, etc. (other than only Kleenheat contractors) as outlined in the emergency management plans for Margaret River and Albany networks.	n/a	

Reference (no./year)	Process and policy deficiency / Performance deficiency (Rating / Reference number, Asset management process & effectiveness criterion / Details of deficiency)	Auditor's recommendation	Action taken	
2/2023	 5. Asset Operations 5. 6 Staff resources are adequate and staff receive training commensurate with their responsibilities The following matters indicate an exposure in Kleenheat's training requirements and records: Practical competency assessments for the more critical maintenance tasks have been completed by the Maintenance & Training Specialist and the results of the practical assessments have been manually documented, however at the time of our review, those results had not been fully captured in Kleenheat's system/electronic records. In addition, Kleenheat had not yet fully developed a maintenance training package that addresses the more routine maintenance tasks An Internal Safety Case audit undertaken in March 2023 reported that Kleenheat had not completed a review of its current competency compliance matrix to ensure all contractors achieve full compliance with mandatory competency training activities. Kleenheat did not meet its Training KPI metrics in FY21 and FY22, in part due to the recent development of a new automated system, which Kleenheat has recognised While contractor staff were aware of their emergency management obligations and a selection of emergency response scenarios, they were not fully familiar with all specific details of Kleenheat's Emergency Management Plan. 	Kleenheat strengthen its competency and training arrangements and any related contractual obligations to ensure all exposures to staff, contractor and network safety and addressed through appropriate training and competency programs and records.	n/a	
3/2023	 6. Asset Maintenance 6.3 Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule The following elements of Kleenheat's maintenance plans and activity require corrective action: The Maintenance Planner had not been scheduling maintenance tasks and updating Oracle eAM per the stated requirements of Kleenheat's Distribution Network Maintenance Process Flow Chart An Internal Safety Case Audit Report dated March 2023 reported that a selection of condition monitoring activities were not completed as scheduled during the audit period. It also identified the need for Kleenheat to develop a process to ensure overdue PM's are escalated to ensure their completion Kleenheat has acknowledged that its current systems do not perform the function of Work Order management as intended, and is seeking to implement an eAM system that can provide seamless Work Order management. 	Kleenheat further strengthen its maintenance planning and completion processes by: (a) Ensuring that Oracle eAM be updated by the Maintenance Planner with correct forecasted/scheduled start dates for maintenance tasks as outlined in the process flow chart (b) Further clarifying the roles and responsibilities of the Maintenance Planner and the Reticulation and Standards Manager (c) Establishing a process for escalation of overdue PM tasks.	n/a	

2.5 Scope and objectives

We have conducted a limited assurance engagement 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 the Licence, have not been established and maintained, in all material respects for the period 1 June 2020 to 31 May 2023.

Our engagement was conducted in accordance with Australian Standard on Assurance Engagements ASAE 3500 Performance Engagements, issued by the Australian Auditing and Assurance Standards Board and provides limited assurance as defined in ASAE 3500. The procedures we performed are described in more detail in section 2.6 below.

A limited assurance engagement in accordance with ASAE 3500, to report on the effectiveness of Kleenheat's AMS for assets subject to the Licence involves performing procedures to obtain evidence about processes and controls designed and implemented within Kleenheat's AMS for assets subject to the Licence. The procedures selected depend on our judgement, including the identification and assessment of risks of Kleenheat's AMS for assets subject to a Licence being materially ineffective.

ASAE 3500 also requires us to comply with the relevant ethical requirements of the Australian professional accounting bodies.

In accordance with the Review Guidelines, the review considered the effectiveness of Kleenheat's existing control procedures within the following 12 key processes in the asset management life cycle:

Key processes	Effectiveness criteria
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 operations (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.
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	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.

Key processes	Effectiveness criteria
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 [new criteria]
	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
7. Asset	7.1 Adequate system documentation for users and IT operators
management information	7.2 Input controls include suitable verification and validation of data entered into the system
systems	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 [new criteria]
8. Risk management	8.1 Risk management policies and procedures exist and are 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

Key processes	Effectiveness criteria
11. Capital expenditure	11.1 There is a capital expenditure plan covering works to be undertaken, actions proposed, responsibilities and dates
planning	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 the capital expenditure plan is regularly updated and implemented
12. Review of asset management	12.1 A review process is in place to ensure the asset management plan and the asset management system described in it remain current
system	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, set out at Appendix A, details the risk assessments made for 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 the period May 2023 to mid-August 2023:

- 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 (see Appendix A) for approval by the ERA
- Correspondence and interviews with Kleenheat staff to gain an understanding of process controls in place (see Appendix B for staff involved)
- Site visit to Kleenheat's Albany operations, with a focus on understanding the distribution assets, their function, normal mode of operation, age and an assessment of the facilities against the AMS review criteria
- Review of documents, processes and controls to assess the overall effectiveness of Kleenheat's AMS (see Appendix B 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 rating (refer to Table 1) and the performance rating (refer to Table 2) for each of the key AMS processes was performed using the below ratings.

Table 1: Process and policy rating scale

Rating	Description	Criteria			
		Processes and policies are documented			
	Adaguataly	Processes and policies adequately document the required performance of the assets			
А	Adequately defined	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			
		Processes and policies require improvement			
В	Requires some	Processes and policies do not adequately document the required performance of the assets			
В	improvement	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)			
		Processes and policies are incomplete or require substantial improvement			
C	Requires substantial	Processes and policies do not document the required performance of the assets			
C	improvement	Processes and policies are considerably out of date			
	·	The asset management information system(s) requires substantial improvements (taking into consideration the assets being managed)			
		Processes and policies are not documented			
D	Inadequate	The asset management information system(s) is not fit for purpose (taking into consideration the assets being managed).			

Table 2: Performance rating scale

Rating	Description	Criteria			
1	Performing effectively	 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	 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	 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		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 3) for each of:
 - Asset management process and policy rating
 - Asset management performance rating.
- Detailed findings, including relevant observations and recommendations (Section 4). Descriptions of the effectiveness criteria can be found in section 4 and the Review Plan at Appendix A.

Table 3: AMS effectiveness summary

			Ratings	
Ref	Asset management process and effectiveness criteria	Review priority	Process and policy	Performance
1. Ass	set Planning		Α	1
1.1	Asset management plan covers the processes in this table	Priority 4	А	1
1.2	Planning processes and objectives reflect the needs of all stakeholders and is integrated with business planning	Priority 5	А	1
1.3	Service levels are defined in the asset management plan	Priority 5	Α	1
1.4	Non-asset operations (e.g. demand management) are considered	Priority 5	А	1
1.5	Lifecycle costs of owning and operating assets are assessed	Priority 4	А	1
1.6	Funding options are evaluated	Priority 5	А	1
1.7	Costs are justified and cost drivers identified	Priority 4	А	1
1.8	Likelihood and consequences of asset failure are predicted	Priority 2	А	1
1.9	Asset management plan is regularly reviewed and updated.	Priority 5	Α	1
2. Ass	2. Asset creation and acquisition		Α	1
2.1	Full project evaluations are undertaken for new assets, including comparative assessment of non-asset options	Priority 4	Α	1
2.2	Evaluations include all life-cycle costs	Priority 4	Α	1
2.3	Projects reflect sound engineering and business decisions	Priority 4	А	1
2.4	Commissioning tests are documented and completed	Priority 4	А	1
2.5	Ongoing legal / environmental / safety obligations of the asset owner are assigned and understood	Priority 2	А	1
3. Ass	set disposal		Α	1
3.1	Under-utilised and under-performing assets are identified as part of a regular systematic review process	Priority 5	Α	1
3.2	The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken	Priority 5	Α	1
3.3	Disposal alternatives are evaluated	Priority 5	Α	Not rated
3.4	There is a replacement strategy for assets	Priority 4	А	1

			Ratings	
Ref	Asset management process and effectiveness criteria	Review priority	Process and policy	Performance
4. Env	vironmental analysis		Α	2
4.1	Opportunities and threats in the asset management system environment are assessed	Priority 4	А	1
4.2	Performance standards (availability of service, capacity, continuity, emergency response, etc.) are measured and achieved	Priority 4	В	3
4.3	Compliance with statutory and regulatory requirements	Priority 4	Α	1
4.4	Service standard (customer service levels etc) are measured and achieved.	Priority 4	А	1
5. Ass	et operations		В	2
5.1	Operational policies and procedures are documented and linked to service levels required	Priority 4	Α	1
5.2	Risk management is applied to prioritise operations tasks	Priority 4	Α	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 2	В	2
5.4	Accounting data is documented for assets [new criteria]	Priority 4	Α	1
5.5	Operational costs are measured and monitored	Priority 4	А	1
5.6	Staff resources are adequate and staff receive training commensurate with their responsibilities	Priority 2	В	3
6. Ass	set maintenance		В	2
6.1	Maintenance policies and procedures are documented and linked to service levels required	Priority 4	Α	1
6.2	Regular inspections are undertaken of asset performance and condition	Priority 2	А	1
6.3	Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule	Priority 2	В	3
6.4	Failures are analysed and operational/maintenance plans adjusted where necessary	Priority 2	В	2
6.5	Risk management is applied to prioritise maintenance tasks	Priority 4	Α	2
6.6	Maintenance costs are measured and monitored	Priority 4	Α	1
7. Ass	set management information systems		Α	1
7.1	Adequate system documentation for users and IT operators	Priority 5	Α	1
7.2	Input controls include suitable verification and validation of data entered into the system	Priority 4	А	1
7.3	Security access controls appear adequate, such as passwords	Priority 5	А	1
7.4	Physical security access controls appear adequate	Priority 5	А	1
7.5	Data backup procedures appear adequate and backups are tested	Priority 4	А	1
7.6	Computations for licensee performance reporting are accurate	Priority 5	А	1
7.7	Management reports appear adequate for the licensee to monitor licence obligations	Priority 5	А	1
7.8	Adequate measures to protect asset management data from unauthorised access or theft by persons outside the organisation	Priority 4	Α	1

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

4. Detailed findings and recommendations

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.

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 Process and Policy/Performance rating: Adequately defined (A) / Performing effectively (1)

Effectiveness criteria	Findings	
1.1 Asset management plan covers the processes in this table	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 in January 2023) contains the following information:	
	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.	
	Process and Policy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)

Effectiveness criteria	Findings	
1.2 Planning processes and objectives reflect the needs of all stakeholders and is integrated with business planning	 Through discussion with the Reticulation and Standards Manager a budgeting process, we determined that: WesCEF's budgeting process includes the Kleenheat LPG Distribution. The annual Corporate Plan articulates the commercial strategy expenditure, operations and profitability). It also forecasts voluble. The AMP highlights cost reduction is a focus to ensure consume largely revolve around the efficient scheduling of maintenance. 	and forecast financial consequences (revenue, capital time trends and gas prices ers receive a competitive gas price. Cost reduction efforts
	Process and Policy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
1.3 Service levels are defined in the asset management plan		
	Process and Policy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
1.4 Non-asset operations (e.g. demand management) are considered	 Through discussion with the Reticulation and Standards Manager at that: Kleenheat's planning process provides for consideration of denton Design Verification and Compliance Check (last updated 20 new networks, existing network expansions, and developm Distribution Network Capacity Check, which is a process for expansion, when Kleenheat receives expansion plans from This process of considering demand management was applied for the proposed Oyster Harbour network expansion and the capacity network. 	mand management through: May 2020), which considers demand management for the plans r assessing the Tier 1 distribution network's capacity for the developer as part of the April 2023 capacity assessment performed apacity check for the April 2023 expansion of the Rapids
	Process and Policy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)

Effectiveness criteria	Findings		
1.5 Lifecycle costs of owning and operating assets are assessed	Through discussion with the Reticulation and Standards Manager and examination of a network lifecycle cost analys 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.		
	Process and Policy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)	
1.6 Funding options are evaluated Through discussion with the Reticulation and Standards Manager and Manager, Planning and Analysis funding for LPG Retic operational requirements is through the Wesfarmers Central Treasury, based or operational expense investments forecasted in the annual budget process.		farmers Central Treasury, based on the capital and	
	Process and Policy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)	
1.7 Costs are justified and cost drivers identified	Through discussion with the Reticulation and Standards Manager a of relevant documentation, we determined:	nd the Manager, Planning and Analysis, and examination	
	Forecasted operations and maintenance costs are budgeted an	I 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		
	• 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.		
	Process and Policy Rating: Adequately defined (A) Performance Rating: Performing effectively		

Effectiveness criteria	Findings	
1.8 Likelihood and consequences of asset failure are predicted	determined that Kleenheat has established the following processes to predict the likelihood and consequence of distribution network asset failure: • The Kleenheat Distribution Safety Case is a requirement under the Gas Standards (Gas Supply and System Safety) Regulations 2007, which focuses on Kleenheat's operational and safety management processes and controls with operations to safely deliver (or distribute) gas to the Tier 1 distribution networks covered under this Licence. The Case has a validity period of 5 years. The Safety Case renewal (Version 9.1) was last revised in November 2021	
	 The Kleenheat Distribution Qualitative Risk Assessment (last up for Tier 1 distribution network assets. The risk assessment inclu 	·
	 Hazard (i.e. gas leakage, contamination, supply reliability et 	rc)
	o Cause	
	o Initial likelihood	
	 Consequences Category Risk control description Control type 	
	Residual likelihood	
	 Residual severity Residual risk 	
	 The Distribution Network Leak Survey (we viewed the December Kleenheat with an operative prediction on the likelihood and from the likelihood and from the likelihood. 	,
	The Distribution Network Capacity Check outlines processes for capacity	identifying and addressing concerns with network
	 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. 	
	Process and Policy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
1.9 Asset management plan is regularly reviewed and updated.	Through discussion with the Reticulation and Standards Manager and examination of the AMP, we determined that revi of the AMP have taken place at least annually (last performed in January 2023), and an annual system generated alert is in Kleenheat's document management system (DOCOVA) for future reviews.	
	Process and Policy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)

4.2 Asset creation and acquisition

Key process: Asset creation/acquisition is the provision or improvement of assets

Expected outcome: The asset acquisition framework is economic, efficient and cost-effective; it reduces demand for new assets, lowers service costs and improves service delivery

Overall Process and Policy/Performance rating: Adequately defined (A) / Performing effectively (1)

Effectiveness criteria	Findings		
2.1 Full project evaluations are undertaken for new assets,	Through discussion with the Reticulation and Standards Manager and the Manager for Planning and Analysis and examination of relevant documentation, we determined:		
including comparative assessment of non-asset solutions	 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), description of capital, financials, risk analysis, timeline and recommendation 		
	The Capital Expenditure Authorisation Form is authorised in accordance with the WesCEF Delegation of Authority (DOA)		
	• The WesCEF Expenditure Authorisation Policy (version 1.1, June 2022) outlines requirements for expenditure authorisation including the completion of the relevant expenditure authorisation form.		
This process was applied to the expansion of Kleenheat's Oyster Harbour distribution network in 202 expansion of the Rapids Landing distribution network in May 2023.			
	Process and Policy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)	
2.2 Evaluations include all life-cycle costs	Through discussion with the Reticulation and Standards Manager a of relevant documentation, we determined:	nd Manager for Planning and Analysis and examination	
	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 1st stage pressure regulator replacement, 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 assets in the Tier 1 distribution network until the 2030 financial year.			
	Process and Policy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)	

Effectiveness criteria	Findings	
2.3 Projects reflect sound engineering and business decisions Through discussion with the Reticulation and Standards Manager and examination of relevant documentate determined that:		and examination of relevant documentation, we
	 The Capex process reflects commercial planning decisions based on reasoned, justified proposals that consider the projected benefits for Kleenheat For the Leinster 1st stage pressure regulator replacement project (initiated after a review of the total cost of isolatic valve replacement on the network completed in June 2019), a proposal was developed by the Reticulation and Standards Manager and peer reviewed by the LPG Sales Manager. The new equipment design is intended to facilitat more efficient maintenance across all LPG distribution networks. 	
	Process and Policy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
2.4 Commissioning tests are documented and completed	Process and Policy Rating: Adequately defined (A) Through discussion with the Reticulation and Standards Manager and examination of relevant documentation, we determined that: • Kleenheat's processes continued to include: • Commissioning tests are to be completed when a new network has been developed or there is a network expansion. • Installation of the network is completed by estate developers. Kleenheat oversees key aspects of construction (depth of pipes, fittings, marker tape, tracer wire, GPS survey coordinates, backfilling etc) post installation • Prior to handover of the network to Kleenheat, Kleenheat is to complete a handover checklist that, amongst other requirements, consists of: • Completion by Kleenheat of a 48-hour pressure test of the network to ensure the network is adequate and leafree • Commissioning certification • Calibration certificates for pressure testing and welding equipment • Qualifications of welder • GPS coordinates, drawings etc (for submission to Dial Before You Dig) • A Commissioning Plan was developed and applied to the May 2023 Rapids Landing Stage 7 network expansion.	
	Process and Policy Rating: Adequately defined (A) Performance Rating: Performing effectively (1)	

Effectiveness criteria	Findings	
2.5 Ongoing legal/environmental/safety	Through discussion with the Reticulation and Standards Manager and examina determined that:	tion of relevant documentation, we
obligations of the asset owner are	• In the AMP, legal/environmental/safety obligations have been assigned to	appropriate staff
assigned and understood.	The GDL9 Performance audit and AMS review, including the performance/the Reticulation and Standards Manager	compliance reporting is the responsibility of
	 Kleenheat's Natural Gas and Regulatory division is responsible for the Gas Regulatory division instigates the commencement of data collection for pe GDL9 and GTL10 licences, as well as assigning responsibilities to the various the data required by the reports, set the deadlines for submission of that dofficer review 	rformance and compliance reporting for the s departments within Kleenheat to provide
	 The Safety Case (last updated November 2021) and related Qualitative Risk is submitted to Building and Energy, details Kleenheat's safety and environ compliance. The responsible officer for the Safety Case and related Qualita Safety Superintendent 	mental obligations and processes to achieve
	WesCEF provides Kleenheat with up-to-date legal/environmental/ safety legal/envir	egal updates through:
	 A quarterly Wesfarmers Environment and Sustainability Briefing, which The briefing identifies legislative, policy and case law changes that occubroken down into the following sections; Environmental, Industrial, Wasenergy, Human Rights and Equal Opportunity, Intellectual Property and has occurred across Wesfarmers operating industries. Each section is sechanges or developments 	urred throughout the respective quarter. It is aste and Recycling, Climate Change and Cyber Security, and Significant Cases that
	 WesCEF subscribes to a safety alert, provided by Workplace Safety Austeam, who passes on information to the businesses, as required 	stralia Pty Ltd, which is reviewed by the HSE
	o WesCEF is a member of Chemistry Australia who also regularly issues u	pdates on legislative changes
	 Subscribe to DMIRS mailing list for notification of safety alerts 	
	Kleenheat is a member of Gas Energy Australia (industry updates).	
	Process and Policy Rating: Adequately defined (A) Performan	nce Rating: Performing effectively (1)

4.3 Asset disposal

Key process: Asset disposal is the consideration of alternatives for the disposal of surplus, obsolete, under-performing or unserviceable assets

Expected outcome: The asset management framework minimises holdings of surplus and underperforming assets and lowers service costs. The cost-benefits of disposal options are evaluated

Overall Process and Policy/Performance rating: Adequately defined (A) / Performing effectively (1)

Effectiveness criteria	Findings		
3.1 Under-utilised and under- performing assets are identified as	Through discussions with the Reticulation and Standards Manager and examination of relevant documentation, we determined that:		
part of a regular systematic review process	 Kleenheat completes an annual financial performance review of assets 	f its distribution networks to identify under-performing	
	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 maintained to those customers at the extremity of the network network length and lead to under performance of the network the network is being expanded. 	x. As networks expand, pressure can be lost due to	
	Process and Policy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)	
3.2 The reasons for under- utilisation or poor performance are	Through discussions with the Reticulation and Standards Manager adetermined that:	and examination of relevant documentation, we	
critically examined and corrective action or disposal undertaken	 Maintenance and inspection procedures are in place to monito order information is reviewed upon completion and reported to investigation or action is required 		
	 As part of the routine investigation of events such as failures or poor performance 	safety incidents, root cause analyses are completed for	
	There were no disposals of Tier 1 distribution network assets d	uring the review period.	
	Process and Policy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)	

Effectiveness criteria	Findings	
3.3 Disposal alternatives are evaluated Through discussions with the Reticulation and Standards Manager, we determined that due to acceptable financial performance and the long 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 I of its networks, which ranges from 20 to 50+ years, dependant on the age of each network and the type of material pipework.		ssets, Kleenheat has not considered disposal alternatives his point in time given the significant remaining lifespan
	Process and Policy Rating: Adequately defined (A)	Performance Rating: Not rated
3.4 There is a replacement strategy for assets.	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 Gas Standards (Gas Supply and System Safety) Regulations 2007. Replacement monitoring is performed through the Oracle eAM module.	
Process and Policy Rating: Adequately defined (A) Performance Rating: Performing effective and Policy Rating: Performance Rat		Performance Rating: Performing effectively (1)

4.4 Environmental analysis

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

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

Overall Process and Policy/Performance rating: Adequately defined (A) / Improvement required (2)

Effectiveness criteria	Findings	
4.1 Opportunities and threats in the asset management system	Through discussion with the Reticulation and Standards Manager relevant documentation, we determined that:	and WesCEF Environmental Advisor, and examination of
environment are assessed	• Threats in the asset management system environment for safe delivery of gas is assessed and a procedure to management distribution network supply disruption scenarios is in place	
	Hazard identification and risk assessment are detailed in Klee	nheat and WesCEF Safety Management System documents
	 Kleenheat has developed a range of metrics that are used to a critical control measures and in addition, the overall performa 	
	Network expansion/creation opportunities are explored and i new developments occur in close proximity to existing netwo	
	Process and Policy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)

Effectiveness criteria	Findings
4.2 Performance standards (availability of service, capacity,	Through discussion with the Reticulation and Standards Manager and Maintenance and Training Specialist Lead, and examination of relevant documentation, we determined that:
continuity, emergency response, etc.) are measured and achieved	• There are a total of 14 KPIs that are tracked for performance by Kleenheat for its Distribution networks as part of its Asset Management Plan. Performance KPI's include:
	o Damages to mains and services
	 Leaks detected on mains, services and at consumer meters
	o Supply interruptions per customer
	Number of emergency calls for the Licence
	 Attendance to emergency calls attended within a two-hour time frame
	o Percentage of unaccounted for gas
	 Odour testing and odour corrective actions
	o Propane compliance
	 Training in technical and safety requirements
	o Safety - number of lost time injuries
	• Kleenheat does not use KPIs associated with percentage of corrective work orders compared to preventative work orders, or for the number of repeat maintenance work orders. Such KPIs would enable Kleenheat to better monitor contractor work quality within its Distribution Network System. We discussed this matter with Kleenheat staff as an improvement opportunity to consider as part of Kleenheat's continuous improvement approach
	The Network KPI report is to be reviewed during quarterly Distribution Network Management meetings, which involve the 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
	 While not reported in KPIs, pressure monitoring is undertaken to assess current capacity and capacity to add users. An Internal Safety Case Audit conducted in March 2023 reported that FY 2023 (to date) pressure monitoring tasks for the distribution networks were overdue. We confirmed that overdue pressure monitoring for Albany and Leinster networks were actioned in July 2023 and Margaret River networks were actioned in June 2023
	 Kleenheat does not use KPIs associated with percentage of corrective work orders compared to preventative work orders, or for the number of repeat maintenance work orders. Such KPIs would enable Kleenheat to better monitor contractor work quality within its Distribution Network System. We discussed this matter with Kleenheat staff as an improvement opportunity to consider as part of Kleenheat's continuous improvement approach
	The Network KPI report is to be reviewed during quarterly Distribution Network Management meetings, which involve the 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

Effectiveness criteria	Findings
4.2 (cont.)	 While not reported in KPIs, pressure monitoring is undertaken to assess current capacity and capacity to add users. An Internal Safety Case Audit conducted in March 2023 reported that FY 2023 (to date) pressure monitoring tasks for the distribution networks were overdue. We confirmed that overdue pressure monitoring for Albany and Leinster networks were actioned in July 2023 and Margaret River networks were actioned in June 2023
	• Kleenheat achieved 10 of 14 KPI's in FY 2021, and 9 of 14 in FY 2022. For all KPIs that are not achieved, Kleenheat considers root causes and determines suitable corrective actions:
	For the four KPIs (NERCs usage, Unaccounted for Gas, Odour Corrective Actions and Training) that were not achieved in FY 2021, corrective actions undertaken in FY 2022 showed improvement in three KPIs. The Training KPI (% of training completed, with a target of 90%) showed further deterioration, which was attributed to COVID impacts, increased leak survey program and associated process improvements which hampered training opportunities in FY22. Kleenheat intends to achieve its 90% target through the execution of its existing training programs. Although the KPI associated with Unaccounted for gas showed improvement from FY 2021, the calculation remained above the maximum 5% target for the Riverslea network for FY 2022 (moved from 13.3% to 8.7%)
	For FY 2022, KPIs for Leaks detected on Mains, Leaks detected on Services and Damage to Services accounted for three of five below target metrics. The deterioration in Leak Detection performance was directly attributed to increased amount of leak surveys completed in FY22. The deterioration in Damage to Services performance related to three strikes on network service impacting 0.255% of services, which is marginally in excess of the 0.25% target. Kleenheat has continued to focus on maintaining safe work practices and repairing leaks in line with its performance targets. The other two below target metrics (Unaccounted for Gas and Training) carried over from the year 2021 as outlined above
	• Site specific Emergency Management Plans are available for each of the Kleenheat Distribution networks and annual emergency response (ER) drills are conducted in accordance with the Plan. However we observed the following aspects of Kleenheat's emergency preparedness activities that require strengthening:
	The Internal Safety Case Audit conducted in March 2023 reported that FY 2023 (to date) ER drills had not been conducted and were overdue. Required participants for the scheduled drills were not available, requiring the task to be rescheduled. At the time of our site visit in July 2023, we confirmed that overdue ER drills for Albany and Leinster networks were actioned in July 2023 and Margaret River networks completed in April 2023
	 ER drills are associated with site assets, site personnel and community safety matters however they are not thorough enough to include local authorities such as Fire Brigade, Medical Centres, Traffic Management, etc. (other than only Kleenheat contractors)

Effectiveness criteria	Findings	
	Recommendation 1/2023	
	Kleenheat add further rigour to its emergency preparedness b	y:
	 (a) Assigning priority to ER drills, particularly where there is a recent history of delays (b) Expand its ER drills to include local authorities such as Fire Brigade, Medical Centres, Traffic Management, etc. (other than only Kleenheat contractors) as outlined in the emergency management plans for Margaret River and Albany networks. The frequency of expanded drills should also be determined e.g. once every three years. At the time of our site visit, while contractor staff were aware of their emergency management obligations, they were not fully familiar with all specific details of Kleenheat's Emergency Management Plan. We discussed this matter with Kleenheat staff as an improvement opportunity for ensuring contractor staff are sufficiently aware of Kleenheat's Emergency Management Plan and emergency preparedness expectations. 	
	Process and Policy Rating: Requires some improvement (B)	Performance Rating: Corrective action required (3)

Effectiveness criteria	Findings	
4.3 Compliance with statutory and regulatory requirements	Through discussion with the Reticulation and Standards Manager, Environmental Advisor and consideration of relevant supporting documentation, we determined that Kleenheat has no specific environmental statutory and regulatory compliance requirements associated with its distribution networks in Leinster, Albany and Margaret River. However, Kleenheat operates and monitors its operations, of which distribution networks are part of, in accordance with the following statutory and regulatory requirements:	
	The AMP outlines the statutory and regulatory obligations for	the Licence
	The Safety Case outlines the safety regulatory obligations of the safety regulatory obligations.	he gas distribution system
	Wesfarmers releases a quarterly Environment and Sustainabil changes, which may affect Wesfarmers or may indicate poten	
	Wesfarmers subscribes to safety and environmental alerts, as legislative updates which are reviewed within the HSE team a	
	 Kleenheat renews its Safety Management System (last update Gas Standards Act 1972 and the Gas Standards (Gas Supply an 	
	 Kleenheat performs an internal review of the Safety Case ann Supply and System Safety) Regulations 2007. This was last per 	•
	 Kleenheat submits annual performance and compliance report with regulatory and statutory requirements. During the annual Manager meets with front line staff and contractors to review understanding if a breach may or has occurred during the report 	al compliance reporting, the Reticulation & Standards applicable GDL9 obligations to confirm their
	 Kleenheat front-line staff receive compliance training covering joint GTL10/GDL9 obligations to enable then when an issue needs escalating to the appropriate manager for review and classification for reporting purpo breach of obligations is to be recorded in Cintellate and corrective actions assigned as a result. 	
	Process and Policy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)

Effectiveness criteria	Findings
4.4 Service standard (customer service levels etc) are measured and achieved	Through discussion with the Reticulation and Standards Manager and inspection of relevant documentation, we determined that:
	• The Kleenheat call centre has set service levels, which are reported monthly and annually by the Customer Service Team. Service levels include:
	 Call response times Calls handled Calls abandoned positively and negatively
	 Kleenheat maintains an effective customer complaint handling process. We sighted the Customer Complaint Handling Policy and Procedure version 8 (June 2021)
	• 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:
	 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.
	• There were no issues noted in the review period in relation to Kleenheat's achievement of customer service levels.
	Process and Policy Rating: Adequately defined (A) Performance Rating: Performing effectively (1)

4.5 Asset operations

Key process: Asset operations is the day-to-day running of assets (where the asset is used for its intended purpose)

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

Overall Process and Policy/Performance rating: Requires some improvement (B) / Improvement required (2)

Effectiveness criteria	Findings	
5.1 Operational policies and procedures are documented and linked to service levels required	Through discussion with the Reticulation and Standards Manager, Maintenance and Training Specialist and Kleenheat's Main Contractor for Albany, examination of relevant documentation, and conduct of a site visit to Kleenheat's Albany location, we determined that:	
	 Kleenheat's AMP provides an outline of the levels of service recreiably and profitably, within legislative requirements. The AM maintenance activities meet service level requirements 	•
	 Kleenheat's 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 Regular updates of policies, Standard Operating Procedures and Permit to Work Systems for the production and operation elements of Kleenheat's gas distribution activities have been maintained 	
	 Use of compression fittings (Riverslea, Leinster) and mechanica leakage increase. Therefore, Kleenheat leak surveys its Riversle to identify and remove leaking fittings before they develop into 	a and Leinster networks at an increased frequency in order
	Process and Policy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)

Effectiveness criteria	Findings	
5.2 Risk management is applied to prioritise operations tasks	 Through discussion with the Reticulation and Standards Manager, examination of relevant documentation, and conduct of site visit to Kleenheat's Albany location, we determined that: The Distribution Network Qualitative Risk Assessment (last modified March 2023) 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 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 Qualitat (trivial, minor, severe, major, catastrophic).	ive Risk Assessment are categorised into five risk levels
	Process and Policy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)

Effectiveness criteria	Findings	
5.3 Assets are documented in an asset register including asset type,	Through discussion with the Reticulation and Standards Manager, examination of relevant documentation and examination of Kleenheat's Oracle system and Inspectivity portal, we determined that:	
location, material, plans of components, and an assessment of assets' physical/structural condition	 Kleenheat utilises its Oracle eAM system as its asset register for its network assets. The Oracle eAM system includes provision for information relating to: Asset group and accounting class Asset location Serial number Kleenheat has also implemented the Inspectivity portal that provides further details of assets listed in the Oracle eAM system in order to provide activity and inspection logs of additional assets and their upcoming inspection dates. Those additional assets are: 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 (assets owned by the consumer) – Ball Valves, Regulator, Meter However, the Oracle eAM system does not have the capability to communicate with the Inspectivity portal leading to discrepancies in data between the two systems The Reticulation and Standards Manager acknowledged the limitations of the Oracle eAM system and confirmed that Kleenheat is seeking to implement an eAM system that can provide seamless Work Order management and resolve the issues faced with the existing Oracle eAM system. As the timing of this transition is unclear, clarity is required to better manage expectations of any future audits. We discussed this matter with Kleenheat staff as an improvement opportunity. 	
	Process and Policy Rating: Requires some improvement (B) Performance Rating: Improvement required (2)	
5.4 Accounting data is documented for assets	Through discussion with the Reticulation and Standards Manager and examination of relevant documentation, we determined that relevant accounting data is documented for assets included in the Fixed Asset Register. 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.	
	Process and Policy Rating: Adequately defined (A) Performance Rating: Performing effectively (1)	

Effectiveness criteria	Findings	
5.5 Operational costs are measured and monitored	Through discussion with the Reticulation and Standards Manager and the Maintenance and Training Specialist, and examination of relevant documentation, we determined that:	
	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 relevant technician within the final submitted work order, 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 basis. 	
	Process and Policy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)

Effectiveness criteria	Findings
5.6 Staff resources are adequate and staff receive training	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 Albany location we determined that:
commensurate with their responsibilities	• 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
	• Technicians are provided with a physical copy of the Distribution Network Manual. Based on discussions during the site visit, new requirements are provided to the technicians and updated references relevant to the work order are provided using the Inspectivity portal, an electronic inspection/audit tool for inspections, new connections, calibrations, leak surveys and pressure testing. This communicates with the work order system within Oracle
	Kleenheat utilises contractors to respond to emergency response calls and aid in maintenance and inspection work
	 Kleenheat measures and tracks 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 assessments are run by the Maintenance and Training Specialist. Required training is outlined in the Retic, Gas Network Staff Competence Framework and Plan. We sighted the most recent report, which shows current contractor training levels across 29 different technical and skill-based competencies
	• In relation to the Leinster network, Kleenheat has recognised that BHP gas fitters, who perform other tasks in the town site and who could be made available to perform tasks on Kleenheat's network, are prevented from performing work on Kleenheat's' network until they have been trained in Kleenheat's procedures. At the time of our review, the Maintenance and Training Specialist was making arrangements to provide that training to BHP gas fitters
	The following matters indicate an exposure in Kleenheat's training requirements and records:
	Practical competency assessments for the more critical maintenance tasks have been completed by the Maintenance & Training Specialist and the results of the practical assessments have been manually documented, however at the time of our review, those results had not been fully captured in Kleenheat's system/electronic records. In addition, Kleenheat had not yet fully developed a maintenance training package that addresses the more routine maintenance tasks. Kleenheat is currently in the process of finalising a training cluster for staff, which will be accessed from WesCEF's Elevate Learning Management System, 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. Each of these tasks/projects are planned for completion within the 2023/24 financial year.

Effectiveness criteria	Findings	
5.6 (cont.)	 The Internal Safety Case audit undertaken in March 2023 reported that Kleenheat had not completed a review of the current competency compliance matrix to ensure all contractors achieve full compliance with mandatory competency training activities. Review of the KPI metrics recorded for Training indicate metrics not meeting Kleenheat's 80% target in FY21 and FY22, in part due to the recent development of a new automated system, which Kleenheat has recognised While contractor staff were aware of their emergency management obligations and a selection of emergency response scenarios, they were not fully familiar with all specific details of Kleenheat's Emergency Management Plan Recommendation 2/2023 Kleenheat strengthen its competency and training arrangements and any related contractual arrangements to ensure all exposures to staff, contractor and network safety and addressed through appropriate training and competency programs and records. Contractor apprentice training is currently not captured with Kleenheat's Elevate on-line training portal, which is designed to track training and assessment (theory and practical) of competencies. Although Kleenheat does not assess apprentice competency, there is value in tracking the basic training provided to apprentices in Kleenheat procedures. We discussed this matter with Kleenheat staff as an improvement opportunity. 	
	Process and Policy Rating: Requires some improvement (B)	Performance Rating: Corrective action required (3)

4.6 Asset maintenance

Key process: Asset maintenance is the upkeep of assets

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

Overall Process and Policy/Performance rating: Requires some improvement (B) / Improvement required (2)

Effectiveness criteria	Findings	
6.1 Maintenance policies and procedures are documented and	Through discussion with the Reticulation and Standards Manager, examination of relevant documentation, and conduct of a site visit to Kleenheat's Albany location we determined that:	
linked to service levels required	 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 	
	• The Distribution Systems Asset Maintenance Plan was developed to comply with the requirements of AS/NZS 4645.1 and is a supporting document to the approved Kleenheat Distribution Safety Case. The Plan outlines:	
	 The maintenance and monitoring requirements of both Tier 1 and 2 distribution network assets 	
	 The importance of these maintenance and monitoring activities 	
	 The procedures that shall be followed to ensure that activities are completed safely 	
	 The frequency at which each requirement must be completed 	
	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 Kleenheat's management of a safe, reliable and profitable distribution system.	
	Process and Policy Rating: Adequately defined (A) Performance Rating: Performing effectively (1)	

Effectiveness criteria	Findings	
6.2 Regular inspections are undertaken of asset performance	Through discussion with the Reticulation and Standards Manager, examination of relevant documentation, testing of maintenance activities and conduct of site visits to Kleenheat's Albany location we:	
and condition	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) using the Inspectivity portal 	
	Observed Kleenheat's continued progression towards documenting completed inspection and maintenance activities electronically. The increasing use of the Inspectivity portal to capture work documentation is allowing Kleenheat to:	
	 Develop a performance history for each inspection location within a network 	
	Reduce administrative burden	
	 Reduce variability of completed work documentation supplied by Network Contractors 	
	o Improve communication with Network Contractors	
	 Monitor progress made by Network Contractors during leak surveys 	
	Determined that inspections were scheduled and undertaken regularly throughout the review period	
	Determined that Kleenheat's Asset Maintenance Plan outlines key maintenance activities and addresses:	
	 The basis for inspection strategy, wider asset management decisions and key risks associated with performing the required maintenance 	
	Inspection frequency	
	References to key procedures	
	Compliance metrics/targets where applicable	
	 Technology/tools required to perform the inspection 	
	 Determined that Kleenheat assesses the effectiveness of the inspections by reviewing results from surveys, inspections and maintenance. For 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. 	
	Process and Policy Rating: Adequately defined (A) Performance Rating: Performing effectively (1)	

Effectiveness criteria	Findings	
6.3 Maintenance plans (emergency, corrective and preventative) are documented and	Through discussion with the Reticulation and Standards Manager and Maintenance Planner, examination of relevant documentation, sampling of maintenance tasks, and conduct of a site visit to Kleenheat's Albany location we determined that:	
completed on schedule	 Kleenheat's Distribution Systems Asset Maintenance Plan (last revised in July 2023) 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 	
	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	
	• In accordance with the Distribution Network Maintenance Process Flow Chart, Preventative Maintenance Work Orders are listed in the Oracle eAM system and the Maintenance Planner is required to scope out the works in the Inspectivity Portal, then raise a purchase order for the relevant maintenance contractor to complete the tasks as per the schedule. For any corrective maintenance tasks arising from inspections, the Maintenance Planner scopes out the works and raises the purchase order for the contractor to complete tasks on schedule.	
	Contractors upload all documentation upon completion in the Inspectivity portal, which is then reviewed and the Maintenance Planner updates the Oracle eAM system to reflect the work order status accordingly	
	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	
	• 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	
	Where applicable, Kleenheat's maintenance contractor will be responsible for performing allocated maintenance activities at the frequencies identified in the Asset Maintenance Plan. The Contractor will liaise with the Kleenheat Reticulation Manager and the Maintenance Manager KH Operations as appropriate regarding periodic reviews and day to day activities as required.	

Effectiveness criteria	Findings	
6.3 (cont)	• Some high priority maintenance tasks were improperly recorded in the Oracle eAM database as overdue and / or cancelled, plus there were instances where the Start Date and Completion Dates of work orders were identical, which did not match Inspectivity records of actual work. The Reticulation and Standards Manager explained that the task of tracking work orders was performed by him through manual white board entries and that Oracle eAM did not perform the function of Work Order management as intended. Although the Inspectivity portal was developed to capture more detail to scope out the Work Orders for contractors' reference, data in Inspectivity did not completely match Oracle eAM data. As detailed at item 5.3 above, the Reticulation and Standards Manager acknowledged the limitations of the Oracle eAM system and confirmed that Kleenheat is seeking to implement an eAM system (a project commenced in the 2023/24 FY) that can provide seamless Work Order management and resolve the issues faced with the existing Oracle eAM system. As the timing of this transition is unclear, clarity is required to better manage expectations of any future audits. We discussed this matter with Kleenheat staff as an improvement opportunity.	
	The following elements of Kleenheat's maintenance plans and activity require corrective action:	
	 The Maintenance Planner had not been updating Oracle eAM with correct forecasted/scheduled start dates for maintenance tasks per the stated requirements of Kleenheat's Distribution Network Maintenance Process Flow Chart. The respective roles of the Maintenance Planner and the Reticulation and Standards Manager can be further clarified The Internal Safety Case Audit Report dated March 2023 reported that the following condition monitoring activities were not completed as scheduled during the audit period: 	
	 Leinster mains leak survey due to a software malfunction with the GPS location equipment. The survey was subsequently performed in July 2023 	
	 Oyster Harbour and Leinster pressure monitoring, which was rescheduled to match resource availability and subsequently performed in May and July 2023 respectively 	
	 The Internal Safety Case Audit Report dated March 2023 identified the need for Kleenheat to develop a process to ensure overdue PM's are escalated to ensure their completion. 	
	Recommendation 3/2023	
	Kleenheat further strengthen its maintenance planning and completion processes by:	
	 (a) Ensuring that Oracle eAM be updated by the Maintenance Planner with correct forecasted/scheduled start dates for maintenance tasks as outlined in the process flow chart (b) Further clarifying the roles and responsibilities of the Maintenance Planner and the Reticulation and Standards Manager (c) Establishing a process for escalation of overdue PM tasks. 	
	Process and Policy Rating: Requires some improvement (B) Performance Rating: Corrective action required (3)	

Effectiveness criteria	Findings	
6.4 Failures are analysed and operational/maintenance plans	Through discussion with the Reticulation and Standards Manager, examination of relevant documentation, testing of maintenance activities and conduct of a site visit to Kleenheat's Albany location we determined that:	
adjusted where necessary	 Incidents and failures within the Gas Distribution Systems are reported and investigated in accordance with standardised methods 	
	 Kleenheat's Safety Management System 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. Kleenheat's Cintellate incident investigation system includes: Identification of contributing factors 	
	 Identification of effective controls and their implementation in an agreed timeframe Identification of other improvements that can be made. 	
	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.	
	 Leak surveys of meters on the Leinster network have resulted in several corrective work orders being raised associated with identified leaks. Although the Reticulation and Standards Manager is satisfied that the number of leaks has trended down, the root cause of these leaks has not been assessed to determine the percentage of repeat leaks as a metric, not only to track contractor's work quality but also to see the effectiveness of such repairs being undertaken and how this may further impact upon the service levels of aging infrastructure for Leinster network. We discussed this matter with Kleenheat staff as an improvement opportunity We reviewed in detail the findings of Incident Number 92923, which occurred in February 2023 and related to Rapids Landing Margaret River Network piping being damaged by excavation by the civil contractor, leading to an estimated 102 litres of gas being discharged. The incident occurred on a construction site, which was contained by protective fencing and managed by the civil contractor prior to Kleenheat taking up management of the network asset. Kleenheat assessed the potential to do harm as the site was located at close proximity to a public road and nearby school grounds, and undertook a root cause analysis before concluding that the incident represented a low risk in accordance with Kleenheat's corporate risk matrix. We are of the view that the incident should have been assigned a higher risk rating, with commensurate corrective actions to address any lessons learned (e.g. relating to contractual arrangements, planning, or application of Kleenheat's procedures). It appears that Kleenheat's corporate Risk Matrix alone does not suitability address incidents of this nature, with further guidance required to ensure incidents with potential to do significant harm are treated appropriately. We discussed this matter with Kleenheat staff as an improvement opportunity. 	
	Process and Policy Rating: Requires some improvement (B) Performance Rating: Improvement required (2)	

Effectiveness criteria	Findings	
6.5 Risk management is applied to prioritise maintenance tasks	 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 Albany location, we determined that: 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 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 Some 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 The following elements of Kleenheat's maintenance plans and activity require improvement. We discussed these matters with Kleenheat staff as improvement opportunities: We observed that the recent leak survey at Leinster and corrective maintenance work order priorities wer	
	Process and Policy Rating: Adequately defined (A) Performance Rating: Improvement required (2)	

Effectiveness criteria	Findings	
6.6 Maintenance costs are measured and monitored	Through discussion with the Reticulation and Standards Manager and the Maintenance and Training Specialist, and examination of relevant documentation, we determined that:	
	• 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 relevant technician within the final submitted work order, 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 basis.	
	Process and Policy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)

4.7 Asset management information systems

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

Expected outcome: The asset management information system provides authorised, complete and accurate information for the day-to-day 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

Effectiveness criteria	Findings		
7.1 Adequate system documentation for users and IT	Through discussion with the Reticulation and Standards Manager and the Technology Governance and Risk Manager, and examination of relevant documentation we determined that:		
operators	The key systems in place are the:		
	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.		
	Process and Policy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)	
7.2 Input controls include suitable verification and validation of data	Through discussion with the Reticulation and Standards Manager a examination of relevant documentation, we determined that:	nd the Technology Governance and Risk Manager, and	
entered into the system	 All staff, contractors and authorised third parties with access to to sign off on the Electronic Usage Policy to at all times, uphold 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 Cintella management oversight and review in relation to verification or		
	Process and Policy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)	

Effectiveness criteria	Findings	
7.3 Security access controls appear adequate, such as passwords	 Through discussion with the Reticulation and Standards Manager and the Technology Governance and Risk Manager, and examination of relevant documentation, we determined that: The security access controls appear adequate, including the application of a refreshed Password Management Standard which includes controls such as increased characters for passwords, Multi Factor Authentication and periodic passphrase renewals 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 	
	Process and Policy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
7.4 Physical security access	Through discussion with the Reticulation and Standards Manager and Technology Systems Manager, we determined that:	
controls appear adequate	• 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 to one team 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
	Process and Policy Rating: Adequately defined (A) Performance Rating: Performing effectively (1)	

Effectiveness criteria	Findings	
7.5 Data backup procedures appear adequate and backups are tested	Through discussion with the Reticulation and Standards Manager and Technology Systems Manager and examination of relevant documentation we determined that:	
	Server rooms have two hours of UPS back up power and general	ator back up for longer periods without main power
	Generators are tested under load monthly at Murdoch and week	ekly 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.	
	Process and Policy Rating: Adequately defined (A) Performance Rating: Performing effectively (1)	
7.6 Computations for licensee performance reporting are	Through discussion with the Reticulation and Standards Manager and examination of relevant documentation we determined that:	
accurate	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.	
	Process and Policy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)

Effectiveness criteria	Findings	
7.7 Management reports appear adequate for the licensee to	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:	
monitor licence obligations	Call centre performance is monitored through the CISCO Call St	atistics 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 n	ew 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 Process and Policy Rating: Adequately defined (A) Performance Rating: Performing effectively (1)	
7.8 Adequate measures to protect asset management data from	Through discussion with Chief Information Officer and Technology Systems Manager, and examination of relevant documentation, we determined that:	
unauthorised access or theft by persons outside the organisation • The Electronic Usage Policy applies to all employees, contractors and authorised third parties. It states to remain considerable the organisation information and intellectual property are the property of WesCEF and are at all times to remain considerable the organisation.		·
	Penetration testing is performed by a professional testing organ	nisation 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 	
	Process and Policy 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: The risk management framework effectively manages the risk that the licensee does not maintain effective service standards

Overall Process and Policy/Performance rating: Adequately defined (A) / Improvement required (2)

Effectiveness criteria	Findings
8.1 Risk management policies and procedures exist and are applied to	Through discussion with the Reticulation and Standards Manager and inspection of relevant documentation, we determined that:
minimise internal and external risks.	The WesCEF Hazard and Risk Management framework, which covers Kleenheat's distribution network asset management system, outlines the process for identifying risks and implementing controls to minimise the risk. The high-level steps are:
	o 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
	• Kleenheat's Safety Case and Distribution Network Qualitative Risk Assessment are 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. We examined the JSA applied to the May 2023 Rapids Landing network expansion activities
	Some maintenance tasks are underpinned by risk-based thinking. For example, 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 networks

Effectiveness criteria	Findings	
8.1 (cont)	 The following aspects of Kleenheat's application of a risk based approach to maintenance activity require improvement. We discussed these matters with Kleenheat staff as improvement opportunities: We observed that the recent leak survey at Leinster and corrective maintenance work order priorities were determined not through a risk assessment approach for the task but on contractors being available (i.e. because they are in Leicester for days or weeks at a time, due to the cost of travel), which is indicative that risk management is not being utilised effectively to prioritise maintenance tasks The Internal Safety Case Audit report dated March 2023 reported that preventative maintenance tasks need to have a criticality identifier for work planners to schedule works more effectively as there were many overdue tasks in the database with no escalation process to address the issues. 	
	Process and Policy Rating: Adequately defined (A)	Performance Rating: Improvement required (2)
8.2 Risks are documented in a risk register and treatment plans are implemented and monitored	 Process and Policy Rating: Adequately defined (A) Performance Rating: Improvement required (2) 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: 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 The Distribution Network 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. Those risks: Are graded on an ascending scale of negligible, low, intermediate, high and extreme based on probability and consequence Rated as high or extreme are considered unacceptable and immediate action are required to reduce the risk ALARP Include asset failure as a result of operational, network design, maintenance and commissioning / decommissioning activities 	
	The Qualitative Risk Assessment is audited internally in conjunction.	·
	 Kleenheat monitors treatments through specialist assessments, planned inspections, safe working practice observations, key performance indicators and incident reporting 	
	Process and Policy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)

Effectiveness criteria	Findings	
8.3 Probability and consequences of asset failure are regularly	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:	
assessed	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:	
	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 Gas Standards (Gas Supply and System Safety) Regulations 2007. We sighted evidence of those reviews undertaken during the review period 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. 	
	Process and Policy Rating: Adequately defined (A) Performance Rating: Performing effectively (1)	

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 major disruptions to service standards

Overall Process and Policy/Performance rating: Requires some improvement (B) / Improvement required (2)

Effectiveness criteria	Findings
9.1 Contingency plans are documented, understood and	Through discussion with the Reticulation and Standards Manager and Maintenance and Training Specialist, examination of relevant documentation, and visit to Kleenheat's Albany locations, we determined that:
tested to confirm their operability	Kleenheat has three levels of emergency response procedures, these are:
and to cover higher risks	 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:
	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.

Effectiveness criteria	Findings	
9.1 (cont)	• Site specific Emergency Management Plans are available for each of the Kleenheat Distribution networks and annual ER drills are conducted in accordance with the Plan.	
	 We sighted evidence that the emergency response tests were run: 	
	In Margaret River (Rapids Landing) in May 2021	
	 In Albany (Oyster Harbour) in May 2021 	
	■ In Leinster in July 2021.	
	 As detailed at 4.2 above, we also observed the following aspects of Kleenheat's emergency preparedness activities that require strengthening: 	
	 The Internal Safety Case Audit conducted in March 2023 reported that FY 2023 (to date) ER drills had not been conducted and were overdue. At the time of our site visit in July 2023, we confirmed that overdue ER drills for Albany and Leinster networks were actioned in July 2023 and Margaret River networks completed in April 2023 ER drills are associated with site assets, site personnel and community safety matters however they are not thorough enough to include local authorities such as Fire Brigade, Medical Centres, Traffic Management, etc. (other than only Kleenheat contractors) Recommendation 1/2023 addresses the opportunity for improvement in Kleenheat's Contingency Planning process. 	
	At the time of our site visit, while contractor staff were aware of their emergency management obligations, they were not fully familiar with all specific details of Kleenheat's Emergency Management Plan. We discussed this matter with Kleenheat staff as an improvement opportunity for ensuring contractor staff are sufficiently aware of Kleenheat's Emergency Management Plan and emergency preparedness expectations.	
	Process and Policy Rating: Requires some improvement (B) Performance Rating: Improvement required (2)	

4.10 Financial planning

Key process: Financial brings together the financial elements of the service delivery to ensure its financial viability over the long term

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

Effectiveness criteria	Findings	
10.1 The financial plan states the financial objectives and identifies	Through discussion with the Reticulation and Standards Manager and Manager Planning and Analysis, and examination of relevant documents, we determined that:	
strategies and actions to achieve those	WesCEF prepares a five-year Corporate Plan on an annual basis, which incorporates Kleenheat's LPG Retic business operations (including metered gas – for the relevant Tier 1 distribution networks covered under the Licence)	
	The Corporate Plan provides strategies, assumptions, analyses and a strategies.	and financial forecasts over a five-year period.
	Process and Policy 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	Through discussion with the Reticulation and Standards Manager and Manager Planning and Analysis, and consideration of Kleenheat's financial planning mechanisms, we observed that the Kleenheat LPG Retic business annual budget is aligned with Kleenheat's overall business plans and is expected to be fully funded through its operational revenue, supported by Wesfarmers Central Treasury.	
	Process and Policy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
10.3 The financial plan provides projections of operating statements (profit and loss) and statement of financial position	Through discussion with the Reticulation and Standards Manager and Manager Planning and Analysis, and consideration of Kleenheat's financial planning mechanisms, we determined that the annual WesCEF Corporate Plan includes a rolling five-year projection of profit and loss and the financial position attributable to each WesCEF operation, including Kleenheat's LPG Retic business.	
(balance sheets)	Process and Policy Rating: Adequately defined (A)	Performance Rating: Performing effectively (1)
10.4 The financial plan provides firm predictions on income for the	Through discussion with the Reticulation and Standards Manager and Manager Planning and Analysis, and consideration of Kleenheat's financial planning mechanisms, we determined that:	
next five years and reasonable	The annual WesCEF Corporate Plan includes firm predictions on income for a rolling five year period	
predictions beyond this period	• Kleenheat has forecasted the lifecycle cost of owning and operating assets in the Tier 1 distribution network until the 2030 financial year.	
	Process and Policy Rating: Adequately defined (A) Performance Rating: Performing effectively (1)	

Effectiveness criteria	Findings	
10.5 The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the	Through discussion with the Reticulation and Standards Manager, and Manager Planning and Analysis, and consideration of Kleenheat's financial planning mechanisms, we determined that the annual WesCEF Corporate Plan and associated budget provides a sufficient level of detail relating to forecast operational, maintenance and administrative costs, as well as capital expenditure requirements.	
services	Process and Policy 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	Through discussion with the Reticulation and Standards Manager and Manager Planning and Analysis, and consideration of Kleenheat's financial planning mechanisms, we determined that: • PowerBI is used to monitor real time actual expenditure against the budgeted amount • Monthly reports are generated in PowerBI and reviewed by relevant Managers, who are required to investigate any significant variances in order to determine whether any corrective action is required.	
,	Process and Policy 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 for these works 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: The capital expenditure plan provides reliable forward estimates of capital expenditure and asset disposal income. Reasons for the decisions and for the evaluation of alternatives and options are documented

Effectiveness criteria	Findings	
11.1 There is a capital expenditure plan covering works to be undertaken, actions proposed, responsibilities and dates	 Through discussion with the Reticulation and Standards Manager and Manager Planning and Analysis, and examination of relevant documentation, we determined that while there is no specific capital expenditure plan for each relevant Tier 1 distribution network covered under the Licence, the following processes and documents address the criteria: 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	
	 Kleenheat's Capital Expenditure Authorisation Form defines project specific details such as responsibilities, dates and timelines, and is used in evaluating and seeking approval for Capex projects. Process and Policy Rating: Adequately defined (A) Performance Rating: Performing effectively (1) 	
11.2 The capital expenditure plan provides reasons for capital expenditure and timing of expenditure	 Through discussion with the Reticulation and Standards Manager and Manager Planning and Analysis, and consideration of Kleenheat's financial and capital planning mechanisms, we determined that: A summary of capital expenditure is included in the annual Corporate Plan and associated budget Kleenheat's 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. Process and Policy Rating: Adequately defined (A) 	

Effectiveness criteria	Findings	
11.3 The capital expenditure plan is consistent with the asset life and	Through discussion with the Reticulation and Standards Manager and Manager Planning and Analysis, and consideration of Kleenheat's financial and capital planning mechanisms, we determined that:	
condition identified in the asset management plan	• Kleenheat has forecast the lifecycle cost of owning and operating assets in the Tier 1 distribution network until the 2030 financial year	
	 Kleenheat's AMP forecasts three years of capital and operational expenditure for each Tier 1 asset per site, which is consistent with figures in the budget. Process and Policy Rating: Adequately defined (A) Performance Rating: Performing effectively (1) 	
11.4 There is an adequate process to ensure the capital expenditure plan is regularly updated and implemented	Through discussion with the Reticulation and Standards Manager and Manager Planning and Analysis, and consideration of Kleenheat's financial and capital planning mechanisms, we determined that: • Capital expenditure requirements are forecast during the annual budgeting process, which takes place in May each year • Capital expenditure requirements are reforecast in the annual corporate planning process, which is initiated in November each year Process and Policy Rating: Adequately defined (A) Performance Rating: Performing effectively (1)	

4.12 Review of asset management system

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

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

Effectiveness criteria	Findings	
12.1 A review process is in place to ensure the asset management plan	Through discussions with the Reticulation and Standards Manager and the Maintenance and Training Specialist, and examination of relevant documentation, we determined that:	
and the asset management system described in it remain current	 The Reticulation and Standards Manager has scheduled a Ci reviewed January 2023) where performance metrics will be 	
	 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 Process and Policy Rating: Adequately defined (A) Performance Rating: Performing effectively (1) 	
12.2 Independent reviews (e.g. internal audit) are performed of the asset management system	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 2020 AMS Review.	
	Wesfarmers Internal Audit performs an annual internal audit on Department of Mines, Industry, Regulation and Safety (DMIRS).	•
	Process and Policy Rating: Adequately defined (A) Performance Rating: Performing effectively (1)	

5. Status of recommendations addressing asset system deficiencies from the previous review

Reference (no./year)	Process and policy deficiency / Performance deficiency (Rating / Reference number, Asset management process & effectiveness criterion / Details of deficiency)	Reviewer's recommendation or action planned	Date resolved	Further action required (Yes/No/Not Applicable) Further action required (including current recommendation reference, if applicable)	
A. Resolved d	A. Resolved during current review period				
B. Unresolved	B. Unresolved at end of current review period				
Reference Reference number, Asset management process & effectiveness Reviewer's recommendation or action planned Further action required (no./year)		Further action required (Yes/No/Not Applicable) Further action required (including current recommendation reference, if applicable)			
Not applicable - there were no recommendations addressing asset system deficiencies from the previous (2020) review					

Appendix A – Review Plan



Wesfarmers Kleenheat Gas Pty Ltd

Gas Distribution Licence (GDL9)

2023 Asset Management System Review

Review Plan

June 2023

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Introduction

Overview

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**).

Section 11Y of the Act requires Kleenheat to provide to the ERA an asset management system review (the **review**) report conducted by an independent expert acceptable to the ERA not less than once in every 24-month period unless otherwise approved by the ERA. With the ERA's approval, Assurance Advisory Group (**AAG**) has been appointed to conduct the review for the period 1 June 2020 to 31 May 2023 (**review period**).

The Licence relates to Kleenheat's operations as a supplier of gas from Liquefied Petroleum Gas distribution systems that it owns and operates in Oyster Harbour (Albany), Margaret River and Leinster.

The review will be conducted in accordance with the ERA's August 2022 edition of the 2019 Audit and Review Guidelines: Electricity and Gas Licences (Review Guidelines). In accordance with the Review Guidelines this document represents the Review Plan (the Plan) that is to be agreed upon by AAG and Kleenheat and presented to the ERA for approval.

Objective

The objective of the review is to independently examine the effectiveness and performance of the asset management system established for the assets subject to Kleenheat's Licence during the review period.

Scope

In accordance with the Review Guidelines, the review will consider the effectiveness of Kleenheat's existing control procedures within the 12 key processes in the asset management life cycle as outlined below at Table 1. Each key process and effectiveness criteria is applicable to Kleenheat's Licence and as such will be individually considered in this review.

Table 1 – Asset management system 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 is integrated with business planning
	1.3 Service levels are defined in the asset management plan
	1.4 Non-asset operations (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.
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

	Key processes	Effectiveness criteria
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	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
7.	Asset management	7.1 Adequate system documentation for users and IT operators
	information systems	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 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

Key processes	Effectiveness criteria
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 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 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

Kleenheat's responsibility for maintaining an effective asset management system

Kleenheat is responsible for putting in place policies, procedures and controls, which are designed to provide for an effective asset management system for assets subject to the Licence.

AAG's responsibility

Our responsibility is to express a limited assurance conclusion on 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 has not been established and maintained, in all material respects, in accordance with the Licence as measured by the effectiveness criteria in the Guidelines for the period from 1 June 2020 to 31 May 2023. The review will be conducted in accordance with Australian Standard on Assurance Engagements ASAE 3500 Performance Engagements (ASAE 3500), issued by the Australian Auditing and Assurance Standards Board.

ASAE 3500 requires that we plan and perform the review to obtain 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 risk.

Limitations of use

Our report will be produced solely for the information and internal use of Kleenheat and is not intended to be and should not be used by any other person or entity. No other person or entity is entitled to rely, in any manner or for any purpose, on our report.

We understand that a copy of our report will be provided to the ERA for the purpose of meeting Kleenheat's reporting requirements of section 11Y of the Act. We agree that a copy of our report may be provided to the ERA for its information 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 reports.

This plan is intended solely for the use of Kleenheat for the purpose of its reporting requirements under section 11Y of the Act.

Inherent limitations

A review consists primarily of making enquiries, primarily of persons responsible for the management of assets, applying analytical and other review procedures, and examination of evidence for a small number of transactions or events. A review is substantially less in scope than a reasonable assurance "audit" conducted in accordance with ASAEs. Accordingly, we will not express an audit opinion in the asset management system review report.

An assurance engagement relating to the period from 1 June 2020 to 31 May 2023 will not provide assurance on whether the AMS for assets subject to the Licence will remain effective in the future.

Independence

In conducting our engagement, we will comply with the independence requirements of the Australian professional accounting bodies.

Approach

The review will be conducted in three distinct phases, being a risk assessment, system analysis/policy and procedure review and examination of performance. From the review results, a report will be produced to outline findings, overall assessments and recommendations for improvement in line with the Review Guidelines. Each step of the review is discussed in detail below.

Risk assessment

The review will focus on identifying or assessing those activities and management control systems to be examined and the matters subject to review. Therefore, the purpose of conducting the risk assessment as a preliminary phase enables the reviewer to focus on pertinent/high risk areas of Kleenheat's asset management systems established for the assets subject to Kleenheat's licence. The risk assessment considers changes to Kleenheat's relevant systems and processes and any matters of significance raised by the ERA and/or Kleenheat. The level of risk and materiality of the process determine the level of review required i.e. the greater the materiality and the higher the risk, the more effort will be applied.

The first step of the risk assessment is the rating of the potential consequences of Kleenheat not effectively maintaining an asset management system for the assets subject to its licence, in the absence of mitigating controls. The consequence classification descriptions listed at Table 1 of the Reporting Manual, provides the risk assessment with context to enable the appropriate consequence rating to be applied to each component of the asset management system subject to review.

Once the consequence has been determined, the likelihood of Kleenheat not effectively maintaining an asset management system for the assets subject to its licence (with reference to the defined effectiveness criteria) is assessed using the likelihood rating listed at Table 17 of the Review Guidelines (refer to Appendix 1). The assessment of likelihood is based on the expected frequency of non-performance against the defined criteria, over a period of time.

Table 2 below (sourced from the Review Guidelines) outlines the combination of consequence and likelihood ratings to determine the level of inherent risk associated with each individual effectiveness criteria

Table 2: Inherent risk rating

		Consequence	
Likelihood	Minor	Moderate	Major
Likely	Medium	High	High
Probable	Low	Medium	High
Unlikely	Low	Medium	High

Once the level of inherent risk has been determined, the adequacy of existing controls is assessed in order to determine the level of control risk. Controls are assessed and prioritised as weak, moderate or strong dependant on their suitability to mitigate the risks identified. The control adequacy ratings used by this risk assessment are aligned to the ratings specified in the Review Guidelines (refer to Appendix 1-3). Once inherent risks and control risks are established, the audit priority can then be determined using the matrix specified in the Review Guidelines (refer to Table 3 below). Essentially, the higher the level of risk the more substantive testing is required.

Table 3: Assessment of Review Priority

	Prelimi	nary adequacy of existing controls		
Inherent Risk	Weak	Moderate Strong		
High	Review priority 1	Review Priority 2		
Medium	Review priority 3	Review Priority 4		
Low	Review Priority 5			

The following table outlines the review requirement for each level of review priority. Testing can range from extensive substantive testing around the controls and activities of particular processes (including physical inspection of asset infrastructure, which will be given greater attention for those processes with a review priority of 1, 2 or 3) to confirming the existence of controls through discussions with relevant staff.

Table 4: Review Priority Table

Priority rating	Review requirement
Review Priority 1	 Via interview and walkthrough, understand relevant processes and controls as they apply to each asset management system effectiveness criteria Examine relevant documents, registers and reports as they apply to each asset management system effectiveness criteria Obtain evidence of policies, procedures and controls being in place and working effectively Controls testing and extensive substantive testing of activities and/or transactions as they apply to each asset management system effectiveness criteria, including physical inspection of applicable asset infrastructure Follow-up and if necessary, re-test matters previously reported.
Review Priority 2	 Via interview and walkthrough, understand relevant processes and controls as they apply to each asset management system effectiveness criteria Examine relevant documents, registers and reports as they apply to each asset management system effectiveness criteria Obtain evidence of policies, procedures and controls being in place and working effectively Controls testing and moderate substantive testing of activities and/or transactions as they apply to each asset management system effectiveness criteria, including physical inspection of applicable asset infrastructure Follow-up and if necessary, re-test matters previously reported.
Review Priority 3	 Via interview and walkthrough, understand relevant processes and controls as they apply to each asset management system effectiveness criteria Examine relevant documents, registers and reports as they apply to each asset management system effectiveness criteria Limited controls testing (moderate sample size) of activities and/or transactions as they apply to each asset management system effectiveness criteria, including physical inspection of applicable asset infrastructure. Only substantively test transactions if further control weakness found Follow-up of matters previously reported.
Review Priority 4	 Confirmation of existing controls via walk through of key processes and examination of key documents including policies and procedures, compliance/breach registers and reports Follow-up of matters previously reported.
Review Priority 5	 Confirmation of existing controls via observation, discussions with key staff and/or reliance on key references including policies and procedures, compliance/breach registers and reports ("desktop review").

The risk assessment has been discussed with Kleenheat representatives to gain their input as to the appropriateness and factual accuracy of risk and control ratings and associated explanations. The key sources considered in reaching our preliminary assessment of the risk and control ratings were based on:

- Results and conclusions reported by the 2020 GDL9 AMS Review
- Our understanding of Kleenheat's assets and internal processes
- Any other factors that may influence the level or strength of controls
- Consideration of relevant circumstances and activity that trigger specific performance issues.

At this stage, the risk assessment can only be a preliminary assessment based on reading of documentation and interviews by the auditors. It is possible that the ratings and risk assessment comments may be revised as we conduct our work and new evidence comes to light. The risk assessment is attached at Appendix 2.

System analysis / policy and procedure review

The level of policy and procedure review required will be determined utilising the priority scale. Once the priority level has been defined, the review will consist of:

- Interviewing Kleenheat representatives and key operational and administrative staff responsible for the development and maintenance of policies and procedural type documentation
- Examination of documented policies and procedures for key functional requirements and consideration of their relevance to Kleenheat's asset management system requirements and standards.

The policy and procedure element of the asset management system review will be performed to provide a rating as defined under Table 5 (refer below).

Key documents which may be subject to review are not specifically disclosed in this plan. A list of documents examined will be included in the review report.

Examination of performance

The actual performance of the relevant controls and processes in place will then be examined via:

- Consideration of reports and references evidencing activity
- Interviews with Kleenheat representatives and key operational and administrative staff
- Physical visit to Kleenheat's Albany operations
- Consideration of the facilities' function, normal modes of operation and age.

A full work program will be completed to record the specific aspects of our review and examination of the performance of each asset management system key process. This work program will be based on:

- The review priority determined by the risk assessment to be applicable to each effectiveness criteria
- The results of the policy and procedure review, as described above
- The location of personnel and activity to be tested.

Review fieldwork will include a visit to Kleenheat's Albany operations, plus meetings with staff at Kleenheat's Perth office.

The performance effectiveness element of the asset management system review will be performed to provide a rating as defined under Table 6 (refer below).

Reporting

The review report will also be structured to address all of the minimum contents specified in section 5 of the Review Guidelines.

In accordance with the Review Guidelines, the reviewer must provide an assessment of both the process and policy rating (refer to Table 5 below and Table 8 of the Guidelines) and the performance rating (refer to Table 6 below and Table 9 of the Guidelines) for each of the key processes in Kleenheat's asset management system.

Kleenheat is responsible for providing a separate post review implementation plan, if required.

Table 5: Process and policy rating scale

Rating	Description	Criteria
Α	Adequately	Processes and policies are documented
	defined	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
В	Requires	Processes and policies require improvement
	some 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)
С	Requires substantial improvement	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	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 6: Performance rating scale

Rating	Description	Criteria
1	Performing effectively	 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	 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	 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	Process is not performed, or the performance is so poor the process is considered to be ineffective.

Resources and team

Key Kleenheat contacts

The key contacts for this review are:

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

AAG Staff

AAG staff who will be involved with this assignment are:

- Margaret-Mary Gauci Senior Consultant
- Tanuja Sanders Senior Engineer
- Andrew Baldwin Executive Director
- Stephen Linden Director (QA review).

Resumes for key AAG staff are outlined in the proposal accepted by Kleenheat and subsequently presented to the ERA.

Timing

The initial risk assessment phase was completed on 9 June 2023, after which the draft review plan and risk assessment were presented to Kleenheat for comment prior to submission to the ERA for review and approval.

The remainder of the fieldwork phase is scheduled to be performed over the period mid-June to mid-July 2023, enabling draft and final reports to be submitted to the ERA by the due dates of 31 July 2023 and 31 August 2023 respectively.

AAG time and staff commitment to the completion of the review is outlined in the proposal accepted by Kleenheat. In summary, the estimated time allocated to each AMS Review activity is as follows:

- Planning (including risk assessment):
 16 hours
- Fieldwork (including system analysis/walkthrough and testing/review): 90 hours
- Reporting: 36 hours.

Appendix 1 - Risk assessment key

1-1 Criteria for classification of consequence of ineffective performance

Source: Modified from Electricity Compliance Reporting Manual

Classification	Criteria for classification
Major	Classified on the bases that:
	The consequences of ineffective performance would cause major damage, loss or disruption to customers; or
	 The consequences of ineffective performance would endanger or threaten to endanger the safety or health of a person.
Moderate	Classified on the basis that the consequences of ineffective performance affect the efficiency and effectiveness of the licensee's operations or service provision, but do not cause major damage, loss or disruption to customers.
Minor	Classified on the basis that:
	 The consequences of ineffective performance are relatively minor – i.e. ineffective performance will have minimal effect on the licensee's operations or service provision and do not cause damage, loss or disruption to customers;
	Assessment of performance against the obligation is immeasurable;
	The matter of ineffective performance is identified by a party other than the licensee; or
	 The licensee only needs to use its reasonable or best endeavours to demonstrate effective performance, or where the obligation does not otherwise impose a firm obligation on the licensee.

1-2 Likelihood ratings

Source: Review Guidelines: Electricity and Gas Licences March 2019

	Level	Criteria
А	Likely	Ineffective process or performance is expected to occur at least once or twice a year
В	Probable	Ineffective process or performance is expected to occur every three years
С	Unlikely	Ineffective process or performance is expected to occur at least once every 10 years or longer

1-3 Preliminary adequacy ratings for existing controls

Source: Review Guidelines: Electricity and Gas Licences March 2019

Level	Description
Strong	Controls mitigate the identified risks to a suitable level
Moderate Controls only cover significant risks; improvement required	
Weak	Controls are weak or non-existent and do little to mitigate the risks

Appendix 2 - Risk assessment

1. Asset Plan	1. Asset Planning				
Key process	Asset planning strategies focus on meeting customer needs in the most effective and efficient manner (delivering the right service at the right price)				
Outcome	Asset planning is integrated into operational or business plans, providing a framework for existing and new assets to be effectively utilised and their service optimised				

Ref	Effectiveness criteria	Consequence	Likelihood	Inherent risk rating	Controls assessment	Review priority
1.1	Asset management plan covers the processes in this table	Moderate	Probable	Medium	Strong	Priority 4
1.2	Planning process and objectives reflect the needs of all stakeholders and are integrated with business planning	Minor	Unlikely	Low	Strong	Priority 5
1.3	Service levels are defined in the asset management plan	Minor	Unlikely	Low	Strong	Priority 5
1.4	Non-asset options (e.g. demand management) are considered	Minor	Unlikely	Low	Strong	Priority 5
1.5	Lifecycle costs of owning and operating assets are assessed	Moderate	Probable	Medium	Strong	Priority 4
1.6	Funding options are evaluated	Minor	Unlikely	Low	Strong	Priority 5
1.7	Costs are justified and cost drivers identified	Moderate	Probable	Medium	Strong	Priority 4
1.8	Likelihood and consequences of asset failure are predicted	Major	Probable	High	Strong	Priority 2
1.9	Asset management plan is regularly reviewed and updated	Minor	Probable	Low	Strong	Priority 5

2. Asset creation and acquisition		
Key process	Asset creation/acquisition is the provision or improvement of assets	
Outcome	The asset acquisition framework is economic, efficient and cost-effective; it reduces demand for new assets, lowers service costs and improves service delivery	

Ref	Effectiveness criteria	Consequence	Likelihood	Inherent risk rating	Controls assessment	Review priority
2.1	Full project evaluations are undertaken for new assets, including comparative assessment of non-asset options	Moderate	Unlikely	Medium	Moderate	Priority 4
2.2	Evaluations include all life-cycle costs	Moderate	Unlikely	Medium	Moderate	Priority 4
2.3	Projects reflect sound engineering and business decisions	Moderate	Unlikely	Medium	Moderate	Priority 4
2.4	Commissioning tests are documented and completed	Moderate	Unlikely	Medium	Moderate	Priority 4
2.5	Ongoing legal / environmental / safety obligations of the asset owner are assigned and understood	Major	Unlikely	High	Moderate	Priority 2

3. Asset disposal			
Key process	Asset disposal is the consideration of alternatives for the disposal of surplus, obsolete, under-performing or unserviceable assets		
Outcome	The asset management framework minimises holdings of surplus and underperforming assets and lowers service costs. The cost-benefits of disposal options are evaluated		

Ref	Effectiveness criteria	Consequence	Likelihood	Inherent risk rating	Controls assessment	Review priority
3.1	Under-utilised and under-performing assets are identified as part of a regular systematic review process	Minor	Probable	Low	Strong	Priority 5
3.2	The reasons for under-utilisation or poor performance are critically examined and corrective action or disposal undertaken	Minor	Probable	Low	Strong	Priority 5
3.3	Disposal alternatives are evaluated	Minor	Unlikely	Low	Moderate	Priority 5
3.4	There is a replacement strategy for assets	Moderate	Probable	Medium	Strong	Priority 4

4. Environmental analysis		
Key process	Environmental analysis examines the asset management system environment and assesses all external factors affecting the asset management system	
Outcome	The asset management system regularly assesses external opportunities and threats and identifies corrective action to maintain performance requirements	

Ref	Effectiveness criteria	Consequence	Likelihood	Inherent risk rating	Controls assessment	Review priority
4.1	Opportunities and threats in the asset management system environment are assessed	Moderate	Probable	Medium	Moderate	Priority 4
4.2	Performance standards (availability of service, capacity, continuity, emergency response, etc.) are measured and achieved	Moderate	Probable	Medium	Moderate	Priority 4
4.3	Compliance with statutory and regulatory requirements	Moderate	Probable	Medium	Moderate	Priority 4
4.4	Service standard (customer service levels etc) are measured and achieved.	Moderate	Probable	Medium	Moderate	Priority 4

5. Asset operations			
Key process	Asset operations is the day-today running of assets (where the asset is used for its intended purpose)		
Outcome	The asset operation plans adequately document the processes and knowledge of staff in the operation of assets so service levels can be consistently achieved		

Ref	Effectiveness criteria	Consequence	Likelihood	Inherent risk rating	Controls assessment	Review priority
5.1	Operational policies and procedures are documented and linked to service levels required	Moderate	Probable	Medium	Strong	Priority 4
5.2	Risk management is applied to prioritise operations tasks	Moderate	Probable	Medium	Moderate	Priority 4
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	Moderate	Likely	High	Moderate	Priority 2
5.4	Accounting data is documented for assets	Moderate	Probable	Medium	Strong	Priority 4
5.5	Operational costs are measured and monitored	Moderate	Probable	Medium	Strong	Priority 4
5.6	Staff resources are adequate and staff receive training commensurate with their responsibilities	Moderate	Likely	High	Moderate	Priority 2

6. Asset maintenance				
Key process	Asset maintenance is the upkeep of assets			
Outcome	The asset maintenance plans cover the scheduling and resourcing of the maintenance tasks so work can be done on time and on cost			

Ref	Effectiveness criteria	Consequence	Likelihood	Inherent risk rating	Controls assessment	Review priority
6.1	Maintenance policies and procedures are documented and linked to service levels required	Moderate	Probable	Medium	Strong	Priority 4
6.2	Regular inspections are undertaken of asset performance and condition	Major	Probable	High	Strong	Priority 2
6.3	Maintenance plans (emergency, corrective and preventative) are documented and completed on schedule	Major	Probable	High	Strong	Priority 2
6.4	Failures are analysed and operational/maintenance plans adjusted where necessary	Major	Probable	High	Strong	Priority 2
6.5	Risk management is applied to prioritise maintenance tasks	Moderate	Probable	Medium	Strong	Priority 4
6.6	Maintenance costs are measured and monitored	Moderate	Probable	Medium	Strong	Priority 4

7. Asset manage	. Asset management information systems				
Key process An asset management information system is a combination of processes, data and software supporting the asset management functions					
Outcome The asset management information system provides authorised, complete and accurate information for the day-to-day running of the a system. The focus of the review is the accuracy of performance information used by the licensee to monitor and report on service stand					

Ref	Effectiveness criteria	Consequence	Likelihood	Inherent risk rating	Controls assessment	Review priority
7.1	Adequate system documentation for users and IT operators	Minor	Probable	Low	Strong	Priority 5
7.2	Input controls include suitable verification and validation of data entered into the system		Probable	Medium	Strong	Priority 4
7.3	Security access controls appear adequate, such as passwords	Minor	Probable	Low	Strong	Priority 5
7.4	Physical security access controls appear adequate	Minor	Probable	Low	Strong	Priority 5
7.5	Data backup procedures appear adequate and backups are tested	Moderate	Probable	Medium	Strong	Priority 4
7.6	Computations for licensee performance reporting are accurate	Minor	Probable	Low	Strong	Priority 5
7.7	Management reports appear adequate for the licensee to monitor licence obligations	Minor	Probable	Low	Strong	Priority 5
7.8	Adequate measures to protect asset management data from unauthorised access or theft by persons outside the organisation	Moderate	Probable	Medium	Strong	Priority 4

8. Risk management			
Key process	Risk management involves the identification of risks and their management within an acceptable level of risk		
Outcome	The risk management framework effectively manages the risk that the licensee does not maintain effective service standards		

Ref	Effectiveness criteria	Consequence	Likelihood	Inherent risk rating	Controls assessment	Review priority
8.1	Risk management policies and procedures exist and are applied to minimise internal and external risks	Moderate	Probable	Medium	Moderate	Priority 4
8.2	Risks are documented in a risk register and treatment plans are implemented and monitored	Moderate	Probable	Medium	Moderate	Priority 4
8.3	Probability and consequences of asset failure are regularly assessed	Major	Probable	High	Moderate	Priority 2

9.	9. Contingency planning			
Key	Key process Contingency plans document the steps to deal with the unexpected failure of an asset.			
Outcome Contingency plans have been developed and tested to minimise any major disruptions to service standards.				

Re	Effectiveness criteria	Consequence	Likelihood	Inherent risk rating	Controls assessment	Review priority
9.	Contingency plans are documented, understood and tested to confirm their operability and to cover higher risks	Major	Probable	High	Moderate	Priority 2

	10. Financial planning		
	Key process	Financial brings together the financial elements of the service delivery to ensure its financial viability over the long term	
Outcome The financial plan is reliable and provides for the long-term financial viability of the services		The financial plan is reliable and provides for the long-term financial viability of the services	

Ref	Effectiveness criteria	Consequence	Likelihood	Inherent risk rating	Controls assessment	Review priority
10.1	The financial plan states the financial objectives and identifies strategies and actions to achieve those	Moderate	Probable	Medium	Strong	Priority 4
10.2	The financial plan identifies the source of funds for capital expenditure and recurrent costs	Minor	Probable	Low	Strong	Priority 5
10.3	The financial plan provides projections of operating statements (profit and loss) and statement of financial position (balance sheets)	Minor	Probable	Low	Strong	Priority 5
10.4	The financial plan provides firm predictions on income for the next five years and reasonable predictions beyond this period	Minor	Probable	Low	Strong	Priority 5
10.5	The financial plan provides for the operations and maintenance, administration and capital expenditure requirements of the services	Minor	Probable	Low	Strong	Priority 5
10.6	Large variances in actual/budget income and expenses are identified and corrective action taken where necessary	Minor	Probable	Low	Strong	Priority 5

11. Capital expen	1. Capital expenditure planning				
Key process	The capital expenditure plan provides a schedule of new works, rehabilitation and replacement works, together with estimated annual expenditure for these works 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				
Outcome	The capital expenditure plan provides reliable forward estimates of capital expenditure and asset disposal income. Reasons for the decisions and for the evaluation of alternatives and options are documented				

Ref	Effectiveness criteria	Consequence	Likelihood	Inherent risk rating	Controls assessment	Review priority
11.1	There is a capital expenditure plan covering works to be undertaken, actions proposed, responsibilities and dates	Moderate	Probable	Medium	Strong	Priority 4
11.2	The capital expenditure plan provides reasons for capital expenditure and timing of expenditure	Minor	Probable	Low	Strong	Priority 5
11.3	The capital expenditure plan is consistent with the asset life and condition identified in the asset management plan	Minor	Probable	Low	Strong	Priority 5
11.4	There is an adequate process to ensure the capital expenditure plan is regularly updated and implemented	Minor	Probable	Low	Strong	Priority 5

12. Review of asset management system								
Key process		The asset management system is regularly reviewed and updated						
Outcome		The asset management system is regularly reviewed and updated						
Ref		Effectiveness criteria	Consequence	Likelihood	Inherent risk rating	Controls assessment	Review priority	
12.1	A review process is in place to ensure the asset management plan and the asset management system described in it remain current		Minor	Probable	Low	Moderate	Priority 5	
12.2	Independe system	ent reviews (e.g. internal audit) are performed of the asset management	Minor	Probable	Low	Moderate	Priority 5	

Appendix B – References

Kleenheat representatives participating in the review

- Reticulation and Standards Manager
- Maintenance Lead
- Maintenance and Training Specialist
- Maintenance Planner
- WesCEF Environmental Advisor

AAG staff participating in the review				
•	Margaret-Mary Gauci	Senior Consultant	28	
•	Tanuja Sanders	Senior Engineer	65	
•	Andrew Baldwin	Executive Director	70	
•	Stephen Linden	Director (QA review)	1	

Key documents and other information sources examined

- Kleenheat Distribution Networks Asset Management Plan, version 5.0
- Kleenheat Distribution Qualitative Risk Assessment, version 14.0.0 (March 2023)
- Kleenheat Distribution Systems Asset Maintenance Plan, version 6.0 (July 2023)
- WesCEF 2023 Corporate Plan Instructions (screenshot)
- Kleenheat Design Verification and Compliance Check version 3.0.0
- Kleenheat Distribution Network Capacity Check procedure, v2.0
- Kleenheat Distribution Safety Case, version 9.1
- Kleenheat Distribution Network Leak Survey Operating Procedure, version 4.1
- WesCEF Expenditure Authorisation Policy, version 1.1
- WesCEF Delegation of Authority Policy, v25.0
- Kleenheat Capital Expenditure Authorisation Leinster Regulators, April 2021
- Kleenheat Commissioning and Purging a Gas Service, version 5.2
- Kleenheat Commissioning and Purging of PE Gas Mains, version 11.0.0
- Kleenheat Commissioning and Purging of PVC Gas Mains, version 2.0.0
- Distribution Network Commissioning Certificate
- Distribution Network Commissioning Scope
- Distribution Network Handover Check List
- Fixed asset register
- Power BI maintenance budget
- Rapids Landing Stage 7 Network Information Sheet
- Stage 7 Pressure testing
- Stage 7 Rapids Landing Commissioning Plan
- Kleenheat Decommissioning Mains and Service procedure

- KHO Permit to Work Procedure, version 12.0.0, June 2023
- Distribution Network Leak Survey, version 4.1, December 2022
- Distribution Networks Isolation Valve Inspection, version 1.0, January 2019
- Kleenheat Installation of a Gas Service, version 8.0.0, August 2020
- Reticulated Gas Quality Testing, version 6.0.0, January 2020
- National Emergency Response Communications System (NERFCS), version 7.0.0, September 2020
- Distribution Networks Supply Disruption Procedure, version 2.1, January 2019
- Emergency Management Plan Leinster, version 3.0.0, February 2022
- KH Margaret River WA Emergency Plan, version 3.0.0, November 2022
- KH Oyster Harbour, Emergency Management Plan, version 3.0.0, November 2022
- WesCEF 2023 Corporate Plan Instructions, August 2022
- WesCEF IT Password Policy, version 0.0
- Draft WesCEF Password Management Standard 0.1
- Draft Electronic Usage Policy v 2 2020
- Backup Verification Records
- Check Veeam Backups
- IT Platforms Team Backup Policy
- WesCEF Access Management Standard version 0.1
- WesCEF Asset Management Standard version 0.1
- WesCEF Technology Risk Management Standard version 0.1
- Example of Vendor Security Assessment (screenshot)
- WesCEF Third Party Security Assessment Guide, version 1.0.0
- WesCEF Internal Audit Report KHG Reticulation Systems Safety Case Audit, March 2021
- Kleenheat Distribution Safety Case Audit, March 2022
- WesCEF Internal Audit Report KHG Reticulation Systems Safety Case, March 2023
- Flow Chart NERCS Call Centre and Responder Leaks
- Albany-Elizabeth 02 KHO Reticulation Network Leak Survey July 2022
- Albany-Karroo 04 KHO Reticulation Network Leak Survey July 2022
- 2022 Audit Actions follow up
- Kleenheat Barricading, Excavating and Reinstatement procedure, version 5
- Kleenheat Bulk Vessel Internal Inspection procedure, version 2.1
- Completed Work Order Extract
- Kleenheat Distribution Network Maintenance Process Flow Chart
- Kleenheat Distribution Networks Isolation Valve Inspection procedure, version 1
- Job Safety Analysis Worksheet: Excavate and Install service
- Kleenheat Installation of a Gas Main procedure, version 5.0
- Issues Register Albany Oyster Harbour

- Issues Register Leinster
- Issues Register Rapids Landing
- Issues Register Riverslea
- Kleenheat Reticulated Gas Service Regulators and Meters maintenance procedure, version 3
- Kleenheat Reticulation Pipe and Fittings Specification, version 3.0
- Leinster-Anderson Routine Leak Survey, July 2021
- Leinster-Camp-Block AF Routine Leak Survey, July 2021
- WesCEF Management of Change procedure, version 7
- Leinster meter box repairs JSA Worksheet
- Leinster meter box leak survey JSA Worksheet
- Kleenheat Pressure Testing a Gas Main procedure v6.1
- Rapids Landing Calum KHO Reticulation Network Leak Survey March 2022
- Rapids Landing Holbrook KHO Reticulation Network Leak Survey March 2022
- Kleenheat Reinstating an Existing Gas Service procedure, v6.0
- Kleenheat Reticulated Gas Quality Testing procedure, v6.0
- Reticulation Networks Valve Stroking Inspection form, v1
- Site Vessel and Fittings Inspection form, v2.0
- JSA Coversheet Stage 7 Commissioning May/June 2023
- Kleenheat Storage and Handling of PE Pipes and Materials procedure, v3.0
- LPG Retic Quarterly Meeting minutes, April 2023
- Aqua Allsorts Margaret River training Matrix, June 2023
- Distribution Contractor Training Matrix, June 2023
- Albany Plumbing and Gas Training Matrix, June 2023
- Leinster Training Matrix, June 2023
- Wavelane Training Matrix, June 2023
- KHO Gas Distribution Contractors Training Reports January 2021
- Kleenheat EnviroFlow Plumbing Pty Ltd Agreement (Emergency Response) May 2022
- LPG Reticulation Capability Matrix
- LPG Retic Quarterly Meeting Agenda and Minutes August 2022
- LPG Retic Quarterly Meeting Agenda (December 2020) and Minutes (January 2021)
- LPG Reticulation Competency Management Plan, v2
- Kleenheat Operations Maintenance Distribution Network Operating Pressure Test Work Instruction, v2.0
- Reticulation Network Pressure Test Work Order Report, Margaret River Riverslea, May 2021 and June 2022
- Reticulation Network Pressure Test Work Order Report, Margaret River Rapids Landing May 2021 and Aug 2022
- Reticulation Network Pressure Test Work Order Report, Albany Oyster Harbour, May 2021

- OPSO Inspection, Albany- Oyster Harbour, May 2021
- Oyster Harbour Capacity Assessment 2023
- Incident INC-92923 Rapids Landing, Feb 2023
- Kleenheat Safety Management System, v12.0
- WesCEF Safety Management System, v4.0
- Leinster Network Emergency Response Exercise, July 2021
- Oyster Harbour Network Emergency Response Exercise, May 2021
- Rapids Landing Network Emergency Response Exercise, May 2021
- ER Scenario Uncontrolled Gas leak in Riverslea Network, April 2023
- Kleenheat Customer Complaint Handling Policy & Procedure
- UAFG Reconciliation 2023 (unaccounted for gas)
- WesCEF Hazard and Risk Management Procedure, v6