



Version 1.0
26 March 2021

Ports of Auckland Independent Health and Safety Review

Commissioned by Auckland
Council

Contents

Background, Scope,
Deliverables, Principles, and
Process

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Background, Scope, Deliverables, Principles, and Process

1.1. Background

- 1.1.1** **Ports of Auckland Limited (POAL)** is incorporated under the Companies Act 1993 and operates Ports of Auckland (including its inland ports, and other activities) under the Port Companies Act 1988. Its principal objective is to operate as a "successful business" in accordance with its statement of corporate intent. Operational decisions are the responsibility of the POAL Board.
- 1.1.2** **Auckland Council (AC)** is the unitary authority for the Auckland region established by the Local Government (Auckland Council) Act 2009. It owns 100% of the shares in POAL. Council is responsible for the appointment of directors to the POAL Board and for approving POAL's statement of corporate intent.
- 1.1.3** **POAL's** current and previous statements of corporate intent include outcomes and strategic objectives for "safe and empowered people", including key performance targets for zero lost time injuries, and to "achieve the target of becoming a zero-harm workplace".
- 1.1.4** Since 2017 there have been two deaths at POAL. Following the investigation into the first fatality, POAL pleaded guilty to offences under the Health and Safety at Work Act 2015, and the second (in August 2020) is currently being investigated by Maritime New Zealand.
- 1.1.5** Because of the importance of Health and Safety (H&S) to operating a "successful business", AC and POAL have agreed to an independent Review (Review) of the H&S framework and culture at POAL.
- 1.1.6** The Review focused on POAL's systemic management of critical H&S risks. This will help inform whether POAL's current H&S framework is fit-for-purpose and identify any systemic issues which need to be addressed.

1.2. Scope of Review

- 1.2.1** **Construction Health and Safety New Zealand Trust (CHASNZ)**, (The Reviewer) has been nominated by AC to lead the Review in accordance with these Terms of Reference. The Review commenced in October 2020 with a draft reporting date of February 2021.
- 1.2.2** The Review was conducted urgently within a short time frame, and accordingly the Reviewer prioritised making meaningful recommendations that inform improvement.
- 1.2.3** The Review assesses and comments on POAL's systemic management of its critical H&S risks for H&S (including hazard identification, H&S risk assessment, monitoring controls and resilience) and the H&S climate at POAL.
- 1.2.4** In carrying out the assessment, the Reviewer paid consideration to factors such as but not limited to the following:
 - a. Governance and leadership (including the accountability relationship between the Board, CEO, and senior managers of POAL in respect of H&S).
 - b. Continuous improvement (including due diligence and continuous improvement functions of the Board, CEO, and senior executives, implementing learnings from previous incidents and near misses).
 - c. Resourcing of and consideration of the H&S function in its business (including empowerment of the H&S team, relevant managers, and investment in plant and equipment).
 - d. POAL's training methods, methods of assessing competency, supervision and reporting regimes in relation to its critical H&S risks.

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- e. Culture and engagement (including modelling good practice, an integrated and holistic approach to H&S and well-being, and effective shared ownership of H&S priorities through collaboration of workers, crews, third parties, contractors and management).
- f. Factors bearing on management of critical H&S risks and organisational culture (including performance management, management accountability for H&S outcomes, financial incentives, industrial relations, and workers and union engagement).
- g. The adequacy of incident reporting, investigation and implementation of suggested improvements.

- b. The terms of reference call for an assessment of H&S culture. Within the academic literature, there is no agreement as to what safety culture is and subsequently what the definition is.¹ A universally accepted definition of safety culture, unlike that of (organisational) culture, is not available.²

This review has opted to use Safety Climate for the survey. There is strong agreement from academic evidence that safety climate is directly linked to employee perceptions of management's commitment to safety and that it is a good measure, because it is a predictor of injuries.^{3 4}

When measuring safety climate, its important to measure the strength of agreement in the survey. In addition to calculating the average score (which will tell us its either a positive or negative climate), we have measured the variance in the scores (which provides the strength of this view).

1.3. Deliverables

1.3.1 The main deliverable is this report on the Review's findings and recommendations, and briefings for the Council's Governing Body and POAL Board following report delivery.

1.3.2 For purposes of fact-checking and natural justice, the Reviewer has provided a draft copy of the Report to the Chief Executives of Auckland Council and POAL for comment prior to the Reviewer finalising the Report. The Reviewer has also checked specific facts with any relevant stakeholders.

1.3.3 The deliverables of the Review followed the scope, key principles and assessment process set out in the terms of reference issued by Council regarding POAL. Specifically, the assessment:

- a. Assesses and comments on POAL's systemic management of its critical H&S risks (including hazard identification, H&S risk assessment, monitoring controls and resilience) and the H&S climate at POAL.

1. Hopkins, A. (2006). Studying organisational cultures and their effects on safety. *Safety Science*, 44(10), 875–889. <https://doi.org/10.1016/j.ssci.2006.05.005>
2. Strauch, B. (2015). Can we examine safety culture in accident investigations, or should we? *Safety Science*, 77, 102–111. <https://doi.org/10.1016/j.ssci.2015.03.020>
3. Beus, Jeremy M., Stephanie C. Payne, Mindy E. Bergman, and Winfred Arthur. 2010. "Safety Climate and Injuries: An Examination of Theoretical and Empirical Relationships." *Journal of Applied Psychology* 95(4):713–27. doi: [10.1037/a0019164](https://doi.org/10.1037/a0019164).
4. Probst, Tahira M., Linda M. Goldenhar, Jesse L. Byrd, and Eileen Betit. 2019. "The Safety Climate Assessment Tool (S-CAT): A Rubric-Based Approach to Measuring Construction Safety Climate." *Journal of Safety Research* 69:43–51. doi: [10.1016/j.jsr.2019.02.004](https://doi.org/10.1016/j.jsr.2019.02.004)

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1.4. Key Principles

- 1.4.1** The Review has been conducted in accordance with the following principles:
- a. The Review was conducted with respect and sensitivity acknowledging that workers are likely to be affected by the tragedy of recent events.
 - b. The Reviewer has acted impartially, and fairly and had complete independence in conducting the Review, formulating their findings and reporting to Council and POAL.
 - c. The Review has reported on key findings and provided recommendations for improvements within the scope of the Review including regarding culture, systems, accountability, performance, H&S risk/ hazard identification and mitigation.
 - d. The findings and recommendations are the Reviewer's own opinion, based on their professional experience and judgement based on the information and material reviewed.
 - e. While the Review was not an investigation into specific incidents, discussion of previous incidents have been used as examples where applicable.
 - f. The Reviewer relied on or referred to other reviews and reports which POAL has conducted (independently or otherwise) and did not duplicate effort for information gathering.
 - g. To encourage free-and-frank exchange of views and provision of information by all participants, and facilitate prompt assessment and reporting of meaningful improvement recommendations:
 - i. The Review was not conducted to evidential standards or for evidential purposes. Information and material relied on by the Reviewer did not need to be attributable or verifiable.

- ii. The Review allowed participants to provide information and comment anonymously and on a fully confidential basis. The Reviewer informed participants of this confidentiality condition.

1.5. Review Process

- 1.5.1** The Reviewer liaised with the Council and POAL as to the practical process by which the Review was conducted. Subject to that, and the Terms of Reference the Reviewer conducted the Review by such process and methodology as the Reviewer considered appropriate.
- 1.5.2** The Reviewer had access to information and materials on the following basis:
- a. POAL was asked to provide the Reviewer with all requested information and materials about its H&S framework including systems, policies, and practices, records and reporting on H&S performance and workforce engagement concerning H&S matters. POAL withheld any legally privileged material, any material the disclosure of which to the Reviewer is restricted by law or which POAL is not permitted by law or contract to disclose.
 - b. The Reviewer has had confidential access to POAL workers for interviews. The Reviewer received contributions from Council, POAL management and board members, unions, workers and any other person or organisation (including confidential voluntary submissions) the Reviewer considered appropriate.
 - c. Any information provided to or collated by the Reviewer as part of the Review process is held securely and kept confidential. Where possible information is kept anonymous to reduce the risk of any privacy breach.

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- d. The Reviewer engaged with Maritime New Zealand before engaging any interviewees to ensure that the Review does not in any way interfere with Maritime New Zealand's current investigation.

1.6. About CHASNZ

- 1.6.1. CHASNZ is registered charitable trust dedicated to improving H&S in construction and related trades. It is independent of POAL, the port industry, and AC.

1.7. Limitations

- 1.7.1. The Reviewers would like to make note of the following limitations:

- a. The Report has been prepared at the request of and for the purposes of AC and POAL. The information contained in the Report is current at the date it is issued. To the fullest extent permitted by law, CHASNZ does not accept or assume responsibility to anyone other than Auckland Council for its H&S Review, the Report or the opinions given in the Report.
- b. As per the terms of reference for this Review, the Review was not conducted to evidential standards and information and material has been relied on by the Reviewer which may not or could not have been verified.
- c. The Reviewers have been contacted anonymously by a number of current and former employees. CHASNZ (The Reviewer) have committed to retaining their confidentiality.
- d. Where appropriate the Reviewers have referred to "perceptions". This has been when there has been a strong theme expressed by multiple independent parties and the Reviewers have found that, in their

professional opinion, this has constituted an important finding for POAL to take into consideration. The basis for the perception may not be verifiable through other means but the Reviewer has reasonable confidence that it is a view held by a fair representation of stakeholders and submit it as such.

- e. This Review has been conducted in a manner that is intended to be beneficial and proactive in supporting AC and POAL in progressing towards keeping employees, contractors, and other third parties safe.
- f. Recommendations provided by the Reviewer are based on findings and observations during the Review period. POAL has responsibility for interpreting and determining if the recommendations are fit for purpose.
- g. This report is provided for the sole benefit of the parties (AC and POAL) and is not to be relied upon by other parties.
- h. The information contained in this Report is for the sole benefit of the parties (AC and POAL) specifically for the purposes of the Council's Review into the H&S critical controls framework and safety climate at POAL. The content should not be used or relied on by any other person or for any other purpose. CHASNZ accepts no liability or responsibility whatsoever to any other person who acts or relies in any way on any of the material contained in this Report for any other purpose.
- i. This report is confidential and cannot be shared, commented on or used without permission and consultation with the parties (AC and POAL).

1.8. POAL Overview

- 1.8.1 POAL's principal activity is to own and operate a seaport on Auckland's Waitemata Harbour.

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1.8.2 POAL provides the following services:

- a. Container terminal handling services which include receipt, delivery, transit storage and shipment of a wide range of import and export cargos.
- b. Vehicle, breakbulk and bulk cargo handling services via independent stevedores (multicargo).
- c. Marine services which include pilotage, towage, hydrography and bunkering services – both directly and through its ownership of SeaFuels Ltd and Bunker Shipz Ltd and its half ownership of North Tugz Ltd.
- d. Intermodal freight hubs in South Auckland, Waikato, Bay of Plenty and Manawatu – both directly and through its ownership of Waikato Freight Hub Ltd and its one third ownership of Longburn Intermodal Freight Hub Ltd.
- e. Supply chain management services – both directly and through its ownership of Nexus Logistics Ltd and CONLINXX Ltd.
- f. Other port-related activities required to manage and operate an efficient and competitive port – both directly and through its half ownership of PortConnect Ltd; and
- g. Services and facilities to support the cruise ship industry.

Organisational structure

1.8.3 The CEO has ten direct reports and at the time of the Review a total of approximately 667 people working at the port.

1.8.4 The Deputy CEO & CFO - leads 56 office-based staff across the following departments:

- Finance
- Governance & Risk
- Information Security
- People Capability & Business Support
- Safety & Wellbeing.

1.8.5 The GM Container Terminal Operations - leads 337 staff, across:

- Stevedoring (300 performing operational roles)
- Rail
- Capacity & Planning
- Berthing
- Gate operations.

1.8.6 The GM Marine, Engineering & Multicargo – leads 163 staff across:

- Marine – 83 performing operational roles (includes pilots, tug & pilot crew, linesmen, harbour control, marine engineering, cruise operations)
- Engineering - 56 performing operational roles (includes mechanics, fitters, engineers, plumbing, electrical, plumbing, welding, radio technician, workshop, stores)
- Multicargo - 7 staff in supervisory roles
- Hydrography – 2 staff in operational roles.

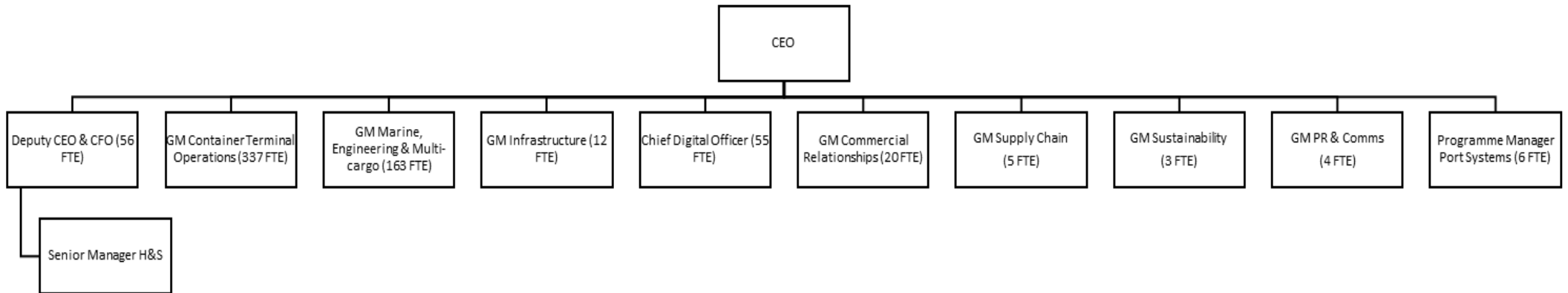
1.8.7 The GM Infrastructure – leads 12 staff across:

- Civil infrastructure
- Property
- Electrical infrastructure
- Environment
- Security – (security operational activity is outsourced to First Security).

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- 1.8.8 The Chief Digital Officer – leads 55 staff, mainly office-based although some staff perform IT installation and fault rectification work in the operational areas.
- 1.8.9 The GM Supply Chain – leads a team of 5 office-based staff.
- 1.8.10 The GM Commercial Relationships – leads a team of 20 office-based staff.
- 1.8.11 The GM Sustainability – leads a team of 3 office-based staff.
- 1.8.12 The GM PR & Communications – leads of team of 4 office-based staff.
- 1.8.13 The Programme Manager Port Systems – leading POAL’s straddle carrier automation project with 6 staff.

Subsidiaries operate under a Board appointed from the Executive team.



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1.9. Overview

1.9.1. Ports in general are high risk environments from a H&S perspective and require a high level of critical H&S risk management. Critical H&S risks are those that could cause fatalities or serious harm injuries. Typical critical H&S risks requiring high levels of control in the port industry include but are not limited to:

- Lifting and loading cargo on and off ships, trucks, and trains.
- Stacking of containers.
- Working at height on ships while lashing (the practice of securing containers).
- Working in and around heavy moving plant such as straddles, extended reach trucks and forklifts.
- Traffic management – interactions between pedestrians, light vehicles, heavy vehicles, and mobile plant.
- Maintenance activity involving working at height, with electricity and in confined spaces.
- Handling and storage of hazardous materials.
- Moving on and off ship from pilot boats.

1.9.2. The industry in New Zealand is comprised of independent and sometimes competing ports. Port industries overseas are often under a national port authority which increases the opportunity for consistent safety standards. The industry in New Zealand is beginning to collaborate on H&S through the Port Industry Association, the Port CEO forum and through initiatives led by Maritime New Zealand and WorkSafe. However, currently benchmarks on H&S performance are not available. This applies equally to consistent safety standards across the industry for common activities such as stevedoring which are managed and applied port by port.

1.9.3. The operational environment at POAL requires highly resilient H&S risk management systems and controls to ensure that work can be carried out with the required safety buffers in place. The board and management of POAL require a high level of assurance that the controls in place to

manage critical H&S risks are appropriate for the risk being managed and working as intended.

1.9.4. A highly resilient control environment requires a strong H&S climate at its foundation. Aligning the organisation to a culture that places H&S of its workforce as highest priority is a key requirement. Without this, efforts to manage safety will be weakened as controls will be circumvented and key predictive indicators such as near miss incidents and control failures may not be reported.

1.9.5. Key influencers of the safety climate are the CEO, senior management, and frontline supervisors. The CEO and senior management set the tone and prioritisation of H&S for the organisation and frontline supervisors enact the will of the organisation through everyday operations.

1.9.6. CHASNZ (The Reviewer) has undertaken an assessment of the critical H&S risk environment and the safety climate at POAL. The recommendations for improvement fall into four key categories and are based on our independent assessment of the current operation as reflected to us by POAL management, workers, and other stakeholders.

1.9.7. The recommendations are designed to assist POAL in the future to strengthen the control environment and improve the safety climate. The topics of Overlapping Duties and Fatigue Management have specifically been included in this assessment due to their potential to contribute to multiple risks across the ports environment.

1.9.8. CHASNZ (The Reviewer) would like to thank all stakeholders who have contributed to this report.

Key Findings and Recommendations

Key Findings and Recommendations

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Key Findings and Recommendations

2.0 Key Findings and Recommendations Summary

General

2.0.1 From the detailed aspects identified in this report, it is the opinion of this Review that there are systemic problems at POAL in relation to critical H&S risk management and organisational culture that relate to H&S.

2.0.2 Although POAL are good at managing aspects of their business such as shipping movements and equipment maintenance, there is more focus needed where there is reliance on the people element, in particular, in the higher risk areas of the business.

2.0.3 In reviewing the systemic management of critical H&S risks the Reviewers have found that there is opportunity for significant improvement to ensure that POAL operates a resilient and appropriate control environment reflective of the level of inherent risk in port operations.

2.0.4 In reviewing the current safety climate, as an aspect of the overarching culture at POAL the Reviewers found that in high risk areas of the port there were inconsistent views on how workers perceived the commitment to H&S by senior management to that of what board, line and executive management felt was being demonstrated.

2.0.5 POAL do accept responsibility for their workplace culture and are working to improve it. The difficult relationship between Maritime Union of New Zealand (MUNZ) and POAL has, at times, hampered H&S improvement. For H&S to continue to improve at POAL, it is essential that all parties work collaboratively to support H&S.

Governance, Leadership and Structure

2.0.6 The role of the CEO in regard to H&S leadership should be reviewed, redefined and measured based on key requirements such as:

- a. Prioritising safety over productivity and profitability.
- b. Communicating regularly and proactively on safety in multiple ways (as opposed to in reaction to a safety incident).
- c. Encouraging comprehensive and meaningful employee engagement in safety.
- d. Helping change at risk behaviours.
- e. Following up with employees and resourcing corrective actions.

2.0.7 Safety as a core value needs an increased focus for all frontline leaders and management.

2.0.8 POAL executive management needs to address perceived engagement and trust gaps between executive management and the frontline workforce regarding H&S expectations. From the observations and interviews made by this Review resolving this issue will be a significant challenge for POAL.

2.0.9 POAL needs to create consistent engagement across the workforce, based on trust, and which addresses the dysfunctional relationship between management and MUNZ. Achievement of this will require good will and positive engagement from all sides.

Critical Risk

2.0.10 POAL have made efforts to establish and document an understanding of their critical risks, although this documentation is sporadic and not consistent in terms of content. There is not an aligned view of the critical risks across the organisation and there is no safety assurance information that clearly demonstrates critical controls are either implemented and effective. This view is corroborated from the physical observations made

Key Findings and Recommendations

from visits to the operations and from independent overlapping accounts from current and former members of the H&S team.

2.0.11 In order to create a resilient H&S control environment POAL needs to:

- a. Improve the Occupational Health and Safety Management System so that it is aligned to ISO 45001 (OHSMS).
- b. Establish a critical H&S risk programme for the organisation with a focus on improving the communication, monitoring and reporting of critical H&S risks and their controls.
- c. Develop and implement a safety assurance framework for the Automation Project.
- d. Further embed the H&S policy into the OHSMS, so that it describes how and when safety assurance processes are delivered at POAL.
- e. Engage human factors expertise to review operating environments and work processes for straddle carriers and cranes.

Overlapping Duties

2.0.12 POAL, as the owner of the joint operating environment that many third parties work within, should:

- a. Improve relationships and cooperation between third party operators within the POAL Auckland Port footprint.
- b. Improve the Common User Safety Protocols (CUSP) so as to clarify H&S expectations for the Auckland Port Footprint that aligns an approach across all organisations and individuals with regards to operations featuring critical H&S risks.

H&S Function

2.0.13 Resourcing of the H&S function requires a transformational H&S practitioner as a leader to reset the H&S strategy. During the Review the incumbent Senior Manager H&S left POAL and a new appointment was made.

2.0.14 This leader should report directly to the CEO and continue to have unfettered access to the POAL board of directors. Other capabilities required within a H&S function in a high-risk environment include driving and implementing a critical H&S risk programme, wellbeing, injury management, and health resources, a safety system team using ISO45001 which may include reporting, analytics, assurance and process safety capabilities. A business partnering approach is required to enable coaching and co-design of H&S initiatives with frontline teams.

2.0.15 The newly appointed H&S lead is currently establishing a new H&S strategic plan however this was not ready during the time of the Review.

Recommendation Table Legend

Implementation Period		
S	Short Term	Within 1 month
M	Medium Term	Within 1 year
L	Long Term	Within 3 years
Estimated Impact		
L	Low	Will improve the safety of some areas of the operation
M	Medium	Will improve structural safety management aspects
H	High	Will improve the systems and safety of work undertaken at POAL to a high degree

Please note that this table is designed as guidance only to assist with implementation and should be evaluated by POAL as a separate exercise.

Key Findings and Recommendations

2.1 GOVERNANCE

Ref	Key Findings (with reference to recommendations)
2.1.1	The board are engaged in safety, regularly undertake site visits and discuss H&S issues as presented by management. (2.1.6, 2.1.8)
2.1.2	The way the board specifies targets that enable the board to track the organisation's H&S performance requires significant improvement. A substantive plan that allows for measurement and review at all levels of management is needed to ensure the organisation is achieving its H&S goals. (2.1.6, 2.1.10)
2.1.3	POAL do have a general understanding of their critical risks and controls, however there is a lack of clarity and understanding over whether the critical controls are sufficient for the risk exposure and whether they are operating as expected. (2.1.7)
2.1.4	The board requires more insight into H&S issues raised by workers and whether these are being adequately addressed. (2.1.8)
2.1.5	There has not been an adequate level of independent technical safety advice delivered to the board in order for the board to be comfortable that safety risk assurance requirements for key projects and operations have been met. (2.1.9)

Ref	Recommendation	Immediate action required	Implementation Period	Estimated Impact
2.1.6	It is noted that the Board does currently review and approve H&S objectives. As an improvement action it is recommended that this becomes a formal process based around the strategic planning cycle.		S	M
2.1.7	Review and agree critical H&S risks and their controls at board level. Agree how control performance (appropriateness and effectiveness) will be measured and reported on to the board. Make the critical H&S risk control performance reporting part of regular monthly reporting. Deep dive into critical H&S risk with operational management regularly to ascertain whether the controls are meeting the organisations H&S objectives (e.g., refer to the fatigue management section). It is noted that this recommendation sits across both management and governance functions.	Yes	Establish risks within 1 month – controls 3-6 months	H

Key Findings and Recommendations

2.1.8	The POAL board do communicate with workers during site visits. When undertaking site observations, ensure there is the facility to independently and confidentially talk to workers around control effectiveness (whether what is written down and trained is actually carried out in practice).		S	M
2.1.9	Focus on verification of H&S assurance activity for key critical H&S risks and projects such as automation. The board should require evidence that appropriate safety assurance work has been undertaken by competent professionals through the form of hazard and operability studies (HAZOP), safety cases or other similar methodologies. It is noted that KPMG have been previously commissioned to conduct an external review in this area. These reports were limited in scope and not technical in nature. POAL had engaged an external specialist to carry out 'bow tie' analysis, however this work, while useful, was not fully completed at the time of the Review and is at a relatively high level.	Yes	S	H
2.1.10	The board should be consulted as key stakeholder when management formally document how the board and management will measure success in H&S performance. It is essential that management create a framework of expectations, objectives, targets, and measures from board level and down through all levels of management and operations. This also requires consultation with workers. An indication as to whether these targets are being met should be communicated to all levels of the organisation.		M	M

Key Findings and Recommendations

2.2 LEADERSHIP

Ref	Key Findings (with reference to recommendations)
2.2.1	Workers' perceptions of H&S leadership and commitment varied depending on what part of the business they operated within. Head office, Maritime and Engineering departments generally felt supported in H&S while Container Terminal Operations (Stevedoring) views were more negative in terms of safety leadership. (2.2.8)
2.2.2	There are gaps between executive management's understanding of H&S control procedures and the perception of frontline workers as to what operating practices are applied in reality. (2.2.8)
2.2.3	Elements of the workforce who undertake high risk roles (mainly terminal operations) believe that executive management prioritises profitability and productivity over H&S and this is reinforced at the operational leadership level. (2.2.8, 2.2.9, 2.2.12)
2.2.4	There are variable perceptions on executive management's commitment to H&S by elements of the workforce (such as stevedoring) who undertake high risk roles. (2.2.10, 2.2.11, 2.2.13)
2.2.5	Workers in terminal operations had a perception that H&S issues, if raised, were not taken seriously by the organisation and resolved adequately. (2.2.12, 2.2.15)
2.2.6	There has been a clear history of industrial dissent, that may be a barrier to the development of a future positive culture within the workforce. All parties need to work together in good faith to achieve H&S improvement. (2.2.10, 2.2.14)
2.2.7	Worker engagement processes need significant improvement. (2.2.8, 2.2.16)

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Ref	Recommendation	Immediate action required	Implementation Period	Estimated Impact
2.2.8	<p>Enhance the board down view of what effective executive safety leadership behaviours are required to achieve the H&S objectives of the POAL.</p> <p>Improve processes to measure, evaluate, report on and coach senior management in these leadership qualities. These should include at a minimum:</p> <ul style="list-style-type: none"> • Prioritising safety over productivity and profitability. • Communicating regularly and proactively on safety in multiple ways (as opposed to in reaction to a safety incident). • Encouraging comprehensive and meaningful employee engagement in safety. • Helping change at risk behaviours. • Following up on incidents reported by the workforce and implementing corrective actions. 		M	H
2.2.9	When reviewing the H&S policy (which is currently underway) include CEO and Senior Executive responsibilities.	Yes	S	M
2.2.10	The legacy of labour relations dissent is hampering the underlying organisational culture. All stakeholders should work positively to focus on creating a culture where H&S is the primary focus and minimum H&S expectations are agreed, supported and acted upon.	Yes	M	H
2.2.11	Develop and prioritise initiatives to address trust issues within the terminal operations regarding the fear of speaking up, lack of follow up of safety issues raised and perception that those who raise issues or follow safety rules will be discriminated against.		M	H
2.2.12	Embed safety and wellbeing as a core value for the organisation through specific training led by the senior executive but aimed at middle and line management that focusses on expected H&S leadership behaviours. H&S modules of core organisational leadership training are being developed but were not available at time of Review.		M	H
2.2.13	Ensure that senior management are trained in the expected H&S leadership behaviours. Courses such as those available from the Business Leader's H&S Forum would be appropriate as are many other commercially based training courses. POAL are currently investigating appropriate training.		M	H

Key Findings and Recommendations

2.2.14	Continue to support and contribute to the Port Industry H&S initiative (led by the PIA and supported by Maritime NZ and WorkSafe) from a leadership perspective by continuing to be an advocate and active member.		M	L
2.2.15	Create an organisation wide focus on key hazards and risks and an expedited prioritisation mechanism for any control or hazard related issues raised by workers.	Yes	S	H
2.2.16	Address the difficulty and lack of ease in reporting issues through existing systems by reviewing and investing in easy to use and visible (to workers) hazard, risk and incident reporting and resolution systems.		S	H

Key Findings and Recommendations

2.3 HEALTH & SAFETY RISK

Ref	Key Findings (with reference to recommendations)
2.3.1	Marine operations and Engineering operations were examples where H&S risk is being managed well. The engineering data management system was impressive and an example of industry good practice. (2.3.10)
2.3.2	POAL have invested in H&S and the lashing platforms were a clear exemplar of how POAL have made a significant investment to keep their people safe. (2.3.11, 2.3.12.)
2.3.3	POAL have provided an account of how their cranes are well-managed to levels of industry good practice. (2.3.10)
2.3.4	The POAL organisational H&S Management System does not appear to be adequately implemented and operating. Although individual H&S documents have been produced, they do not fit into a 'Plan, Do, Check, Act' cycle that would enable continuous improvement and enable commitment and involvement of top management in the overall H&S management programme. (2.3.10)
2.3.5	People working across POAL's operations do not have a consistent understanding of the organisation's critical risks and controls. (2.3.11)
2.3.6	The Reviewers were impressed by the innovative approach to straddle automation at POAL. The POAL project team highlighted a number of safety controls implemented into the project, which made it clear that safety was a priority for POAL on this project. However, the automation project is unable to make a robust safety case for the development and operation of the automated straddles at Fergusson Wharf. It would be reasonable for a major project involving a new approach to integrating automated plant into an existing manual operation to have developed a safety assurance framework to enable an appropriate case to be made about the overall system safety during design, development, and operation. (2.3.12)
2.3.7	POAL's overall approach to safety assurance requires improvement so that all major projects develop a suitable safety assurance framework and provide project governance with clearer information on how they are meeting safety objectives. (2.3.12)
2.3.8	There are many opportunities where Human Factors expertise input would help more effectively analyse usability and user interface issues with plant and other equipment linked to high-risk activities. (2.3.13)

Key Findings and Recommendations

Ref	Recommendation	Immediate action required	Implementation Period	Estimated Impact
2.3.9	Occupational Health and Safety Management System (OHSMS). Consideration of developing the OHSMS to align to ISO 45001 is recommended. Investment in an ISO 45001 scoping audit to highlight what elements of the OHSMS require improvement and assist with developing an improvement plan. A good OHSMS will provide POAL with a better mechanism for managing general H&S risks and ensuring appropriate learning and review activity around H&S risks is being undertaken.	Yes	M	H
2.3.10	Critical H&S Risk Programme – To further augment POAL’s approach to critical risks, it is recommended that POAL establish a critical H&S risk programme. One key output would be a common understanding of what the organisation’s critical H&S risk activities are and development of life saving rules associated with those H&S risk activities. A critical H&S risk programme would also provide focus on critical H&S risk control, with specific activity developed around assessing effectiveness of controls and development of reporting systems focused on critical risk activities and events with high potential for harm. Process safety focus is also a key element of a critical H&S risk programme and is captured in recommendation 2.3.11.	Yes	S	H
2.3.11	<p>It is recommended that a safety assurance framework for automation (and other major projects) is developed and that competent safety engineers are engaged to develop and implement this.</p> <p>It will be advantageous for POAL to integrate the safety assurance framework process into the wider H&S risk management system so safety assurance can be developed and operated across all of POAL’s critical H&S risk portfolio.</p> <p>When undertaking complex projects outside of POAL usual operations, it is strongly advised that specialist H&S capability is engaged to aid in managing the H&S risks associated the project.</p>	Yes	S	H
2.3.12	<p>It is recommended that human factors specialists are engaged to review the operating environments and work processes for straddle carriers and cranes to identify opportunities to improve the overall safety of related operations. Particular attention is drawn to:</p> <ul style="list-style-type: none"> • Straddle training activities where improvements are needed to the safe location of tutors during practical instruction sessions. • Straddle cockpit configuration, where some operators are likely exceeding chair weight ratings, knotting ill-fitting seatbelts, and removing headrests. • Lashing platform processes, where further improvements to safety interlocks and processes might be achieved. • Control room operations across POAL. 		M	M

Key Findings and Recommendations

2.4 OVERLAPPING DUTIES

Ref	Key Findings (with reference to recommendations)
2.4.1	POAL have demonstrated through development of the Waikato Freight Hub that they have the capacity to manage overlapping duties well; in this context in a construction environment involving overlapping projects and contractors. The design of the hub has demonstrated how POAL have considered risks to their tenants during the design phase demonstrating good practice as a client and developer. (Not linked to a recommendation).
2.4.2	POAL do undertake work to manage overlapping duties with third parties who use the port, including some collaboration forums. Current relationships between POAL and many of the third parties using the port require improvement. It is the view of this Review that POAL can and should do more to lead effective cooperation, communication, and consultation between third parties on matters of H&S. (2.4.8, .2.4.9, 2.4.10, 2.4.11)
2.4.3	Deteriorating infrastructure and poor housekeeping within the POAL Multicargo footprint are exposing third party operators to H&S risks that should be managed by POAL. The POAL team in Multicargo require increased support by POAL top management to improve the risk environment for third party operators. (2.4.9)
2.4.4	Poor traffic management (including clearly marked roadways and adequately signed infrastructure) within the POAL port footprint are presenting risks associated with site traffic and their interface with mobile plant and other vehicle operations. (2.4.11)
2.4.5	POAL have implemented a Common User Safety Protocol (CUSP) document. By way of improvement, POAL should make it consistently clear to all third parties operating on their property what the critical H&S risks are and what the 'non-negotiable bottom line' is regarding the controls for these risks. (2.4.9)
2.4.6	There is a risk that a third-party driver may be struck by exiting traffic whilst adjusting container locks in the common roadway of the Wiri freight hub, presenting the potential for death or serious injury. (2.4.10)
2.4.7	POAL do not currently receive adequate assurance from third party tenants that critical H&S risks are appropriately controlled and managed. (2.4.9)

Key Findings and Recommendations

Ref	Recommendations	Immediate action required	Implementation Period	Estimated Impact
2.4.8	Multicargo - Improve communication and cooperation between POAL and all third parties operating within the multicargo area. The Review acknowledges the existence of an inter-PCBU operational sub-group. One suggested approach would be to establish a H&S Leadership Group.	Yes	S	H
2.4.9	It is appreciated that POAL are going to some effort to engage with third parties, by way of further improvement POAL should consider creating a clear H&S expectations document that is effectively communicated to all 'third party' organisations operating on POAL property. This document should clearly align to an agreed set of critical H&S risks and controls in order to establish what is 'not negotiable' and what is expected as a minimum when operating on POAL premises.	Yes	S	H
2.4.10	Wiri Freight Hub - Work with tenants to establish a safe place of work for drivers to access their loads and trailers without being exposed to the risk of being hit by other site traffic.	Yes	S	H
2.4.11	Wiri Freight Hub - Establish a mechanism whereby POAL can gain assurance that third party tenants are managing their critical H&S risks appropriately, particularly those risks which have the potential to effect other third parties and the wider public.		S-M	M
2.4.12	Wiri Freight Hub - Consider appropriate controls (e.g., a barrier system) to prevent the fire water tank from being damaged by traffic operations.	Yes	S	M

Key Findings and Recommendations

2.5 FATIGUE MANAGEMENT

Ref	Key Findings (with reference to recommendations)
2.5.1	POAL use the services of Dr Matthew Thomas, who is an Associate Professor in Health Medical and Applied Sciences to develop and review bio-mathematical models of fatigue management. (No recommendation)
2.5.2	Fatigue management documentation requires improvement to ensure that it meets the intent of the implemented processes. (2.5.6)
2.5.3	Reactive and predictive information on fatigue is available within the organisation but not currently used to best effect. (2.5.7)
2.5.4	The models used to predict and govern fatigue should be peer reviewed. (2.5.7, 2.5.8, 2.5.9)
2.5.5	Worker representation from high risk areas may provide important signals around whether the workforce or individuals are fatigued. (2.5.10)

Key Findings and Recommendations

Ref	Recommendations	Immediate action required	Implementation Period	Estimated Impact
2.5.6	Ensure that the FRM Committee and associated FRMS is effectively maintained and operated. Board reporting should include regular updates and whether the meetings have been occurring, attended and minuted adequately. Key indicators should be reported to the Board as per the following recommendation.	Yes	S	M
2.5.7	<p>Potential key indicators for the FRM committee, management and board include:</p> <ul style="list-style-type: none"> a. Trends in fatigue and sick leave taken by reason code. b. Bio-mathematical risk scores of the roster both in forecast and historical trends by week, month, and year for seasonal analysis. c. Modelling on current and forecast workforce capacity compared to demand and potential impact on fatigue scores. An optimal workforce capacity should be modelled based on an overall targeted (lower) fatigue score. This can be compared to the actual workforce available so that management and board understand the fatigue risk profile of the current workforce based on future projected work demand. d. Number and type of fatigue related incidents and hazards reported. 		M	M
2.5.8	Consider seeking independent peer review and advice on the bio-mathematical model underpinning the rules inbuilt into rostering and fatigue detection processes. This should be governed and reported back to the FRM Committee.		M	M
2.5.9	There is a potential opportunity to compare and learn and improve fatigue management from other high risk, 24 x 7 rostered operations such as the Department of Corrections who have been specifically focused and prioritizing this area in recent years.		M	M
2.5.10	Review and update the 2014 Stevedoring Hours of Work Policy to include recent changes.	Yes	S	M

Key Findings and Recommendations

2.6 INCIDENT REPORTING AND INVESTIGATION

Ref	Key Findings (with reference to recommendations)
2.6.1	Overall incident reporting including near miss reporting may not adequately capture the volume of incidents that are potentially occurring at POAL. This view is based on worker feedback to the Reviewer and from review of the past year's incidents. This may in part be due to factors such as the difficulty workers have in using the Portsafe system and partly due to a perception that line management do not follow up on H&S issues and see those raising them as troublemakers. (2.6.7)
2.6.2	The Reviewers note POAL are working to improve the reporting culture including cultural and leadership issues that may hinder this. (No recommendation)
2.6.3	There have been reports to Reviewers that frontline workers have reported incidents to supervisors that are not entered into Portsafe. (2.6.7)
2.6.4	The Reviewers noted that there are near miss incidents where no harm has occurred, but there was potential for serious harm or fatality. These events have not adequately assessed in relation to their risk and are not investigated in relation to that risk. (2.6.8, 2.6.9) Further detail has been passed to POAL by the Reviewer.
2.6.5	More investigation resources are required to ensure high potential incidents can be adequately investigated. (2.6.10)

Key Findings and Recommendations

Ref	Recommendation	Immediate action required	Implementation Period	Estimated Impact
2.6.7	In addition to the steps POAL are already taking, POAL should seek to improve the frequency of risk, hazard, near miss and incident reporting. Key to this is ensuring that incidents are accepted by line management and responded to in a timely and open manner with those raising the issues.		S-M	H
2.6.8	Review the H&S framework to establish more effective criteria to determine when investigations should be carried out into near miss incidents where serious harm or fatality could have occurred.		S	H
2.6.9	Where applicable, link incident reporting to critical H&S risks in order to determine where key controls have failed and require improvement.	Y	M	H
2.6.10	<p>Train more workers to support investigations in appropriate methodologies to increase the capability of the organisation to create learning from incidents and strengthen controls as a result.</p> <p>Consider applying a 'learning teams' approach to help with learning from the front line to improve work. Learning teams bring together a group of people who were involved in a safety incident, or who might have useful information about it, to learn and improve (Link to WorkSafe NZ information on Learning Teams: https://www.worksafe.govt.nz/the-toolshed/case-studies/wepr-case-studies/involving-everyone-in-learning-reaps-benefits)</p>		M	M

Key Findings and Recommendations

2.7 ORGANISATIONAL CULTURE & ENGAGEMENT

Ref	Key Findings (with reference to recommendations)
2.7.1	<p>Climate survey key findings Survey perceptions indicated that senior management presence in the workplace is low. (2.7.10)</p>
2.7.2	<p>Rules and procedures were perceived to be the greatest focus rather than pro-active engagement and discussion when senior management does visit the workplace. (2.7.10)</p>
2.7.3	<p>It is perceived that there is a high level of blame attribution to workers after an investigation has been completed. (2.7.10)</p>
2.7.4	<p>Perceptions are positive in relation to investment into safety and understanding and communication of safety rules and responsibilities. (2.7.10)</p>
2.7.5	<p>There are mixed perceptions regarding worker relationships with frontline supervisors and leaders and their safety leadership capabilities. (2.7.12)</p>
2.7.6	<p>Safety representation and worker engagement also indicated mixed responses to ensuring the voice of the worker is heard. (2.7.13)</p>
2.7.7	<p>Focus Group Key Findings Some workers in the Container Operations teams perceived that there was a culture of retribution that occurs when H&S issues are raised which results in reduced hours and opportunities for promotion by front line management. (2.7.12)</p> <p>It is noted that senior leadership have emphasised the importance of H&S reporting and that safety leadership training is intended to be increased.</p>
2.7.8	<p>Night shift workers felt there was a potentially different culture at night where control adherence differed from training and procedures, in particular for high risk work such as lashing. This was exacerbated with lower levels of supervision and oversight by the health and safety function. (2.7.10)</p>
2.7.9	<p>Night shift workers perceive that there are times where inconsistency in resourcing levels compromises the ability to work safely. (2.7.10)</p>

Key Findings and Recommendations

Ref	Recommendations	Immediate action required	Implementation Period	Estimated Impact
2.7.10	Share, discuss, and hold action planning sessions using the results of this safety climate survey. The Reviewers understand that POAL have held similar sessions on engagement. Action planning sessions should enable workers to share their ideas and thoughts on how to improve H&S.		M	M
2.7.11	Continue carrying out safety climate questionnaires at biannual intervals (6 monthly) as a mechanism for tracking climate movement based on this baseline survey (including multilingual options).		M	M
2.7.12	Increase frontline leadership training as a key focus area including pastoral care for workers.		M	H
2.7.13	Work with supervisors and line management who supervise high risk activities such as lashing to define clear protocols around minimum staffing levels to provide a clear and consistent organisational response.	Y	S	H

Key Findings and Recommendations

2.8 HEALTH & SAFETY FUNCTION

Ref	Key Findings (with reference to recommendations)
2.8.1	Personnel changes at a H&S management level has impacted the ability of the team to develop, implement, and monitor the effectiveness of the H&S framework. (2.8.6, 2.8.7)
2.8.2	During the Review, the incumbent Senior Manager H&S left POAL and a new appointment was made. Recruitment for a new H&S structure is underway. This new appointment continues to report to the Deputy CEO/CFO with an indirect reporting line to the CEO, not directly to the CEO as per the Reviewer's recommendation.
2.8.3	It is noted that the future direction would enable full and unfettered access of the Senior Manager H&S to the CEO and Board.
2.8.4	At the time of the Review there was a lack of understanding of the intent and content of the "Strong Foundations, Safe People Programme." Concern was raised that there is no involvement of the current H&S function. (2.8.8)
2.8.5	It is noted that the 'Strong Foundations, Safe People' programme is to be superseded by a new strategic H&S plan.

Key Findings and Recommendations

Ref	Recommendations	Immediate action required	Implementation Period	Estimated Impact
2.8.6	Establish a GM H&S position that reports directly to the CEO.	Y	S	H
2.8.7	<p>The Reviewers recommend re-establishing a H&S structure and function that includes the following capabilities: H&S Transformation leader, Critical H&S Risk Programme Wellness/Injury Management/Health resourcing, Safety Systems</p> <p><i>Please note this a suggested indicative recommendation for guidance that POAL should evaluate based on its future operational requirements.</i></p>		M	M
2.8.8	Ensure that the head of H&S prioritises the setting of a new comprehensive H&S strategy.		S	H

Key Findings and Recommendations

2.9 TRAINING

Ref	Key Findings (with reference to recommendations)
2.9.1	Overall, the standard of training and assessment activities is carried out to a high level. (2.9.4., 2.9.7)
2.9.2	The connection between the training curriculum and controls established for managing critical risks requires improvement to ensure that workers in critical areas have a common understanding of the risks and controls. (2.9.5)
2.9.3	Although there are many areas where engineering controls have been applied, there is a strong focus on training as an administrative control in a high-risk operation where greater use of elimination and engineering controls could be adopted. (2.9.8, 2.9.6)

Ref	Recommendations	Immediate action required	Implementation Period	Estimated Impact
2.9.4	Consider existing training in relation to work as done versus work as imagined and how this could be used to create a dynamic training environment where variability is explored.		M	H
2.9.5	As part of the recommended critical risk programme ensure that training captures key controls and golden safety rules required to prevent fatalities or serious harm from identified critical H&S risks. This should include collaboration with those responsible for creating and delivering training with the H&S Risk teams		M	H
2.9.6	Consideration should be given to the creation of a set of “Golden Rules” or “Lifesavers” (these are key controls which are easily digestible for all that work at the POAL)	Y	M	H
2.9.7	Improve on-the-job re-assessment so it is carried out at an appropriate frequency (i.e. every two years).		M	H

Key Findings and Recommendations

2.9.8	Look for opportunities to create higher levels of controls (elimination, substitution, engineering) in areas where are a purely behaviour/training relation safety control is in place to manage significant critical H&S risk.	Yes	S	H
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2.10 CONTINUOUS IMPROVEMENT

Ref	Key Findings (with reference to recommendations)
2.10.1	The Reviewers have concerns about the practice of video recording shift toolbox meetings as this may be contributing to an environment of low trust between workers and management. 2.10.3)
2.10.2	The content of shift toolbox meetings is too dense for effective adoption by workers, and the size of the groups included in the meetings does not allow for free discussion or questioning by workers. (2.10.3)

Ref	Recommendation	Immediate action required	Implementation Period	Estimated Impact
2.10.3	Consider the adoption of elements of a lean management system, - specifically Leader Standard Work and Daily Management Systems (DMSs). These offer opportunities for collaborative engagement between front line leaders and workers to better define daily priorities and collectively resolve problems as they occur.		M	M

Key Findings and Recommendations

Appendix

Climate Survey Results

3

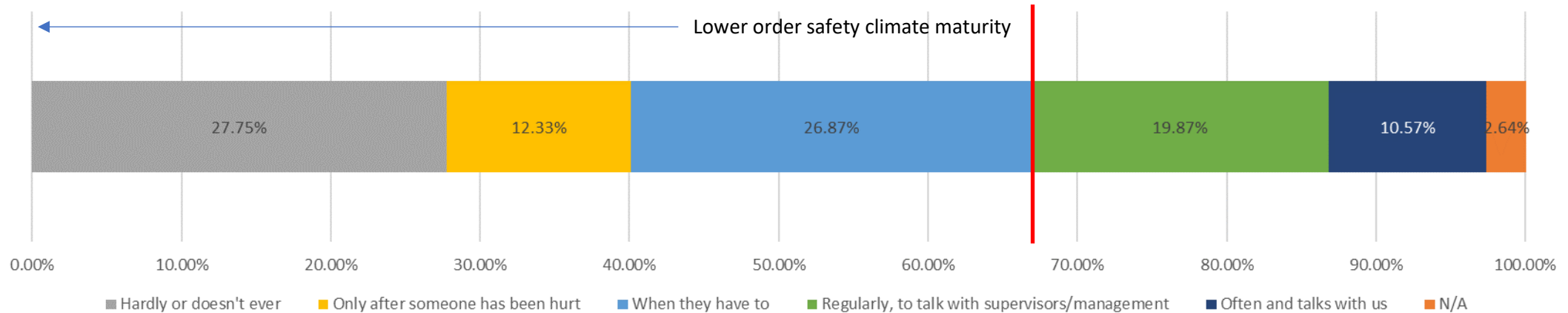


Safety Climate Survey

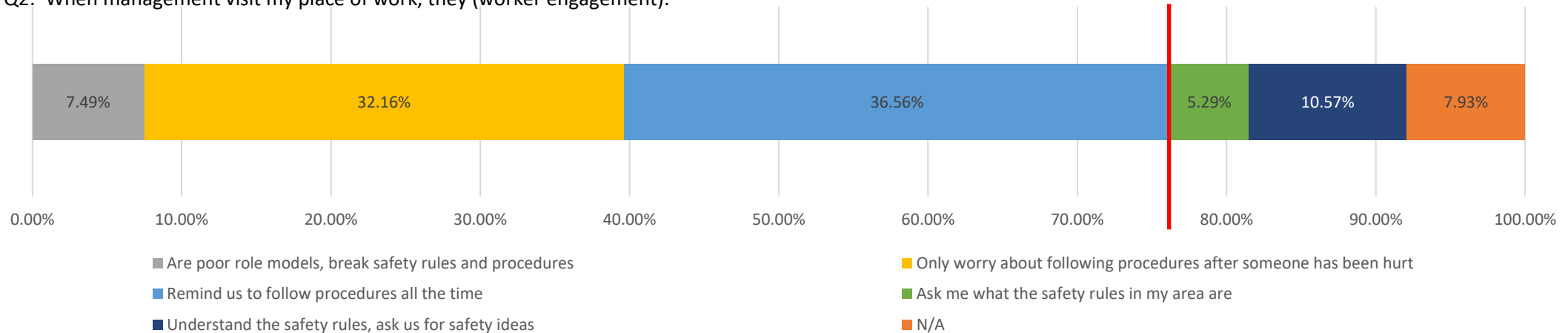
There were 227 climate surveys completed from the total workforce of 667 employees and conducted in 7 different languages. 86% of the responses were from workers in higher risk positions such as stevedoring. Office based workers had a lower uptake on completing the survey, however this is not considered material to the findings of the survey due to the relatively lower level of H&S risk that these workers are exposed to. The sample size represents a margin of error of 5.29% and a confidence level of 95%.

Management Questions:

Q1: Senior Management visits my work area (frequency):

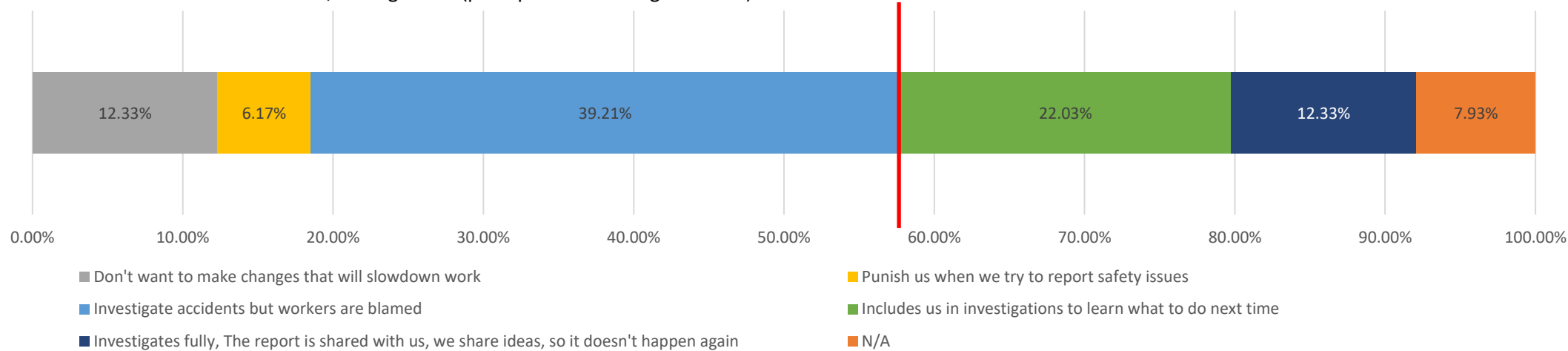


Q2: When management visit my place of work, they (worker engagement):

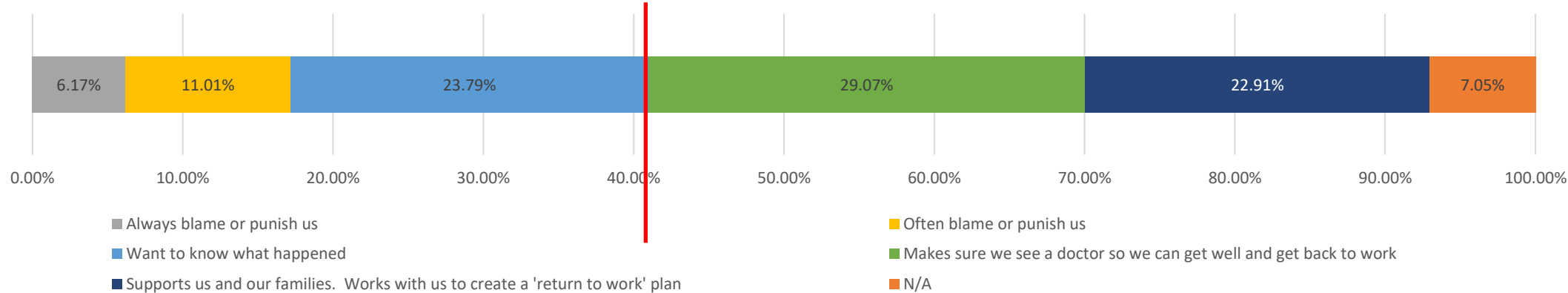


Safety Climate Survey

Q3: After an accident or a near-miss, Management (perception of investigation bias):

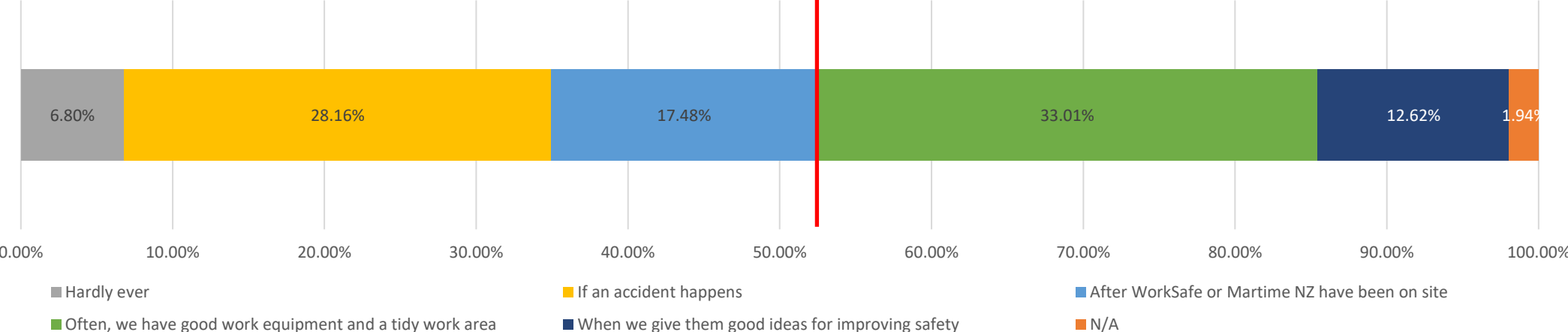


Q4: When workers are injured, Management (just culture and care for workers):



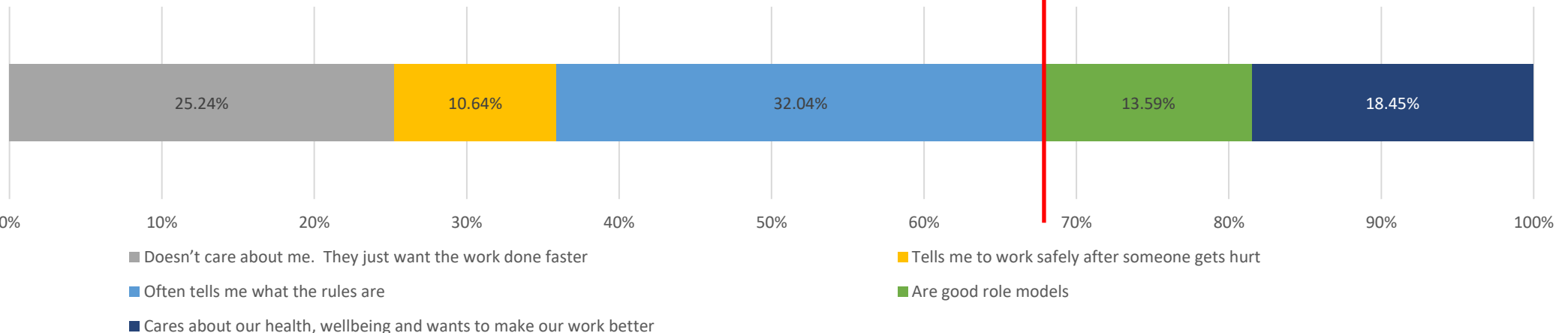
Safety Climate Survey

Q5: Management spends money on safety (perception of adequate resourcing):



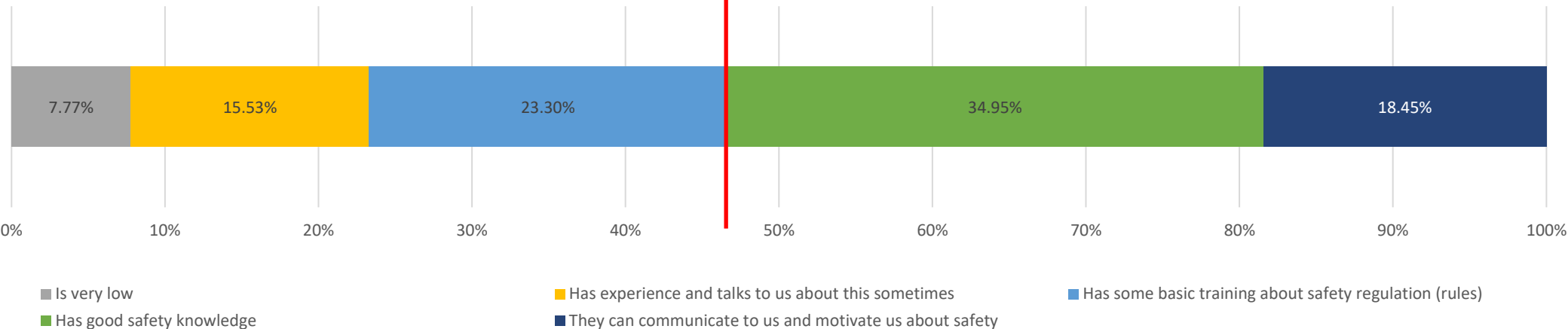
Frontline Leadership/Supervisor Questions

Q7: My Supervisor (pastoral care):

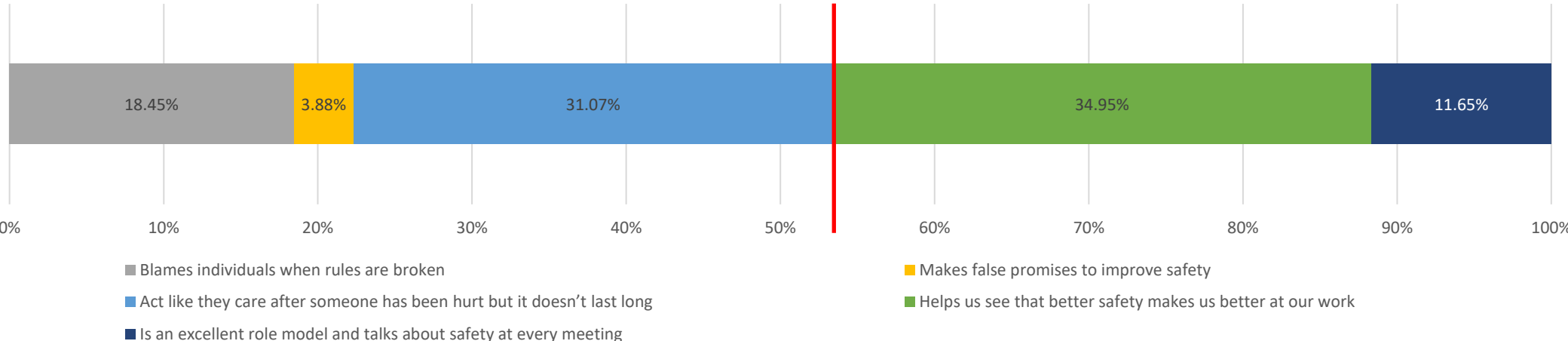


Safety Climate Survey

Q8: My supervisor’s knowledge of health and safety:



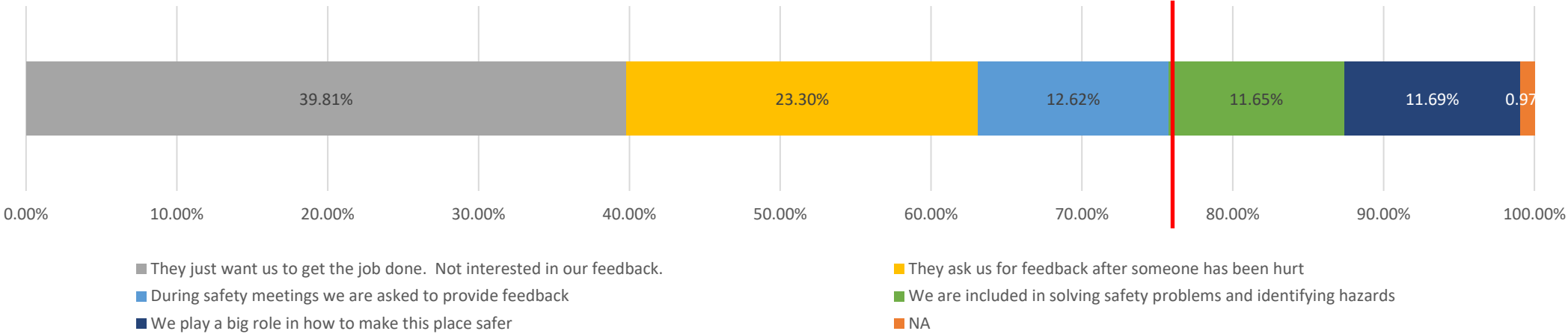
Q9: My supervisor (role modelling)



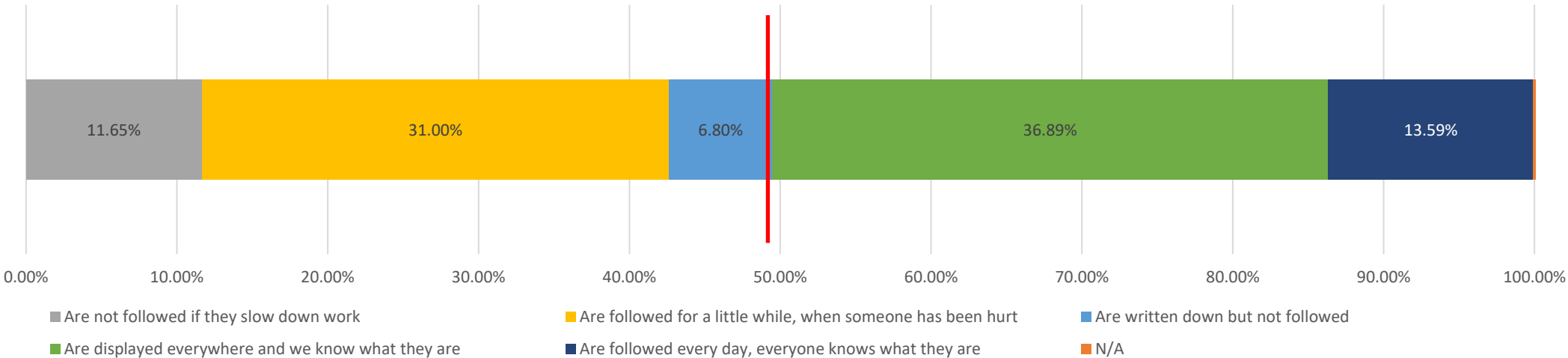
Safety Climate Survey

POAL/Safety Rules Questions

Q10: At POAL (worker engagement):

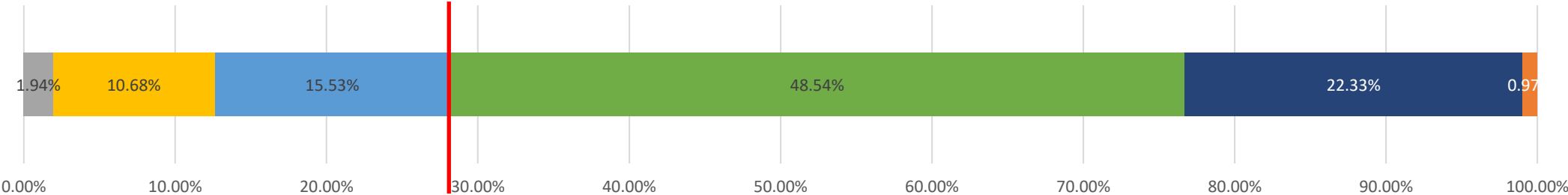


Q6: Safety rules and responsibilities:



Safety Climate Survey

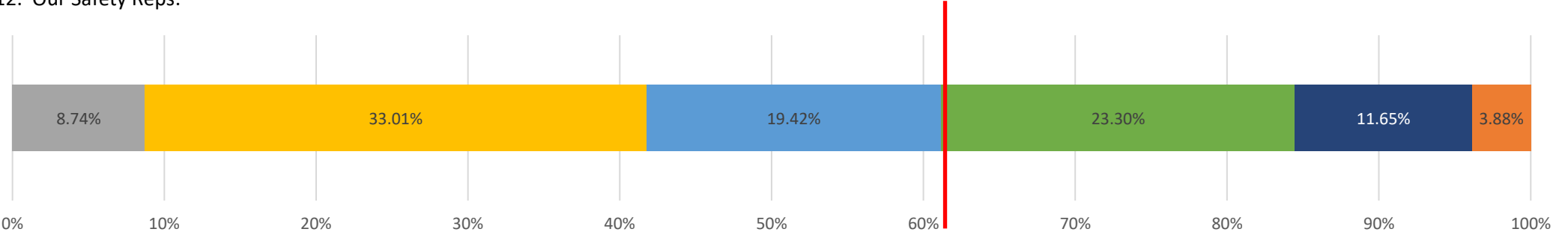
Q11: At POAL (critical H&S risk)



- I don't understand what could kill or seriously injure me and how I am protected
- I know some things that could kill or seriously injure me
- We have safety rules. It is not clear what could kill or seriously injure us or how we are protected
- We have safety rules about things that could kill or seriously injure us. We can stop work if we feel unsafe
- We have safety rules that are always reviewed and updated. We don't start work unless there are safety controls in place
- N/A

Safety Representative Questions:

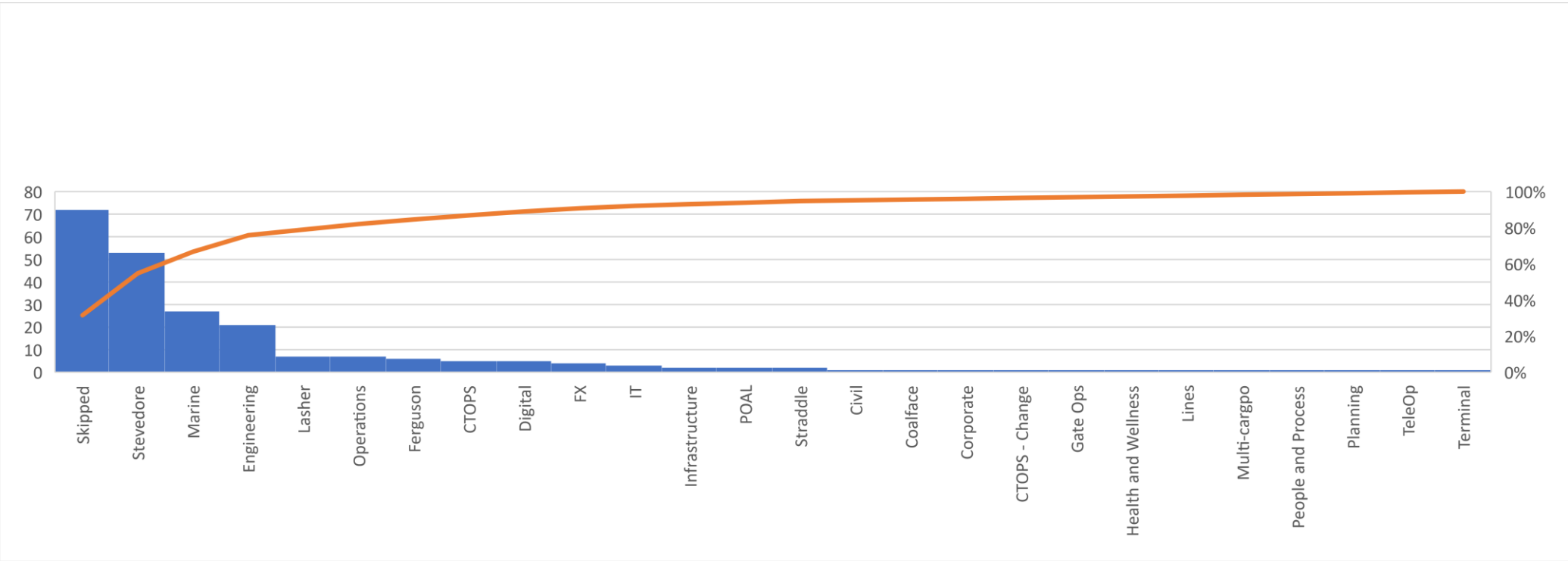
Q12: Our Safety Reps:



- Don't ask about safety, I don't feel heard or represented
- Try to speak for us but are often ignored by management
- Only attend the safety committee meetings
- Help investigate accidents and are involved in setting rules
- Our safety committee are across all aspects of safety
- N/A

Safety Climate Survey

Q13: What department do you work in (open response):



Safety Climate Survey

Q14: Do you have any other comments? (open response)



Roger McRae, Independent Chair CHASNZ

Chris Alderson, CEO CHASNZ

Jon Harper-Slade CFIOSH, GM Safety Innovation CHASNZ

Emma Brookes, Health and Safety Specialist CHASNZ

