



Government
of South Australia

SafeWork SA

Respirable Crystalline Silica Campaign Report

2020-21

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Executive summary

From 1 October 2020 to 1 April 2021, SafeWork SA undertook a compliance campaign (the campaign) focused on respirable crystalline silica (RCS) in the fabrication, construction, and mining industries. The fabrication industry included persons conducting a business or undertaking (PCBUs) using engineered and natural stone (i.e. monumental masons).

The campaign was based on the proactive RCS compliance campaign undertaken by SafeWork SA in 2019 (the 2019 campaign). The audit report for the 2019 campaign is available on the SafeWork SA website – [RCS Compliance Program 2019 Audit Report](#).

The campaign was undertaken as a result of a recommendation in the 2019 campaign audit report. The objective of the second audit was to ensure compliance had been maintained, and that businesses and operators continued to understand their responsibilities to ensure the health and safety of their workers and others, and controls to eliminate or reduce risk remained in place. SafeWork SA broadened the scope of the campaign to include monumental stone masons, and mining and quarrying sites, as workers in those industries are at high risk of respiratory illness from inhalation of RCS.

SafeWork SA conducted 199 site visits and 71 compliance audits during the campaign.

A total of 102 Statutory Notices were issued where breaches of the work health and safety legislation was identified, consisting of 95 Improvement Notices and 7 Prohibition Notices.

The largest area of non-compliance identified in the campaign was the failure to conduct air monitoring to determine the airborne concentration of substances or mixtures to which a workplace exposure limit (WEL) applies.

30 stone benchtop PCBUs were audited, resulting in the issue of 69 Statutory Notices, the majority of which were for failing to conduct air monitoring, identifying the hazards of RCS, and implementing control measures.

8 monumental stone mason PCBUs were audited, resulting in the issue of 8 Statutory Notices, the majority of which were for failure to carry out air monitoring and implement controls to keep exposure under the WEL for RCS.

11 construction PCBUs were audited, resulting in the issue of 11 Statutory Notices for failing to ensure respiratory protective equipment (RPE) was a suitable size and fit for workers to use and wear, and to minimise the risks associated with exposure to airborne particulates.

22 mining and quarrying PCBUs were audited, resulting in the issue of 14 Statutory Notices for failure to conduct air monitoring and implement controls to keep exposure under the WEL for RCS.

Of the industries that were audited in 2019, a comparison of results between campaigns identified that:

- 25 fabricators of engineered stone had increased compliance, with most maintaining safe systems of work that were implemented as a result of the 2019 campaign
- 11 construction PCBUs had increased compliance with documented safe systems of work and Safe Work Method Statements (SWMS) for High Risk Construction Work (HRCW).

Australia has a WEL for RCS. A WEL for a particular chemical sets out the legal concentration limit of that chemical that must not be exceeded in a workplace. On 1 July 2020, South Australia implemented the new national policy for RCS WEL and reduced the limit for RCS to 0.05mg/m³ measured as an eight-hour time weighted average. This is consistent with other states and territories.

Due to COVID-19 restrictions, PCBUs received advance notification of the campaign.

It is recommended that SafeWork SA:

- continues to provide information and education to PCBUs in accordance with the [South Australian Government Strategy for Respirable Crystalline Silica Exposure Awareness and Reduction 2020](#)
- communicates the outcome of the campaign to internal and external stakeholders
- maintains a focus on RCS exposure during the 2021 SWMS compliance campaign as the audits identified an improvement in the way construction PCBUs manage HRCW
- conducts a review of data to identify any stone benchtop industry trends associated with exposure to RCS in 12 months and conducts another compliance campaign if improvements are not being maintained.

Background

SafeWork SA regulates compliance with work health and safety legislation and can require PCBUs to rectify safety breaches through the issue of Statutory Notices.

In 2019, SafeWork SA undertook a two-stage proactive compliance campaign for RCS exposure risk and controls in accordance with the *Work Health and Safety Act 2012 (SA)* (the Act) and the *Work Health and Safety Regulations 2012 (SA)* (the Regulations):

- Stage one: compliance audits that focused on fabricators and installers of engineered stone products (26 businesses).
- Stage two: compliance audits that focused on businesses in the construction industry, with the potential for a high level of RCS exposure (12 businesses).

The 2019 campaign involved a series of education seminars, health screenings, and the auditing of workplaces.

Work Health and Safety (WHS) Inspectors conducted audits across the specified industries, resulting in 173 Statutory Notices issued to PCBUs for non-compliance.

Common findings across industry groups related to inadequate provision of worker information, training, and instruction relating to RCS exposure. This included risks of exposure, suitable control measures (such as isolation and administrative controls) and specific training in the use and maintenance of RPE.

The 2019 audit recommended SafeWork SA undertook an unannounced follow-up compliance campaign in 6 to 12 months to ensure compliance had been maintained and that PCBUs were aware of the reduced WEL, for RCS effective 1 July 2020.

Introduction

SafeWork SA undertook compliance audits from 1 October 2020 to 1 April 2021 for RCS exposure, to establish whether there was ongoing compliance with the WEL for RCS, and whether any previously identified issues had been rectified.

The campaign audited the compliance of PCBUs that had been audited in 2019 to ensure:

- compliance had been maintained
- PCBUs understood their responsibilities to protect their workers
- PCBUs were aware of the reduced WEL for RCS.

SafeWork SA undertook compliance audits on the PCBUs identified in the 2019 audit and on newly-identified manufacturers of stone products performing fabrication work, and PCBUs in the monumental stone and mining and quarrying industries.

WHS Inspectors commenced the campaign on 1 October 2020, but due to the COVID-19 cluster in South Australia resulting in the 'circuit-breaker' absence from workplaces, the campaign was suspended until the COVID-19 measures were reduced. Proactive work was suspended from 16 November 2020 to 4 December 2020 inclusive. When restrictions were lifted, the campaign continued until 1 April 2021.

2020-21 campaign

Scope

The scope of the campaign was to:

- determine whether industry was aware of the reduction in the revised WEL for RCS, and ensure that appropriate safe systems of work were in place to protect workers
- educate PCBUs about their responsibilities when working with RCS, the reduced WEL for RCS, and their WHS responsibilities under the Act and Regulations.

Audit and industry focus

Fabrication industry - stone benchtops

WHS Inspectors audited PCBUs that were previously audited during the 2019 campaign to confirm ongoing compliance, and to determine whether issues identified at that time had been rectified.

Compliance audits were also undertaken at newly-identified manufacturers of stone products in South Australia that perform fabrication work.

Fabrication industry - monumental stone

WHS Inspectors undertook compliance audits in the monumental stone industry where workers were potentially at high risk of respiratory illness from RCS during cutting, sanding, and polishing granite for head stones.

The monumental stone industry was not part of the 2019 campaign.

Construction industry

In the 2019 campaign, a desktop audit of the construction industry was undertaken to identify whether PCBUs had systems in place for workers when using dust-generating tools for cutting, sanding, and crushing concrete.

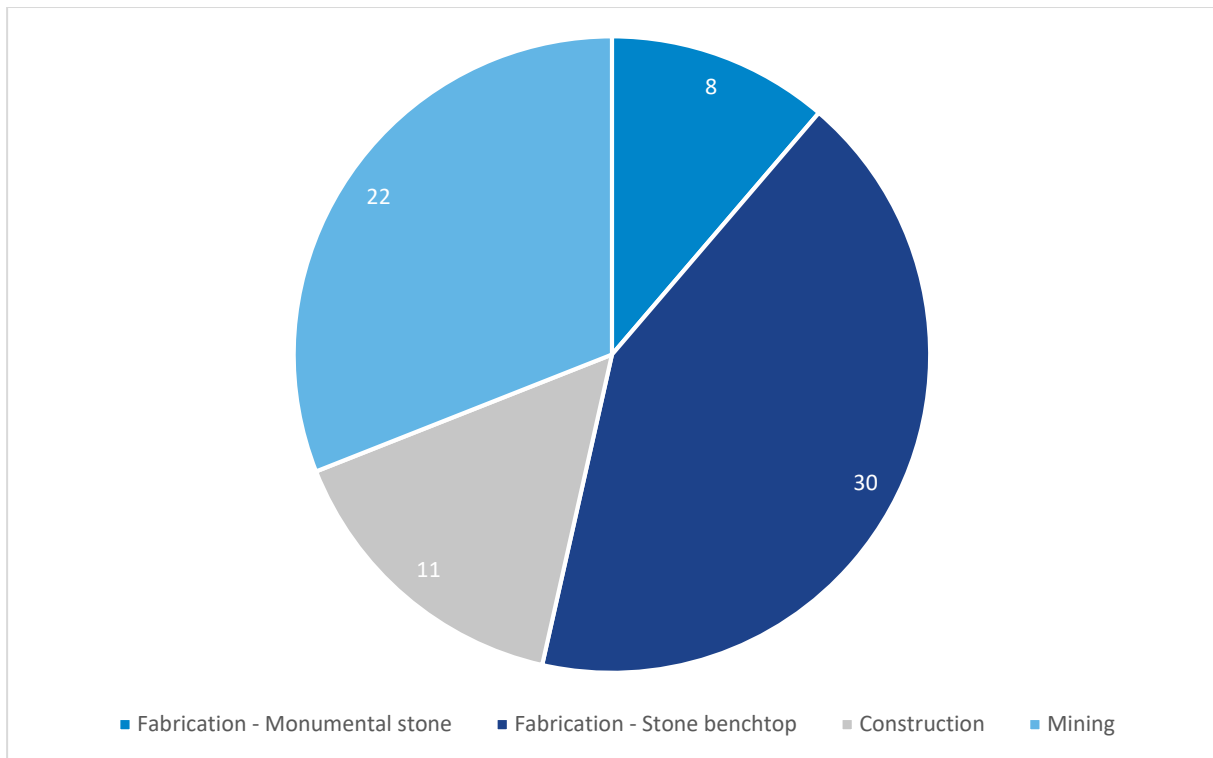
During the 2020-21 campaign, construction industry compliance audits were undertaken at construction worksites to determine whether PCBUs were following their documented safe systems of work.

Mining industry

WHS mining Inspectors undertook compliance audits that focused on activities that had high risk of exposure to RCS, to ensure that PCBUs had implemented, maintained, and monitored control measures. The mining industry was not part of the 2019 campaign.

Industry audits

Figure 1: Audits by industry



WHS Inspectors undertook 199 site visits and 71 compliance audits.

Total audits undertaken by industry:

Construction 11 compliance audits

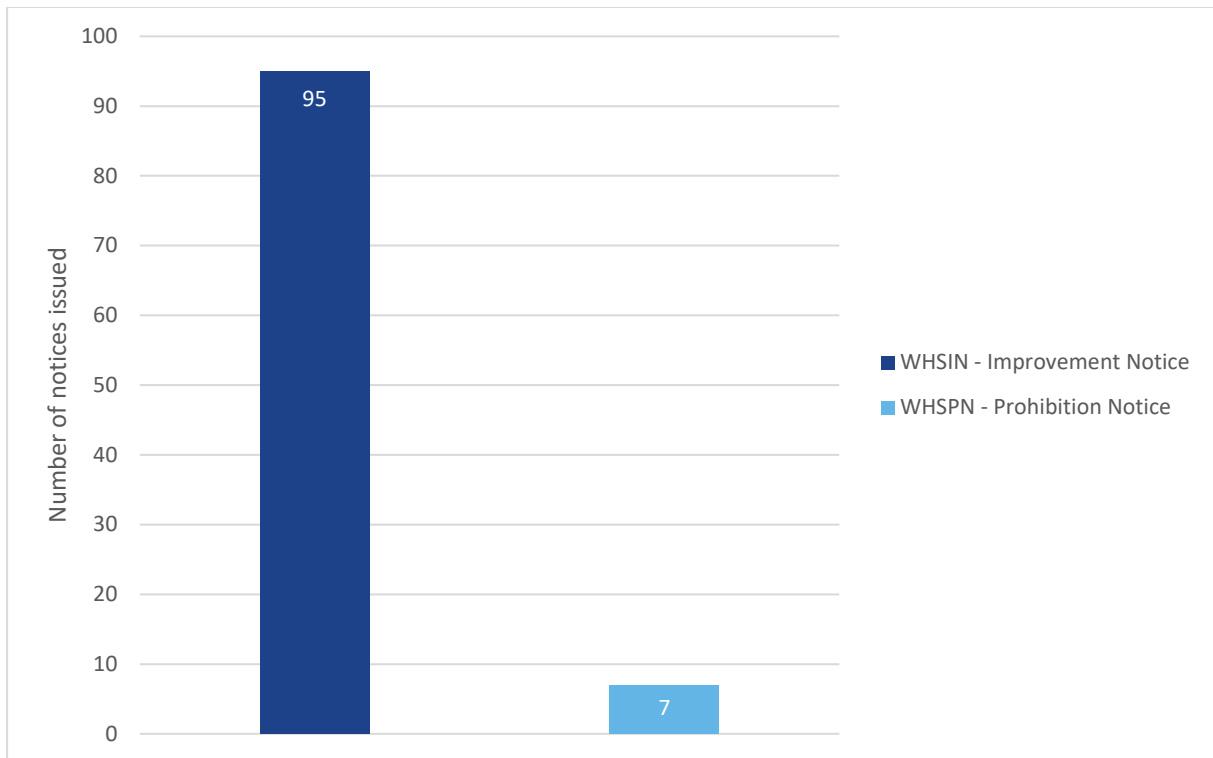
Mining 22 compliance audits

Fabrication Stone benchtops - 30 compliance audits

 Monumental stone - 8 compliance audits

Notices issued

Figure 2: Notices issued



WHS Inspectors issued 102 Notices for non-compliance, including 95 Improvement Notices and 7 Prohibition Notices.

A breakdown of the reasons for the issue of Notices can be seen in Figure 3.

Figure 3: Reason for the issue of Notices

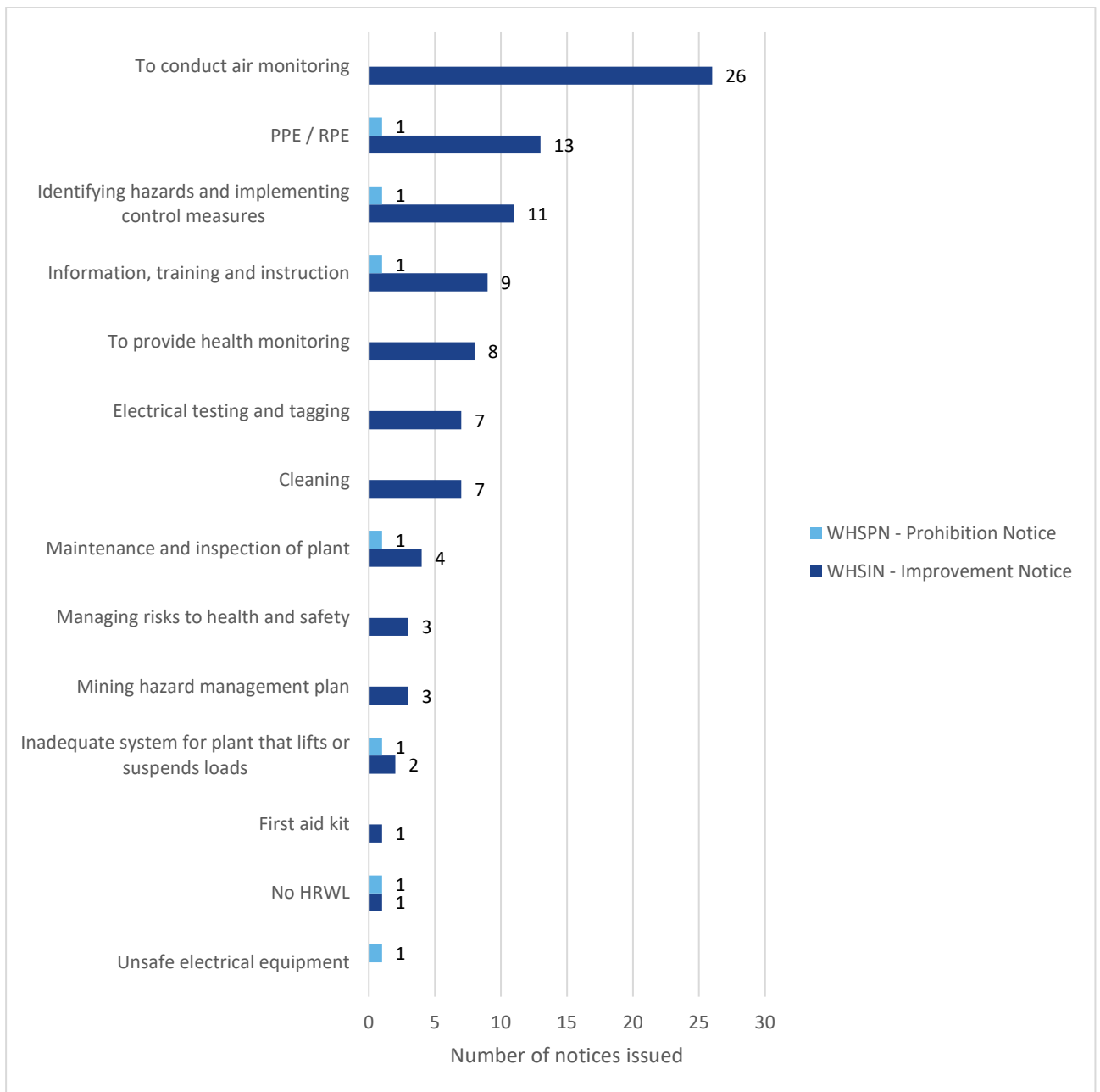
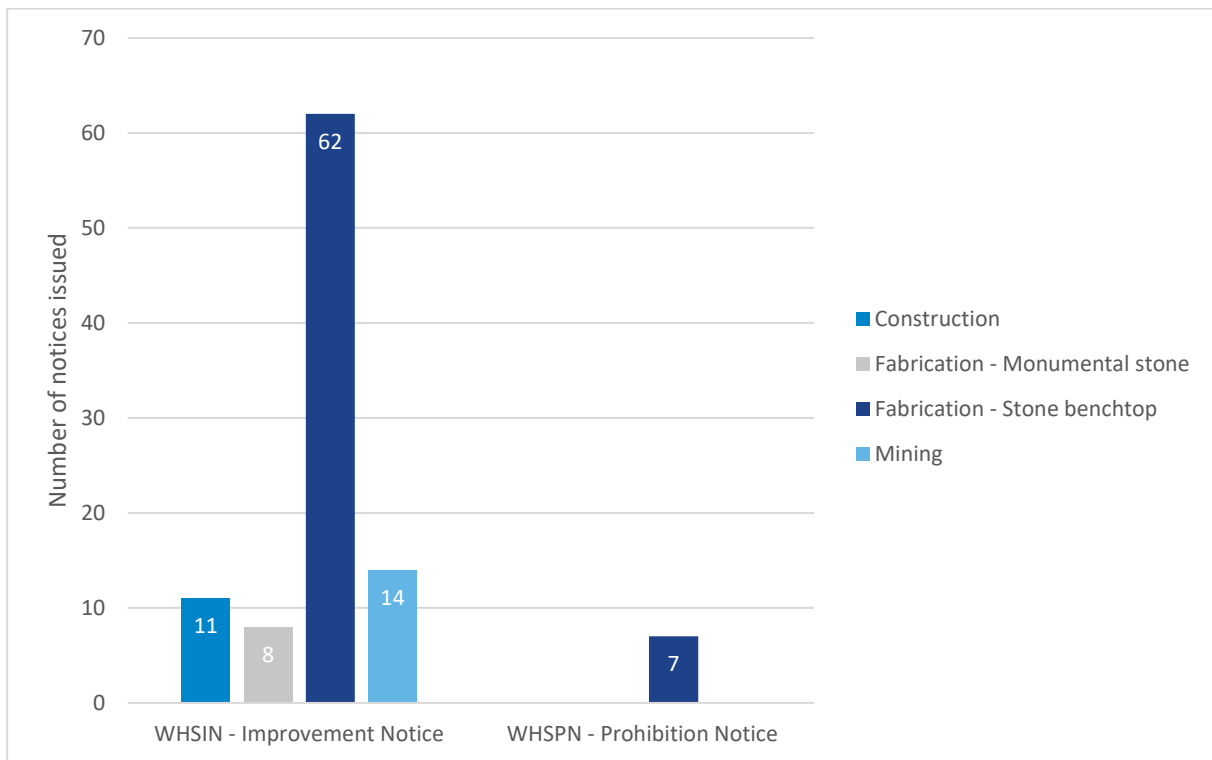


Figure 4: Notices issued by industry



Under the Act, WHS Inspectors must provide reasons for the issue of Improvement or Prohibition Notices. Whilst Improvement Notices were the most commonly issued Notice, Prohibition Notices were issued where there was an activity occurring, or likely to occur, that created a serious risk to the health or safety of a person.

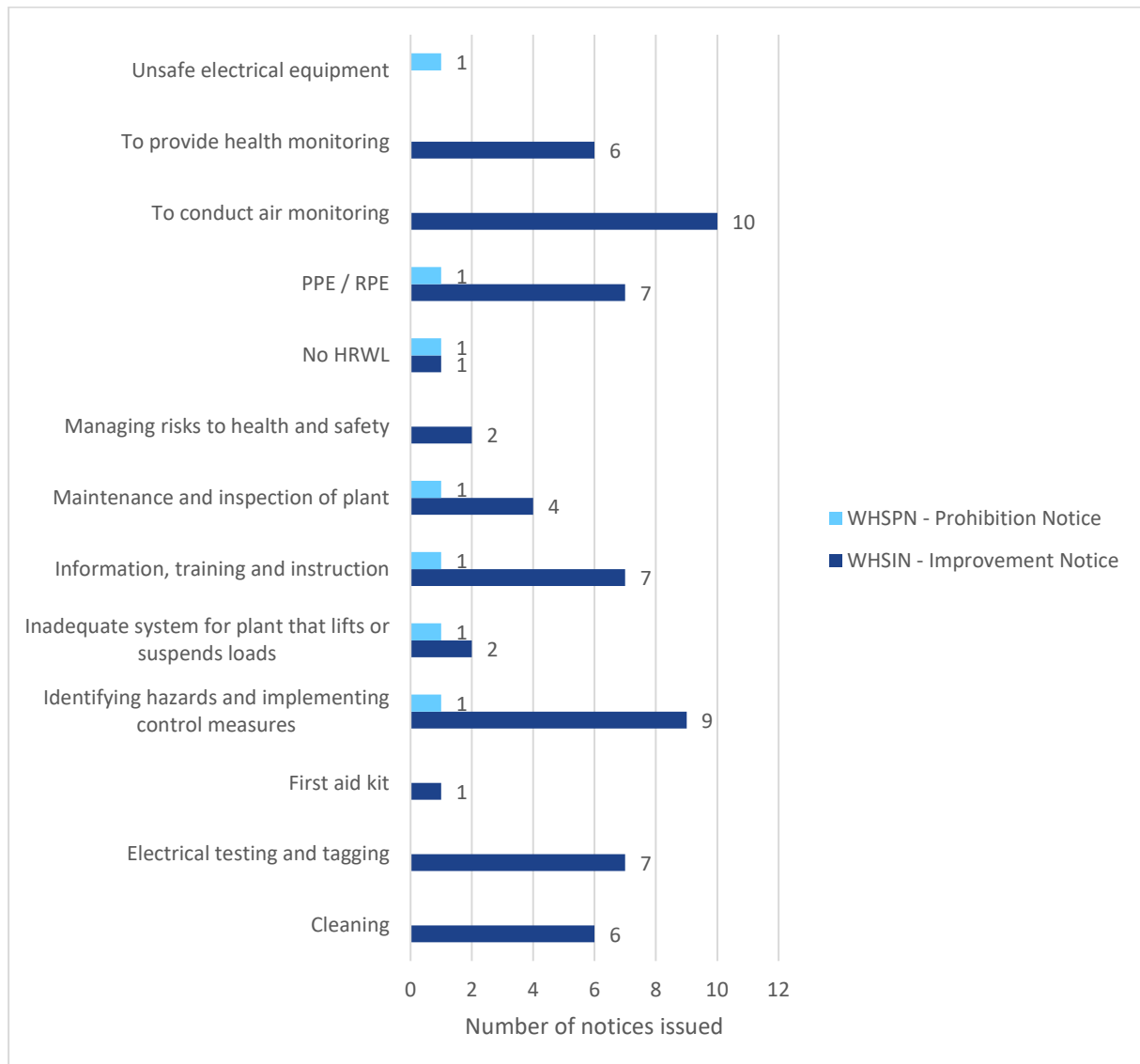
Trends

The majority of Notices were issued for the following reasons:

- failure to conduct air monitoring to determine the airborne concentration of a substance or mixture at the workplace, to which an exposure standard applies
- worker exposure to RCS as a result of working with materials that contain RCS, without wearing RPE of a suitable size and fit
- failure to provide adequate training for workers in correct storage of breathing apparatus (masks)
- failure to provide information, training, and instruction to workers to protect themselves from risks to their health and safety arising from exposure to RCS.

Fabrication industry – stone benchtops

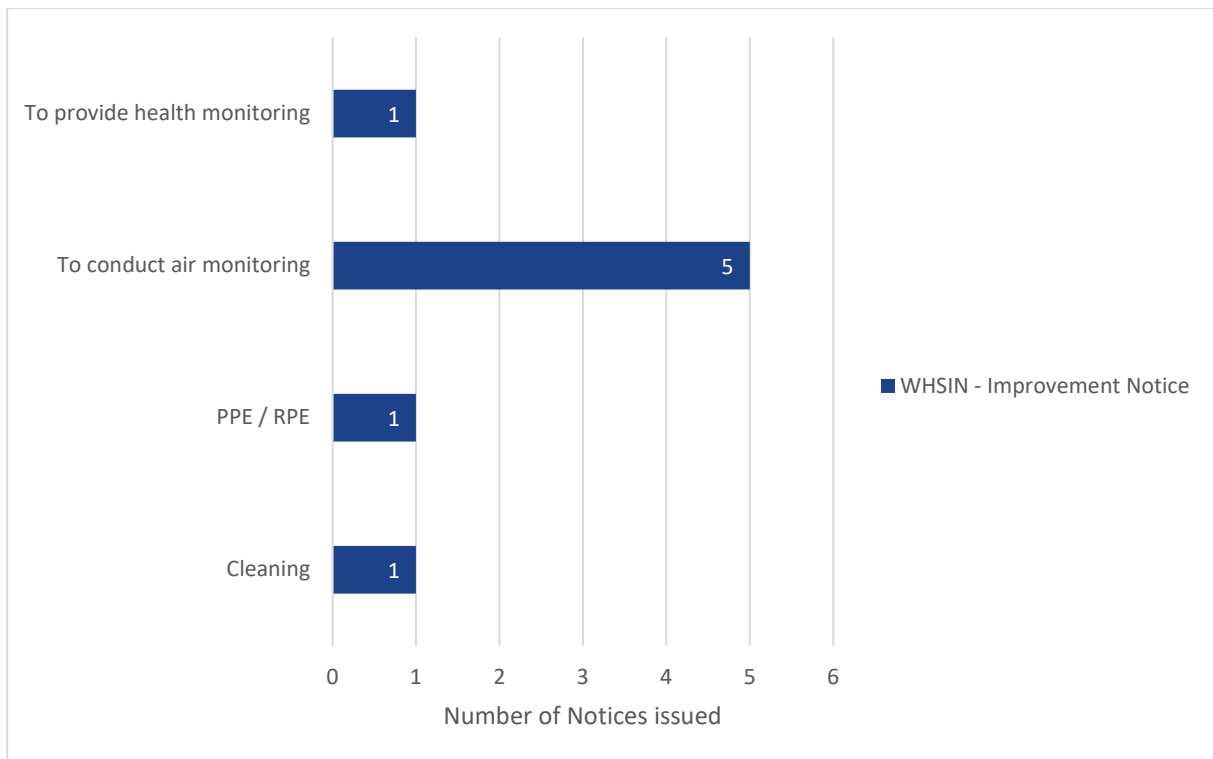
Figure 5: Breakdown of Notices issued to the fabrication industry– stone benchtops



A total of 69 Notices were issued to the stone benchtop industry, the majority of which were for PCBU's failing to conduct air monitoring, identifying the hazards of RCS, and implementing control measures.

Fabrication industry – monumental stone

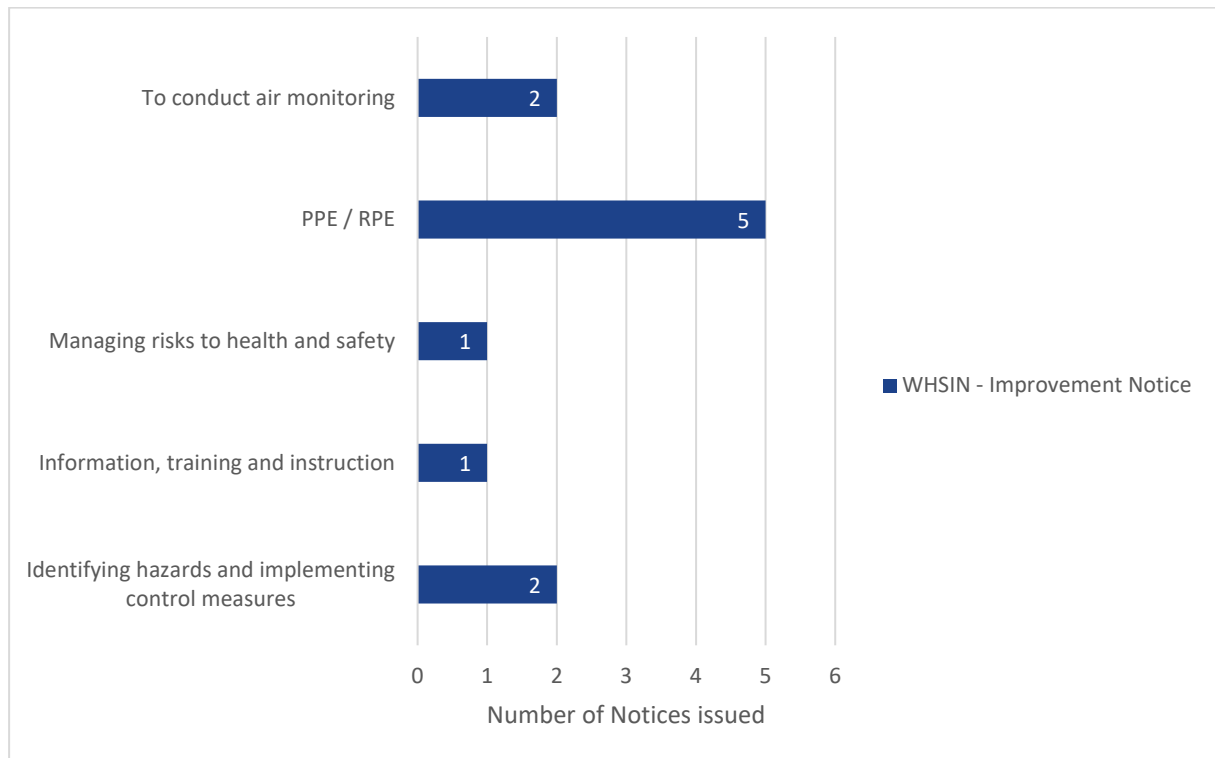
Figure 6: Breakdown of Notices issued to the fabrication industry – monumental stone



A total of 8 Notices were issued to the monumental stone industry, the majority of which were for failure to carry out air monitoring to determine the airborne concentration of RCS, and implement controls to keep exposure under the WEL for RCS.

Construction industry

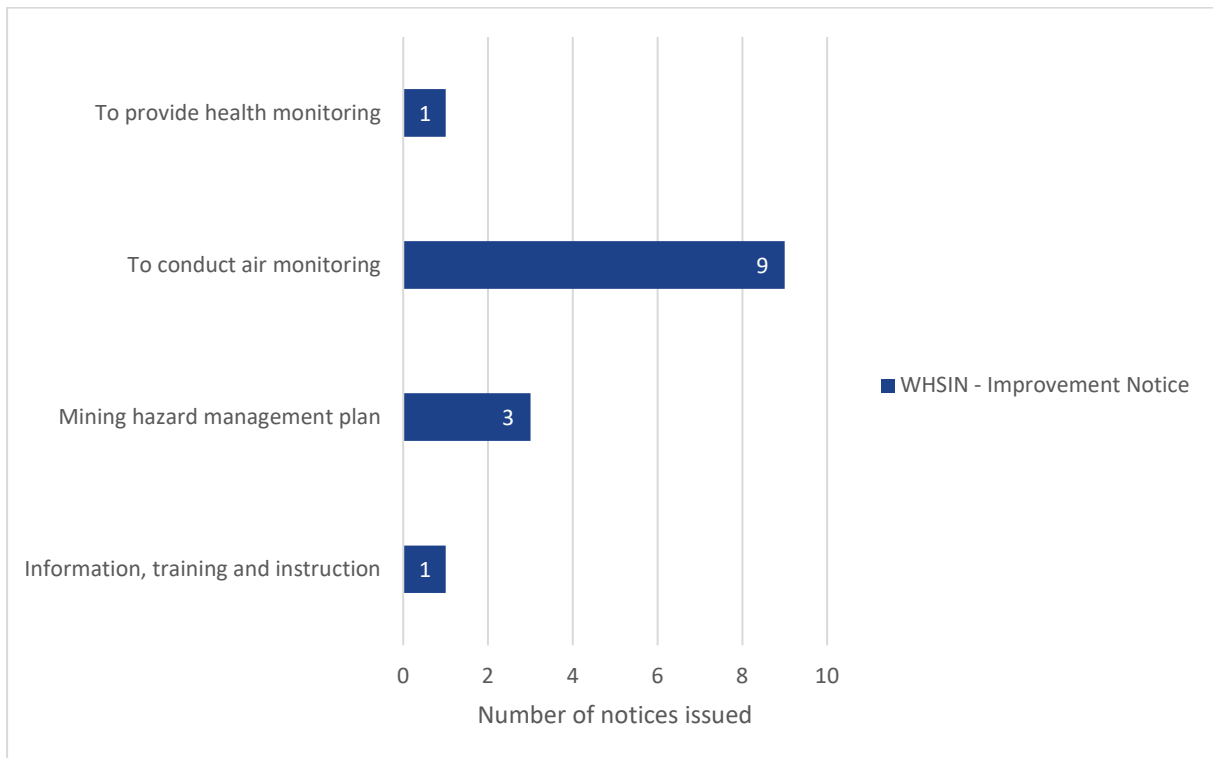
Figure 7: Breakdown of Notices issued to the construction industry



A total of 11 Statutory Notices were issued for failure to ensure RPE was a suitable size and fit for workers to use and wear, and to minimise the risks associated with exposure to airborne particulates.

Mining industry

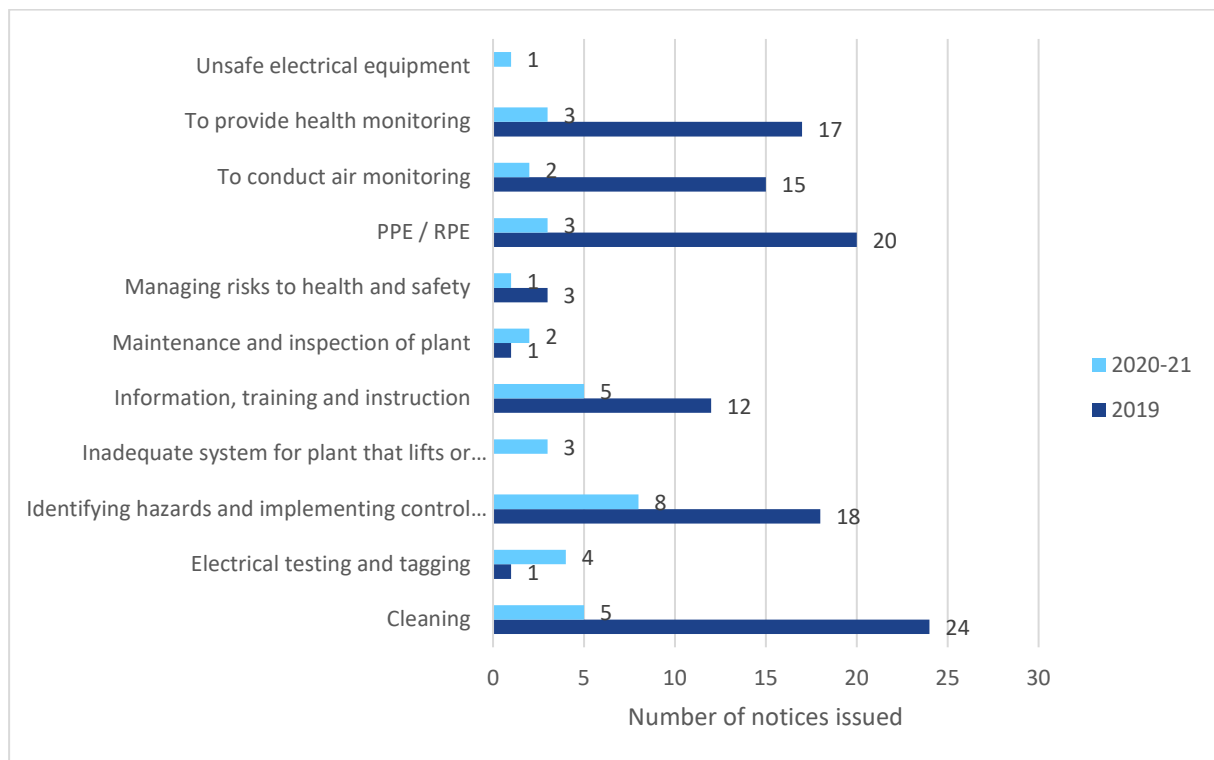
Figure 8: Breakdown of Notices issued to the mining industry



A total of 14 Notices were issued for failure to conduct air monitoring to determine the airborne concentration of RCS, and implement controls to keep exposure under the WEL for RCS.

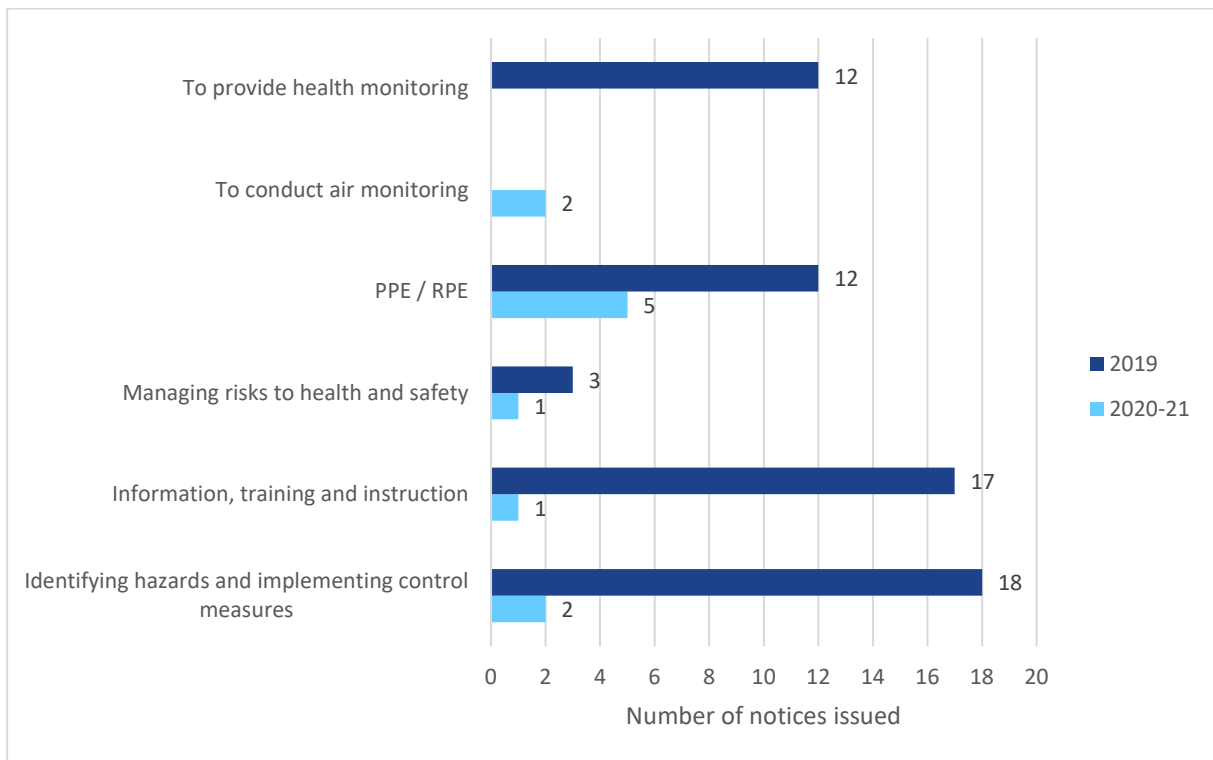
2019 / 2020-21 Notice comparison

Figure 9: Breakdown of Notices issued to the fabrication industry– stone benchtops



The campaign identified an increase in compliance, with most PCBUs maintaining their safe systems of work that were implemented as a result of the 2019 campaign.

Figure 10: Breakdown of Notices issued to the construction industry



The campaign identified an increase in compliance and that PCBUs were following their documented safe systems of work. There is an opportunity for ongoing industry education for maintenance of RPE, to ensure it is a suitable size and fit for workers to use and wear and provide training.

Summary

The campaign aimed to establish whether compliance was being maintained at businesses audited during the 2019 campaign, and whether businesses and operators understood their responsibilities to ensure their own safety, and the safety of co-workers.

The campaign identified an increase in compliance in the fabrication – stone benchtop industry with a total of 37 Notices issued, compared to 111 Notices issued during the 2019 campaign. The campaign also identified an increase in compliance in the targeted construction PCBU's with a total of 11 Notices issued compared to 62 Notices issued during the 2019 campaign.

The two additional industries (fabrication of monumental stone, and mining and quarrying) included in this campaign, also identified a number of breaches relating to managing RCS.

During the campaign, a significant number of sites were visited by WHS Inspectors and compliance audits undertaken, and although a level of compliance was noted, a large number of Notices were issued for non-compliance. Of particular concern was the largest area of non-compliance, namely the failure to conduct air monitoring, with the stone benchtop industry issued with the largest number of Notices for non-compliance.

WHS Inspectors will continue to educate and guide PCBU's and industry groups, and monitor compliance through their day-to-day activities.

Recommendations

It is recommended that SafeWork SA:

- continues to provide information and education to PCBU's in accordance with the [South Australian Government Strategy for Respirable Crystalline Silica Exposure Awareness and Reduction 2020](#)
- communicates the outcome of the campaign to internal and external stakeholders
- maintains a focus on RCS exposure during the 2021 SWMS compliance campaign as the audits identified an improvement in the way construction PCBU's manage HRCW
- conducts a review of data to identify any stone benchtop industry trends associated with exposure to RCS in 12 months and conduct another compliance campaign if improvements are not being maintained.

Further information

Businesses requiring further information and advice can telephone SafeWork SA on 1300 365 255 or visit the SafeWork SA website at www.safework.sa.gov.au

Workplaces can request a visit from the SafeWork SA advisory service who can provide practical advice based on a workplace's industry, size, risk, and complexity.

SafeWork SA advisors can help with understanding work health and safety responsibilities, and provide practical support to improve systems, practices, and safety generally.