



## Coal – Similar Exposure Group (SEG) List

This information sheet provides guidance on SEGs used in Queensland Coal mines. Specifically, what are they, their benefits, how they are established, their broad classification and how they are used when reporting monitoring data periodically to the Mine Inspectorate, Resources Safety and Health Queensland (RSHQ).

### What are SEGs?

SEGs are used to identify a group of workers who have the same general exposure to risks. This can include:

- Similarity and frequency of the tasks performed.
- The types of materials and processes used to complete tasks.
- Similarity of the way tasks are performed.

### Benefits of SEGs

The nature and extent of the risks to which every worker is exposed should be identified and the level of risk assessed. Grouping coal mine workers (CMWs) into a SEG avoids having to assess every position individually. If the members of a large work group do a similar job and are exposed to similar risks, data from a representative sample of those workers can be used to estimate the exposure of the whole group.

### Site Specific SEGs

Mines are encouraged to establish and use their own SEGs list. This should be based on observations and sampling of their specific work groups. However, to facilitate the periodic (quarterly) reporting of SEG data to the Mines Inspectorate, all data must be allocated under one of the appropriate SEGs listed on the following pages.

The site specific SEG listing and the composition and population of individual SEGs should be reviewed periodically to ensure it remains relevant to the site operations. Particularly if the nature of the work changes, new processes or equipment are

introduced or the descriptive statistical analysis for the SEG indicates a high variance (e.g. geometric standard deviation >3.0).

### How to Establish SEGs

The most acceptable method for a mine to establish their own SEGs is by observation and sampling.

- Observation involves grouping work activity according to the task, job description, the process, and exposure to any agent in the work environment and control measures applied. Identifying SEGs by observation alone is not sufficient because exposure can alter with differences in work techniques from one worker to another or from shift to shift.
- Sampling data is required (either historic data or data collected for the purpose of defining a SEG) to support the observational data. With sufficient data collected, statistical analysis can confirm that the group is representative of a single SEG.

### Itinerant SEGs

There may be some SEG based activities undertaken on coal mines or coal mine leases that are considered non-routine or intermittent. Examples of SEGs in this category may include:

- drift construction
- topsoil removal

The SSE must consider itinerant SEGs when establishing the respirable dust monitoring program, as it is still a requirement under Section 89 of the CMSHR 2017 that dust exposures for these activities are controlled and monitored.

### Reporting Quarterly Data

The site senior executive (SSE) shall provide a quarterly dust monitoring report to the Mines Inspectorate by the dates specified in Table 1 below, including all personal exposure sampling results collected during the quarter.



## UNDERGROUND COAL MINES

SEG	CODE	PRIMARY TASK DESCRIPTIONS
<b>Outbye Construction / Infrastructure</b>	QCU006	Coal mine workers performing roadwork construction and maintenance underground; installing / removing infrastructure underground including hoses, cables, lights and pipe work; shotcreting and concreting underground.
<b>VCD Installer</b>	QCU007	Coal mine workers spraying stoppings and using jackhammer and conducting VCD removal tasks.
<b>ERZ Controller</b>	QCU008	Coal mine workers performing inspections and statutory duties in production panels, returns and outbye locations.
<b>Surface Maintenance</b>	QCU009	Coal mine workers servicing / maintaining plant and equipment including work in surface workshop.
<b>Control Room Operator</b>	QCU010	Coal mine workers involved in control room operations. This includes those workers remotely operating automated equipment from within an enclosed control room environment.
<b>Belt Splicers</b>	QCU011	Coal mine workers performing belt maintenance, splicing and commissioning.
<b>Boilermaker (Surface)</b>	QCU012	Coal mine workers involved in steel fabricating, welding, oxy cutting, air gouging—surface workshop and CHPP workshop.
<b>Administration</b>	QCU013	Coal mine workers undertaking administration and security activities on the surface, whom are not directly involved in mining related activities.
<b>Resin Worker</b>	QCU014	Coal mine workers undertaking resin injection and void filling activities throughout the underground workings. This includes the use of polyurethane resins (PUR) and phenolic resins.
<b>Stone Drivage</b>	QCU015	Coal mine workers involved in mining through stone, faults and intrusions (e.g. for mine expansion or drift construction). Doesn't include development or longwall workers who encounter small areas of faulted ground or stone banding.
<b>Secondary Support</b>	QCU016	Coal mine workers undertaking secondary support tasks including bolting; building cogs; standing cans; building bulkheads; injecting cementitious products (grout).
<b>Gas Drainage UG</b>	QCU017	Coal mine workers undertaking gas drainage tasks underground.
<b>Shift Co-Ordinator / Management</b>	QCU018	Shift or section coordinators and under managers who undertake inspections and supervisory tasks. This includes a mixture of underground and surface activities.
<b>Production Support / Bullgang</b>	QCU019	Coal mine workers undertaking longwall support and development support activities. This may include some minimal coal winning activities within their work period (e.g. straightening shear, bolting unsupported ground etc).
<b>Returns</b>	QCU020	Coal mine workers routinely undertaking maintenance, construction, service recovery, secondary support, stone dusting and services extension / retractions activities in return airways.
<b>Surface Other</b>	QCU021	Coal mine workers performing any other tasks on the surface of an underground mine that are not adequately represented by any other SEG.
<b>Underground Other</b>	QCU022	Coal mine workers routinely performing any underground non-production tasks underground that are not adequately represented by any other SEG.
<b>Gas Drainage Surface</b>	QCU023	Coal mine workers undertaking gas drainage tasks on the surface.

## UNDERGROUND COAL MINES

SEG	CODE	PRIMARY TASK DESCRIPTIONS
<b>Drilling Other</b>	QCU024	Coal mine workers undertaking surface to seam drilling operations at an underground coal mine for the purpose of boreholes, shafts and services.
<b>Warehousing</b>	QCU025	Coal mine workers undertaking warehousing activities including forklift operation.
<b>Tech Services</b>	QCU026	Coal mine workers performing mine planning and design (includes surveyors, geotechnical engineers, ventilation officers, hygienists, observers conducting tasks underground.)
<b>Domestic Cleaners</b>	QCU027	Coal mine workers involved in the general domestic cleaning of internal and external buildings and structures (e.g. crib rooms, bathhouses, restrooms, office spaces and meeting rooms).
<b>Industrial Cleaners</b>	QCU028	Coal mine workers involved with heavy and light industrial cleaning of plant and equipment.
<b>Remote Mining Operations</b>	QCU029	Coal mine workers involved in the continuous remote method of mining of consecutive unsupported plunge cuts extending from pre-developed gate roads under controlled conditions. This includes remote guidance, horizon control, gas monitoring and incorporating a high level of automation functionality.

\* Sub groups for Longwall and Development SEGs must be selected on the dust data import template where applicable.

## SURFACE COAL MINES

SEG	CODE	PRIMARY TASK DESCRIPTIONS
<b>Pre-strip and Overburden Removal</b>	QCS001	Coal mine workers working in pre-strip areas of the mine and operating equipment (e.g. haul trucks, loaders, dozers, graders and excavators).
<b>Coal Removal</b>	QCS002	Coal mine workers involved in the removal of product coal (e.g. digger/shovel, dump trucks, dozer).
<b>Open Cut Inspection Services</b>	QCS003	Coal mine workers performing inspection and monitoring tasks in the mining and excavation areas (e.g. OCE and shift supervisors).
<b>Road Maintenance</b>	QCS004	Coal mine workers operating graders and water trucks for the purposes of road maintenance.
<b>Boilermaker</b>	QCS005	Coal mine workers involved in steel fabricating, welding, oxy cutting, air gouging. Includes workshop, field and CHPP activities.
<b>Field Maintenance</b>	QCS006	Coal mine workers undertaking electrical and mechanical maintenance activities predominantly in mining areas other than a fixed workshop.
<b>Blast Crew</b>	QCS007	Coal mine workers undertaking blasting and shot firing duties.
<b>Tech Services</b>	QCS008	Coal mine workers performing mine planning and design (includes surveyors, geotechnical engineers).
<b>Exploration Drillers</b>	QCS009	Coal mine workers undertaking exploration drilling operations including exploration geologists.
<b>Blast Hole Drillers</b>	QCS010	Coal mine workers undertaking blast hole drilling operations.

## SURFACE COAL MINES

SEG	CODE	PRIMARY TASK DESCRIPTIONS
<b>Belt Splicers</b>	QCS011	Coal mine workers performing belt maintenance, splicing and commissioning.
<b>Warehousing</b>	QCS012	Coal mine workers undertaking warehousing activities including forklift operation.
<b>Administration</b>	QCS013	Coal mine workers undertaking administration and security activities, whom are not directly involved in mining related activities.
<b>Workshop</b>	QCS014	Coal mine workers undertaking electrical and mechanical maintenance and services predominantly in the workshop.
<b>Service Crew</b>	QCS015	Coal mine workers supplying fuel, grease and oil to mobile plant throughout the mine.
<b>Tyre Fitters</b>	QCS016	Coal mine workers performing tyre handling, tyre fitting and tyre repair duties.
<b>Dragline</b>	QCS017	Coal mine workers operating or supporting dragline operations.
<b>Dozer Push</b>	QCS018	Coal mine workers operating a dozer to push overburden and spoils.
<b>Emergency Response Personnel</b>	QCS019	Employees and/or contractors whose principle responsible is supplying emergency response capability.
<b>Open Cut Other</b>	QCS020	Coal mine workers performing any other tasks at an open cut mine that are not adequately represented by any other SEG.
<b>Control Room Operator</b>	QCS021	Coal mine workers involved in control room operations. This includes those workers remotely operating automated equipment from within an enclosed control room environment.
<b>Pump Crew</b>	QCS022	Coal mine workers performing pump crew activities such as polywelding, pump checks, operating backhoe and other mobile equipment.
<b>Highwall / Auger</b>	QCS023	Coal mine workers conducting highwall / auger mining operations such as operator, deckhand and loader operations.
<b>Quarrying / Stone Crushing</b>	QCS024	Coal mine workers conducting crusher activities associated with an onsite quarry or as a by-product of coal mining activities such as non-coal mobile crusher activities.
<b>Mobile / Bypass Crushing (Coal)</b>	QCS025	Coal mine workers conducting coal crushing activities using fixed and mobile crushers. This includes operation of loaders, dozers and excavator within this area.
<b>Civil Construction</b>	QCS026	Coal mine workers conducting civil construction projects such as concreting, road construction, earthworks and surface infrastructure.
<b>Coal Haulage</b>	QCS027	Coal mine workers hauling coal from processing plants to load out facilities.
<b>Rehabilitation</b>	QCS028	Coal mine workers operating heavy mobile equipment for mine environmental rehabilitation and remediation.
<b>Surface Coating / Preparation</b>	QCS029	Coal mine workers involved in surface preparation, abrasive blasting, surface coating / painting.

## SURFACE COAL MINES

SEG	CODE	PRIMARY TASK DESCRIPTIONS
<b>Domestic Cleaners</b>	QCS030	Coal mine workers involved in the general domestic cleaning of internal and external buildings and structures (e.g. crib rooms, bathhouses, restrooms, office spaces and meeting rooms).
<b>Industrial Cleaners</b>	QCS031	Coal mine workers involved with heavy and light industrial cleaning of plant and equipment.
<b>Groundskeeping</b>	QCS032	Coal mine workers maintaining grounds (e.g. gardens, lawns).
<b>Shutdown Maintenance</b>	QCS033	Coal mine workers involved in maintenance activities during major shutdowns of plant.

## COAL HANDLING PREPARATION PLANT (CHPP) & ROM

SEG	CODE	PRIMARY TASK DESCRIPTIONS
<b>CHPP Production</b>	QCP001	Coal mine workers involved in control room operations, hosing, clearing blockages, shovelling, bobcat, general maintenance and train loading out activities.
<b>CHPP Maintenance</b>	QCP002	Coal mine workers undertaking electrical and mechanical maintenance throughout the plant and in the workshop.
<b>CHPP Laboratory</b>	QCP003	Coal mine workers taking samples and processing samples in CHPP laboratory.
<b>CHPP HME</b>	QCP004	Coal mine workers operating heavy mobile equipment (HME) such as stockpile dozer, loader, dump truck
<b>Belt Splicers</b>	QCP005	Coal mine workers performing belt maintenance, splicing and commissioning
<b>CHPP Other</b>	QCP006	Coal mine workers performing any other tasks at the CHPP that are not adequately represented by any other SEG.
<b>ROM HME</b>	QCP007	Coal mine workers operating heavy mobile equipment (HME) such as loaders / dozers around ROM not otherwise covered under CHPP activities. This may include loading and carting rejects.
<b>CHPP Shutdown Maintenance</b>	QCP008	Coal mine workers involved in maintenance activities during major shutdowns of the CHPP.