

# **Network Operator and Retail Supplier Licence Application Form**

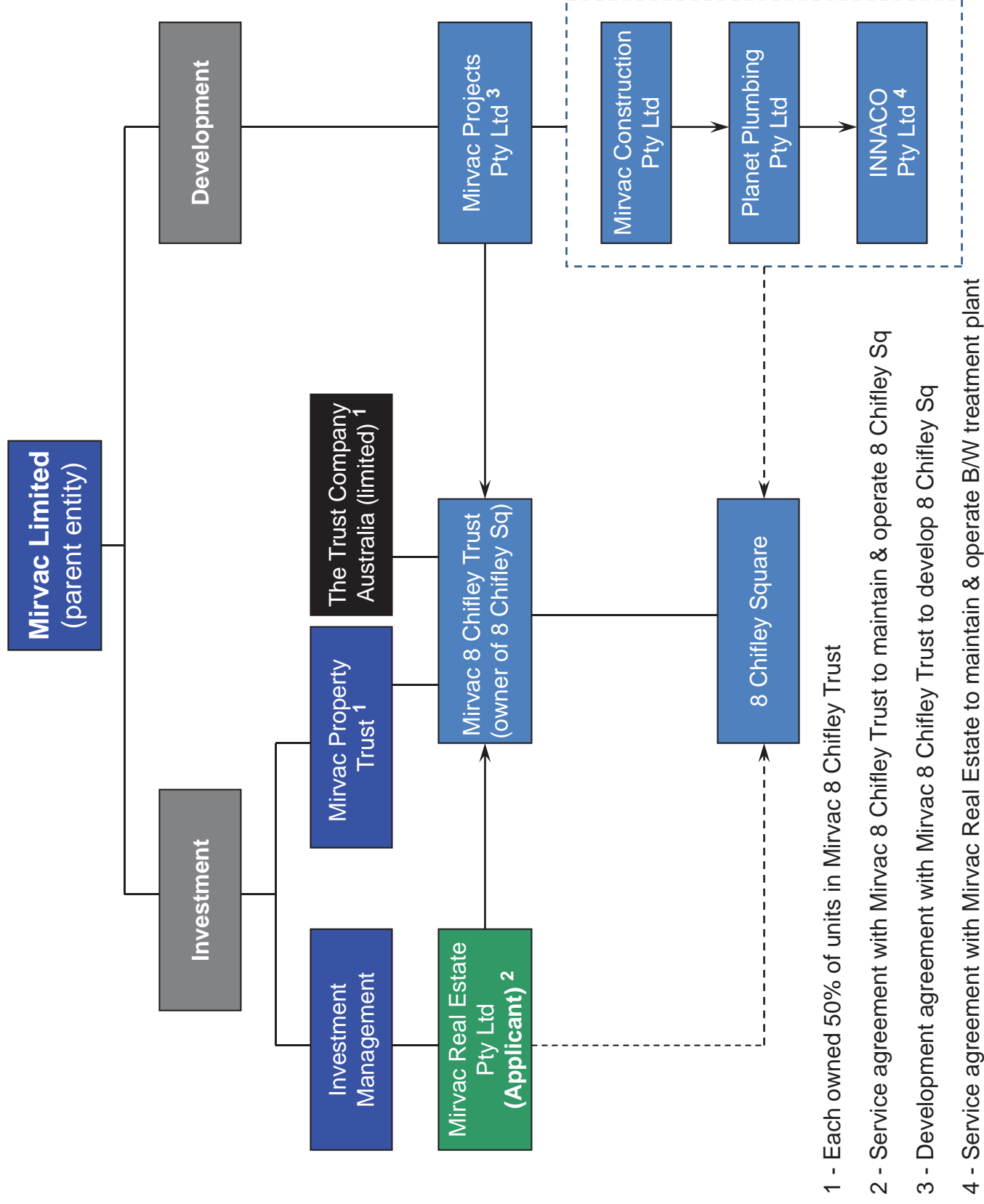
*8 Chifley Square*

*Mirvac Real Estate Pty Ltd*

*Appendices Section 6*

## APPENDIX 6.1.1

### APPLICANT ORGANISATIONAL CHART



## APPENDIX 6.1.3

### DETAILS OF KEY PERSONNEL

**Mr Matthew Kelly: Senior Building Engineer – Services – Mirvac Projects Pty Ltd**

Matthew holds a Bachelor degree in Construction Management & Property (Hons 1) and is a Green Star Accredited Professional. He has over 7 years of experiences in Construction industry as building engineer and has previously worked on The Ark project located at 40 Mount Street North Sydney, which involved design, construction and delivery of a recycled water treatment plant. He has been in his current role for almost two years and is responsible for delivery of all building services including construction of the proposed blackwater treatment plant.

**Mr Brian Hennessy: Divisional Engineering & Operations Manager - Northern Zone – Mirvac Real Estate Pty Ltd**

Brian has been in the property industry in the Engineering & Operations field for 12.5 years managing all aspects of maintenance, contract management, risk management for retail, office and industrial assets totalling in excess of \$5.5 b in value. He holds a Diploma Property Operations (PCA) and a Diploma in Marine Engineering Systems (Royal Australian Navy) as well as RAN Watch keeping certificates for; gas turbine main engines, electrical generation and distribution systems, refrigeration and air conditioning systems, sewage collections and treatment systems, pneumatic compressors and reticulation/storage systems.

Prior to joining Mirvac Real Estate, Brian worked on cogeneration power station (160MW) as a control room operator managing a plant comprising of gas turbines generators, heat recovery steam generators (Boilers), steam turbine, demineralised water treatment plant, high voltage electrical switching and distribution systems.

As part of his current role, Brian's is responsible for compliance with relevant legislative.

**Mr. Tone Barber, Project Manager – Planet Plumbing Group Pty Ltd**

Tone has 36 years experience in Hydraulics and over 25 years experience in Project Management. Some of Tone's projects he has managed includes:

- Medica Hurstville Builder Hansen Yuncken
- Energy Australia Learning Centre Builder Brookfield Multiplex
- YHA Youth Hostel the Rocks Builder Built
- Macquarie Bank Head Office Builder Brookfield Multiplex
- The Bond Hickson Road Builder Bovis Lend Lease
- Wharves 8 & 9 Pyrmont Builder Brookfield Multiplex
- 100 Pacific Highway St Leonards Builder Thiess
- POW Children's Hospital Randwick Builder John Holland

**Dr. Lars Herngren, Design Manager – Innaco Pty Ltd/Henry & Hymas**

**MSc (Civil Engineering), PhD Urban Water Quality**

Lars Herngren is the Head of the Water Department at Henry & Hymas and has extensive experience and in-depth understanding of wastewater treatment and reuse processes, exceptional understanding of hydraulic and hydrological processes and an excellent knowledge and experience of stormwater treatment measures and stormwater drainage. Innaco is a wholly owned subsidiary of Henry & Hymas and Lars is therefore engaged by Innaco on a project by project basis.

Lars has a Master of Science in Civil Engineering from the Royal Institute of Technology (Sweden) and completed a PhD in urban water quality with QUT in Brisbane. Lars has major experience from dealing with stakeholders and the community in water reuse projects. Major projects with Henry & Hymas/Innaco include:

- Figtree Falls Eco Resort and Village – Master Planning and Project Management
- Woolworths Glenorie Water Recycling Scheme – Authority approvals of a blackwater recycling scheme
- Gordon Golf Course – Management of Design and approvals of sewer mining scheme
- North Turramurra Golf Course – Management of Design and approvals of sewer mining scheme
- Cliff Oval – Detailed Design of stormwater harvesting scheme
- Clovelly Beach – Detailed Design of stormwater harvesting scheme
- St Ives Landfill Leachate Water Recycling Scheme – Management of Design and approvals of landfill leachate water recycling scheme

**Mr. Darren Ritchie – Project Manager – Innaco Pty Ltd**

**BEng – Civil**

Darren has more than 8 years experience in site inspection and construction supervision. He has extensive knowledge and experience in all OH&S and EH&S requirements and documentation and the organisation of staff and sub-contractor to achieve a successful outcome of the project. Darren is also the Construction Supervisor and Manager for the water recycling projects with Ku-ring-gai Council. Some of the major projects Darren has supervised include:

- Woolworths Supermarket Development - Glenorie
- Erskine Park industrial subdivision, Erskine Park
- Gordon Golf Course Sewer Mining
- St Ives Vegetation Landfill Water Reuse Project
- North Turramurra Golf Course Sewer Mining
- Cronulla Park Stormwater Harvesting Scheme - Installation of primary treatment

**Mr. Justin Conway – Process Designer – Innaco Pty Ltd/Waterup Pty Ltd**

Justin has more than 11 years project experience on Large Scale Water & Wastewater Treatment plants including:

- Design (Process modelling c/- BioWin), Installation Supervision, Commissioning, Operation of Water, Wastewater, and Water Recycling Treatment Plants.
- Development/management of process technology review, performance specification, design development, project bid selection, project supervisory roles, and staff management.
- Complete recycled water scheme design (collection, treatment, & distribution).
- Recycled water scheme risk management analysis and licensing (federal/state/local Government departmental regulatory liaison) consulting services.

Justin has a Master of Engineering Science in Water and Wastewater Treatment and a Bachelor of Science in Chemical and Biological Sciences. He is currently self employed and work as a contractor to Innaco to undertake the process, mechanical and electrical design. Significant projects as self employed (2009/2010/2011) include:

- Role: Design Consultant Engineer to Barangaroo Delivery Authority (BDA) 2010 ongoing  
  
Project: Barangaroo Headland Park - Recycled Water Management Design & Seepage Water Treatment System Design  
  
Client: NSW Government- Barangaroo Delivery Authority (Headland Park)
- Role: Senior Design Engineer (to Warren Smith & Partners/Department of Defence) 2009 – ongoing (2012 expected)  
  
Project: Wastewater Treatment Plant Design & Construct 1.0ML MBR (WWTP) Reuse Plant  
  
Client: Department of Defence, Kapooka Army Barracks

Justin's previous employment has included Project Engineer at Sydney Water, Project Manager/Applications Engineer at Siemens Water Technologies and Water Treatment Engineer at Campbell Brothers Cleantec.

#### **Mr. Laurie Kelly – Electrical Designer – Innaco Pty Ltd/WaterUp Pty Ltd**

Laurie has 35 years experience as an electrical engineer and electrician. His employment history is as follows:

WaterUp Pty Ltd                      Wastewater & Water treatment plants

**Start Date:**                                      Feb 2010 - current

**End Date:**

**Position:**                                      Electrical Supervisor

**Responsibilities:**                      Design, installation, and commissioning of MBBR/MBR waste water plant control systems (to 650kL/d); Siemens PLC & HMI Touchscreen and fully automated PID process control loops, fitted with telemetry & remote IP access. RO water plants with Zelio smart relays, chlorine and caustic closed loop dosing systems and associated auxiliary electrical services.

Design, selection and construction of MCC/PLC/Control switchboards and systems for remote RO water treatment plants, UF water treatment plants and SBR waste water plants (to 1.2MLD), including PLC code and HMI software project development for Schneider, Siemens and Allen Bradley PLC's, and subsequent site process commissioning.

Electrical design superintendent – Wagga Wagga NSW Department of Defence ELF Kapooka WWTP (1.0ML/d MBR) – currently in delivery (2011/2012).

Ullrich Aluminium      Kurri Kurri NSW      Aluminium Extrusion Plant

**Start Date:** May 2009

**End Date:** July 2009

**Position:** Commissioning Electrician

**Responsibilities:** Installation and commissioning of new extrusion plant

Boddington Gold Mine WA      Primary Crushers & Conveyor      MIE

**Start Date:** Feb 2009

**End Date:** April 2009

**Position:** Shift L/H Electrician

**Responsibilities:** Installation and construction works on primary ore crushers and conveyors

Cloudbreak Iron Ore Mine WA      Desands Plant      GOODLINE/FMG

**Start Date:** Nov 2008

**End Date:** Dec 2008

**Position:** Commissioning Supervisor

**Responsibilities:** Commissioning and run up of drives in Desands section of ore processing plant

Gas Turbine Generator      Paraburdoo WA POSITRON/Rio Tinto

**Start Date:** July 2008

**End Date:** Oct 2008

**Position:** Electrician L/H

**Responsibilities:** Site electrical works installation, construction and pre-commissioning and testing on IHI 48MW LNG turbine generator



Caddadup & Halls Head Wastewater Treatment Plants Mandurah WA WA Water Corp

**Start Date:** Sept 2007

**End Date:** June 2008

**Position:** Site Electrical & Instrumentation Supervisor

**Responsibilities:** Project and technical management of the Electrical and Instrumentation site installation of 2 municipal oxidation ditch wastewater treatment plants (3.2 & 1.7 MLD) for WA Water Corp and John Holland JV at the towns of Halls Head and Caddadup (Mandurah). Workslope inclusive of HV and LV installation and upgrade of power supplies, installation of new Switchrooms and MCC's, WAS & RAS system upgrades and sludge removal systems. Installation of site monitoring and SCADA systems to WA WaterCorp specifications, including phone and wireless remote warning and alarm notification, and online monitoring with Citect via online server.

Site MCC control system utilized Siemens PLC and Profibus communications between individual drives with redundant control and communication systems supplies, Danfoss VSD's for motor control loops and various Instrument transmitters for all process parameter measurements(DO, ultrasonic & hydrostatic level measurement, pH, ORP and magflow meters) as well as digital equipment. Site equipment commissioning and integration to the existing infrastructure, and assistance with the DCS commissioning was also provided.

Kalgoorlie Nickel Smelter      Kalgoorlie WA      Broadspectrum/BHP

**Start Date:** July 2007

**End Date:** Aug 2007

**Position:** Electrician

**Responsibilities:** Pre-shutdown & Shutdown installation and commissioning of new reaction shaft roof thermocouples and BOSH units

Olympic Dam Smelter      Roxby Downs SA      Broadspectrum/BHP

**Start Date:** July 2007

**End Date:** July 2007

**Position:** Electrician

**Responsibilities:** Shutdown maintenance - Refurbishment of clay drill electric furnace

Flag Switchboards      Perth WA

**Start Date:** April 2007

**End Date:** June 2007

**Position:** Electrician

**Responsibilities:** Construction and commissioning work of distribution & control switchboards associated with residential and backup supply systems in Perth CBD

Roche Mining – Process Engineering Tom Price WA

**Start Date:** October 2006

**End Date:** Feb 2007

**Position:** Electrician

**Responsibilities:** Installation and commissioning work associated with the Tom Price iron ore process plant upgrade

Self Employed – Singleton & Hunter Valley

**Start Date:** July 2003

**End Date:** September 2006

**Position:** Electrical Supervisor

**Responsibilities:** Self employed on domestic, commercial and light industrial projects and installations, and carrying out testing and checks for OH&S compliance.

Xstrata Coal/Cumnock Colliery – Hunter Valley

**Start Date:** Oct 1992

**End Date:** May 2003

**Position:** Longwall Engineering Superintendent

**Responsibilities:** Responsible for the electrical and mechanical operational performance, maintenance and overhaul project work on the Longwall equipment. This equipment comprises high power and high voltage electrical drives, communications, monitoring and signaling and instrumentation equipment, both on the underground equipment and between surface and underground, and various process control systems and PLC's to support the overall system.

Elcom Collieries/Liddell State Mine – Hunter Valley

**Start Date:** July 1982

**End Date:** Oct 1992

**Position:** Electrical Supervisor

**Responsibilities:** Responsible for the daily implementation of the electrical operational and maintenance activities at the mine and to oversee installations and relocations on shift.

Clutha Coal – Oakdale NSW

**Start Date:** March 1981

**End Date:** June 1982

**Position:** Electrician

**Responsibilities:** Underground and surface electrical installations, and their maintenance and relocations.

Sydney County Council

**Start Date:** Jan 1976

**End Date:** June 1982

**Position:** Apprentice/Technical Officer

**Responsibilities:** Completed apprenticeship and worked with the Council Testing Branch for a further 2 ½ years on High Voltage Equipment installations and testing and Australian Standards equipment compliance testing.

#### **Des Conway, Senior Mechanical Designer – Innaco Pty Ltd/Conway Engineering**

Des has 6 years experience in water and wastewater mechanical design. His experience include:

2006-Present: Director of Conway Engineering Pty Ltd. Solely responsible for all aspects of the company management. Oversee work done in-house by sub-contractors. Project Manage all projects (over 55 to date), including all aspects of mechanical, hydraulic, pneumatic design, analysis, fabrication, machining, prototype assembly, cold commissioning, hot commissioning, regulatory & statutory obligations.

Also currently developing a product to be direct marketed to mining industry OEM's.

Key design projects:

- Water and Wastewater Treatment (Siemens Water, WaterUp)
  - o Piping design/mechanical; Rouse Hill RWP2, Bundamba 1B – chemical dosing
  - o Aeration basin design – industrial and municipal waste streams
  - o Complete mechanical WWTP layout - MBR detailed design/mechanical arrangement
- Underground Coal Mining (Rambor, Centennial Coal)
- Lifting/Height safety Equipment (Bullivants)

2005-2006: Sole trader Engineering Consultant working chiefly for Rambor and also kitchen appliance sheet metal design work.

2005: Chief Engineer and race Engineer to Steve Owen at Britek Motorsport. Role was to oversee

direction of all technical aspects of the two V8 Supercars entered in the championship and to engineer Steve Owen in Car 25.

2003-2004: Race Engineer with Ford Performance Racing. Engineered Craig Lowndes in Car 6 for both seasons. In charge of all technical specifications on the race car, strategy during races etc.

2001-2002: Design Engineer at Frank Soto & Associates on various projects including plastics engineering, 3D modeling, Finite Element Analysis.

2000-2002: Part of University Of Wollongong Formula SAE team, co-ordinated design of suspension, brakes & steering sub-systems on the car. Competed in Australasian competition in

2001 and USA (World Championships) in 2002. Described at the time as the best first year car in the event's 20 year history.

2000: Worked as Mechanical Engineer at Australian Metal Recovery, designed various plant

improvement items including briquetting, tin casting and fume extraction projects. In charge of ISO9001 accreditation/system maintenance.

### **Barry Lin, Operations Engineer – Innaco Pty Ltd**

Bachelor Degree of Mechanical & Electrical Engineering, graduated in 1992. Guangzhou University Science and Technology Institute.

### **Skills**

Chemical Water and wastewater treatment equipment design, fabrication, installation, supervision, commissioning, operation, control and maintenance

- Cooling tower / boiler / wastewater / dust control
- Pulp and paper's chemical feeding systems
- Electric engineering equipment design, installation, supervision, commissioning and maintenance
- Switchboard, 415V motor control centers, DCS, power transformers, electric motors (DC motors, AC single-phase motors, AC three-phase motors-squirrel cage induction, wound rotor & synchronous), cables (HV power, LV power, control, instrumentation, communications), inverters, PLC/HMI

Barry joined INNACO in August 2011 and has been managing the Gordon Golf Course Sewer Mine.

Previous experience includes:

GE Infrastructure Water & Process Technologies (Australia)

Barry was the Maintenance Engineer for GE's fleet of mobile water treatment plants. This included scheduling and carrying out maintenance of plants on site and also between projects. Plants ranged from 10 to 200kl/hour involving potable, sea water, brackish water and waste water reuse systems.

The systems involved operation and maintenance of a broad range of technologies, including Ion Exchange, multi media filtration (MMF), brackish water Reverse Osmosis (RO), sea water RO, Electro Dialysis Reversal (EDR), Ultrafiltration (UF) and Membrane Bio Reactors (MBR).

GE Infrastructure Water & Process Technologies (China) - Field Service Engineer

- CNOOC and Shell Petrochemicals Company Limited. Cooling Tower water treatment.
- Nanjing BASF-YPC. Cooling Tower water treatment.
- Shanghai BP SECCO Petrochemical Co., Ltd. Chemical dosing optimisation.
- Shaoguan Smelter Plant. Polymer dosing installation.
- Dongguan Humen Power Plant. UF, RO, EDI Installation and Commissioning.

## APPENDIX 6.1.5 PART I

### HEALTH AND SAFETY ENVIRONMENTAL POLICY

## HEALTH SAFETY ENVIRONMENT POLICY

Mirvac is a leading ASX-listed, integrated real estate group with activities across the real estate, hotel, investment and development spectrum. Health Safety Environment is central to Mirvac's core business values. Our vision is simple – to provide workplaces free from harm and supported by a culture which ensures that the safety of people and protection of the environment remains an absolute priority. Mirvac believes the best business solution for management of Health Safety Environment is also the best business solution for all Stakeholders across the Mirvac Group.

### Objectives for achieving our vision include:

- > Complying with applicable statutory requirements, codes of practice, standards and guidelines
- > Establishing measurable objectives and targets aimed at the elimination of work related incidents or impacts from our activities, products and services
- > Defining roles, responsibilities and levels of accountability for Health Safety Environment

### Strategies include:

- > Integration of risk management principles in all core planning activities including the prevention of pollution
- > Regular review of objectives and targets to promote improved performance outcomes across all business divisions
- > A commitment to measurable and continual improvement in Health Safety Environment performance across the Mirvac Group through strategic planning
- > Working with government and industry to improve performance outcomes for the benefit of our stakeholders and wider industry goals
- > Establishment and ongoing expansion of Health Safety Environment learning and development initiatives
- > Regular consultation with our workforce and other stakeholders to improve decision-making on Health Safety Environment matters
- > Ensuring incidents are investigated and lessons learnt are distributed across all business divisions within the Group
- > Distributing Health Safety Environment information, including this policy, across the Group to all employees, workers and interested parties
- > Providing timely and effective injury management and environmental remediation strategy
- > Regular review of Health Safety Environment policies and procedures to ensure compliance with legislation and ongoing relevance across the Group
- > The provision of sufficient resources to ensure Health Safety Environment remains central to core business values
- > Prequalification of Service Providers (contractors and suppliers)
- > Adopting sustainable business principles and practices that meet the needs of stakeholders without compromising future resource needs
- > Recognising and rewarding excellence in Health Safety Environment performance

I commit Mirvac to the implementation of this policy and task all divisions and personnel across Mirvac with the responsibility for achieving our vision.



Nicholas Collishaw  
Managing Director

05 December 2011

### HEALTH SAFETY ENVIRONMENT POLICY

This policy is not intended to be contractual in nature and does not impose any contractual obligations on Mirvac.  
Mirvac reserves the right at its sole discretion to vary, replace or cancel this policy at any time.

Policy Authorised by: Executive Leadership Team	Date last amended: 05.12.2011
Policy Maintained by: Corporate Services HSE Department	

APPENDIX 6.1.5 PART II  
HEALTH AND SAFETY MANUAL



# Mirvac Group

## Health Safety Environment



## Management System Manual

# Mirvac Group

## Health Safety Environment Management System Manual

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# Mirvac Group

## Health Safety Environment Management System Manual

### 1.0 INTRODUCTION

This manual outlines the Health Safety Environment Management System (HSE MS) for the Mirvac Group (MG-HSE-MS Manual). It describes core elements, their interaction and provides direction to related HSE MS documents including policies and procedures dedicated to the management of HSE. The scope of this HSE MS includes Mirvac Group HSE requirements that relate to all levels and divisions across Mirvac Group including Investment and Development. Responsibilities, accountability and related reporting mechanisms for HSE are defined within the Management System.

Where unique HSE conditions or requirements relate to a specific Mirvac division, the requirements of the Mirvac Group HSE MS are further implemented through a Mirvac Division Health Safety Environment Management System Manual. The Division HSE MS Manual includes standard system control measures, procedures and forms, exclusive to each Division and related business functions, to manage these specific situations.

Each Mirvac workplace prepares a Workplace Risk Management Plan. The Plan is a blueprint for implementing the requirements of the Division HSE MS Manual at the workplace level.

All Mirvac HSE management system manuals are prepared to comply with the requirements of:

- Australian Standard AS/NZ4801-2001 Occupational Health and Safety Management System – Specification with Guidance for Use.
- International Standards Organisation for ISO14001-2004 Environmental Management Systems – Requirements with Guidance for Use.
- Occupational Health and Safety Assessment Series OHSAS18001-2007 Occupational Health and Safety Management Systems – Specification and Guidance for Use.

The HSE MS is based on a cycle of continual improvement as shown below.

Figure 1 – Mirvac Group HSE Management System Continual Improvement Cycle.



# Mirvac Group

## Health Safety Environment Management System Manual

### 1.1 Definitions

Terms used in Mirvac HSE MS documents are defined in the Mirvac Group [Definitions in the Management of Health Safety Environment HSEP4.24](#).

### 1.2 Amendments

Revisions to this manual which eventuate from the annual HSE Management Review process may be independently issued, but are reviewed by the Mirvac Board HSE & Sustainability Committee prior to release. Revisions of the Mirvac Group HSE Management System are documented in the Mirvac Group Document Control Register HSEF2.04 (access to the Register is restricted).

## 2.0 HEALTH SAFETY ENVIRONMENT POLICY

The Mirvac Group [Health Safety Environment Policy](#) is displayed in Mirvac workplaces at prominent positions and communicated to employees and others during workplace inductions. Other Mirvac Group subordinate policies relating to specific HSE issues in the workplace include:

- [Bullying and Harassment – A Summary of Mirvac's Policy](#);
- [Drugs & Alcohol Policy](#);
- [Injury Management & Return to Work Policy](#);
- [Noise Control Policy](#);
- [SmokeFree Policy](#);
- [Corporate Responsibility & Sustainability Policy](#);
- [Ultra Violet Radiation/Sunlight Policy](#); and
- [Young Worker Policy](#).

The Mirvac Group HSE Policy and the Mirvac Group Corporate Responsibility & Sustainability Policy are publicly available to interested parties on the Mirvac Group Internet at [www.mirvac.com.au](http://www.mirvac.com.au). Other subordinate policies as detailed above are also displayed at prominent positions in Mirvac workplaces.

## 3.0 PLANNING

### 3.1 OHS Hazards & Environmental Aspects/Impacts

#### 3.1.1 Design

Where a Division carries out a design function related to a building or structure, safe design is considered through the implementation of the Mirvac Group [Risk in Design \[Designing Out Our Risk \(DOOR\)\] Procedure HSEP4.03](#). The purpose of the DOOR process is to, where reasonably practicable, eliminate or minimise significant OHS hazards and significant environmental aspects through design change. Unresolved risks identified in the DOOR process that relate to workplace activities are transferred to the Risk & Opportunity Register.

Hazard/aspect identification, risk assessment and risk control processes at Mirvac workplaces are conducted in accordance with the principles of risk management outlined in the Mirvac Group [Risk Management Procedure HSEP4.25](#).



## Mirvac Group

# Health Safety Environment Management System Manual

### 3.1.2 Risk & Opportunity Register

For each workplace, Mirvac identifies the significant occupational health and safety (OHS) hazards and the significant environmental aspects of activities, products or services using the Mirvac Group [Risk Management Procedure HSEP4.25](#) and Mirvac Group [Preparing a Risk & Opportunity Register Procedure HSEP4.27](#). These procedures cover those OHS hazards and environmental aspects which Mirvac can control, and over which Mirvac can be expected to have an influence as well as those of its service providers (contractors and suppliers) that carry out work at a Mirvac workplace.

Significant OHS hazards and significant environmental aspects are defined as those that have an untreated risk ranking or score equal to or greater than 'Medium'. The significant OHS hazards and significant environmental aspects for each workplace are outlined on the Mirvac Group [Risk & Opportunity Register HSEF2.09](#) prepared for each workplace and attached to a Workplace Risk Management Plan (WRMP) prepared by each workplace. The Risk & Opportunity Register reflects any changes made in the workplace and is periodically reviewed by the Workplace Manager (or a nominated representative) to ensure currency and accuracy.

In addition to the above, other OHS hazards and environmental aspects related to a specific Division are outlined in the Mirvac Group [Standard System Control Measures HSEP4.30](#). The control measures are specific to each Mirvac division or related business functions.

### 3.2 Legal & Other Requirements

Mirvac identifies and maintains access to all HSE legal and other requirements (i.e. standards and codes) that are directly applicable to its activities, products or services and those of its service providers.

Mirvac identifies HSE legal and other requirements applicable to workplaces and lists these in their respective workplace Risk & Opportunity Register(s) attached to each WRMP. Access to current legal and other requirements (either electronic through [Legal & Other Requirements](#) or paper) is made available at all Mirvac workplaces.

The HSE legal and other requirements, of each workplace are kept up-to-date by Division/Regional HSE Manager(s) using subscriptions to regulatory authority websites or other suitable means.

Changes to legal and other requirements relevant to a workplace are identified in HSE monthly reporting and communicated through HSE alerts, tool box talks or other consultative arrangements determined by the Group Manager HSE or Division/Regional HSE Manager(s).

### 3.3 HSE Objectives & Targets

The current Mirvac Group HSE objectives and targets are listed in [Appendix 1](#). Objectives and targets at Mirvac include a series of lead indicators (e.g. senior management involvement to enhance workplace culture; incident reporting and training) and lag indicators (e.g. frequency rates for injury and time lost). The lead and lag indicators aim to improve measurement and performance in key aspects of Mirvac HSE management. Progress against each is measured and reported to the Mirvac Group Board HSE & Sustainability Committee and the Mirvac Group Executive Committee at maximum quarterly intervals.

HSE objectives are further defined in the Mirvac Group [HSE Strategic Plan](#) prepared annually. Progress against the Plan is monitored by the Group Manager HSE in conjunction with Division/Regional HSE Manager(s) at the Division level.

When establishing and reviewing the Mirvac Group HSE objectives and targets, Mirvac considers corporate requirements, legal requirements, potential significant injuries, potential significant aspects, the views of interested parties and the options available for addressing issues in the context of operational and business constraints.

# Mirvac Group

## Health Safety Environment Management System Manual

Divisions document their own Lag Indicator targets in line with the Mirvac Group HSE objectives and targets and in consultation with the Group Manager HSE. Divisions also document their own Division Additional HSE Targets to address Division specific HSE issues. These are included in the Division HSE Management System Manual. Each Division documents actions required to achieve HSE targets. That is, a responsible person(s) is allocated and a timeframe established for completion of the action.

The Mirvac Group HSE objectives and targets include a requirement for Senior Executives to complete HSE related actions as detailed in [Appendix 1](#). Similar requirements are defined in the objectives and targets for key management stakeholders in each Division or business unit, e.g. Construction Management Team or Hotels & Resorts Management Team. The objective of this initiative is to provide demonstrated leadership in HSE to drive workplace culture change across the Mirvac Group.

### 3.4 Workplace Risk Management Plans

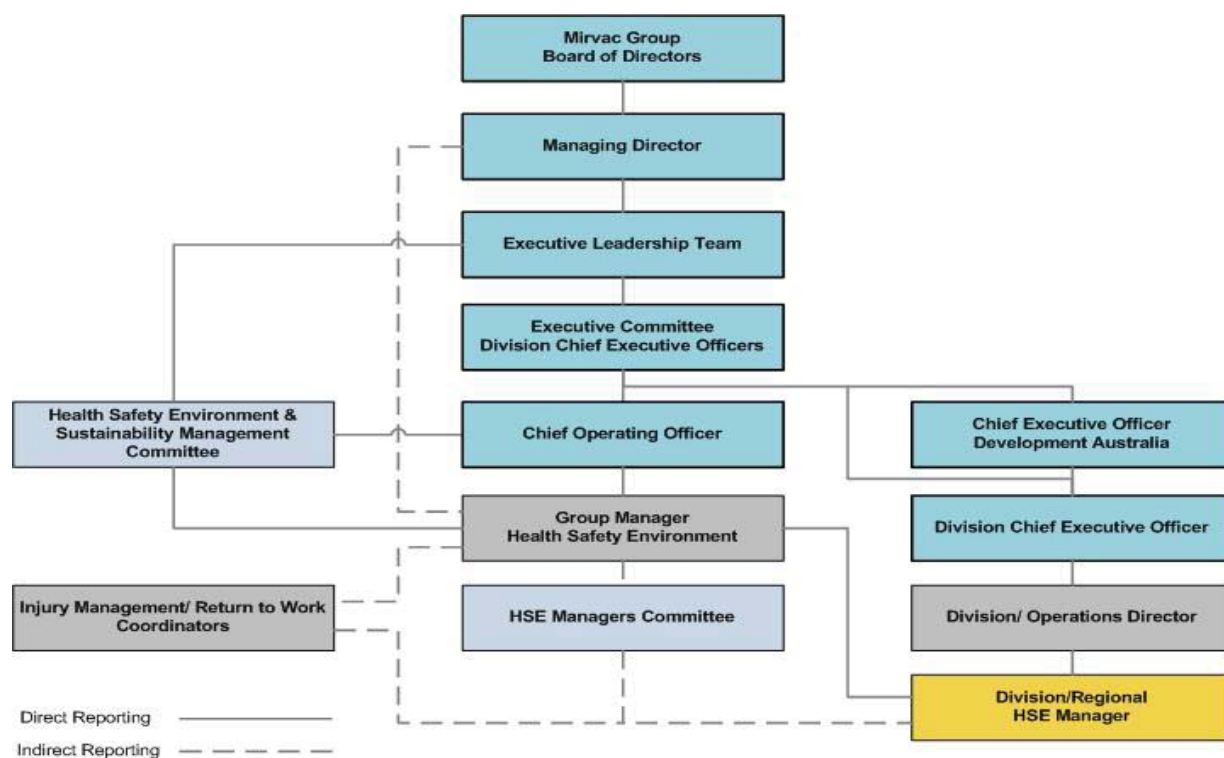
Each specific Mirvac workplace prepares a Workplace Risk Management Plan. The WRMP is a blueprint for implementing the requirements of the Mirvac Group HSE MS at the workplace level and includes a Risk & Opportunity Register(s) which identifies critical controls for key potential OHS risks and environmental aspects. WRMP templates are available on the Mirvac Intranet at [Workplace Risk Management Plans](#).

## 4.0 IMPLEMENTATION

### 4.1 Structure & Responsibility

The Organisational Chart for HSE Reporting is contained in [Figure 2](#) and details the lines of reporting on HSE for the Mirvac Group and senior management.

Figure 2 - Organisational Chart for HSE Reporting



## Mirvac Group

# Health Safety Environment Management System Manual

HSE responsibilities and accountabilities for key roles listed in the Organisational Chart for HSE Reporting are defined in [Appendix 2](#). Responsibilities and accountabilities for committees shown in the Organisational Chart for HSE Reporting are outlined in the respective charters held by each Committee Chairperson. HSE Key Performance Indicators based on responsibility and accountability are reviewed annually and located on the Mirvac Intranet at [Key Performance Indicators](#).

The Mirvac Group HSE management representative for the Mirvac Group HSE Management System is the Group Manager HSE, as detailed in [Appendix 2](#).

Divisions define and document HSE responsibilities and accountabilities in consultation with the Division/Regional HSE Manager(s) for any other roles not dealt with in [Appendix 2](#), including the management representative responsible for administering the Division HSE Management System.

## 4.2 Training, Awareness and Competency

### 4.2.1 HSE Training Identification

The Mirvac Group HSE Training Needs Analysis outlined in [Appendix 3](#) identifies general HSE training requirements for the Mirvac Group. In addition, divisions may document their specific training needs in a division HSE Training Needs Analysis consistent in format with that outlined in [Appendix 3](#). This includes the HSE training for those division roles that are not covered in the Mirvac Group HSE Training Needs Analysis and a schedule for implementing required training.

Workplace specific HSE training and competencies (e.g. food hygiene, spill response, first aid, consultation and committees, fire warden, confined space entry, asbestos removal or other) for Mirvac personnel, are identified and listed in the Mirvac Group [Training Needs Analysis HSET5.02](#) attached to each Workplace Risk Management Plan.

In addition to the HSE Training Needs Analysis, consultation occurs with Mirvac employees to identify any additional HSE training needs based on current or planned position changes within Mirvac. This is documented in an individual's Performance Management Review by their manager.

Training needs identified in the Risk & Opportunity Register or review of specific work activities, e.g. confined spaces, or work at height, includes a requirement for service provider personnel to be appropriately trained.

Young workers less than 25 years old and with less than two years work experience undertake additional induction training in accordance with the Mirvac Group [Young Worker Policy](#). Students undergo additional induction training in accordance with the Mirvac Group [Student Placement Procedure HSEP4.16](#).

Both internal and external training completed at Mirvac workplaces is reported on the Mirvac Group [Monthly HSE Summary Report HSEF2.16](#).

### 4.2.2 HSE Training Courses & Records

Training courses (other than those that are a legal requirement and accredited) are evaluated either by the Group Manager HSE or the Division/Regional HSE Manager(s) to ensure that the Training Provider(s) can demonstrate competency in the training discipline, and in adult learning.

When a trainer is engaged for internal and specialised training, where either the trainer is not a Registered Training Organisation (RTO) or the course is not National Training Information Service (NTIS) registered, then the Group Manager HSE or the Division/Regional HSE Manager(s) completes the Mirvac Group [Training Activity Profile HSET5.01](#) for the course/provider to ensure adequate competency and training standards are established.

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Training records for Mirvac employees retained by the Group Manager HSE or the Division/Regional HSE Manager(s) include:

- a completed Mirvac Group [Training Activity Profile HSET5.01](#) for the course/provider;
- course outline or content;
- attendance records using Mirvac Group [Training Attendance Register HSET5.06](#);
- assessment results and associated certificates of completion; and
- evidence that the trainer is competent in the discipline of the training and in adult learning.

Records of required qualifications, competencies and specific industry induction requirements for service providers (if required) are retained at the workplace. Records relating to Mirvac Group HSE training are retained by the HSE department in files identified in [Appendix 5](#).

### 4.2.3 HSE Induction

All personnel carrying out work at a workplace (employees and service providers) are inducted in the relevant hazards and environmental aspects identified in the Risk & Opportunity Register attached to the WRMP prior to commencing work. This induction also includes information on what to do in case of an emergency.

Records of induction (including evidence that the employee or service provider has read, understood and agrees to comply with the HSE requirements) are retained at the workplace or centralised electronically in accordance with the Privacy Act 1998, and National Privacy Principles (NPP) or equivalent regional legislation.

## 4.3 HSE Consultation, Communication and Reporting

### 4.3.1 HSE Consultation

HSE consultation at Mirvac workplaces is conducted in accordance with the Mirvac Group [Consultation Procedure HSEP4.23](#) and identified on the Mirvac Group [HSE Consultation Statement](#). The HSE Consultation Statement is displayed in prominent location(s) at all workplaces and is 'marked up' to reflect the agreed consultation arrangements for the workplace. The Mirvac Group [HSE Committee Constitution Guideline HSEG3.18](#) is available for use in the development and formation of a workplace HSE Committee.

The HSE consultation arrangements agreed at each workplace are detailed in the WRMP. The Workplace Manager, or a nominated representative, retains a record demonstrating that workers including employees and service providers if applicable were consulted on the method of HSE consultation agreed at the workplace (this would normally be minutes of a HSE Committee or Consultation Group or Work Group meeting that includes the tabling of the Committee/Consultation or Work Group Constitution and the HSE Consultation Statement).

Service providers and other persons conducting a business or undertaking at Mirvac workplaces are required to consult with their employees on issues that may impact HSE, e.g. a Tool Box Talk, and a record of the minutes forwarded to the Workplace Manager or a nominated representative.

Consultation includes the requirement for all workers including employees and service providers (contractors and suppliers) to report hazards and incidents.

Mirvac employees are required to:

- report hazards using the Mirvac Group form [Hazard Notification HSEF2.12](#) or Mirvac Group Hazard Notification Card;
- report community contacts (complaints or other related to HSE) using the Mirvac Group form [Community Contact Notification HSEF2.07](#);



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- report all incidents immediately and an initial written report regarding the incident must be entered into the Mirvac Group online reporting system within 24 hours. Alternatively, where direct access is not available, information can be recorded using the Mirvac Group [Incident Investigation Report HSEF2.01.1](#).

A Work Health and Safety (WHS) Entry Permit Holder may enter a workplace to consult with relevant workers on WHS matters or for the purposes of inquiry into a suspected contravention of the WHS Act 2010. Details of the requirements for entry by the WHS Entry Permit Holder are outlined in the Mirvac Group [Right of Entry Guideline HSEG3.42](#) and further detailed in the [Safe Work Australia Right of Entry Legislative Fact Sheet](#).

### 4.3.2 HSE Communication

Internal HSE meetings at the Mirvac Group level are outlined in [Appendix 4](#). Divisions and workplaces outline their internal meetings in this format.

Relevant internal communications (written, verbal or electronic) comprising emails, memos, HSE meetings (e.g., toolbox talks), HSE Alerts, HSE seminars with staff; awareness campaigns including policy, are communicated via a number of mediums, including the HSE notice-board, to Division/Regional HSE Managers, Division and Workplace Managers, employees and relevant service providers.

Formal external requests for HSE information from regulatory authorities or other parties received by workplace personnel are forwarded for action to the Division/ Regional HSE Manager(s) and Group Manager HSE. The Group Manager HSE documents and responds to these requests in consultation with senior management. Decisions related to formal external requests of Mirvac Group are dealt with on a case-by-case basis by the Group Manager HSE.

Incoming written communications from external parties received by the Mirvac Group HSE Manager are listed in the Mirvac Group External Correspondence Control Register available only to the Group Manager HSE and located at H:\HSE\Document Control\External Correspondence. The Division/Regional HSE Manager maintains an equivalent register, and forwards written communications received, to the Group Manager HSE. Communications include those from regulatory authorities, legal representatives, HSE alerts and requests for information. Actions arising from incoming communications are also recorded in the Register.

Significant environmental impacts are reported in the Mirvac Annual Report in accordance with the Commonwealth of Australia Corporations Act. The Report is located on the Mirvac Internet at [www.mirvac.com.au](http://www.mirvac.com.au).

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### 4.3.3 HSE Reporting

The following reporting is carried out within the Mirvac Group:

What Gets Reported	By Whom	Who Receives Report	How Often
Internal audits HSE MS implementation at the workplace level (by Divisions)	Division/Regional HSE Manager(s)	Division Director	Min. 10% sample 3 monthly
Internal/external audit result summary and trend reporting including corrective actions (by Division).	Division/Regional HSE Manager(s)	Division Director; Group Manager HSE;	6 monthly
Internal MS review by Division/Business Unit	Division/Regional HSE Manager(s)	Division Director; Group Manager HSE;	12 monthly
Mirvac Group HSE Legal Compliance Audits (Group generated)	Independent Auditor	Division Director; Group Manager HSE; Board HSE&S Committee; Division/ Regional HSE Manager(s)	12 monthly
External HSE Management System Certification Audits (Group generated)	External Auditor	Division Director; Group Manager HSE; Board HSE&S Committee; Division/ Regional HSE Manager(s)	6 Monthly
Monthly HSE Summary Report including injuries, productivity hours, audits, Hazard Notifications, HSE Workplace Inspections, COBBA, community contact notifications, consultation activity; internal/ external training (from Divisions);	Workplace Manager / nominated representative	Division/Regional HSE Manager(s); Division Director; Group Manager HSE	Monthly
Monthly HSE Summary Report HSEF2.16 collating all Division/Business Unit workplaces	Division/Regional HSE Manager /nominated representative	Division/Regional HSE Manager(s); Division Director; Group Manager HSE	Monthly
HSE Incident Information (statistics, incident details, injuries, community contacts, HSE Instructions, regulatory authority activity/notices, waste)	Workplace Manager / nominated representative	Division Director; Group Manager HSE	Monthly
Workers Compensation Claim Notifications	Workplace Manager / nominated representative; Return To Work Coordinator	Division/ Regional HSE Manager(s); Group Manager HSE; Return To Work Coordinator HR Coordinators	Monthly
Statutory Reporting	Workplace Manager / nominated representative; Division/Regional HSE Manager(s)	Division Director; Group Manager HSE; Division/ Regional HSE Manager(s)	Monthly
Mirvac Group HSE performance targets and charts, sustainability compliance indicators, sustainability projects, key communications, legislation, incidents and alerts	Group Manager HSE Group Manager Sustainability	Mirvac Board; Executive Leadership Team Executive Committee Board HSE&S Committee;	Monthly

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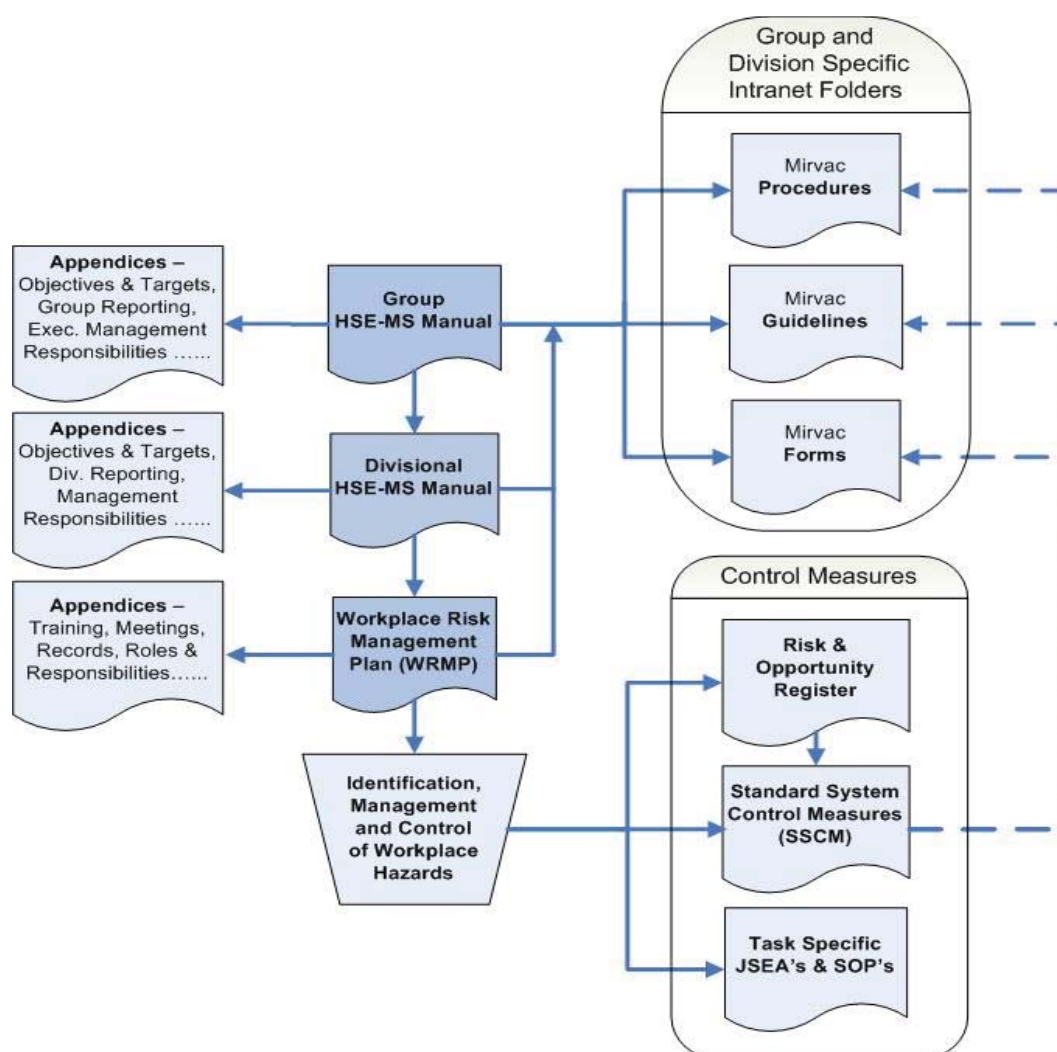
### 4.3.4 HSE Instruction (non-conformity)

Where a risk to the health and safety of an individual(s) or impact to the environment is classified as significant (greater than medium) through the risk ranking process, and also identified as 'uncontrolled' at a workplace, a Mirvac Group form [Workplace HSE Instruction HSEF2.20](#) is completed and issued to the employee or service provider responsible for corrective action. The Workplace Manager, or a nominated representative, ensures that corrective action is completed and effective. Instructions are reported on the Mirvac Group form [Monthly HSE Summary Report HSEF2.16](#).

### 4.4 HSE Documentation

The documents that comprise the Mirvac Group HSE MS are outlined below.

Figure 3 – HSE Management System Documentation Structure.



Mirvac Group HSE MS documentation (HSE MS Manual, policies, procedures, guidelines, forms and training materials) is available at the Mirvac intranet under [Our People - Health Safety Environment](#). Division HSE MS documents are made accessible to employees by each Division.

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### **4.5 Document & Data Control**

Mirvac controls all relevant HSE documents and HSE data to ensure the current version is accessible at all times. Mirvac Group documents are individually listed in the Mirvac Group Document Control Register along with the document originator, document number, date of issue and any information on revisions (access to the Register is restricted).

All HSE documents are identified and controlled in accordance with the Mirvac Group [Document Identification & Control Procedure HSEP4.00](#). Retention periods for documents are listed in the Mirvac Group [Document Retention Procedure HSEP4.01](#).

HSE documents that are obsolete, out of date or without identification and control identifiers are not distributed at workplaces. When identified, these documents are removed immediately from circulation. Procedures become 'uncontrolled' from the date of retrieval, downloading or printing from the Mirvac Intranet. MG-HSE-MS additions, changes or deletions are circulated by regular e-mail revision updates and listed in the Mirvac Group Document Control Register.

### **4.6 Hazard/Aspect Identification, Risk Assessment & Risk Control**

Workplaces identify the significant OHS hazards and the significant environmental aspects of activities, products and/or services. These are listed in the workplace specific Risk & Opportunity Register(s) attached to the WRMP.

The significant HSE risks for a workplace are managed by either:

- a Mirvac Group or Division HSE Procedure or HSE Guideline;
- a WRMP and it's workplace specific Risk & Opportunity Register(s);
- a task specific risk assessment; job safety & environment analysis (JSEA) or equivalent; and
- adequate supervision, instruction or training having regard to the competence, experience and age of personnel.

The hazard identification, risk assessment and risk control processes used in the preparation of HSE procedures, risk assessments or JSEA are prepared in accordance with the principles of risk management outlined in Mirvac Group [Risk Management Procedure HSEP4.25](#). OHS hazards or environmental aspects are reported using the Mirvac Group form [Hazard Notification HSEF2.12](#) or Mirvac Group Hazard Notification Card.

JSEA for common tasks can be found on the Mirvac Group Intranet at [3.4 Workplace Risk Management Plans](#) (access to the JSEA is restricted to Division/Regional HSE Managers). The JSEA can be used to assist the development of workplace specific documents. Where developed by Mirvac, a JSEA is prepared on the Mirvac Group form [Job Safety & Environment Analysis HSEF2.14](#).

#### **4.6.1 Service Providers & Purchasing**

Those Mirvac personnel that engage service providers do so through Division based HSE Conditions of Contract or Purchase Order HSE Terms & Conditions.

The ability of a service provider to satisfy the HSE conditions of contract is considered in the award of any contract or issue of any Purchase Order to undertake work at a Mirvac workplace by completing the Mirvac Group [Service Provider Tender/High Risk Work HSE Assessment Checklist HSEF2.33](#). Any shortcomings identified are detailed in corrective action requests to the service provider.

- Service providers selected to undertake work involving HSE risks provide an HSE Management Plan or equivalent for the work they are to undertake prior to commencement.
- The HSE Management Plan is reviewed by the Workplace Manager, or a nominated representative, prior to the service provider commencing work at the workplace. This is done

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by completing the Mirvac Group form [Service Provider Permit for Works to Proceed HSEF2.17](#) Part A [HSE Management Plan Review] and Part B – [JSEA Review].

Selective material including products and substances, plant and equipment purchased or hired that is delivered to a Mirvac workplace is inspected to determine its fitness for purpose and compliance with HSE legislation, Australian/New Zealand Standards and manufacturer's requirements before use. Any identified significant HSE issues result in the material, plant or equipment being quarantined until rectification or the item is removed from the workplace.

In addition, the service provider or supplier carries out the work in accordance with the HSE Management System defined by the Mirvac Group, the Division/Business Unit and the WRMP.

### **4.6.2 Mandatory Procedures OHS Hazards & Environmental Aspects/Impacts**

The procedures listed in [Appendix 6](#) are a Mirvac Group requirement and implementation is mandatory at all Mirvac workplaces. Mirvac Group forms referenced in procedures or provided on the Intranet are also mandatory, as applicable to the Division or region.

### **4.7 Emergency Preparedness & Response**

Mirvac workplaces have emergency response plans that identify potential HSE emergency situations and contain emergency response procedures for each potential HSE emergency situation identified.

Each workplace has a documented workplace Emergency Response Plan (ERP) prepared in accordance with the Mirvac Group [Emergency Response Procedure HSEP4.20](#). Mirvac Group templates to assist in the development of an Emergency Response Plan are located on the Intranet at [4.7 Emergency Response](#).

Each ERP is reviewed periodically to ensure currency. Testing of the ERP occurs at maximum 12 month intervals or more frequently if determined by individual workplaces. An evaluation of the test includes: the time taken to evacuate the workplace including specific areas or floors; the effectiveness of: the evacuation operation; the siren and of access/egress.

Incidents relating to spills to the environment are managed in accordance with the Mirvac Group [Spill Management Procedure HSEP4.12](#).



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## **5.0 MEASURING AND EVALUATING**

### **5.1 Monitoring & Measurement**

Workplaces monitor the key characteristics of operation that have the potential to cause significant injuries or significant impact on the environment. Each WRMP specifies what is measured, by whom, how often and where records are kept. This includes all material, plant and equipment used in a Mirvac workplace (including those hired).

Any equipment used to carry out HSE monitoring or measurement is calibrated and maintained in accordance with the manufacturer's recommendations.

Progress against Mirvac Group HSE objectives and targets is evaluated monthly as part of the Mirvac Group [Monthly HSE Summary Report HSEF2.16](#) and in the Mirvac Board Health Safety Environment & Sustainability Monthly Report.

An HSE Workplace Inspection Schedule is prepared for each workplace. The Schedule is included in the WRMP and lists:

- what is monitored or measured;
- by whom;
- how frequently; and
- where the records are retained (specific location ID).

#### **5.1.1 Health Monitoring**

Potential situations where health monitoring may be required are identified in the Mirvac Group form [Risk & Opportunity Register HSEF2.09](#) developed for each workplace and the Mirvac Group [Hazardous Substances & Dangerous Goods Management Procedure HSEP4.21](#). These include workplace specific health issues, which may arise, e.g. exposure to carcinogenic substances such as asbestos. Individual employee health monitoring is recorded by the Mirvac Return To Work Coordinator in consultation with the Division/Regional HSE Manager through an Injury Management and Return-To-Work Case File and is available to individual employees on request. A copy of the case file is forwarded to the Group Manager HSE.

In addition, where employees are frequently required to use personal protective equipment to protect against the risk of hearing loss associated with noise that exceeds the exposure standard the employees will be monitored through audiometric testing.

Selective potential employees that are exposed to high risk work undertake a pre-employment medical assessment provided in accordance with the Mirvac Group [Pre-Employment Medical Assessment Procedure HSEP4.17](#).

### **5.2 Evaluation of HSE Compliance**

Compliance with HSE legal and other applicable requirements is evaluated at maximum 12 month intervals through an independent compliance audit across a sample of Mirvac Group workplaces. Audits are conducted by a person(s) competent in carrying out HSE legal compliance audits that is independent of the day-to-day production/operations of the workplace nominated for audit.

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### **5.3 Non-Conformity & Corrective/Preventative Action**

#### **5.3.1 Incidents at the Workplace**

Workplace HSE incidents are reported within 24 hours in accordance with the Mirvac Group [Incident Reporting Procedure HSEP4.22](#) and using Mirvac Group online reporting system or by completing the Mirvac Group form [Incident Investigation Report HSEF2.01.1](#). Where all information required in the incident investigation report is not readily available within the 24 hour period, a preliminary report is issued and supplementary information provided as it comes to hand and the Mirvac Group online reporting system updated accordingly. Exceptions include extreme incidents involving emergency services and the regulatory authority(s), which require immediate notification to the Workplace Manager. In these cases, the Workplace Manager (or nominated representative) contacts the Division/Regional HSE Manager(s), the Division Director and the Group Manager HSE in accordance with the Mirvac Group [Extreme Incident Response Procedure HSEP4.28](#).

The Group Manager HSE is contacted prior to any external notification to a regulatory authority in relation to an incident (extreme or otherwise) at a Mirvac workplace. Notices issued by any Regulatory Authority to a workplace are reported on the Mirvac Group [Monthly HSE Summary Report HSEF2.16](#) and a copy of the Notice is forwarded to the Group Manager HSE within seven working days of the date of issue recorded on the notice.

Corrective/ preventative action is documented for all reported incidents in accordance with the Mirvac Group [Incident Reporting Procedure HSEP4.22](#). Evaluation of the effectiveness of corrective/ preventative action and trends with regards to incidents is ongoing across Mirvac Group at multiple levels by Group, by Division and by Workplace.

#### **5.3.2 Non-Conformities & HSE MS Improvements**

Workplace non-conformities or improvements to the HSE MS are tracked to resolution by each Division which includes a record of corrective actions and evaluation of their effectiveness. This includes HSE action items from reviews, audits, workplace inspections, hazard/aspect notification reports, opportunities for improvement and incidents. These action items are corrected in a timely manner to prevent recurrence.

Where the risk associated with an identified non-conformity is rated as medium, high or extreme a review of the Risk & Opportunity Register is undertaken at a workplace level to determine:

- the content of the Register, i.e. is the hazard and risk or aspect and impact related to the non-conformity included in the Register; and
- the effectiveness of critical control measures, i.e. short term and long term duration; and
- the effectiveness of monitoring activities related to each critical hazard and risk or aspect and impact.

Changes to the WRMP are made by the Workplace Manager, or a nominated representative, on the condition that changes are in accordance with the Mirvac Group HSE MS, the Division HSE MS and AS4801/OHSAS18001/ISO14001 requirements. The Workplace Manager, or a nominated representative, may request assistance from the Division/Regional HSE Manager(s) or the Group Manager HSE prior to making any changes.

Changes to the Division HSE MS are made by the Division/Regional HSE Manager(s) in consultation with Division Directors on the condition that changes are in accordance with Mirvac Group HSE MS and AS4801/OHSAS18001/ISO14001 requirements. Division/Regional HSE Manager(s) have the changes reviewed and approved by the Division/Operations Director and Group Manager HSE prior to implementation.

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Changes to the Mirvac Group HSE MS processes including procedures, guidelines, policies, forms or other documents are referred to the Group Manager HSE by completing a Mirvac Group form [Corrective Action Request HSEF2.57](#). Corrective/preventative action implemented is assessed for effectiveness by those that authorise any changes.

### **5.3.3 Injury management & return to work**

All employee injuries that occur at work and result in time off or an inability to complete normal duties are managed in accordance with the Mirvac Group [Injury Management & Return to Work Procedure HSEP6.00](#).

### **5.3.4 Unresolved risks identified in the workplace**

Where risk(s) to safety/wellbeing of employees, service providers or the public still exist, or material harm to the environment has been identified and corrective/ preventative action is not undertaken within 30 days and no specific action plan has been instigated, the Division/Regional HSE Manager(s) elevates the outstanding risk item(s) to the Group Manager HSE for resolution.

### **5.3.5 Unacceptable HSE performance**

Unacceptable HSE performance by employees or service providers is managed in accordance with the Mirvac Group [Unacceptable HSE Performance Procedure HSEP4.33](#). Non-conformities relating to the observation of repeated unacceptable HSE performance require the completion and issue of a formal Mirvac Group form [Workplace HSE Instruction HSEF2.20](#).

### **5.3.6 Counselling & Employee Assistance**

Mirvac Group operates a 24 hour per day 7 days a week counselling service for all Mirvac employees. More detailed information can be found at the Mirvac Group [Employee Assistance Program Policy & Procedure HSEP4.06](#).

## **5.4 Records Management**

The Mirvac Group HSE Records Matrix listed in [Appendix 5](#) outlines key HSE records held by the Mirvac Group. The Division HSE MS Manual and respective WRMP also specify key HSE records, consistent in format with the Mirvac Group HSE Records Matrix. This includes HSE records not covered in the Mirvac Group HSE Records Matrix.

The retention period specified for workplace records is in accordance with the Mirvac Group [Document Retention Procedure HSEP4.01](#). HSE record filing at the workplace is carried out in accordance with the Mirvac Group [Document Filing Procedure HSEP4.02](#).

## **5.5 HSE MS Internal Audits**

Mirvac HSE MS internal audits are carried out in accordance with the methodology outlined in ISO19011 Guidelines for Quality and/or Environmental Management Systems Auditing and Mirvac Group [Auditing HSE Procedure HSEP4.31](#). Audits are conducted by a person(s) competent in carrying out HSE MS internal audits that is independent of the day-to-day production/operations of the workplace nominated for audit.

The Division/Regional HSE Manager(s) maintains a schedule of Division internal HSE MS audits of workplaces using the Mirvac Group form [Audit Schedule HSEF2.05](#) and in accordance with the following requirements:



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HSE Audit Type	Division/ Region	Frequency + Scope
Internal implementation audit of HSE Management System at the workplace level [arranged by Division/Regional HSE Manager(s)/Coordinator]	Development Commercial Development Housing	Min 10% sample of workplaces every 3 months
	Hotels & Resorts	Min 10% sample of workplaces every year
	Mirvac Asset Management + Funds Management	Min 10% sample of workplaces every year
Internal legal compliance audit	All	Min 5% of sample of high risk workplaces every year
External HSE Management System Audits [arranged by Group Manager HSE]	All	Min 5% of sample of high risk workplaces every year
*Independent HSE MS audit - Legal compliance	All	Min 10% sample of workplaces every year
External Independent HSE MS audit - Certification to standards	All	Yearly (specific divisions in line with Mirvac certification implementation program)

\*Refer Mirvac Group Auditing HSE Procedure HSEP4.31

Items identified for corrective/preventative action in audits that apply to the Mirvac Group are tracked to resolution by the Group Manager HSE and evaluated for their effectiveness by monitoring trends across completed workplace audits.

Items identified for corrective/preventative action in audits that apply to the Division are tracked to resolution by the Division/Regional HSE Manager(s) and evaluated for their effectiveness by monitoring trends across completed workplace audits. The Division/Regional HSE Manager(s) in consultation with the appropriate Mirvac Director maintains and forwards a summary of audit findings including key corrective actions implemented as a result of audits, along with trend analysis at maximum six (6) month (calendar year) intervals to the Group Manager HSE by completing the Mirvac Group form [Summary of HSE Audit Findings Report HSEF2.61](#). The Group Manager HSE, in consultation with appropriate Division/Regional HSE Managers, prepares a corrective action plan, in response to trends identified across the Mirvac Group or a specific Division.

## 6.0 HSE MS REVIEW

Mirvac conducts a formal review of the Mirvac Group HSE MS at yearly intervals in accordance with the Mirvac Group form [HSE Management System Review HSEF2.59](#). Each Division completes an annual HSE MS review in July/August and forwards the results to the Group Manager HSE. The collated review and proposed changes are discussed and agreed at the HSE Managers Committee Conference. Agreed changes are subsequently implemented within the first quarter year period following each financial year end – 30<sup>th</sup> June.

The review includes but is not limited to an analysis of performance against:

- objectives outlined in the annual Mirvac Group [HSE Strategic Plan](#);
- Mirvac Group HSE objectives and targets;

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- internal and external audit findings;
- changes to legislative requirements; and
- corrective action requests.

The results of the Mirvac Group HSE MS review are used to further develop the Health Safety Environment Management System across the Mirvac Group and to inform the upcoming Mirvac Group HSE Strategic Plan in preparation for the next financial year reporting period.

### **6.1 Review Structure**

The Mirvac Group is committed to monitoring and measuring its HSE MS performance to verify that workplace processes and practices are in keeping with the commitments listed in the Mirvac Group HSE Policy and HSE objectives provided in the Mirvac Group HSE Strategic Plan.

The Mirvac Group considers regular HSE meetings and reporting at all levels, as an important tool for reviewing the effectiveness of existing HSE policies, procedures and plans, communicating HSE hazards, aspects and incidents as well as assessing HSE performance across the organisation.

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### Appendix 1 – Mirvac Group HSE Objectives and Targets

Objectives	Mirvac Group Performance Targets			
LEAD INDICATORS	Below Acceptable	Business As Usual	Stretch	Outstanding Industry Leader
<b>Workplace culture</b> (yearly) <b>Demonstrated commitment to HSE by active participation.</b> <i>(a) Mirvac Group (MG) Executive Committee complete at least 8 x HSE related actions per year in accordance with the Mirvac Group <a href="#">Executive Actions HSE Participation Procedure HSEP4.41</a>.</i>	<40%	41–65%	66–99%	100%
<b>Incident Reporting</b> <i>Promote timely reporting of workplace incidents.</i>	>48hrs	37–48hrs	24–36 hrs	<24 hrs
	<80% Close out	80–89% Close out	90–98% Close out	>98% Close out
<b>Community Contacts</b> (HSE related matters) <i>Promote timely response and resolution of community based contacts including residents, customers or general public.</i>	>68 hrs	59–68 hrs	48–58 hrs	<48 hrs
<b>Waste</b> <i>Promote material recycling and reuse to reduce waste to landfill.</i>	<26% By Weight	26–40% By Weight	41–50% By Weight	>50% By Weight
<b>Training</b> <i>(i) Induction training for all new starters, transfers or relocations.</i> <i>(ii) 'Licence To Operate' Training all employees</i>	<70%	71–80%	81–99%	100%
	<80%	80–85%	86–99%	100%
<b>Compliance</b> <i>Audit compliance to critical controls listed in the Workplace Risk &amp; Opportunity Register.</i>	<75%	75–85%	86–90%	>90%
	<80% Close Out	80-89% Close Out	90-99% Close Out	100% Close Out
LAG INDICATORS				
<b>Construction (employees)</b> <i>Roll. Av. Lost Time Injury Frequency Rate (LTIFR)*</i>	>10	6–10	5–6	<5
<b>Construction (Service Providers + Employees)</b> <i>Roll. Av. Lost Time Injury Frequency Rate (LTIFR)*</i>	>14	10–14	9-10	<9
<b>Development(employees)</b> <i>Roll. Av. Lost Time Injury Frequency Rate (LTIFR)*</i>	>7	6–7	4–6	<4
<b>Hotels &amp; Resorts(employees)</b> <i>Roll. Av. Lost Time Injury Frequency Rate (LTIFR)*</i>	>15	14–15	13–14	<13
<b>Property &amp; Business Services (MAM)</b> <i>Property Services Man. Roll Av. (LTIFR) (employees)</i> <i>Maintenance/construction activity (Roll. Av. LTIFR)*</i> <i>(Service Providers + employees)</i>	>6	5–6	4–5	<4
	>7	6–7	5–6	<5
<b>Environment Frequency (EIFR)*</b> <i>Environmental Incident Frequency Rate rolling average</i>	>10	6–10	3–5	<3

**\*Notes:**

- (i) A lost time injury/disease (LTI) is defined as those occurrences that resulted in a fatality, permanent disability or time lost from work of one day/shift or more.
- (ii) The formula for lost time injury frequency rate and environment incident frequency rate is: [no. of occurrences in the period / no. of productivity hours worked (excluding all forms of leave) in the period (x 1,000,000)].
- (iii) Environmental incidents include: notices or other enforcement activity issued by a Regulatory Authority or equivalent, incidents involving spills, dust and noise.

## **Mirvac Group**

# **Health Safety Environment Management System Manual**

### **Appendix 2 – MIRVAC GROUP HSE RESPONSIBILITIES & ACCOUNTABILITIES**

[Board of Directors](#)

[Managing Director](#)

[Executive Committee](#)

[Chief Executive Officer Development Australia](#)

[Division Chief Executive Officer](#)

[Division Director](#)

[Chief Operating Officer](#)

[Group Manager Health Safety Environment](#)

[Division/Regional Health Safety Environment Manager](#)

[All Managers](#)

[All Supervisors](#)

[All Employees](#)

# Mirvac Group

## Health Safety Environment Management System Manual

### Appendix 3 – MIRVAC GROUP HSE TRAINING NEEDS ANALYSIS

#### Key Mirvac Group Training Activities

Position	W S I	D L L	R A S	R M S	S R	A H O	F W	S F A	O F A	E I R	C/ W H S O/ S R	R T W	E P	L T O	H S E - M S
Senior Exec															
Executives															
Dept Managers															
Managers															
Supervisors															
Employees															

#### KEY

- Mandatory Mirvac Group training requirements in addition to workplace specific procedures
- As required by individual job description and WRMP requirements

#### Code

#### Mirvac Group Core Training

#### High Priority - within 3 months

- GC/SAT** OHS General Industry (Green Card)/Safety Awareness Training for all Mirvac personnel working on or frequenting construction sites.
- WSI** Workplace Specific Induction.
- RAS** Responsibility & Accountability Statement.
- RMS** OHS Risk Management for Supervisors – LTO (external provider).
- SR** Spill Response.
- FW** Fire Warden.
- SFA** Senior First Aid.
- LTO** 'Licence To Operate' Commencing July 08:

Why HSE;  
Roles & Responsibilities;  
Spot the Hazard;  
Risk Management Awareness,  
Our HSE Management System;  
Preventing Harassment in the Workplace;  
Preventing Strains & Sprains,  
Environmental Awareness,  
Sun Safety Awareness,  
Environmental Awareness  
Surviving an Armed Hold-Up

#### Medium Priority – within 6 months

- DLL** Director Legal Liability.
- AHO** Anti Harassment Officer.
- C/WHISO/SR** Consultation/Committee/Workplace Health & Safety Officer/Safety Representative
- RTW** Return To Work/Injury Management.
- EP** Environment Protection training (for workplaces with >Medium Risk Aspects identified)
- EIR** Extreme Incident Response.
- HSE-MS** 3 – Tier HSE Management System

#### Low Priority – within 12 months

- OFA** Occupational First Aid.

## Mirvac Group

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#### **Appendix 4 – MIRVAC GROUP INTERNAL HSE MEETINGS**

<b>Meeting</b>	<b>Purpose of Meeting</b>	<b>Attendees</b>	<b>Frequency of Meeting</b>
HSE&S Management Committee	Supply Committee with relevant HSE&S Board Report, performance information and maintain awareness of HSE issues.	GM HSE; GM HR; General Counsel/Company Secretary, GM Mirvac Asset Management; Chief Operating Officer; GM Mirvac Constructions, CEO Mirvac Hotels & Resorts, Sustainability Manager (Group Strategy); GM Office & Industrial, GM Retail, CEO Development Australia.	Monthly
Division/Regional HSE Manager(s) Committee	Review HSE information and identify HSE issues within Mirvac for consideration	GM HSE (Chair); Division/Regional HSE Manager(s) – Corporate; QLD, NSW, VIC, Homes NSW, WA, Hotels & Resorts.	Max. 2/year
Construction HSE Committee	Review HSE information and identify HSE issues within Mirvac construction operations for consideration	GM HSE (Chair); CEO Development Australia; Construction Directors; Division/Regional HSE Manager(s) – Corporate; QLD, NSW, VIC, Homes NSW, WA.	Bi-monthly
Executive Leadership Team	HSE information for Managing Director and key executives including Monthly Board HSE Report	Managing Director, Chief Operating Officer, General Counsel/Company Secretary, CEO Development Australia.	Monthly

# Mirvac Group

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### Appendix 5 – MIRVAC GROUP HSE RECORDS MATRIX

Record	Location	By Whom	Retention Period
Division HSE Monthly Reports (Received)	HSE Dept. monthly HSE report filing L25 Margaret St Sydney	Group Manager HSE	10 years
Mirvac Group HSE Monthly Reports (Prepared)	HSE Dept. monthly HSE report filing L25 Margaret St Sydney	Group Manager HSE	10 years
Incidents Information	HSE Dept. incident report filing by month L25 Margaret St Sydney. H Drive HSE/Incident Reporting	Group Manager HSE	10 years
Register of Injuries	HSE Dept. incident report filing L25 Margaret St Sydney. Register of Injuries Database (My Workspace)	Group Manager HSE	10 years
Injury Management Workers Compensation Claims Information and Employee Health Records	HSE Dept. Claims report filing L25 Margaret St Sydney.	RTW Coordinator	10 years
Employee Health Records [exposure to carcinogen, audiometric testing or other]	HSE Dept. Claims report filing L25 Margaret St Sydney.	RTW Coordinator and copy to Group Manager HSE	30 years
Internal and External Audit Reports	HSE Dept. report filing L25 Margaret St Sydney. H Drive /HSE/Auditing	Group Manager HSE	10 years
HSE Reports (not audits)	HSE Dept. L25 Margaret St Sydney. H Drive/HSE/Reporting	Group Manager HSE	10 years
HSE Management System Reviews	HSE Dept. L25 Margaret St Sydney. H/HSE/Reporting	Group Manager HSE	10 years
HSE Training Records for Senior Management Training Activity Profiles for Mirvac-wide Courses or those for Senior Management	HSE Dept. incident report filing L25 Margaret St Sydney. H Drive/HSE/Training; H Drive/HSE/LTO Training	Group Manager HSE	10 years
HSE MS documents	HSE Dept. H/HSE/HSEMS	Group Manager HSE	10 years
HSE MS documents revision history	HSE Dept. H/HSE/Document Control/Document Control Register	Group Manager HSE	10 years
HSE MS documents	HSE Dept. H/HSE/HSEMS	Group Manager HSE	10 years
HSE incoming external communication	HSE Dept H/HSE/Document Control/External Correspondence Control Register	Group Manager HSE	10 years
HSE Alerts	HSE Intranet/Group Alerts	Group Manager HSE	10 years
Division/Regional HSE Manager(s) Committee Minutes	H Drive/HSE/Meetings/ Division/Regional HSE Manager(s) Committee	Group Manager HSE	10 years
HSE&S Management Committee Minutes	H Drive	Company Secretariat; GM HSE	10 years
Construction HSE Committee	H Drive	Group Manager HSE	10 years

# **Mirvac Group**

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### **Appendix 6 – MIRVAC GROUP HSE PROCEDURES**

The Mirvac Group procedures are mandatory and are implemented and followed by all Mirvac workplaces where applicable.

Mirvac Intranet link – [Mirvac Group HSE Procedures](#)

Mirvac Intranet link – [Mirvac Group HSE Guidelines](#)

Mirvac Intranet link – [Mirvac Group HSE Forms](#)