



Department of Mines, Industry Regulation and Safety
**RESOURCES SECTOR
AWARDS FOR EXCELLENCE**

Golden Gecko • Community Partnership • Safety & Health



GOLDEN GECKO
Awards for Environmental Excellence



SAFETY & HEALTH
RESOURCES SECTOR AWARDS



Community Partnership
Resources Sector Award



Government of Western Australia
Department of Mines, Industry Regulation and Safety

MINISTER'S MESSAGE



Western Australia's resources sector, now valued at more than \$114 billion in 2017-18, continues to be the backbone of the State's economy.

Without mining and energy, our world could not function.

Western Australia is an incredibly diverse State and it is encouraging to see the resources sector continually strive to improve outcomes.

To ensure our nationally significant industry is sustainable, industry development must take account of the environmental, social and safety needs of Western Australia.

The Department of Mines, Industry Regulation and Safety's 2018 Resources Sector Awards for Excellence celebrate the projects and partnerships that are at the forefront of community partnerships, health, safety and environmental innovations.

We are encouraged by the resources sector's commitment to continual improvement in environmental outcomes and responsibilities, forming meaningful and enduring relationships with communities and protecting the mental and physical wellbeing of workers.

By sharing these projects, the department is encouraging others in the resources sector to continually improve and be at the forefront in social, safety and environmental outcomes.

On behalf of the McGowan Labor Government, I applaud all the entrants of the 2018 Resources Sector Awards for Excellence.

I'd also like to congratulate the finalists who have demonstrated innovative thinking and applied new technologies to safeguard our State. They are a credit to the resources sector.

The Hon. Bill Johnston MLA

Minister for Mines and Petroleum

THE AWARDS



GOLDEN GECKO

Awards for Environmental Excellence

Since 1992, the Golden Gecko Awards have recognised environmental excellence demonstrated in the mining and petroleum industry. This year five entries are in the running for this prestigious award. The Department of Mines, Industry Regulation and Safety congratulates the entrants on the quality of their applications.



The Safety and Health Resources Sector Awards recognise individuals, teams and companies that have developed a new initiative or an original solution to safety and health problems in the workplace.

The Awards highlight and promote leadership and innovation to ensure continuous improvement to safety and health in WA's resources sector. This year 12 finalists have been selected for this award in the Systems and People and Engineering categories.



Community Partnership Resources Sector Award

Now in its third year, this award publicly recognises Western Australian community groups and resources industry organisations that show outstanding achievement and leadership in building partnerships, creating mutually beneficial relationships and achieving positive outcomes that extend well beyond gaining a social licence to operate.

2018 Golden Gecko Entrants

Alcoa and Murdoch University Partnership Eradicates Biological Bulldozer Phytophthora Dieback Alcoa of Australia	1
Chasing Ghosts: Understanding Ghost Bat Ecology in the Pilbara BHP	1
Biosecurity Management in Quarrying: Best Practice Dieback Management Hanson Construction Materials	2
The State Wide Array Surveillance Program Pilbara, Kimberley, Mid West, Southern and Fremantle Port Authorities and the Department of Primary Industries and Regional Development	2
Rapid Impact Detection Roy Hill Holdings and Astron Environmental Services	2

2018 Safety and Health Resources Sector Award Finalists

ENGINEERING

SkyHook MKIV Mobile Fall Arrest Anchor System Fremantle Commercial Diving	3
Spring Leaf Pack Hoist Mineral Resources Limited (MRL)	3
Elimination of Chlorine Gas from Rio Tinto Pilbara Villages Rio Tinto	4
Improving Electrical Safety of High Voltage Switchgear Rio Tinto	4
Elimination of Working Under a Suspended Load Rio Tinto	5
Lightning Protection System Roy Hill Holdings	5

SYSTEMS AND PEOPLE

Driving Down Injuries and Incidents in Road Train Haulage Atlas Iron	6
Controlling Energy Sources – Mobile Maintenance Fortescue Metals Group	6

CONTENTS CONT...

Reduction of Sprains and Strains in Mining Industry	
Kalgoorlie Consolidated Gold Mine	7
Newmont Boddington Gold Health and Safety Representative (HSR) Mentoring Program	
Newmont Mining	7
Emergency Response Exposure Reduction Initiative – BARRIO	
Rio Tinto Iron Ore	8
Reducing Exposure to Working on Live Equipment	
Rio Tinto Iron Ore	8

2018 Community Partnership Resources Sector Award Finalists

Healthy Food for All – Pilbara Regional Strategy	
Foodbank WA and BHP	9
KCGM and EKPS Goldfields Community Partnership	
East Kalgoorlie Primary School (EKPS) and Kalgoorlie Consolidated Gold Mines	9
Makerspace Project	
Yule Brook College and Carey Mining	10
Alcoa / Munda Biddi Trail Foundation Partnership	
Munda Biddi Trail Foundation and Alcoa	10
Pilbara Mentoring Partnership	
EdConnect Pilbara Mentor Me program and Roy Hill Community Foundation	11
Rio Tinto Earth Assist	
Conservation Volunteers Australia, Department of Biodiversity, Conservation and Attractions, Department of Education and Rio Tinto	11

ALCOA AND MURDOCH UNIVERSITY PARTNERSHIP ERADICATES BIOLOGICAL BULLDOZER PHYTOPHTHORA DIEBACK

Alcoa of Australia

Alcoa and Murdoch University's project has delivered a world-first – a technique that can eradicate the Phytophthora dieback pathogen without toxic chemicals and on a large scale. This technique has immediate application by others in the resources and extractive industries worldwide.



CHASING GHOSTS: UNDERSTANDING GHOST BAT ECOLOGY IN THE PILBARA

BHP

Evidence of the presence of the Ghost Bat in BHP's Mining Area C commenced a significant collaborative project across industry, government and academia that has resulted in a regionally relevant understanding of the ecology of the ghost bat in the Pilbara and enabled effective management of the species.



BIOSECURITY MANAGEMENT IN QUARRYING: BEST PRACTICE DIEBACK MANAGEMENT

Hanson Construction Materials

Hanson has embarked on a statewide redevelopment of its sand and aggregates quarry operations located in the South West of Western Australia in an effort to responsibly restrict the spread of Dieback across the State and reduce the risk to award winning restoration efforts onsite.



THE STATE WIDE ARRAY SURVEILLANCE PROGRAM

Pilbara, Kimberley, Mid West, Southern and Fremantle Port Authorities and the Department of Primary Industries and Regional Development

The State Wide Array Surveillance Program (SWASP) is a world-first in the use of molecular techniques by a collaborative marine biosecurity surveillance network to more rapidly respond to a potential incursion of an introduced marine pest.



RAPID IMPACT DETECTION

Roy Hill Holdings and Astron Environmental Services



Rapid Impact Detection is an innovative method of vegetation monitoring, identifying environmental phenomena as it occurs and enabling immediate response to be undertaken.

SKYHOOK MKIV MOBILE FALL ARREST ANCHOR SYSTEM

Fremantle Commercial Diving

The SkyHook MKIV (SkyHook) is a unique truck mounted, mobile rated overhead anchor point for two people, designed and engineered to allow safe working at heights, or the rescue of an injured person from a water tank, in situations where no other suitable anchor point and/or rescue equipment is installed on an asset.



SPRING LEAF PACK HOIST

Mineral Resources Limited (MRL)

MRL identified the need for an engineering design to eliminate the risk of musculoskeletal injuries and significantly reduce impact injuries to hands and fingers associated with the task of removing and replacing leaf spring packs on their extensive range of multi-combination and super-quad road train trailers.



ELIMINATION OF CHLORINE GAS FROM RIO TINTO PILBARA VILLAGES

Rio Tinto

Rio Tinto Iron Ore identified that gas chlorinators were still in use at the main potable water treatment systems at their accommodation villages. To eliminate the risk of exposure to chlorine gas for both personnel maintaining potable water at the village and individuals residents, an onsite Electrolytic Chlorination system was successfully installed at four facilities.



IMPROVING ELECTRICAL SAFETY OF HIGH VOLTAGE SWITCHGEAR

Rio Tinto

Rio Tinto Iron Ore's online partial discharge solution has enabled employees to take a more holistic view of the process of risk reduction across its extensive fleet of high voltage switchgear assets. With the ability to predict failures, resources can be better allocated to corrective and preventative actions that will mitigate the identifiable risks, which include arc flash and hazardous gas exposure.



ELIMINATION OF WORKING UNDER A SUSPENDED LOAD

Rio Tinto

Any crane lifting operation where there is a risk of personnel being exposed to a suspended load requires effective controls to mitigate any potential risk to personnel. An engineer designed guide system is a critical control initiative that successfully eliminates the requirement for an operator or maintainer to be working in proximity to a suspended load in the drop zone during this task.



LIGHTNING PROTECTION SYSTEM

Roy Hill Holdings

The Lightning Protection System (LPS) is an innovative, unique and long-term solution to a frequent hazard in the mining industry. The LPS benefits people by allowing them to safely move around facilities during lightning red alerts, by capturing lightning strikes at preferred points then redirecting the energy to a grounding system.



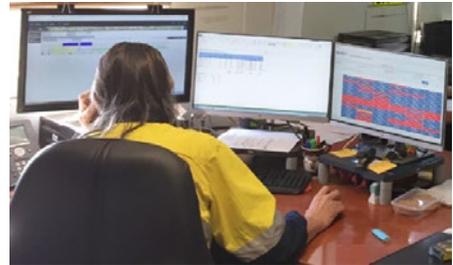
2018 SAFETY AND HEALTH RESOURCES SECTOR AWARD FINALISTS

SYSTEMS AND PEOPLE

DRIVING DOWN INJURIES AND INCIDENTS IN ROAD TRAIN HAULAGE

Atlas Iron

There are many factors involved in ensuring personnel are fit for work and free from fatigue. The holistic approach taken between Atlas and Rivet has shown a considered, well-structured plan that has had measureable benefits with improved outcomes to the drivers, community and companies.



CONTROLLING ENERGY SOURCES – MOBILE MAINTENANCE

Fortescue Metals Group

A safety package that is designed for upskilling and keeping mobile maintenance workers in control of potentially damaging stored energy. Fortescue's work groups now have short, clear and accurate instructions on how to control stored energy within their maintenance work.



REDUCTION OF SPRAINS AND STRAINS IN MINING INDUSTRY Kalgoorlie Consolidated Gold Mine

Redesigning the storage racks for steel rods and repositioning hydraulic fluid storage is a simple, cost effective engineering solution that has had a huge impact on minimising sprains and strain injuries to staff, improving not only the health and wellbeing of employees but also increasing production and contributing to the success of the business.



NEWMONT BODDINGTON GOLD HEALTH AND SAFETY REPRESENTATIVE (HSR) MENTORING PROGRAM Newmont Mining

The HSR mentoring program is designed to support Health and Safety Representatives, providing education on their legal responsibilities and requirements, as well as equip them with skills to successfully engage their work groups and the workforce. The program delivers 11 topics and workshops over 11 months.



EMERGENCY RESPONSE EXPOSURE REDUCTION INITIATIVE – BARRIO

Rio Tinto Iron Ore

Best practice, Airborne Contaminants, Risk, Reduction, Initiative and Operation, or ‘BARRIO’ is an effective and practical solution to mitigate the risk of exposure to fire based atmospheric contaminants that have been identified as health risks.



REDUCING EXPOSURE TO WORKING ON LIVE EQUIPMENT

Rio Tinto Iron Ore

An isolation incident in 2015 at Rio Tinto Iron Ore Ports Dampier highlighted the risk of working on live equipment associated with mirror-image conveyors with multiple access points. Several mitigating measures were implemented for working among mirror-image conveyors including a human factors approach, and an easily deployed, low cost, sustainable method of plant identification.



HEALTHY FOOD FOR ALL – PILBARA REGIONAL STRATEGY

Foodbank WA and BHP

Food, cooking and eating together are associated with sharing and social cohesion, and as such are an important part of the social fabric within schools, families and communities. Foodbank WA's School Breakfast Program and Food Sensations suite of programs in the Pilbara in partnership with BHP, are important vehicles for bringing together broad groups of students and adults within a social rather than formal educational or health setting.



KCGM AND EKPS GOLDFIELDS COMMUNITY PARTNERSHIP

East Kalgoorlie Primary School (EKPS) and Kalgoorlie Consolidated Gold Mines

The community partnership between East Kalgoorlie Primary School (EKPS) and Kalgoorlie Consolidated Gold Mines (KCGM) commenced in 2010, and has since grown to become a multi-faceted collaboration creating sustainable outcomes for the Goldfields community.

Through a variety of sponsorship programs, in-kind donations, engagement initiatives and a long-term partnership agreement the relationship between EKPS and KCGM has proven to be advantageous, with the aim to create long-term health and wellbeing benefits to the community.



MAKERSPACE PROJECT

Yule Brook College and Carey Mining

Yule Brook College and Carey Mining developed an alliance with the shared vision of improving opportunities and outcomes for young people at the college. The alliance has resulted in the innovative 'Makerspace' program.

Makerspace is a multi-purpose space for students to explore and experience making material artefacts. Through this process, they learn to value and appreciate the importance of STEAM disciplines - science, technology, mathematics, arts, and engineering - while developing their personal skills and qualities such as creativity, persistence and collaboration. Members of the school community and beyond can join in and act as mentors to students, particularly the young Indigenous students.



ALCOA / MUNDA BIDDI TRAIL FOUNDATION PARTNERSHIP

Munda Biddi Trail Foundation and Alcoa

This community partnership of more than 18 years is about working together to help build, maintain, promote and foster sustainable support for a unique, world-class and enduring asset for Western Australia – the Munda Biddi Mountain Bike Trail.

The partnership between Alcoa and the Foundation has from the outset extended beyond financial support to include in-kind assistance. It has grown to link the Alcoa employee volunteer program and the Foundation trail maintenance program, and to support projects for the communities through which the Trail passes.



PILBARA MENTORING PARTNERSHIP

EdConnect Pilbara Mentor Me program and Roy Hill Community Foundation

Pilbara Mentor Me is a partnership program designed by Roy Hill Community Foundation and EdConnect Australia that offers life-changing mentoring and learning support in schools for young people.

This community volunteer program was established in Port Hedland in 2016 to provide local students with the academic and social support they need to succeed. It offers volunteers an opportunity to undertake specific training and immerse themselves in a program that is making a real difference in their local community.



RIO TINTO EARTH ASSIST

Conservation Volunteers Australia, Department of Biodiversity, Conservation and Attractions, Department of Education and Rio Tinto

Rio Tinto Earth Assist (RTEA) is a statewide environmental education program, funded by Rio Tinto and delivered by Conservation Volunteers Australia, that enables Western Australian teachers and students to make a real on-ground difference.

Working in close partnership with the Department of Education and the Department of Biodiversity, Conservation and Attractions, RTEA provides in-school and external activities that link to and support the WA Curriculum and cross curriculum priorities, specifically Sustainability and Aboriginal & Torres Strait Islander Histories and Cultures.



ABOUT THE AWARDS

GOLDEN GECKO

The gecko was chosen to represent the awards because they are seen as a bio-indicator. Geckos have specialist habitat requirements which take time to develop and their presence in mine site rehabilitation shows progress towards a healthy and functioning ecosystem.



SAFETY AND HEALTH RESOURCES SECTOR AWARD

Workers, family, community and safety are all interconnected. The triangular shape of the Safety and Health Resources Sector Award trophy represents a hazard symbol, which encompasses the many faces of the community that are affected by safety and health outcomes in the work place.



COMMUNITY PARTNERSHIP AWARD

The design of the Community Partnership Resources Sector Award statue depicts the strong partnerships that have matured and grown between communities and resource companies to leave a positive and long lasting legacy.





Department of Mines, Industry Regulation and Safety
Mineral House, 100 Plain Street
East Perth, Western Australia 6004
Tel: +61 8 9222 3333 | Fax: +61 8 9222 3862
Email: excellenceawards@dmirs.wa.gov.au

 @DMIRS_WA

This booklet is printed on paper that is Certified Carbon Neutral by The Carbon Reduction Institute (CRI) in accordance with the global Greenhouse Gas Protocol and ISO 14040 framework. The paper contains 55% recycled fibre (25% post consumer and 30% pre consumer) and 45% elemental chlorine free pulp. All virgin pulp is derived from well-managed forests and controlled sources. It is manufactured by an ISO 14001 certified mill.