

Mount Pleasant Operation News

Community & Employee Newsletter - December 2020

Issue 8



Rehabilitation at MPO



Pictured above, a regular inspection of the rehabilitation progress by Andrew Reid, Chris Waygood, Peter York and Michelle Eckersley.

The Mount Pleasant Operation (MPO) aims to deliver high quality rehabilitation that exceeds community and regulator expectations. We are steadily working towards this aim by achieving goals such as, completing rehabilitation before first coal in 2018 and continuing to progressively rehabilitate the site as additional areas become available.

Despite the recent drought, bushfires, heavy rain (at times) and the global pandemic, we have undertaken 59 hectares of rehabilitation up until mid-2020, with another ten hectares currently underway. Creating a landform from the ground up that ties into the existing landscape has been a challenging and rewarding experience for our employees, operators, and contractors and we would like to share some of the questions we have been asked throughout our journey.

Designing the shape of the rehabilitation

What is a sympathetic landform and why did we choose this design?

- A sympathetic landform has been designed to resemble the natural landscape surrounding Muswellbrook and to move water through the landscape. At MPO, our entire rehabilitation effort on the eastern emplacement area is designed on this principle.
- Another common term is 'Geofluv' which refers to the software package used to design and model the landform to ensure it is stable and non-polluting over the long term.

Continued over the page



Pictured above, galahs preparing nesting sites in one of the habitat trees.



We would like to wish our employees and community members a Merry Christmas and a safe and happy New Year.





Pictured above, kangaroos enjoying the shade provided.

Creating and augmenting habitat with habitat features

Dead trees, log, and rock piles, what is their role on the rehabilitation?

- A literature review was completed on habitat preferences of species that have previously been identified on the mining lease and surrounding areas. The habitat features are used to recreate these preferences.
- Trees that contain hollows, crevices, loose bark, or large branches which provide ideal habitat are identified during mine clearing and salvaged for use as habitat trees on the rehabilitation.
- The dead trees (habitat trees), standing on the MPO rehabilitation, play an important role providing habitat for a range of species, including birds, bats, and arboreal mammals.
- These habitat trees are also strategically placed approximately 50m apart providing species like squirrel gilders a pathway across the rehabilitation and in the future, linkages to the broader landscape.
- Other trees felled during clearing are used in conjunction with hollow trees to create log piles which suit ground dwelling and burrowing species such as echidnas.
- Rock piles are created from sandstone rock where possible to provide habitat and basking areas for reptiles.

Plants in the rehabilitation

Plant selection and plant communities, what are we planting in our rehabilitation and why?

- The plants and seed used in the MPO rehabilitation are from four local plant communities, three of which were identified in the pre-mining landscape and one from the wider Muswellbrook area. When selecting plants and seed, consideration is given to its genetic diversity and resilience to climate change.
- One plant community, key to our rehabilitation, is the White Box Yellow Box Blakely's Red Gum Woodland, listed as an endangered ecological community. Approximately 45 percent of our rehabilitation has been planted with species consistent with this endangered ecological community.

- We are currently trialling several concepts in our rehabilitation including:

> Aspect planting; this refers to planting plants where they are naturally found in the landscape and recreating this on our rehabilitation.

> Where possible we match the plant communities to soil type. For example, planting ironbark and spotted gum plant communities on sandy or volcanic hillslope soils and box gum grassy woodlands on more fertile alluvial soils.

> Trialling a dry rain-forest plant community found around the area known as the 'Muswellbrook Common' within sheltered areas of the rehabilitation. Plants within this community are known to increase food availability for a range of bird species.

MPO's Role in the broader landscape

What are we doing to connect the MPO rehabilitation back to the broader landscape?

- We are developing plans to create wildlife corridors, connecting the Hunter River to the MPO rehabilitation, and creating corridors to the south, providing connections to other mine rehabilitation.

Wildlife in the rehabilitation

How old is your rehabilitation and when do you expect native animals move back into the area?

- Our rehabilitation began in 2018 with one hectare rehabilitated prior to first coal. Two years on we are progressively undertaking rehabilitation with 59 hectares currently rehabilitated, including the installation of 354 habitat features.

• We expect it will take a few years for wildlife to move back into the area, however, on recent inspection a "[A mating pair of] galahs were preparing the hollows for nesting. The [habitat] tree [they had chosen had only been installed for] two weeks and shows how rapidly tree hollows are utilised by hollow dependent species within a landscape.

It could take years for these hollows to form naturally. MPO's rehabilitation area is now providing ecosystem function before the area has been [deep ripped, seeded and] planted."



Minister meets with Upper Hunter Mining Dialogue

The Minister for Finance and Small Business, Damien Tudehope, **pictured above, far left**, visited the Upper Hunter as part of the NSW Minerals Council tour program. Minister Tudehope met with members of the Upper Hunter Mining Dialogue and was given an update on local industry and the Dialogue's activities with members of the recently formed Joint Economic and Social Development Working Group. MPO's Ngaire Baker is the inaugural chairperson of the working group and is **pictured centre back**, at the meeting with Sue Gilroy from Singleton, Mike Kelly, President of the Muswellbrook Chamber of Commerce, Michael Johnsen MP, Member for the Upper Hunter, Deb Barwick, NSW Indigenous Chamber of Commerce and James Barben, NSW Mining Director Policy.



CCC check out rehabilitation and the CHPP

Pictured above from left, the MPO Community Consultative Committee (CCC) took the opportunity to visit site rehabilitation prior to a recent meeting. The committee was given an up-close inspection of the area known as the "Frog Pond."

Pictured left, MPO's Senior Process Engineer Tom Wilson with members of the CCC during a tour of the coal handling preparation plant.

Pictured below, compare the photos, the rehabilitated area known as the "Frog Pond" snapped a few months after the visit to the same location by the CCC.



MPO Optimisation Project

The MPO has prepared a comprehensive Environmental Impact Statement (EIS) for the Mount Pleasant Optimisation Project (the Project).

The Project proposes extraction of additional coal reserves within MPO Mining Leases (MLs) and an increase in the rate of coal extraction without significantly increasing the total disturbance footprint (**Figure 1**) on next page.

Environmental Impact Statement

The EIS considers the potential environmental impacts of the Project in accordance with the Environmental Assessment Requirements issued by the NSW Department of Planning, Industry and Environment.

The EIS will outline:

- a detailed description of the Project;
- an assessment of potential impacts;
- continuation of existing MPO environmental management measures; and
- an evaluation of the merits of the Project.

Workforce

As at mid-2020, the full time equivalent operational workforce of the MPO was approximately 440 people.

The Project workforce would be an average of approximately 600 people, with a peak of 830 full time equivalent staff anticipated.

Staging of Coal Production

Project increases in coal production would be staged, allowing time to establish the Eastern Out of Pit Emplacement and the focus of mining to move westwards away from Muswellbrook, prior to peak production occurring.

The proposed staging of the Run of Mine coal production rate would also result in a gradual build-up in operational employment. This may offset other coal mine closures and ramp-downs that are expected to occur over the life of the Project.

Key Assessment Findings

The MPO would adopt an extensive range of noise and air quality emission mitigation measures for the Project. As a result the MPO incorporating the Project would have lower night-time noise levels for residences on the western outskirts of Muswellbrook, than under the current approval.

The water management system for the Project has been designed to protect the integrity of local and regional water resources. Potential impacts on flow in the Hunter River are expected to be negligible.

Groundwater modelling completed for the Project indicates minimal drawdown in the 'highly productive' Hunter River alluvium and there would be no deterioration in groundwater quality.

The Social Impact Assessment identified the potential impacts of the Project primarily as a continuation of the social impacts currently being experienced from the approved MPO.

Next Steps

Following NSW Government review of the EIS, it is anticipated that it would be placed on public exhibition in the first quarter of 2021.

The NSW Minister for Planning and Public Spaces, or the Independent Planning Commission would determine whether the Project can proceed.

The MPO will provide updates on the assessment process for the Project in later newsletters and encourages all interested people to be involved by making a submission on the Project.

PCYC wraps up Christmas



Pictured above, volunteers from MPO joined colleagues from various mines, businesses and community at the Muswellbrook PCYC before Christmas to help Manager De-anne Douglas and team sort and wrap more than 300 presents and non-perishable food items for the less fortunate members of the Upper Hunter.



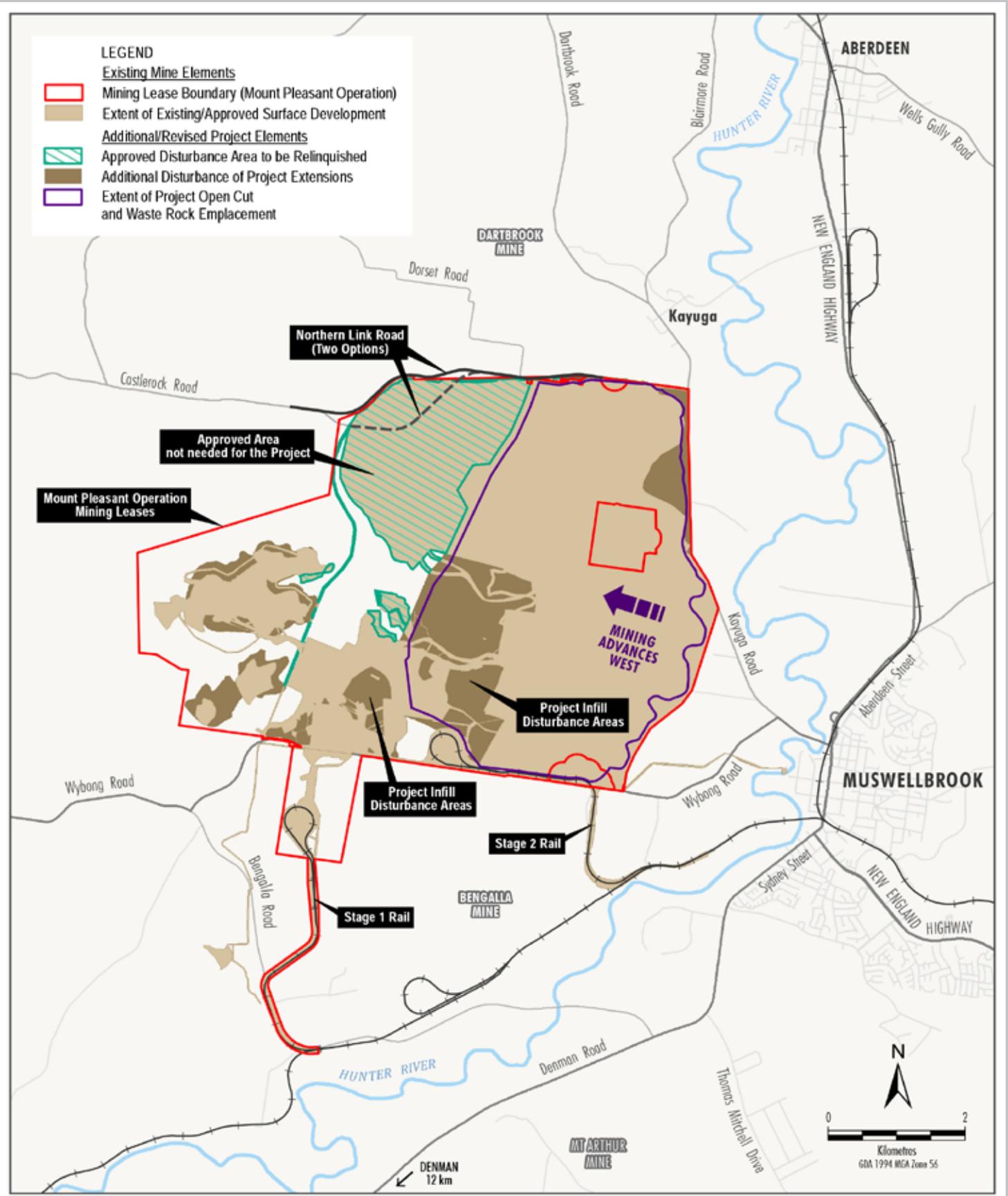
Pictured above from left, Tom, Megan and Richard in the middle of sorting gifts for wrapping.



Pictured above, Paul from MPO's Rail Loop Project team has only been in Muswellbrook a short time but was one of the first to put his hand up to help. He was kept busy wrapping and boxing personalised Christmas baubles for nursing home residents.

MPO Optimisation Project

Figure 1 -





Cultural Cool Burn

The MPO team worked with Dr Peta Standley from Firesticks Alliance, local Aboriginal Elders, and Rural Fire Service brigades to undertake a cultural cool burn on MPO offset land. However, due to a wet winter the grass was not ready to burn and the process has been postponed until 2021.

A cultural burn is a 'cool burn' which means that the fire is confined to the ground/shrub layer and the tree canopy is not burnt. The Firesticks Alliance uses the term 'cultural burning' to describe burning practices developed by Aboriginal people to enhance the health of the land and its people. Cultural burning can include burning or prevention of burning of country for health of plants and animals such as native grasses, threatened species or biodiversity in general. Fire may be used to gain better access to country, to clean up important pathways, maintain cultural responsibilities and as part of cultural heritage (Firesticks Alliance, 2019 - <https://www.firesticks.org.au/about/cultural-burning/>)

Pictured above right, undertaking the cool burn on MPO off set land.

Pictured above, Attendees gather for the Welcome to Country and safety talk prior to the cool burn.



ACDF on film

The MPO Aboriginal Community Development Fund (ACDF) Committee took to Singleton Showground to feature in a promotional video to promote the much-anticipated 2021 Cultural Spectacular. To be held in Singleton on 8th May next year, further details will be released in the New Year.

Pictured above left, Ice Cream Productions Managing Director and Event Manager, Benny Eggmolesse, during filming at Singleton Showground with Aunty Jean Hands, seated, and MPO's External Relations Manager and ACDF Executive Officer, Ngaire Baker.

Pictured above right, Independent Chairperson Tony Jarrett, Aunty Jean Hands, Renee MacDonald, Uncle Glen 'Bing' Morris, and Malcolm Franks filmed inviting the community to the Cultural Spectacular.



NAIDOC Week recognised at MPO

Steve Fordham, Managing Director of Blackrock Industries, **pictured below, left**, and the first contractor to work on site in 2016, leads the NAIDOC Week recognition at MPO.

Steve is standing behind a recently installed Monument depicting the 'MPO Journey' as described in Aboriginal art by local Wanaruah man, artist Mat Stair. Mat said he was honoured to be involved in this awesome project and he thanked all involved at MPO for the opportunity. Mat's work can also be seen on the guard rails as you approach the MPO carpark.

Continuing with NAIDOC celebrations, **pictured right**, Blackrock's MPO Site Supervisor Steve Edwards with Sedgman, MPO CHPP Manager Megan Kropp and Infrastructure Coordinator, Lee Lesley with boomerangs presented by Steve Fordham during NAIDOC celebrations.



CHPP major shut



As a designated essential service, the resources industry continued to operate during the pandemic, the photo above, shows teams gathering at the MPO CHPP for a pre-start meeting prior to work commencing on a major maintenance shut is just one example of how we adapted to cater for social distancing and keeping everyone safe during this time.

'Second Chance for Change'

Steve Fordham, Blackrock Industries Managing Director featured in The Australian to discuss 'Second Chance for Change' – a program aimed at helping incarcerated Aboriginal men by providing employment opportunities and pathways to reduce reoffending.



Pictured above, The Australian newspaper photo-journalist Jane during the photo shoot with Steve at MPO.



New facilities for Kayuga Rural Fire Service

We joined with our neighbours Bengalla Mining Company and Glencore's Mangoola Mine to provide the funds for a bathroom facility to be built at Kayuga Rural Fire Service (RFS). We appreciate the amazing effort by all members of our local RFS brigades.

Pictured above, Kayuga RFS Brigade Captain Jonathan Moore.

MPO tree planting



Pictured above, from left, Blackrock Industries Hayden, Tray, Clayton and Bruce busy planting new trees sourced from Aberdeen Nursery around the MPO carpark.



Working with The University of Newcastle and NIER

The Newcastle Institute for Energy and Resources (NIER) is one of the University of Newcastle's flagship research institutes and MPO is very proud to work with NIER on several projects including Strategies for Dust Management, Modelling (CFD) Wind Barriers and Tailings to Topsoil (in conjunction with Bengalla Mining Company and Muswellbrook Shire Council).

One of the University's and NIER'S projects involves the use of a LiDAR unit. The first calibration campaign for the unit was held at MPO as part of a three-and-a-half-year industry supported PhD scholarship and project. It is the first time the system, developed at the University by Associate Professor John Holdsworth, has operated by 100 percent battery and remotely on a mine site.

Pictured above, the successful PhD candidate, Liam Sutton is pictured left, with MPO's Paul O'Loughlin.

Pictured below, from left, we welcomed members of the University of Newcastle faculty to MPO recently, Associate Professor Ken Williams, Deputy Vice-Chancellor Research and Innovation Professor Janet Nelson, MPO's Principal Mining Engineer Paul O'Loughlin and Executive Director of the Newcastle Institute for Energy and Resources, Professor Alan Broadfoot.



Upgraded playground facilities

Pictured above, the students from St James' Primary School, Muswellbrook were very happy to see the work completed on their upgraded playground.



Barn owls thrive thanks to Wildlife Aid

MPO and our mining services contractor Thiess teamed up with Wildlife Aid to raise and relocate four barn owls.

MPO will sponsor the owls for their time spent in care with Wildlife Aid, supporting their food consumption and other expenses.

Wildlife Aid said they were extremely thankful for the ongoing support from both MPO and Thiess.





Support for the Over 35's

The global pandemic played havoc on all aspects of day-to-day life throughout 2020, however, we were more than happy to support the Singleton Strikers Over 35's football team when they could take to the field. **Pictured above, from left,** a few of the MPO team wearing the Strikers colours, Mick, Paul and Ryan.

'MAD MACH's' take the GF



This extremely talented group of young ladies, **pictured above,** named their netball team, designed their uniform, and took out the grand final in their first year playing together, all on top of the year that was 2020. Well done MAD MACH's, we are extremely proud of all you have achieved and huge shout out to your families, especially MPO's Josh Kelly for your efforts to get the team on the court. We look forward to supporting you in 2021.



Merriwa Pony Club camp success

It was wonderful to receive photos from the Merriwa Pony Club Camp this year and to see children of all ages from around the district participating in a variety of events. Well done to all involved and we look forward to supporting this event in 2021. **Pictured above,** nine-year-old Tori Carter showing superb horsemanship to hold the extra-large Australian flag during the event titled "Flag Ride."

Trees donated to Aberdeen club

We were thrilled to assist the Aberdeen Golf Club with planting 50 mature trees throughout the course. Previous planting was not as successful as hoped due to the recent drought conditions. We took the storm brewing overhead as we planted as a positive sign that these beautiful trees purchased by MPO from Aberdeen Nursery will provide golfers with shade and a few challenges for many years to come.

Pictured right, the MPO assisting golf club members with the tress planting.



Planting biomass crops for bioenergy



We were pleased to assist Dr Fabiano Ximenes, Lead Researcher and his team on the Biomass cultivation and soil improvement program this year. The team from The New South Wales Department of Primary Industries (DPI) undertook a massive tree planting exercise recently on off-set land provided and prepared by MPO and their contractors. Dr Fabiano Ximenes, Lead Researcher and his team planted the 6,400 trees as part of the \$4 million Biomass for Bioenergy project funded under the NSW Primary Industries Climate Change Research Strategy. The new bioenergy project is looking at how trees can help sustain our energy needs and give farmers a supplementary income. Dr Ximenes said, in terms of Bioenergy applications, it could replace coal emissions and provide heat for major institutions. We are not prescribing the main use, but our aim is to determine what will grow best in NSW, and then let local markets dictate what is best for them.

NSW DPI Forest Science is partnering with CSIRO (Australian Tree Seed Centre) to investigate the productivity of these woody biomass crops, grown under a variety of conditions.

Pictured above, Technical Officer, Kate Wright works with the team to hand dig the holes to plant 6,400 trees on a site near MPO.

Creative kits for families during Covid-19



Kenzi, **pictured above**, daughter of MPO's coal handling preparation plant operator Sedgman's Infrastructure Coordinator, Lee, enjoyed the activities included in the kid's bags distributed to families during the early stages of the pandemic.



Kids are our future

The look of sheer delight on the face of young Max, pictured above, son of our Land & Property Officer, Sandy made our year. Max received the activity pack, an initiative of Scone Rotary Club, on his visit to his new school for an induction before he commences full time in 2020. From all reports, Max was a little apprehensive about the change until he received this amazing pack. It was an absolute pleasure to be involved in this initiative by Scone Rotary and we look forward to assisting in the future and offering 'all hands-on deck' to pack.



Going pink for a good cause

Breast cancer is the most diagnosed cancer in Australia, it is a disease we cannot ignore. But together, we can change the outcomes. MPO made a pledge to GO PINK and WEAR IT to raise funds to support game-changing breast cancer research into early detection and preventative treatments, which is vital to increasing survival rates. We 'painted' MPO pink, by hosting a National Breast Cancer Foundation (NBCF) morning tea fundraiser to support NBCF in their journey to stop deaths from breast cancer by 2030.

Pictured above, from left, James, Lavinia and Matt put on the pink for a good cause.



RUOK Day

Pictured above from left, Chloe, Matt and Tom took the opportunity to catch up over coffee and discuss R U OK? Day, acknowledging that a conversation could change a life. It is so important to keep an eye on those around us and ask, R U OK? But do not stop there...

Remember, there is more to say after R U OK?



Giving his all for the community

Pictured above, MPO's Dave took time during the year to give much needed blood.

24/7 Operation

The Mount Pleasant Operation operates on a 24-hour, seven day a week roster.

Contact Us

Please contact the following FREE CALL numbers 24 hours a day, seven days a week if you have any questions or concerns.

Community Hotline – 1800 886 889 | Blasting Hotline – 1800 931 872 | General Enquiries – 1800 931 873

Our goal is to respond to your community feedback as quickly as possible.

Further information, including blast times and location can be found on our website

www.machenergy.com.au or by emailing info@machenergy.com.au

MACHEnergy

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