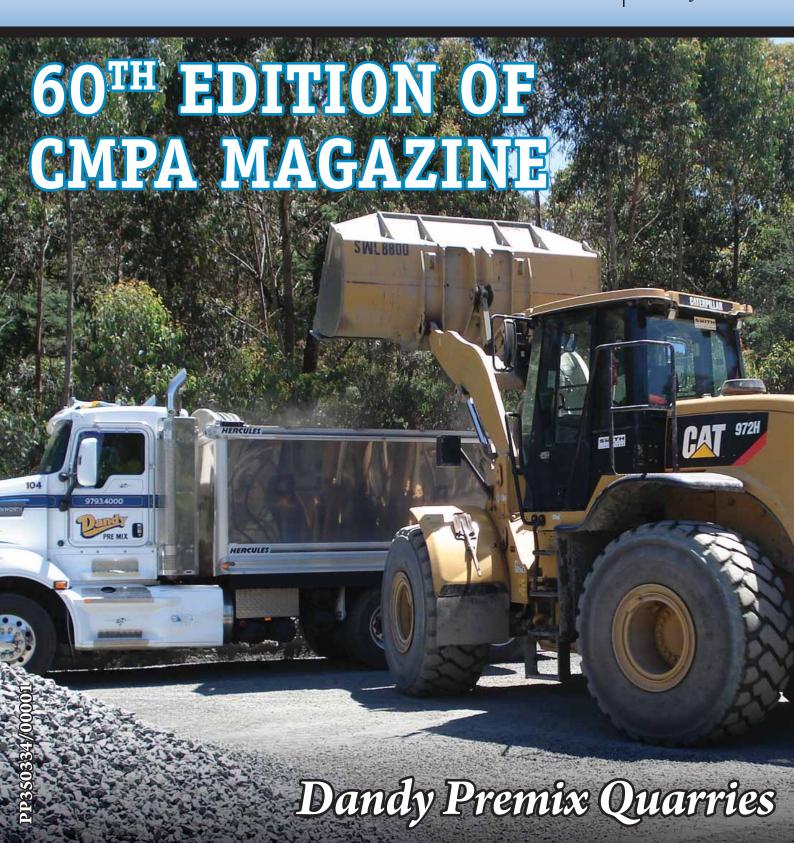
SAND & STONE

The official magazine of the CMPA

- VICTORIAN PLANNING SYSTEM
- HISTORY OF EXPLOSIVES
- GOVERNMENT DIRECTION IN 2012
- SUSTAINABLE CEMENT

ISSUE 60

Dec/Jan 2012

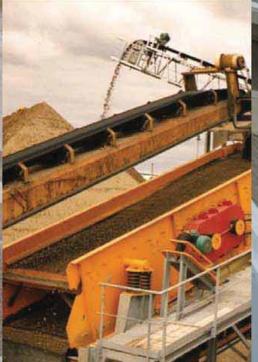


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FROM THE CMPA SECRETARIAT

Reflecting on the past year and the road ahead!

JOHN MAWSON, Chairman of the CMPA reflects on 2011 and the challenges that lie ahead for Members in the coming year.

URING 2011 your industry association the CMPA, has continued to serve members' interests through training, system design and support, departmental liaison and government lobbying. The assistance of Members and Associates has been critical as the CMPA strives to support members in their pursuit of our common goals. The need to continually improve safety and productivity while minimising environmental harm and generating a positive financial outcome remains at the forefront of our Executive and Management Committee's attention.

For the CMPA to continue its work the on-going support of Members and Associates is vital. The willingness of the broader industry and all levels of government to listen and respond to CMPA input is also vital and should be acknowledged.

To earn the support of Members and Associates the CMPA must continue to listen to the concerns of its stakeholders, respond appropriately and continually evolve. I would ask any Member or Associate who has a concern about the policy or

practices of the CMPA to raise their concern with a Management Committee Member. Similarly if there are issues that the CMPA should be paying more attention to or areas of training or systems or technical support that you feel require more CMPA energy then please tell a Management Committee Member. The Association will provide the best value for your membership dollar when it is fully informed of your needs.

The challenges for extractive industry operators that lie ahead in 2012 are, as always, many and varied. The CMPA will continue to direct much energy towards industry training and government lobbying. Our on-going efforts to have the circumstances of quarry operators better recognised in the MRSDA will be a major focus as will our efforts to improve Rehabilitation Bond calculations and the Work Authority referral process.

I trust that 2012 will be safe and profitable for all our industry and that by being well informed the CMPA will continue to develop and support the people who sustain and invigorate it.







AGM & DINNER 2012 RACV CLUB HEALESVILLE

The CMPA AGM & Dinner 2012 in Healesville is shaping up to be a very fun filled weekend. There already Associate six Sponsors committed to the event, and arrangements bookings being made for are currently for the entertainment dinner. Saturday afternoon and Sunday morning activities are also being planned; including a golf event, winery tour, breakfast and a trip to Healesville Sanctuary.

With only seven months to go it's very important if you are planning to attend, to book your weekend away early to avoid missing out on a place of your choice. For all your accommodation needs phone 03 5962 2600 or refer to www.visityarravalley.com.au

If you haven't already, put this date in your diary please do so now. Further details to come in the next issue of *Sand & Stone*.

Date: Saturday 25th Aug. 2012

Location: RACV Club - Healesville

Time: 6.00pm for AGM,

6.30pm for Dinner

Cost: CMPA Members \$120

MEMBERS SPOTLIGHT

Dandy Premix Quarries Pty Ltd

GARY CRANNY, reports on the history, development and management philosophy of Dandy Premix Quarries Pty Ltd.

THE Yarra Valley Quarries site at Launching Place has accommodated some form of extractive industries operations continuously for more than 75 years. In 1964 the site underwent a significant upgrade and commercialisation, with the name "Warradoo Quarry" being bestowed upon it by then owner Mario Colangelo.

The name "Warradoo" originating from the aboriginal word "warra" meaning rock according to an aboriginal worker employed by Mario at the time.

The quarry was subsequently purchased and expanded by Grant Phillips in 1993 with major infrastructure improvements implemented through to 2007 when a further change of ownership saw Mark Cranny acquire the site and Work Authority as Dandy Premix Quarries (YVQ), trading as Yarra Valley Quarries.

With over 25 years of experience in the transport of quarry products and the operator of four modern concrete batch plants (Dandy Premix Concrete Pty Ltd) in the south-east growth corridor of Melbourne, encompassing a large fleet of agitators, tippers and bulk cement tankers, the move into quarry management was something of a natural progression, albeit complete with a steep learning curve for Mark

As a customer of the quarry over many years under Grant Phillips ownership, Mark was familiar with numerous elements of the business, including its constraints, but most importantly, the quality and experience of the team employed at YVQ. This was a crucial factor in his decision to purchase that has been vindicated many times over during the four years hence.

While Dandy Premix Concrete is the single largest YVQ customer for concrete aggregates, the Yarra Ranges Council and a growing number of contractors represent the majority of weighbridge sales across a variety of products.

Regardless of the ability of YVQ to meet the needs of Dandy Premix Concrete for aggregates, Mark has no intention of ramping up supply or focusing on such an outcome, stating "we continue to want to support other industry independents; on balance we believe that is a preferable business model for us and also in the broader best interests of our industry."

In December 2010 the Yarra Ranges Council issued a Planning Permit to allow the expansion of extractive industry operations on the site in accordance with the DPI Work Authority Variation endorsed some 12 months prior.









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MEMBERS SPOTLIGHT

This variation, which was the first requiring a mandatory Community Engagement Plan, ensures the continuity of resource supply for a further 20 years within the existing WA area, in-line with current annual sales.

The acquisition of two properties comprising 120 hectares immediately adjoining the existing YVQ site has subsequently positioned YVQ to pursue a further and significant opportunity for long term expansion into the future.

These developments, combined with an ongoing program of capital investment in plant and equipment upgrades, opportunities for up-skilling and a strong emphasis on health and safety has provided the YVQ workforce with a renewed sense of employment security and satisfaction.

Mark is committed to these fundamentals, especially YVQ employees being provided with suitable opportunities to develop their professional potential. In so doing, he believes they grow with the business, adding personal value and develop a better appreciation of their role.

The quarry currently employs 10 full-time people and provides work for a number of others on a regular contractual basis or as specific service and/or maintenance providers. All YVQ employees are local Yarra Valley residents and whenever possible the quarry purchases goods, services and consumables through local suppliers.

Recognising that YVQ operates in a highly valued landscape, Mark is acutely aware of the environmental sensitivity of the local Yarra Ranges communities.

In his words "it is important we get the right long term fit between our commercial activities and local community values. We want to be known as community players and be recognised as environmentally responsible".

YVQ is committed to the environmental protection of large tracts of its land and to the success of progressive rehabilitation works after the completion of quarrying. As Mark puts it "our extractive operations give us an opportunity (a second chance if you like) to provide long term enhancements of a landscape that was harvested and poorly regenerated last century – that has to be a positive good news story".

Consistent with Mark's earlier remarks in relation to independent operators in the extractive industry, Dandy Premix (Quarries & Concrete) is a strong supporter and advocate of the CMPA.

In Mark's words "I'm a great believer in the value provided by privately owned businesses and of the tremendous opportunities being self-employed offers to the right, properly motivated individuals or families. Our sector is a powerful, but often understated contributor to the State and National economies and our standard of living. The CMPA role in advancing and protecting the interests of independents in the extractive industries is not just worthwhile, but vital."

"It is our intention to continue to play our part in contributing to the success of the CMPA and the benefits it brings to family owned businesses like Dandy Premix; we trust others share our views on the CMPA, that membership grows and our voice to government becomes louder and more influential."

Pictured on the cover is Yarra Valley Quarries loading 10/14mm Aggregate for Dandy Premix Concrete.









60 SECONDS WITH A VOTING MEMBER...

What is your name? Leigh (Homer) Coombs

Who do you work for? Dandy Premix Quarries (T/A Yarra Valley Quarries)

How many years have you worked for this business? 4.5 years – since Dandy Premix Quarries purchased Yarra Valley Quarries

How many years have you been involved in the Industry? 19 years

What is your role at the company? Sales and Administration Manager

What does your job involve?

Day-to-day management of weighbridge operations, product sales and the associated administrative duties. My job also involves extensive liaison with customers and the Quarry Manager about production scheduling. I'm also the elected site HSR.

What is the best part of your job?

The satisfaction of achieving the business and employee team goals, working locally in a stable position and the support provided to improve through education and training.



RECENT EVENTS

CMPA attended the WorkSafe Victoria Earth Resources Tripartite Safety Forum in Melbourne.

The CMPA met with Members to discuss the development of the Short Form Cartage Contract and a generic Credit Terms form.

CMPA attended a meeting with Craig Halliday and staff from Bendigo TAFE and Paul Kennett from the Manufacturing & Engineering Skills Advisory Board to discuss future training and education for the Extractive Industries.

Bruce McClure and Basil Natoli had a meeting with Nicholas Clarke from Clarkeology regarding the CMPA's submission on the review of the *Aboriginal Heritage Act* 2006.

The CMPA attended the Earth Resources Regulation Branch stakeholder's forum at DPI.

CMPA met with CCAA, MCA and Prospectors & Mining Association of Victoria regarding a joint letter to the Hon Michael O'Brien Minister for Energy & Resources discussing concerns with the current progress of the Mineral Resources (Sustainable Development) Act review.

CMPA Members attended a meeting at Parliament House with the Hon Tim Bull MP.

The CMPA attended the EPA forum on Fill and Waste Management.

Bruce McClure attended the Civil Construction Alliance meeting at which the Hon Ryan Smith, Minister for Environment and Climate Change and Minister for Youth Affairs was the guest speaker.

CMPANEWS

By **CMPA SECRETARIAT**

CMPA Secretariat provides an update of the latest news and happenings.

CMPA 2012 AGM & DINNER

Sponsorship for the 2012 CMPA AGM and Dinner at the RACV Club in Healesville has opened.

All Associates were emailed a copy of the sponsorship flyer back on the 16th December 2011. At present we have commitment from six Associate Members at different sponsorship levels.

Get in early to avoid disappointment!

ASSOCIATE VISITS BY SECRETARIAT

The coming months will see Gavin Moreira visit Associate Members to not only say hello and put faces to names but to obtain valuable information on how the CMPA is travelling and how we can better help your company grow.

The first two visits were in Melbourne on Monday 5th and south east Melbourne on Monday 12th December. This involved site visits of twelve Associate Members.

The Associates were very happy with the presentation, content and advertising opportunities in the CMPA publications Sand & Stone and the Associates Reference Manual. They also acknowledged the numerous networking opportunities associated with sponsoring the AGM and dinner, the General Meeting of Members and other workshops and training days throughout the year.

There is great anticipation of the 2012 AGM & Dinner in Healesville, which looks to be a very fun-filled weekend.

It was great to hear that all Associates were very appreciative of what the CMPA does for its Members. The CMPA's attitude towards safety and compliance is a major plus and draw card towards attracting membership. The Associates are all looking and hoping to get more involved with quarrying in the New Year to improve and expand their businesses.

Thank you to all the Members recently visited by Gavin for taking the time to show him around your site and providing him with valuable information.

2012 CMPA WALL PLANNER

The 2012 CMPA Wall Planner was sent out in the last issue of *Sand & Stone*. This is the first of its kind that has been developed and your feedback on its usefulness in the office or the lunchroom would be greatly appreciated. The CMPA is looking to improve on this tool for the years ahead.

If you require any more copies of the wall planner please contact the Secretariat and we will be more than happy to send them out to you.

Thank you to the eighteen Associate Members who have taken out adverts your support is greatly appreciated.

Remember to Support the Suppliers who support you!

APPEARANCE BEFORE PARLIAMENTARY COMMITTEE

The CMPA has been invited to appear before the Economic Development and Infrastructure Committee (EDIC) late in January 2012 in regard to its *Inquiry into Greenfields Mineral Exploration* and project development in Victoria.

The Committee is very interested to hear more about the Construction Material Processors Association's observations and experiences on issues relating to the inquiry.

In late June 2011 the EDIC invited the CMPA to make a submission to the inquiry and a comprehensive submission was subsequently submitted late in August 2011. A detailed report on the CMPA submission is available in issue 58 (Aug/Sept 2011 page 10 & 11) of the Sand & Stone.

Based on the submissions received and public hearings, the Committee will propose a range of recommendations to the Victorian Government (based on the evidence it receives), to which the government must respond within six months from the date the report is tabled.

Realistically it will be towards the end of 2012 before Members become aware of the Government response to the inquiry.

STATUS OF DPI DRAFT GEOTECHNICAL GUIDELINES

At the recent Department of Primary Industries regulation branch stakeholder's forum held on 28 November 2011, Mr John Mitas Manager Minerals and Extractive Operations and Chief Inspector of Quarries reported on the current status of the draft *Geotechnical Guidelines* document that DPI has been working on for some time.

The document has been subject to stakeholder comments and has also been reviewed by the State Government's Technical Review Board (TRB). The TRB has some major concerns with the guidelines. The comments from the TRB and other stakeholders will be addressed in revised guidelines that are currently being carried out by staff from Monash University for the DPI.

The next version should be completed and out for stakeholder comment in February 2012.

DANGEROUS GOODS INTERIM REGULATIONS

The Victorian Government has announced that it has started work on a supplementary assessment that will look at the impact of the proposed model *Work Health and Safety* laws on Victoria. It expects this process will take several months.

As we've previously advised, this decision had implications for the *Dangerous Goods* (Storage and Handling) Regulations 2000 (Storage and Handling Regulations) which expired on 5 December 2011.

To avoid a regulatory gap, the *Dangerous Goods (Storage and Handling) Interim Regulations 2011* have been made, without a regulatory impact statement, for an interim period of 12 months. These are a direct translation of the current *Storage and Handling Regulations*. Changes have been strictly limited to updating references to third party documents and removing redundant provisions. All regulation numbering remains the same.

Continuing the current *Storage and Handling* framework by way of interim regulations is a 'stop-gap' measure that minimises the impact on duty holders and maintains safety standards while the supplementary impact assessment is being prepared.

In the event that Regulations are made to capture the benefits of harmonisation, they would likely subsume the local *Storage and Handling Regulations*.

SECRETARIAT VISITS VOTING AND POTENTIAL MEMBERS

Over the next few months Bruce McClure General Manager CMPA will be visiting a number of Voting Members and also establishing ties with potential Members.

In December 2011, Bruce accompanied by Adrian Town visited a potential new Member in Dandenong and then travelled to Langwarrin to visit current Members Aidan J Graham Pty Ltd and Burdett Sands. It was good to hear firsthand the issues that are currently affecting these Members. Both have well established businesses but are well aware that they have a finite source of product at their current locations.

Early in the New Year the intention is to visit Members in the South West Region. This will be followed by visits to sites in the North East region.

CMPA ASSOCIATE COMMITTEE MEETING

In early December the CMPA Associate Committee held its last meeting for the year at Komatsu in Campbellfield. A total of 10 people attended the meeting including a couple of new faces. Discussions were had around next year's AGM and Dinner to be held in Healesville. Items brought to the table included, sponsorship, entertainment and activities to make the event an enjoyable weekend.

The growth and development of *Sand & Stone* was discussed and so too the importance of contribution by Associate Members in the form of advertorials, editorials and staff profiles to not only help keep the content interesting for all readers but to publically advertise your business. An integral part of being a Member of an association is to be able to communicate to other Members what you are all about and what you can offer to help grow each other's businesses. Successful businesses can only benefit the industry in the long run.

The CMPA's website needs to keep being developed and utilised by Members not only as a resource but as a key marketing tool for the association and the industry. It's important that key links are created between the CMPA and Preferred Suppliers. Other networking opportunities for 2012 are being investigated including regional trade shows in conjunction with workshops and meetings. As well as other ways to be able to communicate more regularly with voting Members was keenly discussed.

MINERAL RESOURCES AMENDMENTS (SUSTAINABLE DEVELOPMENT) AMENDMENT ACT 2010

The Mineral Resources (Sustainable Development) Amendment Act 2010 (the Amendment Act) introduces a number of changes to the Mineral Resources (Sustainable Development) Act 1990, (MRSDA 1990). The Amendment Act was approved by Government in September 2010 and comes into operation on the 1st February 2012.

The amendments to the Act were introduced as phase one of a two phase review of the MRSDA 1990 that the Department of Primary Industries commenced in 2009.

The main impact on the Extractive Industries of the phase one review and amendments is the introduction of the Statutory Endorsement of Work Plans.

Information regarding the new regulations is available from www.dpi.gov.au/earth-resources

Further details on the impact of the Statutory Endorsement are discussed on page 11 of this edition of Sand & Stone.





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Statutory Endorsement

BRUCE McCLURE, General Manager of the CMPA reports on the recently released draft Statutory Endorsement Flow Chart.

STATUTORY Endorsement was introduced by the DPI under Stage 1 of the Minerals Resources (Sustainable Development) Act 1990 (MRSDA) review. It was introduced to streamline work approvals by reducing or eliminating duplication of referrals to agencies. Statutory Endorsement is contained within the legislative Mineral Resources Amendment (Sustainable Development) Bill 2010 and will come into effect no later than 1 February 2012. It should be noted that Statutory Endorsement:

- Gives statutory recognition to the current administrative practice of work plan endorsement;
- Only applies to mining and extractive industry work plans where there is a need for a planning permit (i.e. not exploration work plans or for approvals subject to an EES);
- Will be incorporated into the DPI-DSE work plan Memorandum of Understanding; and the existing DPCD mining and extractive industry planning practice notes are being updated to reflect the change to the approvals process; and
- Is not applicable to sites under the Code of Practice for Small Quarries.

DPI has introduced a flow chart to stakeholders that shows the statutory endorsement process. The flow chart only reflected DPI's proposed procedure for assessing and endorsing work plans within the bounds of the new legislative requirements. The DPI quickly realised that the flowchart highlighted the need to seek inclusion of the legislation within the Victorian Planning Provisions (VPPs). They reached agreement in principle with DPCD as to how the statutory endorsement legislation will appear within the VPPs. DPI then sort stakeholder feedback on the proposed changes as they realised that this would provide support to the process of getting the VPPs updated which DPI saw as key to making sure that statutory endorsement works.

The CMPA made a submission to DPI on the proposed flowchart and the proposed changes to the VPPs. The details on the CMPA submission are shown below.

As you are no doubt aware, the CMPA, although supportive of the aim of the statutory endorsement process, is highly concerned that the potential costs faced by proponents will increase substantially and restrict access into the industry, and also questions the ability of the DPI to ensure timely flow of statutory endorsements under its present budgetary and legislative position.

The proposal for changes to the VPPs appear to be workable from a planning permit perspective, however raises three queries:

- 1. Will sites currently not requiring a Statutory Endorsed Work Plan (SEWP) or those working under the code of practice now require one to progress through the planning process?
- 2. How will the clear definition of referral authorities presently given in Clause 66 of the VPP be made in the future?
- 3. As the DPI will be doing much of the work previously undertaken in the planning permit process, will they be appropriately remunerated for their efforts by the DPCD or will the fees charged to proponents simply be further increased?

With respect to the flowchart itself being developed by DPI, the following comments are raised:

- When a referral authority objects to endorsement on a specified ground/s, it is important that the issue/s are clearly defined so a proponent is able to address this without fear of 'new' reasons being brought forward by the referral authority if they choose to provide more information or revisions. Will this be prevented and if so, how will it be addressed?
- At the first instance when VCAT can be accessed, can the application
 be simply for reconsideration of one referral authority's objection and
 then resume the statutory endorsement process or must it consider the
 whole of the application? It would seem that if one authority objected,
 that the DPI could reasonably instantly refuse the proposal without
 waiting for responses from any outstanding referral authorities.
- In the second instance when VCAT can be accessed, is this limited to issues relevant to the planning permit (and therefore not consider issues addressed during statutory endorsement)?
- The last activities shown on the flowchart appear to lead onto a further action and required clarification.

A revised flow chart taking into account the comments from the stakeholders has not yet been released. The CMPA has some fundamental issues with the Statutory Endorsement process particularly as it may result in increased costs for members who are seeking work plan endorsement. History has shown that despite repeated assurances that governments want to reduce red tape, cut down costs and make approvals etc simpler to understand and easier to obtain, the exact opposite has usually been the inevitable result. One only hopes that the Statutory Endorsement process does not follow this trend.

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A Year in the Victorian Planning System

ANDREW NATOLI, Lawyer and Planner for Planning & Property Partners Pty Ltd reports on the major announcements of the year in the Victorian Planning System.

T has been a busy year in the Victorian ♣ Planning System, with a number of major announcements that have the potential to reduce the regulatory burden on extractive industries and to enhance the positive role the planning system can play in protecting and promoting stone resources at a strategic level.

Given the time of year it is worth taking stock of these announcements and, more importantly, to look forward to how these and other initiatives might pan out in 2012 so that industry is ready to respond.

Victorian Planning System **Ministerial Advisory Committee**

Of all of the initiatives announced this year perhaps none is more eagerly awaited than the outcomes of the Planning System Ministerial Advisory Committee.

As reported in a previous edition of Sand & Stone, in July of this year the Minister for Planning, Matthew Guy, appointed an advisory committee to consider public submissions and to make recommendations on 'overhauling' the planning system, focusing on the Victoria Planning Provisions and the need to reduce unnecessary costs and delays.

Chaired by Geoff Underwood including representatives from industry and government, the advisory committee has recently concluded its deliberations and its consideration of over 500 submissions from a range of stakeholders, including the CMPA. The Committee has now finished its preliminary report and delivered it to the Minister for Planning.

It is anticipated that the Government will respond to the committee's findings and recommendations early in the New Year.

I, along with many other users of the planning system, look forward to seeing how far the recommendations will go to simplify aspects of the planning system and how firm the Minister's resolve will be in their implementation. This will be something to watch out for in early 2012.

Planning Scheme Amendment VC77

In September of this year the Minister for Planning approved State-wide amendment VC77 to all local planning schemes to tidy up and consolidate provisions relating to mining and extractive industries.

At face value the changes appear quite extensive but were approved without any fanfare and surprisingly limited public information is available to provide any explanation of their basis.

Nevertheless I am advised by DPCD that the basis for their approval by Ministerial amendment (i.e. without public exhibition) was that the changes merely represent an administrative tidy up and shouldn't have any practical implications for industry stakeholders.

The rationale provided was principally as an administrative 'catch up' for the Victoria Planning Provisions, which had become out of date and did not properly reflect the requirements of industry legislation such as the Mineral Resources (Sustainable Development) Act 1990. According to the DPCD, provisions of the VPPs relating to earth resource exploration and extraction required consolidation, clarification and correction.

What members will probably first notice is the change in terminology and grouping of extractive industry uses under the heading 'Earth and Energy Resources' and changes in definitions governing extractive industries. This is presumably to reflect legislative groupings and divisional responsibilities of DPI. Some of the key changes include:

- Amended the nesting group heading to be 'Earth and Energy Resources'.
- Replaced the term 'Mineral, stone, or soil extraction' with 'Earth and energy resources industry' and inserted the definition 'Land used for the exploration, removal or processing of natural earth or energy resources. It includes any activity incidental to this purpose including the construction and use of temporary accommodation.'
- The term 'Extractive industry' has been replaced with 'Stone extraction'.
- State Planning Policy for Mineral and Stone Resources (Clause 14.03) has been revised to reflect the new terminology.
- Provisions relating to earth and energy resources have been consolidated and updated into Clause 52.08.
- Revamped Special Use Zone schedules for quarries to reflect new definitions and the operation of exemptions provisions.
- Updated the terminology and exemptions under the various overlay provisions.

As noted above, it is not anticipated that these changes will have any significant practical implications for day to day approvals of extractive industry proposals but with such extensive changes there is always the potential for unintended consequences.



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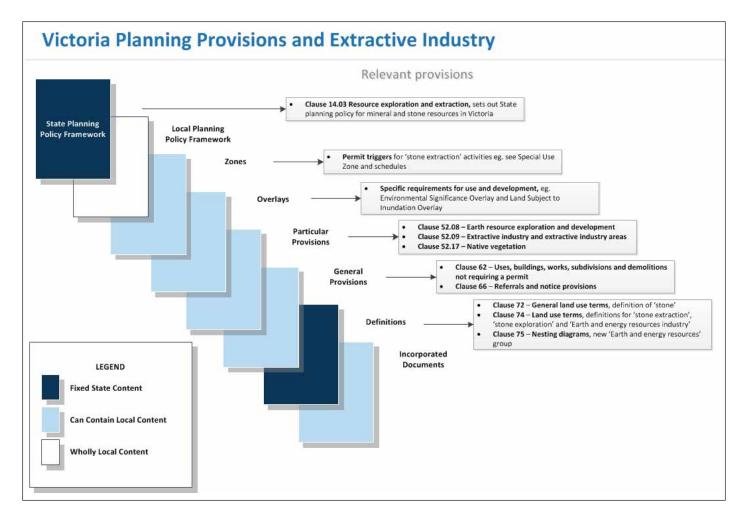
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VCAT - Major Cases List

Anyone who has recently been involved in lodging or running tribunal appeals will be aware of the sometimes lengthy delays in having matters heard and determined by the Tribunal, particularly for large complex matters involving many parties. High levels of development activity and increasing third party involvement has resulted in an appeal system which is overloaded and Tribunal resources that are now stretched thin.

In 2010 the Tribunal successfully piloted a Major Case List that successfully reduced the length of delays for major planning proposals in the Planning and Environment List of VCAT, however funding for this program ran out in March 2011.

On 18 November VCAT President Justice Iain Ross announced that a new Major Cases List has been funded and will recommence on 3 January 2012.

To qualify for the major cases list a commercial or industrial project must have a value of \$5 million or greater. It is important to note that in determining the estimated development cost the relevant VCAT practice note specifically excludes the "value of any material to be extracted from the land". Once a project is in the list a permit applicant can expect a decision within 18 weeks of an application being lodged with VCAT.

The following timeframes will generally apply:

- A practice day hearing within 5 weeks of an application being lodged;
- Mediation within 8 weeks of an application being lodged;
- A hearing within 14 weeks of an application being lodged; and
- A decision or interim decision delivered within 4 weeks of the last date of hearing.

The new list will work on a user pays basis whereby applicants will pay an initial fee of \$3000 and a daily hearing fee of \$3,114.90. For large complex matters this MCL offers a significant improvement given current delays and I look forward to its operation in the New Year.

Buffer Discussion Paper -Victorian Planning and **Environmental Law Association**

DPCD has engaged the Victorian Planning and Environmental Law Association (VPELA) to prepare a discussion paper on the application and operation of land use buffers in the Victorian Planning System. It is understood that the discussion paper will look at the issues of buffers generally and identify principles that could be applied in the future.

Whilst the project will not be calling for public submissions VPELA will be drawing on the expertise of its members in preparing the discussion paper.

Once completed it is understood that the discussion paper will be forwarded to DPCD for its consideration and it may at some point in future be released for broader public comment. This is something to watch out for in 2012.

A new Metropolitan Strategy for Melbourne

Another initiative which will potentially have significant implications for extractive industries is the State Government's commitment to developing a new metropolitan strategy over the next two years.

The new strategy will replace the beleaguered Melbourne 2030 document which the Government and a number of stakeholders considered was poorly thought out in terms of its implementation. It is understood the development of the new strategy will be coordinated by the Premier's office.

Little in the way of detail has been announced other than that the process will commence with public consultation meetings between the Ministers for Planning and Transport and local government and other planning stakeholders.

Expect more detailed announcements in 2012. •

WHERE WILL THE GOVERNMENT

RON KERR, Honorary CEO CMPA reports on the demise of sand and stone.

71TH the enactment of the Extractive Industry Act - 1966 some older participants in the industry saw it as the end of the free world. Others moved forward and took the new direction in their stride. It resulted in the industry workforce, the local community and the environment being better protected and a clear direction that ensured the State's extractive industry resources were identified and made accessible to those who were interested in carving a life out of this sector. It also resulted in Victoria's quarries and their managers being recognized as some of the most skilled and efficient throughout Australia.

The regulation of our Industry has changed in the past 12 years, with the original objectives gradually eroded and/or picked up by other authorities. It has reached a point where our Act no longer exists in its own right. As a result, there is no clear purpose or objective in the protection or identification of stone and sand resources in this state.

The CMPA believes there is a lack of stewardship by Government of the State's extractive resources. There is no doubt this will put in jeopardy future sustainable extraction of the resource for the benefit of the community and the economy of Victoria. Both local councils and private business owners are being directly affected by this lack of direction from Government on a daily basis.

Businesses in the Melbourne metropolitan area have been unable to source raw materials to meet daily demand. Local councils in regional Victoria report that the delivery costs of materials are becoming greater than the cost of the material itself! There is also a range of quarry materials now being carted in excess of 150kms to their market.

To date this practice has not been reflected in the prices being set for the material and all the overhead costs including rising transport costs, but it is obvious that this cannot continue as returns continue to diminish. The honeymoon for our customers must come to an end. Previous estimations of price rises of 30% - as nominated in the CMPA's An Unsustainable Future of 2009 - may be seen as extremely conservative in hindsight.

Presently there appears to be no specific obligation on any Government department to ensure future generations will have security of resource. This lack of clear obligation hinders the delivery of effective outcomes for the industry.

There are no apparent obligations on any State Department administering regulation over the industry to ensure that future generations will have security of resources and this is not assisting in delivering effective outcomes. There is also no recognition of the value of the resource to the State which exacerbates the deteriorating investment in exploration and capital resourcing in our Industry.





TAKE US IN 2012?

Paradoxically grasses and trees have a financial value to the State and offsets of significant value are being required before investment into projects can be undertaken, in our Industry and any other land use project for that matter.

For small to medium enterprises, the lack of commitment to protecting resources for future generations - commensurate with the continual expansion of regulatory burdens and costs - is ensuring that industry investment is unattractive if not, clearly restricted.

It is well recognized by those working in our Industry - and those being served by it - that the extractive industry is vital to the growth and wellbeing of the Victorian economy. This must be recognized by the current Government in the revision of its policy objectives during 2012.

To address these issues the extractive industry sector should be incorporated under the scope of the Planning Act to better recognize and protect the State's limited sand and stone resources for future generations. This is needed to:

- a. Ensure Victoria remains a vibrant and healthy economy with assured access to extractive resources industries situated as close to their market and the major transport routes as practicable;
- b. Ensure Victorian businesses using extractive resources are able to access choice of supply; and

c. Address the current deterioration of Victoria's extractive industry resources that have suffered due to a lack of protection over recent times, historically high levels of demand and urban growth pressure.

While there are regular reviews of legislation with financial impact statements being prepared, there is little evidence that this is followed with any viable and practicable outcomes. If this was not accurate, industry participants would not be faced with, for example, a \$300,000 bill for a Cultural Heritage Management Plan, or a bill to pay \$100,000 per habitat hectare for native vegetation offsets, or to have a financial burden placed upon an operator's business only to find the offset value for time-stamping of high category land in excess of \$270,000 per hectare, extensive time (up to 7 years) to gain approval for Work Authority. Small to medium businesses do not have the financial resources, nor time, to run their businesses this way.

Our industry was identified 46 years ago as requiring its own dedicated legislative framework to protect the natural resource while facilitating effective business operations. That legislation proved its worth by providing clear direction resulting in dynamic growth. Sand and stone resources are not an infinite resource and their demise as a cornerstone of the construction industry seems inevitable if Government does not arrest the implications of unwarranted and restrictive regulation. •



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Sixtieth Edition of CMPA Magazine

BRUCE McCLURE CMPA General Manager reflects on the fact that this is the 60th edition of the CMPA magazine.

THIS current issue of Sand & Stone is the 60th edition of the Construction Material Processors Association Inc. (CMPA) official magazine.

This magazine is one of the main methods used by the association to ensure that its members are kept up to date on issues such as new regulations, government policies etc that will impact on their businesses.

It gives the position of the association members on the many and varied subjects that a modern association deals with on a regular basis. The magazine also keeps members abreast of new ideas, innovations that may be of benefit for their businesses.

The official magazine of the CMPA commenced in June 2000 shortly after the incorporation of the CMPA in February 2000, as the CMPA News. The first editor was Mike McCann. A copy of the first cover of this issue is shown below.

CMPA NEWS



Isn't this a Work of Art ???

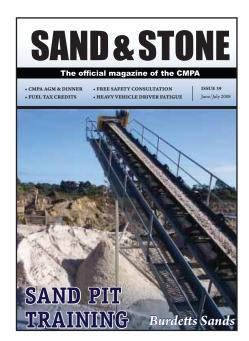
Issue 1. June 2000

In May 2008 the Sand & Stone magazine was born. The inaugural issue of the Sand & Stone issue number 39 continued the role of the CMPA News as the means by which the association communicates its position and activities to all members and interested parties. Apart from the name the main change with the magazine was the introduction of a coloured production rather than the entire black and white editions previously. The introduction of colour has been a major improvement to the magazine and makes it a first class production. The CMPA must thank Tom McKenny for his guidance and support given when the first layout of Sand & Stone was being set-up.

The cover of issue 39 which was the first coloured edition is shown to the right.

A review of the magazines since 2000 is a real trip down memory lane. One of the main issues that was a real problem for members at the CMPA inception is rehabilitation bonds. Unfortunately 12 years later all the bad aspects that rehabilitation bonds impose on family businesses are still with us and bonds has been a frequent subject in subsequent editions of Sand & Stone.

A real highlight of the magazine is the 'Members Spotlight' section where we learn about the history and development of the businesses of our members. Not only do we learn about how their businesses actually started but we also learn about the characters who are such a vibrant part of our industry. Every quarry site has its history, its characters and this needs to be recorded.



Our members run businesses ranging from sand pits to major stone quarries and if there is a common thread running through all sites, each member is very proud of what they has achieved no matter how large or small their site is.

What a revisit of the previous magazines does show is the tremendous strides that the CMPA has made in the twelve years of its existence. The development of good quality industry based manuals, the development and submission of the position of members on numerous inquiries by successive governments, all are shown in the previous magazines. The magazines have become the recorded history of the association and they provide an accurate view of the past.



HISTORY OF EXPLOSIVES AND INITIATION DEVICES

REZA GHAEMI, Technical Service Engineer from Orica Mining Services reports on the history of explosives and initiation devices.

TODAY few people give much thought to the role that L explosives play in their lives each day and how they are linked to our standard of living and our very way of life. Explosives provide the means to free up the vast resources of the earth for the advancement of civilization.

From crude beginnings over 1000 years ago the commercial explosives industry has gradually evolved through research and development into a Safe and Efficient provider of chemical energy to the Mining and Quarrying industries for the extraction of raw materials.

In Australia alone, blasting operations use more than 1 million tonnes of explosives and 12 million detonators per year. Sophisticated bulk and packaged emulsion explosives and electronic initiating systems have been perfected within the last 15 years which have led to dramatic improvements in the productivity of mines and quarries and ultimately improving the standard of living for all Australians.

The history of major developments in explosives and initiation devices is presented below in chronological order of discovery.

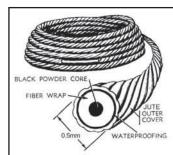
BLACK POWDER (9TH CENTURY)

Some records suggest that black powder, a mixture of saltpetre, sulphur and charcoal, originated in China in the 9th century, but that its use there was almost exclusively in fireworks and signals. A strong case can also be made that the father of black powder was the English medieval scholar Roger Bacon, who wrote explicit instructions for its preparation in 1242, in the strange form of a Latin anagram, difficult to decipher.

For the following 300 years, black powder was used solely as a rocket and gun propellant in Asia, Middle East and Europe. It was not until the 17th century that black powder was used for rock blasting. There is authentic evidence that it was employed in the Royal mines of Schemnitz, Hungary, in 1627.

The first application in civil engineering was in the Malpas Tunnel of the Canal du Midi in France in 1679. For various reasons, such as high cost, lack of efficient rock boring implements, and fear of roof collapse, the use of black powder in mining did not spread rapidly, though it was widely accepted by 1700 replacing the practice of fire setting as the principle method of loosening rock in the mining industry in Europe.





(L) Early gun powder mill (R) Safety fuse

SAFETY FUSE (1831)

A major step forward in the safe ignition of black powder came with the invention of Safety Fuse by William Bickford, a leather merchant who lived in the tin-mining district of Cornwall, England was familiar with the frequency of accidents in the mines, and the fact that many of them were caused by deficiencies inherent in the quill fuse (goose quills were cut so that they could be inserted one into the other and then filled with powder). In 1831 he conceived the safety fuse, a core of black powder tightly wrapped in textiles, one of the most important of which was jute yarn. The safety fuse provided a dependable means for conveying flame to the charge. Its timing (the time required for a given length to burn) was amazingly accurate and consistent, compared to that of its predecessors, and it was much better from the standpoints of resistance to water and abuse. The present-day version of Safety Fuse is not very different from the original model. The core is coated with a waterproofing agent, such as asphalt, and is covered with either textile or plastic.

NITROGLYCERIN (1846)

When Ascanio Sobrero discovered nitroglycerin in 1846, he found its properties so unpredictable and frightening that he warned against its use. Nitroglycerin was developed on a commercial scale by Immanuel Nobel and his son Alfred, marketed as "Nobel's Blasting Oil". In early applications, the liquid nitroglycerin was poured into the borehole and initiated by various types of black powder igniters.

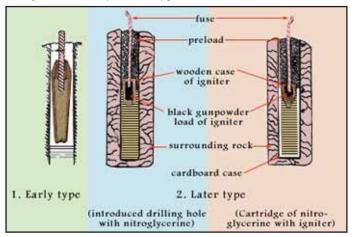


Due to numerous explosion accidents in use and during transportation, use of nitroglycerin was banned in many countries in the mid 1800's which led to the development of Dynamite by Alfred Nobel in 1866.

PLAIN DETONATOR (1864)

Swedish Inventor Alfred Nobel found that by enclosing a small charge of finely powdered black powder in a closed wooden capsule and leading the fuse through a tight fitting hole in the capsule plug he could reliably ignite nitroglycerin using shock rather than heat. Patents on this invention were applied for in 1864. The Nobel patent detonator, the first detonating blasting cap (plain detonator), was born. Further developments, described in a later 1865 Nobel patent for the detonator made use of a small quantity of a primary explosive, mercury fulminate, pressed into a copper capsule which was crimped at one end of the black powder fuse. Even today most experts regard Nobel's invention of the blasting cap as the greatest advance in the science of explosives since the discovery of black powder as it showed the importance of initially detonating a high explosive with a shock wave-heat combination to achieve maximum energy, an important concept for the development of modern commercial explosives.

Comparision of early and late type detonators



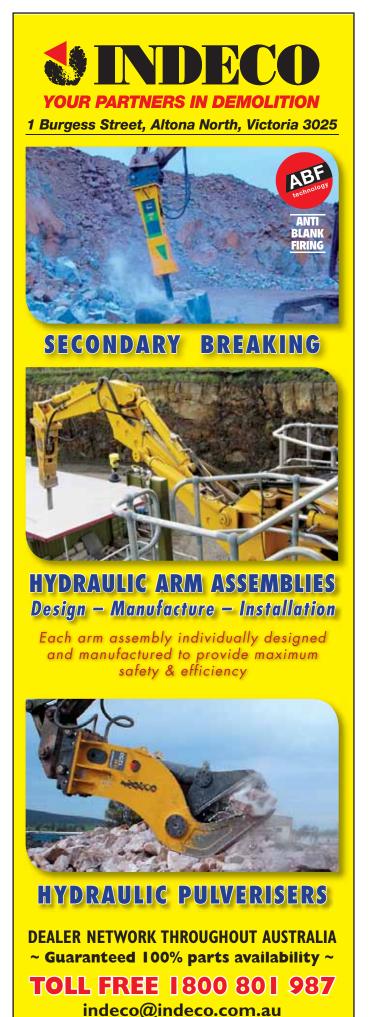
DYNAMITE (1866)

Swedish scientist Alfred Nobel invented dynamite, a high explosive consisting of sodium carbonate and three parts nitroglycerin to one part kieselguhr, a diatomaceous earth. In 1866 he obtained patents in England and in 1867 in Sweden, naming his new invention "Nobel's Safety Powder". One advantage of dynamite over nitroglycerin was that it could be shaped into cylinders for easy insertion into boreholes. In 1875 Nobel discovered Blasting Gelatine by dissolving nitrocellulose in nitroglycerine and introduced Gelatine Dynamite a more efficient and powerful explosive. Nobel's inventions of commercial blasting explosives were to dominate the field of blasting well into the 20th century and undoubtedly assisted the evolution of the Industrial Age.

ELECTRIC DETONATORS (1870S)

Electric ignition of gunpowder was first performed by Doctor Watson of England in 1745. This was achieved with an electric spark, which was unreliable since the powder was often scattered without igniting. To overcome this problem Benjamin Franklin pressed the powder into a tin cartridge to achieve a faster and more reliable result (1750). Both Watson and Franklin used a Leyden jar, an early parallel-plate capacitor, as the source for the electrical spark. Despite the uniqueness of this system, electric firing was not really introduced until the 1800's. It was in the 1870s that the forerunner of the modern electric detonator was first assembled. In contrast to the spark-type ignitions previously used, it employed a fine, high-resistance wire soldered between two insulated leg wires and embedded in, or coated with, an ignition (flashing) mixture.

- Continued on page 20



HISTORY OF EXPLOSIVES AND INITIATION DEVICES

- Continued from page 19

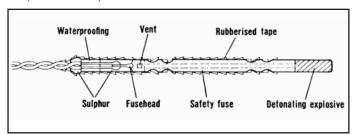
ELECTRIC BLASTING MACHINES/EXPLODERS (1878)

In 1871, Moses G. Farmer developed a hand-cranked dynamo especially designed to initiate electric detonators however, the first practical and widely used electrical blasting machine was invented by H. Julius Smith, an American, in 1878. It comprised a gear-type arrangement of rack bar and pinion that operated an armature to generate electricity. When the rack bar was pushed down rapidly it revolved the pinion and armature with sufficient speed to obtain the desired current. This current was released into the external, or cap, circuit when the rack bar struck a brass spring in the bottom of the machine. Smith's blasting machine was improved and made in a range of capacities. These generator type machines are still in widespread use, although they have been replaced to a considerable extent by mains power firing and capacitor-discharge exploders. The latter were first introduced in 1948 and rapidly found favour because of the high capacity for their weight and size. They have a battery power source for energising one or more capacitors and a safe, dependable means for discharging the stored energy.

DELAY ELECTRIC DETONATORS (1895)

The early electric detonators were all of the instantaneous variety, but it was a logical step to attach a detonator to one end of a short piece of fuse and an electric igniter to the other end and in this way in 1895, H. Julius Smith introduced the delay electric blasting cap. This was the basis of modern delay electric detonators.

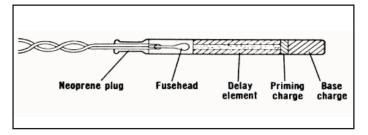
Early Vented Delay Detonators



The next step that occurred in the late 1920's was to make the fuse short (requiring a very slow burning composition) and incorporate it into a (vented) shell. This construction reduced the erratic burning rate of the fuse-type delay train and produced a more practical delay detonator. The delay powder train was improved further in the 1930's by Eschbach, who introduced delay compositions that evolved so little gas that there was no longer a need to vent the detonator. This eliminated risk of preignition of high explosive and also made it possible to provide fully waterproofed assemblies which gave delay times much more regular because of the removal of variable venting effects.

Short-interval delay detonators were introduced in 1946, having delay intervals in milliseconds rather than seconds.

Modern delay detonator



DETONATING CORD (1902)

In nonelectric blasting the most significant development, following safety fuse, was detonating cord which resembles safety fuse but contains a core of high explosive instead of black powder. Although a variety was in military use in Europe in the 1870's, it was not until 1902 that a form of detonating cord, a tin tube filled with picric acid, was first used in a mining application. Modern detonating cord consisting of PETN in a fabric braid was introduced in 1938.

ANFO (1950'S)

Ammonium Nitrate, a powerful oxidiser, has been considered as an inert substance, but it is well known after some famous disasters, that although its sensitivity is very low when the product is pure, its sensitivity increases greatly in the presence of combustible impurities, and can therefore be detonated with an appropriate booster or cartridge explosive.

The explosive properties of ammonium nitrate were first formally utilised in 1867 by replacing a portion of nitroglycerin as an ingredient in dynamite. The Ammonium Nitrate fuel oil, ANFO, which entered the market on a large scale around 1955, was the first commercial explosive to really capture an important part of the explosive market. During the 1960's ANFO replaced dynamite in dry holes because of costs savings, safer handling characteristics and mechanical loading ability.

WATER GELS (1950'S)

In 1957 a professor at the University of Utah, Dr Melvin Cook began experimentation with a mixture of AN, water, guar gum (a gelling and crosslinking agent), and aluminium. His resulting explosive material called "slurry" was water resistant and of high density and had a relatively high detonation velocity.

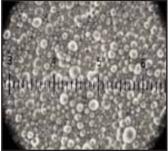
The new technology spread rapidly with explosives suppliers introducing similar products using TNT, smokeless powder and paint fine aluminium as sensitisers and energisers. These early water gels were only used in bulk applications until the development of chemical gassing in 1964 enabled slurries to enter into the small diameter market. Water Gels have been almost totally superseded by Emulsion explosives.

CAST BOOSTERS (1950'S)

After World War II, during the 50's and 60's there was high availability of low cost military high explosives that had been released to the commercial market. The availability of these products together with the need for compact high detonation pressure boosters for the initiation of ANFO products and later, water gels, prompted the development of the cast booster.

Cast Boosters are cap-sensitive explosives that typically contain the high explosive trinitrotoluene (TNT) as the casting material. Different molecular explosives are mixed into the melted TNT and impart additional energy and/or sensitivity to the booster. Where extra sensitivity is required for pick up from low strength detonating cords, different manufacturers have used various techniques to impart the desired sensitivity, including; high percentage of PETN in the primer, plasticised PETN tubes fitted over the pins before pouring, detonating cord wrapped around the pins, sealed plastic bottle of PETN in the centre of the booster).





(L) ANFO (R) Emulsion Explosives

EMULSION EXPLOSIVES (1961)

The history of emulsion explosives began in 1961 when Richard Egly and Albert Neckar of Commercial Solvents Corporation filed a patent application with the U.S. Patent Office for a blasting agent composed of a blend of a water-in-oil emulsion and a solid oxidizing agent such as ammonium nitrate. This was granted in 1964 as U.S. Patent 3,161,551. Rather than looking for a new type of explosive in the form of an emulsion, they were trying to make a waterproof ANFO. Subsequent developments in the 1960's and early 1970's resulted in emulsion explosives with explosive characteristics of minimum diameter and detonation rate comparable to the various grades of dynamite. In addition, emulsions were developed with characteristics which allowed their safe and efficient use in high-volume bulk loading systems.

NON-ELECTRIC DELAY DETONATORS (1967)

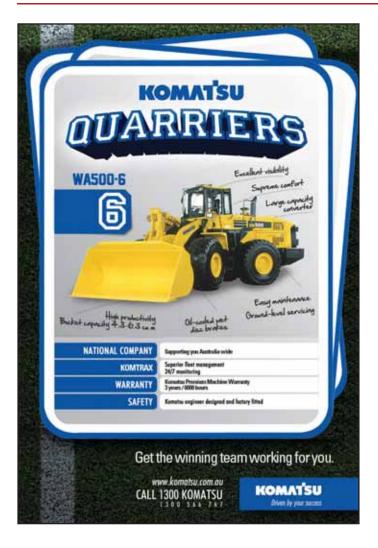
An initiation system comprised of low coreload detonating cord attached to a delay detonator was introduced in the U.S. in 1967, while almost simultaneously a system utilising a plastic tube with a very thin internal coating of aluminium and the high explosive HMX, attached to a delay detonator, was introduced in Sweden. The inventor was Dr. Per Anders Persson. This "shock tube" based system carried the trademark name of "Nonel®". The Low Energy Detonating Cord (LEDC) systems never rose to prominence and the one incorporating shock tube has become the dominant initiation system worldwide.

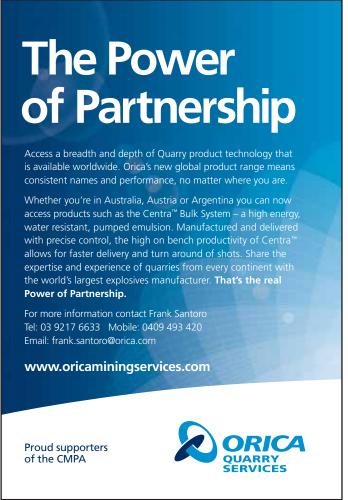
ELECTRONIC DETONATORS (1970'S)

Electronic delay detonators, or electronic blasting systems (EBS), have been under development since the 1970's. The principle advantage of the electronic detonator is very precise timing. An integrated circuit chip and capacitor contained inside the detonator, controls the initiation time. To arm and fire the detonators, a specially coded firing signal is required which makes the system immune to extraneous electrical hazards. •

The CMPA thanks both Frank Santoro and Reza Ghaemi from Orica Quarry Services for their production of this article.

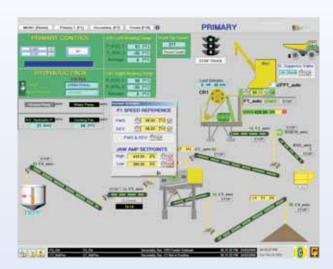
References - ISEE Blasters handbook 18th edition; The World of Explosive (website); Wikipedia; High Explosives & Propellants, S Fordham.





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NEXT GENERATION OF SUSTAINABLE CEMENT BLENDS

With an ever-increasing focus being placed on Ecologically Sustainable Development and sustainable construction, reducing Australia's carbon footprint is clearly a major challenge for all Australians, from families and businesses, to governments - Local, State and Federal.

NE company that has been helping to meet this challenge for over two decades is leading Australian blended cement supplier, Independent Cement and Lime Pty Ltd (lCL), which has developed a range of specialist 'sustainable cement' blends specifically formulated to reduce the environmental impacts of cementitious binders used in concrete and stabilisation products. Marketed under the banner Ecoblend, these blended cement products Supplementary Cementitious utilise Materials (SCMs) such as slag and flyash to deliver a range of environmental benefits, including a reduction in CO2 equivalent emissions during manufacture, efficient utilisation of a recovered resource stream, and a significant reduction in the energy required to manufacture the product, without adversely effecting product quality or performance.

Cement Production - The Need for a Sustainable Approach

Cement is typically made from limestone, which is burned in gas and coal fired kilns at extremely high temperatures (approx. 1450°C), transforming the limestone both chemically and physically, into a lumpy grey material known as clinker. This clinker is then crushed into cement powder in grinding mills. Cement is the key ingredient, the 'glue' that binds the sand and aggregate to make concrete.

Concrete is the most important of all building materials. Its ready availability, durability, versatility and relative cost have ensured its continued (and growing) use over many decades. However, the industry is responsible for significant levels of greenhouse gas emissions, primarily from the chemical reaction that occurs when the limestone is burned. The mining of the limestone and transport of the cement, together with the energy required during manufacture, add further to the CO2-e output.

Indeed, it is estimated that some 900kg of CO2-e emissions are generated for every tonne of cement manufactured, with the cement industry alone responsible for approx. 5% of global CO2-e emissions.



Site Photo – Steel Cement grinding mill

Having recognised the very real environmental issues associated with the manufacture of cement some years ago, ICL has since that time invested heavily in the development and production of a more environmentally sustainable alternative - Ecoblend.



Site Photo – Steel Cement's GBFS stockpile

Ecoblend – Supporting a Greener Future

Following extensive research, development and major investment in plant and equipment, ICL commenced production of its Ecoblend range of environmentally friendly 'cement blends' in 1991. In these Ecoblend products, conventional cement is partly replaced with SCMs, typically blast furnace slag or flyash.

Introducing these supplementary materials has had a significant impact on the CO2-e emissions generated by cement manufacture, achieving this in a number of ways:

- Ecoblend products contain a minimum of 30% SCMs significantly reducing the demand for clinker-based cements and hence the requirement for the burning of fossil fuels used in the energy intensive cement clinker production, as well as reducing the emissions that occur during the burning process itself. For each tonne of SCMs used, CO2-e emissions are reduced by 700kg.
- The use of Granulated Furnace Slag (GBFS) as the cement replacer means that the slag, which is a by-product of steel production, is no longer considered 'waste' and is not put into landfill.

Ecoblend is in fact a superior cementitious product, offering increased durability or longer life, particularly in adverse environments (e.g. salt water, sulphate environments, etc.), meaning that the concrete will last longer further reducing its environmental impact.

Not surprisingly, this combination of environmental benefits and material quality has resulted in a strong demand for Ecoblend products. In fact, Ecoblend has proven to be so successful, that ICL's current production facility is running at capacity - producing some 250,000 tonnes per annum - delivering a staggering saving of some 160,000 tonnes of greenhouse gas emissions each year. •

Contact Independent Cement and Lime Pty Ltd for more information on 03 9676 0000.

Weighty Innovation to Revolutionise Earthmoving

An innovative new mobile weighing system for excavators is set to revolutionise the construction and earthmoving industries, according to Loadrite Product Manager, Excavator Series, GORDON HAIN.

THE X-Weigh system for excavators improves productivity by quickly, easily and accurately weighing the material in the bucket, then displaying the payload information on a monitor in the machine's cab. This information can be stored as daily, weekly or monthly reports in the monitor for later retrieval, a hard copy can be printed using the optional printer, or the information can be sent straight to your desktop using the Loadrite software's optional MMS technology.

What makes this system truly ground-breaking is the fact that, with its unique sensor configuration, it can be applied to quick hitch systems, making it an unobtrusive and natural part of the excavator's operation, says Gordon.

"When you're working on a project you need to be able to swap between buckets fast and easily and that's why the quick hitch system has become so widespread," said Gordon. "Being able to continue to accurately weigh the payload regardless of which bucket you're using or how frequently you swap buckets means the entire project can proceed at maximum efficiency with weighing and measurement in the hands of the excavator operator.

"In addition, the ability to weigh as you go rather than rely on weighing measurements taken at weighbridges on site creates further efficiencies and saves time. With the industry's focus increasingly on maximising productivity, a mobile weighing system like X-Weigh is worth its weight in gold.

The information it provides allows you to make critical decisions more effectively."

The best example of this is in loading road trucks to take material to landfills. For safety reasons, trucks can't be overloaded, which sometimes leads to operators under filling them to be on the safe side. This means the under filled trucks not only have to make more trips overall, but can also create additional costs because landfills charge per load, not by weight.

"It is far more cost and time effective to make sure the trucks are filled to capacity," said Gordon. "That's where the X-Weigh system comes into its own. You're measuring each load before it goes into the truck. As soon as the truck is full, you know it.



There's no waiting to be weighed on the weighbridge and dealing with inaccuracies the truck is ready to go.

"You can also monitor what material was loaded into which truck, like rocks versus dirt, which is important for when the project is being charged rock body rates." The ease and practicality of this solution means it provides a faster and more economical solution to weighbridges on some jobs and replaces the "guesstimation" that often takes place.

When John Holland became an open alliance partner in the recent South Morang Rail Extension Project, they turned to The CAT Rental Store to provide the excavators they needed. Two excavators were fitted with the X-Weigh system by Victorian Loadrite distributor, Galesafe Weighing.

"The X-Weigh system with added sensors absolutely adds to your competitive advantage on a project like this," said The CAT Rental Store Business Development Manager, Mark Gubbels.

"With a site like South Morang they don't have space to set up the number of mobile weighbridges that would be required for fast processing. If you've only got one or two weighbridges then the trucks have to line up to be weighed, which is a real waste of time. The X-Weigh is a far cheaper, more efficient alternative.

"With the inclusion of the additional quick hitch sensor and software upgrade, utilising the X-Weigh doesn't take any more time than the traditional load and dump cycle, so operators can continue to work at maximum speed whilst maintaining tight accuracy."

John Holland's Earthworks Superintendent -South Morang Rail Extension project, Garry Auld, says the X-Weigh system provided a number of benefits. As a member of an open alliance, the company shares in the



CAT excavator fitted with the X-Weigh system

job's profits and losses, so accuracy and productivity are extremely important to them and the X-Weigh system provides the tools that allow them to manage that productivity very closely.

"Using X-Weigh, we know we're not overloading trucks and we know we're getting value for money by getting maximum weight in the trucks," said Garry. "It helps us work out our conversion rates from tonnage to cubic metres, which can change a bit depending on the type of material. Information goes directly to one of the engineers' computers and they can receive accurate daily reports, which should all match up with what we're paying at the tip."

"The technology is good and the advantages of using it are evident. There's really no other cost effective way of knowing that you're not overloading the trucks but are still getting the most out of them. And you know how much you're getting out of the gate every day so you don't even need a weighbridge."

Gordon agrees that the X-Weigh system is likely to remove the need for weighbridges in many situations.

"X-Weigh is simple, accurate, cost effective and it directly affects the productivity of a project," he said. "It is absolutely going to revolutionise the industry and allow earthmoving and construction contractors to be completely certain that they are getting the most from their excavators and their trucks." •

Galesafe Weighing are the distributor of Loadrite Products, including the revolutionary X Weigh system, in Victoria.

For more information, contact Jim or Rowena at Galesafe on 03 9465 0900.





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Follow up by WorkSafe of Previous Notices Issued

BRUCE McCLURE, CMPA General Manager reports on WorkSafe Victoria's follow up of notices issued at extractive industry sites.

URING the period 1 July 2011 to 20 November 2011, WorkSafe followed up on 31 notices that had been issued previously at a number of sites. Several of these follow ups related to notices that were issued prior to this period, however the majority related to notices actually issued during this period.

The notices that were followed up by WorkSafe consisted of:

- 25 Improvement Notices,
- 3 Prohibition Notices, and
- 3 Dangerous Goods Improvement Notices.

Grouping similar types of notices together provides the breakdown of notices followed up as displayed in the table to the right:

Of the 31 notices that were followed up, 29 were complied with and closed out on the return visit. However, 2 were found to have not been complied with at the first return visit.

One of these non-compliances relates to the provision of worker amenities (dining facilities), the other relates to a poor procedure with regards to repetitive and potentially heavy lifting. Both of these non-compliances occurred at the same site. Of these two outstanding notices, the work amenities issue has since been complied with, and the other will be reviewed again at the end of November following review and assistance by a WorkSafe ergonomist and suggested changes. •

Type of Issue	I.N. Follow Up	P.N. Follow Up	D.G.I.N Follow Up	Total
Amenities	4			4
Asbestos	1			1
Electrical Equipment	3			3
Emergency Response Facilities	2		1	3
Explosives - Housekeeping			1	1
Explosives - Signage			1	1
Falls from height	1			1
Hot Work	1			1
Lifting/carrying/handling objects	2			2
Plant - Decommissioning/unsafe	1	3		4
Plant - Guarding	4			4
Plant - Maintenance	4			4
Plant - Security	1			1
Vehicle Access	1			1
Grand Total	25	3	3	31

SUMMARY

What this article highlights is that WorkSafe Victoria do check that notices are complied with and it is in the best interest of the site involved with a notice to deal with it quickly and to ensure that the issue is closed off.

If in doubt as to what WorkSafe requires to happen to close off a notice it only takes a call to the WorkSafe Inspector involved to seek advice.



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Looking for a career in the extractive industries?

GAVIN MOREIRA, Administration Officer of the CMPA provides an overview of the Certificate II in Surface Extraction Operations course.

THE start of a new year is a good time to consider expanding $oldsymbol{\perp}$ your knowledge base. Should you be looking to enhance your skills as a quarry operator? A good place to start is the Certificate II in Surface Extraction Operations Course. This course will give you the basic skills and knowledge needed to operate as a successful extractive industries operator. You will learn valuable communication skills, basic first aid and how to contribute to site quality outcomes.

You can choose to study electives in:

- development (dewatering and grader operators),
- winning (water boat, barge, and bulk water truck operations, blast surveys, blast hole drilling operations, handling and transporting explosives and conducting dredging operations),
- sales, testing and dispatch (sampling, site laboratory, weighbridge and sales loader operations),
- processing (crushing, blending plant and sand wash plan operations, treatment and disposal of rejects and tailings, and screening operations) and
- maintenance (operational maintenance, basic cutting and welding, non-slewing and slewing crane operations).

The CMPA in conjunction with Box Hill Institute of TAFE is running the unit in early February:

CONDUCT CRUSHING OPERATIONS

This two day course covers the crushing operations on a work site. It includes the planning and preparation for operations as well as the operation and post operational procedures of fixed and mobile crushing plants. It also covers the skills and knowledge required to operate the crushing plant. Why should Employees attend?

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- Access, interpret and apply technical information.
- Apply plant operating procedures.

Attendance of both days' of training is required and the successful completion of an assessment task.

Thursday 9th & 23rd February 2012 Date:

Time: 8.30am to 4.30pm

Location: Northern Quarries, Cooper Street, Epping. •

To book, please phone Diane Wilson at Box Hill TAFE 03 9286 9711.

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Excessive Noise in the Workplace

Exposure to excessive noise can cause temporary or permanent hearing loss. Below is an extract from the CMPA's updated "WORK SAFELY REFERENCE MANUAL" providing handy hints on managing noise on your work site.

EXPOSURE to excessive noise can cause temporary or permanent hearing loss or tinnitus (ringing in the ears). It can also cause stress which can lead to accidents.

Hearing loss depends on the level of noise and duration of exposure. According to regulations, a person cannot legally be exposed to more than 85dB (A) over any eight hour period or a peak level of 140dB(C) without controls in place.

Consider the following:

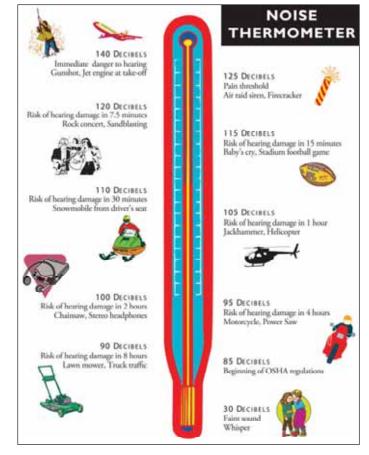
- Is it difficult to communicate between people at a distance of 1m?
- Do you or others notice a reduction of hearing over the course of the day? (This may not be noticed until after work)
- Do you or others experience:
- Ringing in the ears?
- The same sounds having different tones in each ear?
- · Blurred hearing?
- · Difficultly hearing?
- Is hearing protection provided?
- Do signs indicate hearing protection needs to be worn?
- Have there been any claims for work-related hearing loss?
- Does information supplied with mobile or fixed plant indicate noise levels equal to or greater than those identified above?
- Does the Noise Thermometer, suggest the noise level of any plant is greater than the limit imposed by Regulations?

If you answer 'Yes' to one or more of these questions, it indicates that further investigations are required. This may consist of measuring noise exposure, conducting hearing checks and making changes accordingly.

If you cannot hear normal conversation at a distance of 1m, you may be subjected to too much noise.

If it is established that noise is an issue, controls could include:

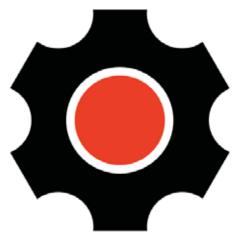
• Eliminate the source of the noise (i.e. change the process, upgrade the plant)



- Reduce the amount of noise generated (i.e. baffles, dampers or enclose either the plant or operator)
- Using administrative controls, reduce the noise people are exposed to (i.e. time spent on shift, monitoring)
- Use PPE controls to reduce exposure (i.e. hearing protection). •

Image courtesy of Sight and Hearing Association of Australia.





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A New Age for Superannuation in Australia

How will the proposed changes to superannuation affect your business? NATALIE GULLIFER from Landers & Rogers Lawyers reports.

▼ISTORIC legislation was introduced 1 into Parliament on 2 November 2011 to increase the level of Superannuation Guarantee (SG) contributions from the current 9% to 12%.

The Bill passed the House of Representatives on 23 November 2011, and is now before the Senate.

In addition to increasing the level of SG contributions to 12%, the Superannuation Guarantee (Administration) Amendment Bill 2011 also proposes to remove the age limit on SG contributions (presently, SG is not required for an employee who is aged 70 or more).

Each of the above measures are intended to commence on 1 July 2013.

following table indicates the schedule of increases in the level of SG contributions each year, starting with a 0.25% increase on 1 July 2013 and reaching the 12% level by 1 July 2019.

To avoid a 'Superannuation Guarantee Shortfall', employers must superannuation contributions by the required time in respect of each quarter calculated at the correct charge percentage multiplied by each employee's ordinary time earnings.

The Government has stated that the amendments are dependent on the passing of the Minerals Resource Rent Tax package.

YEAR	SG CONTRIBUTION
Year starting on 1 July 2013	9.25%
Year starting on 1 July 2014	9.5%
Year starting on 1 July 2015	10%
Year starting on 1 July 2016	10.5%
Year starting on 1 July 2017	11%
Year starting on 1 July 2018	11.5%
Year starting on or after 1 July 2019	12%

BOTTOM LINE FOR EMPLOYERS

If passed, employers will need to make sure that their payroll systems are configured to remit the increased contributions to each employee's superannuation fund, and any implications for employment agreements and remuneration packages will also need to be considered.

Employers who contribute to defined benefit superannuation funds may need to seek particular advice about the implications for them. •

For further information contact Landers & Rogers Lawyers Phone: 03 926 9583 Email: ngullifer@landers.com.au

Website: www.landers.com.au

This potential change legislation will affect the entire Australian workforce, not just the extractive industry.

your business prepared financially to meet the propsed 3% increase to SG contributions over the next 7 years?

CMPA will keep you informed if and when the bill passes the senate. Look out for more information on the changes to superannuation in future editions of Sand & Stone.





VLPA Update

PETER MCCLUSKY provides an update on the Victorian Limestone Producers Association.

AGM AND CONFERENCE

The VLPA's Anual Genearl Meeting and conference was held at the City Memorial Bowls Club Warrnambool on Friday 18th November 2011.

Bruce Couch, the Chairman retired by rotation after an eventful two years that included campaigns on acid soils, the resources and carbon taxes and the Murray-Darling Basin future. The new Chairman is Kevin Matthews of Lakeside Lime in Warrnambool. Kevin's family have been in the quarrying, lime, cement and garden supplies in the district for several generations.

A number of important issues were covered including increasing interest from government through the Commonwealth's "Caring for our Country" program filtering through to Catchment Management Authorities and with ultimate benefits available to the lime industry. Richard Murphy of the Glenelg-Hopkins CMA explained how "Caring for our Country" money has been secured by his CMA for trial sites to improve soils including combating acid soils with lime.

Other important topics included the fuel rebate system and how we might be affected under carbon tax legislation, future scenarios for water availability in the important markets for lime in the Murray-Darling Basin, government recommendations for heavy metal testing relating to variations in geology and end use as well as a valuable AV presentation from VicRoads demonstrating how easily truck rollovers can occur.

ACID SOILS FIELD DAYS

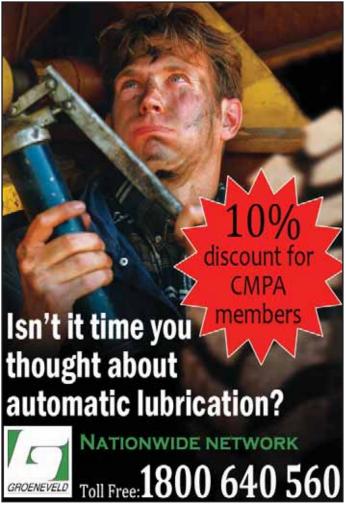
A successful field day was held at Krowera on the Bass Coast in late November. VLPA worked with West Gippsland Catchment Management Authority and Bass Coast Landcare Network and DPI to publicise the importance of using lime to combat acidic soils and raise pH in the region.

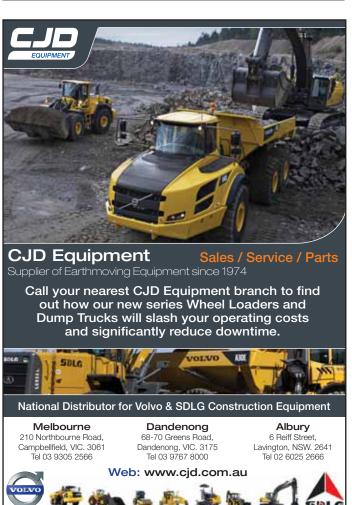
VLPA representatives. explained the workings of lime in soil health and how the VLPA's testing procedure and code of conduct operate. Participants were provided with a list of VLPA members.

This follows on from two very successful field days at French Island and Poowong North covering the subjects of soil pH and soil carbon in which VLPA recently worked with Westernport Catchment Landcare Network.

Further information is available from Peter McCluskey by phoning 0408 496 588.







DPI Update

IAN MCLEOD, Manager Minerals and Extractive Operations, Melbourne District, reports on current projects.

APPROVED WORK PLANS

Approved Work Plans and Work Plan variations are an essential part of Work Authorities (WAs) and provide a handy reference to quarry managers of the approved quarry design details, permissible site activities and how the site is to be operated. Work Plans and Work Plan variations must contain the information prescribed in Schedule 1 of the Mineral Resources (Sustainable Development) (Extractive Industries) Regulations 2010 to gain approval by DPI. DPI inspectors review the adequacy of approved Work Plans whilst conducting site audits, bond reviews and or prior to transferring a WA from one holder to another. When necessary, DPI inspectors can require approved Work Plans to be updated to meet the current legislative requirements. WA holders and or applicants are encouraged to review Work Plans to:

• Ensure Compliance

If not detected at an early stage, non-compliance of site operations with the approved Work Plan can result in DPI taking enforcement action which can result in significant cost to operators;

Gain approval to develop additional resources on WA

There are some WAs with approved Work Plans that only enable extraction from a portion (and not all) of the site. Most of these sites have been in operation for many years. It is assumed these old Work Plans did not show the full development of the site due to limited knowledge of the resource at the time. WA holders of these sites are finding they now have an increasing number of legislative challenges when they try to obtain Work Plan variations to gain access to additional reserves. The main requirements are compliance with the Victoria's Native Vegetation Framework (under the Flora and Fauna Guarantee Act 1988 [State]) and the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act [Federal]) and meeting planning requirements due to recent residential development nearby. (Note: There is no formal requirement for a Cultural Heritage Management Plan for Work Plan variations for these sites regardless of the existence of cultural sensitivity. However, the sites are required to comply with the requirements of the Aboriginal Heritage Act 2006 if artefacts are encountered); and

• Gain approval to extract from sites that already hold planning permission but do not have an approved Work Plan

There are some historical WA applications which already have planning permission but do not have approved Work Plans. The WA applicants gained planning permission for these sites when the land use zonings were changed from "Extractive Industry" to "Special Use" in the late 1990s. The WAs have not been granted for these sites as they do not have approved Work Plans. The applicants for these WAs will also find an increasing number of legislative challenges when they try to obtain Work Plan approval. The following requirements now apply; compliance with the Native Vegetation Framework (Flora and Fauna Guarantee Act 1988 [State]) and the EPBC Act [Federal] plus there is a formal requirement for a Cultural Heritage Management Plan to be approved prior to gaining work plan approval if cultural sensitivity exists on these sites.

These WA holders and or applicants are strongly encouraged to progress these Work Plans or Work Plan variations without any further delay.

AUDIT PROGRAM

DPI's six-monthly targeted auditing program is about to end. A total of ten targeted audits (comprising pest animal & plant and hydrocarbon storage) were planned to be undertaken at extractive industry and mining sites in each of the five districts before the end of December this year. The results of the audit will be available for publication in the next issue of *Sand & Stone*.

STAFF NEWS

John Mitas continues to manage the Department's involvement with the future remedial works at Morwell as well as his normal duties.

Lionel Woodford commenced work as an Inspector of Mines in the Melbourne District on 14 December 2011. Lionel was formerly a Biosecurity Officer with DPI at Ballarat.

Mark Ritch joined DPI as Program Manager Community Engagement on 19 December 2011. Mark was formerly the Community Engagement Co-ordinator at Bayside Council.







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Precisionscreen New Heavy Weights

VIRGINIA VARELA-EYRE, Marketing Coordinator at Sandvik Mining and Construction, reports on the new partnership with Precisionscreen.

TAVING worked in close partnership Having worked in State I years, Sandvik Mobiles have now appointed Precisionscreen Pty Ltd as the exclusive dealer for the sales and aftermarket service of its complete range of track-mounted mobile crushers and screens.

According to Ciarán Ryan, Area Sales Manager for Sandvik Mobile Crushers and Screens, "Precisionscreen have continually impressed with their ability to stock machines and spares in strategic locations throughout Australia and their market coverage and knowledge is second to none. Precisionscreen are renowned for their customer service and will always "go that extra mile" to ensure customer satisfaction. They are an ideal partner for the Sandvik range and we are proud to be associated with them."

Precisionscreen was founded by Harold Kerr in 1986, in Brisbane, Queensland. It was originally established as a manufacturer of screening, crushing and washing equipment and has grown from a small family company, employing just two employees, to a company which now employs more than forty personnel and has offices in the states of NSW, Victoria and WA.

With a reputation built through the years on a customer focused culture and expertise gained within the factory and field environments, Precisionscreen's sales and service personnel are qualified to advise customers on the most profitable solutions. Harold Kerr the Managing Director of Precisionscreen believes this move will cement Precision as leaders in mobile crushing and screening "It will allow us to increase our capabilities to ensure all customers' needs are met".

The Sandvik U and Q range of mobile crushers and screens provides customer-focused solutions for large and small operations within the construction and aggregates industries.



Ciarán Ryan, Area Sales Manager for Sandvik Mobile Crushers and Screens and Harold Kerr Managing Director Precisionscreen signing the new Sandvik contract.

The world's best-selling Q range includes jaw, cone and impact crushers; double and triple deck screeners and scalpers. The U range of equipment also includes jaw and cone crushers and has been designed to meet the requirements of the larger quarry owner, contractor or mining customer. Although fully capable of operating independently, all machines in both the Q and U range can also work in combination with each other. •



For further information contact Precisionscreen

Phone: 1800 727 991

info@precisionscreen.com.au Website: www.precisionscreen.com.au





60 SECONDS WITH AN ASSOCIATE MEMBER...

What is your name? **Daniel Ahern**

Who do you work for? Precisionscreen Pty Ltd

How many years have you worked for this business?

How many years have you been involved in the Industry? 9 years

What is your role at the company? Victorian Service Technician

What does your job involve? Maintaining, servicing and commissioning mobile crushers and screens.

What is the best part of your job? Problem solving, working closely with clients and being a part of their operations.



Steel Cement Celebrates 20 years

MICK BYRNE, Group General Manager, Independent Cement and Lime Pty Ltd, put pen to paper to share the story surrounding the formation of Steel Cement and the challenges that it faced along the road to success.

THE founders of Independent Cement were well informed on L the usefulness of ground slag as a cement replacement. With great foresight, determination and courage they agreed to build a grinding mill at Port Melbourne.

The decision to build a mill was subject to acquiring granulated slag from BHP at Newcastle. This coincided with BHP at Newcastle looking to expand its options for the use of Blast Furnace slag from its site. The decision to granulate was based on BHP's desire to capture the increased value that Granulate offered over rock slag.

The contract entered between Steel Cement and BHP added greater value for the granulate and presented Steel Cement with a very large quantity of granulate to be sold as road base in the Hunter or shipped to the mill at Port Melbourne.

The Japanese company, UBE Industries, became a shareholder and supplied the modern vertical roller mill. The Japanese personnel worked alongside Steel Cement's contractors and staff, including Alan Dow, Phil Ireland, Alf Frommer, Wayne Tuddenham and Dave Lambrick. The former have many great memories of their time in Melbourne, and several recently visited for the 20th Anniversary dinner.

Unfortunately, following the opening of the plant, the market for cement in Victoria collapsed and the company struggled through a most difficult era. Losses mounted and the efforts to meet Steel Cement's obligations to remove granulate proved onerous. A shipload was even stored in Barro Group's Mountain View Quarry at Point Wilson.

It's important to remember that while the use of slag is now an everyday event, that was not the case in the early 1990s. Steel Cement and ICL pioneered the use of slag in Victoria. Thankfully, despite their difficulties, BHP supported the efforts of Steel Cement to stick it out. The shareholders did their best to support the use of ground slag in their concrete.

Over the years, the ownership structure changed, with the pioneers David Noonan and Len Willey's companies selling, and later Ube Industries. The company finally became a wholly-owned subsidiary

of Independent Cement, which by then was a 50:50 partnership between the Barro Group and Adelaide Brighton Cement.

The current success of Steel Cement is a testimony to the foresight of its founders, particularly David Noonan, the courage of its shareholders, the dedication and hard work of the management and staff who have maintained the facility, and the great work that has been done in the promotion of its output. Steel Cement is now an integral part of Independent Cement, and while it faces some interesting decisions over the next few years, its current success is just reward to all those associated with the company over the 20 years. •



Tanker loading at Independent Cement & Lime's Port Melbourne terminal



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TRAINING & EVENTS

SHOT FIRER'S RENEWAL COURSE

Have you received a request from WorkSafe to renew your Shot Firers licence?

If so, you need to attend the next two day Box Hill Institute of TAFE organised renewal course for currently licensed Shot Firers. The first day of the course will be conducted at Box Hill with classroom training on the first morning followed in the afternoon by the written examination for the Use of Blasting Explosives. The second morning will involve a practical assessment on site at a local quarry to ensure attendees are competent to handle explosives and initiate shots.

Tuesday 6th & Wednesday 7th March 2012 Date:

Location: Box Hill Institute of TAFE, Whitehorse Road, Box Hill

and Northern Quarries, Epping

8.00am - 4.00pm (Includes Lunch) Time:

TBA Cost:

WORKSAFELY

This two day course covers the essential requirements to satisfy safe work practices. It includes accessing and identifying the site safety procedures, applying personal safety measures, applying operational safety measures, maintaining personal well being and identifying and reporting incidents.

It also covers the skills and knowledge required to apply basic risk control processes at a work site.

This is two units in the Certificate II from the RII09 Resources and Infrastructure Industry Training Package RIIOHS201A and

It requires the attendance of both day's training and the successful completion of an assessment task.

Date: Friday 17th February and 2nd March 2012

Location: DPI Offices, Bendigo Time: 8.30am to 4.30pm

Cost: **TBA**

CONDUCT CRUSHING OPERATIONS

This two day course covers the crushing operations on a work site. It includes the planning and preparation for operations as well as the operation and post operational procedures of fixed and mobile crushing plants. It also covers the skills and knowledge required to operate the crushing plant.

Date: Thursday 9th & 23rd February 2012

Time: 8.30am to 4.30pm

Location: Northern Quarries, Cooper Street, Epping

Cost:

To book any of the above courses, please contact Diane Wilson at Box Hill Institute of TAFE by phoning 03 9286 9711.

CMPA TRAINING CALENDAR

May 2012 Work Safely,

Conduct Crushing Operations

Shotfirer's Renewal Course June 2012

July 2012 Conduct Screening Operations

Sept. 2012 Shotfirer's Renewal Course,

Combined Crushing & Screening Operations

Nov. 2012 Work Safely,

Conduct Crushing Operations

CMPA AGM & DINNER 2012

Just a reminder to keep this one in your diary:

Saturday 25th August 2012 Date: RACV Club - Healesville Location:

Time: 6.30pm Dinner

Cost: \$120

Refer to the CMPA website homepage www.cmpavic.asn.au at any stage for an up-to-date list of all upcoming training courses and events and their relevant booking details.



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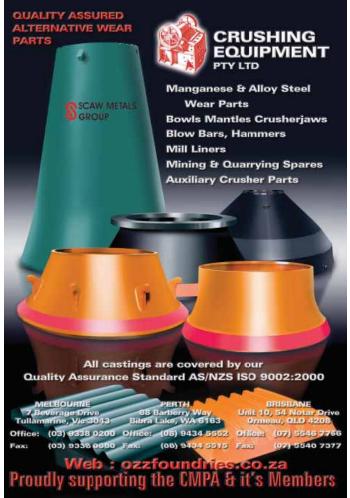
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