



## The International Network for Acid Prevention

An organization of international mining companies that seeks the prevention of acid rock drainage (ARD) and metal leaching in support of responsible mineral development.

### 1. SUMMARY

Welcome to the latest issue of the INAP Newsletter. First, I would like to announce that INAP is now on LinkedIn and we invite you to follow our INAP Group page to keep-up on the latest developments within INAP.

Following the success of the first AMD/ARD Leading Practice Awards in 2018, applications are now open for the 2021 awards to be presented at ICARD 2021. This is a great opportunity to recognize company excellence and share examples of leading practice.

This issue also features articles on ICARD 2021, the Australian AMD Workshop, SANAP-led workshops in Chile, the latest INAP activities, and on ICMM's Integrated Mine Closure Good Practice Guide.

INAP wishes to acknowledge Charlene Hogan (MEND) and David Williams (ADTI-MMS), from our Global Alliance partners, who have recently retired. Special thanks to both for their contributions to making these initiatives a success and we wish them all the best in retirement.

Happy reading to all. Comments and suggestions are welcomed!

### *In this Issue*

1. Summary
2. INAP Strategic Plan
3. 2021 AMD/ARD Awards
4. INAP on Social Media
5. INAP Presents to ICMM Mine Closure Working Group
6. SMI Hosts INAP in Brisbane
7. ICARD 2021, Brisbane, Australia
8. 10th Australian AMD Workshop, March 2020
9. INAP Leads Short Course In Newcastle, NSW
10. SANAP-led Workshops a Success in Chile
11. IMWA 2019 Conference held in Russia
12. Mine Closure 2019 Papers Available Online
13. ICMM Launched Mine Closure Good Practice Guide
14. Up-Coming Events

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## 2. INAP Strategic Plan

INAP is currently developing a Strategic Plan, which includes an update to INAP's vision statement, a review of current risks and emerging challenges and discussion on INAP work program themes. During development of the Strategic Plan, a number of future work programs were discussed and these programs are being prioritised according to INAP member companies needs and alignment with INAP's Strategic Plan.

## 3. 2021 International AMD/ARD Leading Practice Awards

Every three years, the International Network for Acid Prevention (INAP) recognizes leading AMD/ARD mitigation/prevention practice at a specific operating site and also at the corporate level. The first set of awards was presented at 11th ICARD in South Africa in September 2018. The submission process for this next round is now open, and these awards will be presented at the 12th ICARD in Brisbane in 2021.

INAP has adopted, for this round of awards, a two-stage evaluation process for the review of the submissions. Stage 1 requires that candidates identify which award (corporate or specific operating site) they are applying for. In addition, candidates are requested to provide a brief high-level summary (3 to 5 pages maximum) of their application. Guidelines on crafting their applications can be found on the INAP website or linkedin (<https://www.linkedin.com/company/international-network-for-acid-prevention-inap/?viewAsMember=true>) and additional, relevant information is encouraged, provided that the length of the submission stays within the 5-page maximum.



Candidates are not required to be a member of INAP. Closing date is January 31, 2020 for Stage 1 submissions. Proponents will be notified by the end of March 2020 on whether their submissions are selected and/or not selected to proceed to Stage 2. Detailed criteria for Stage 2 will be available from the website in December.

Applications and any enquiries should be sent to the INAP Technical Manager, Gilles Tremblay at [gilles.tremblay@inap.com.au](mailto:gilles.tremblay@inap.com.au)

## 4. INAP on Social Media

INAP is now on LinkedIn and we invite you to follow our INAP Group page to keep-up on the latest developments within INAP. Please search "INAP: International Network for Acid Prevention" to join or click on this link <https://www.linkedin.com/company/international-network-for-acid-prevention-inap/?viewAsMember=true>.

There you will find information on various INAP activities and events including new and completed projects, conference announcements (e.g. ICARD), the AMD/ARD Leading Practice awards amongst many others. The INAP Group page is a work in progress with more information to be posted in the future. Good positive feedback has been received by INAP on this initiative.

## 5. INAP Presents to ICMM Mine Closure Working Group

The International Council on Mining and Metals' (ICMM) Mine Closure Working Group recently met in Perth prior to Mine Closure 2019. Ros Green, Chair of the INAP Operating Committee was invited to present on INAP's current work program and to discuss potential synergies between the two industry groups. Key outcome from this meeting was a discussion on updating the GARD Guide with recent mine closure guidance publications. Both groups agreed on the importance of continued communications.

## 6. SMI Hosts INAP Meetings in Brisbane

Special thanks to Mansour Edraki and his team at the Sustainable Minerals Institute at the University of Queensland in Brisbane for hosting INAP for their biannual meetings in late April. Prior to the meetings, SMI had organized a series of mine site tours focussing on the mining industry's management of water quality issues. Visits to Mount Carrington (White Rock Minerals) and to the New Oakleigh Mine (New Hope Coal) were the highlights of this two-day tour.

Another highlight for members was the visit to the Brisbane Convention Centre, site of the 2021 ICARD. There members had the opportunity of seeing first-hand this impressive facility located close to downtown Brisbane.

The final event for the week was a mini-symposium on Acid and Metalliferous Drainage Management organized by SMI and INAP which attracted delegates from industry, governments and academia. The all-day event, features 14 presentations that explored everything from geomicrobiology to reactive mineral waste management. The presentations are available from: <https://amdworkshop.com.au/event/session/288>

## 7. ICARD 2021, Brisbane, Australia

The Twelfth International Conference on Acid Rock Drainage (12th ICARD) is planned for the week of September 20th, 2021 in Brisbane, Australia. Please visit <https://amdworkshop.com.au/icard> for more information on this event.

ICARD 2021 will be hosted by The University of Queensland's Sustainable Minerals Institute (SMI). Preparations have started and on behalf of SMI and INAP, we are looking forward to seeing many of you in Brisbane in 2021.



## 8. 10th Australian AMD Workshop, March 2020, Dubbo, NSW

The 10th Australian Workshop on Acid and Metalliferous Drainage (AMD) 2020) will be held March 23-26, 2020 in Dubbo, NSW. This year's theme "Minimising AMD risk across the mining life cycle" highlights the importance of mine planning and early interventions throughout the life of mine to correct potential deviations from AMD management plan or performance.



Australian Workshop on Acid  
and Metalliferous Drainage

The workshop will be hosted by The University of Queensland's Sustainable Minerals Institute (SMI). SMI is the Australian partner in INAP's Global Alliance.

More information, including registration details, are available from the SMI website at <https://amdworkshop.com.au/>

## 9. INAP Leads Short Course in Newcastle, NSW

INAP led a short course on "Understanding AMD/ARD and the implications for rehabilitation and closure" at the 9th Annual Best Practice Ecological Rehabilitation of Mined Lands Conference in Newcastle, NSW in June. The objective of this short course was to help attendees develop a better understanding of the fundamentals of AMD/ARD generation processes and management options through to closure. The short course was coordinated by Gilles Tremblay (INAP) and special thanks are given to Sophie Pape (Earth Systems), Guy Boggs (WA Biodiversity Science Institute), Sebastian Lamoureux (O'Kane) and Bruce Kelley (INAP) for their participation in this successful short course.

## 10. SANAP-led Workshops a Success in Chile

The Chilean Chapter of the South American Network for Acid Prevention (SANAP) has been very active in 2019. Under the leadership of the Sustainable Minerals Institute – International Centre of Excellence (SMI-ICE-Chile), workshops were held this year on topics identified by the local members.

In April a workshop on "Hydraulic barriers, natural waters and contact waters" was held. This was followed in May with a workshop on "Control and removal of sulphate from mining effluents" that had more than 90 people attend. And in June a "Geochemical characterisation of mining waste for efficient and sustainable management" workshop was held, also attracting more than 100 delegates. The workshops are held in conjunction with major conferences in Santiago and have exceeded expectations in terms of attendance. The topics are clearly of great interest in Chile and SANAP has responded to a real need. Delegates have been very positive in their feedback.

The presentations from these workshops are available through the SMI-ICE Chile webpage at <http://www.smiicechile.cl/descargables/>

## 11. IMWA 2019 Conference held in Russia

For the first time in IMWA's (International Mine Water Association) history, an annual conference was held in Russia. Dr. Elena Khayrulina, Perm State University, with the support of the Russian Ministry of Science hosted the 2019 IMWA conference which was the first international conference held at this university. 227 delegates from academia, governments, consultants and industry representing 25 different countries attended this 5-day event held in July which featured 88 presentations and 41 posters. Student participation was excellent with 27 students vying for the prizes given for the best and second-best student presentations. Mid-conference field trips were held to the Kizel coal basin and to an underground salt mine in the Urals. A five-day post-conference field trip was also held to the mining regions in the Urals.

The proceedings, as for all other IMWA congresses, are available from the IMWA web site at [www.IMWA.info](http://www.IMWA.info). In 2020, IMWA will be held in New Zealand and in 2021 in Wales, United Kingdom.

## 12. Mine Closure 2019 Conference Papers Freely Available Online

The International Mine Closure Conference was held this September in Perth and was the largest Mine Closure conference (500 delegates) held by the Australian Centre for Geomechanics (AGG). Many INAP member companies were present at the conference and presented papers. The MC2019 papers can be found at the following link <https://papers.acg.uwa.edu.au/c/mc2019>. This is one of many conference proceedings that can be found on this extensive platform. An excellent accessible reference site for all.

## 13. ICMM Launches the Integrated Mine Closure: Good Practice Guide

The Integrated Mine Closure: Good Practice Guide is regarded as a major update to ICMM's Closure Toolkit that was released in 2008. The guide is intended to support the goal of ICMM members, other responsible mining companies, and regulators in delivering a positive legacy while balancing environmental protection and social wellbeing with financial performance. The guide was developed over an 18-month period by the ICMM Closure Working Group, which is made up of mine closure practitioners from leading global mining companies. The guide can be downloaded from: <https://www.icmm.com/en-gb/news/2019/icmm-launches-new-closure-guide>

## 14. Up-Coming Events

Don't miss the following upcoming events:

- **Tailings and Mine Waste 2019**  
November 17-20, 2019. Vancouver, BC, Canada  
<https://tailingsandminewaste.com/>
- **Improving Estimates of Releases from Mine Tailings in Life Cycle Assessment**  
December 3, 2019. Vancouver, BC. Canada

- **26<sup>th</sup> Annual BC/MEND ML/ARD Workshop**  
December 4-5, 2019. Vancouver, BC, Canada
- **10<sup>th</sup> Australian AMD Workshop (AMD 2020)**  
March 23-26, 2020. Dubbo, NSW. Australia.  
<https://amdworkshop.com.au/>
- **Water in Mining**  
April 22-23, 2020. Toronto, Ontario. Canada  
<https://waterinmining.net/>
- **Mine Waste and Tailings 2020**  
July 28-30, 2020. Brisbane, Australia.  
<https://tailings.ausimm.com/>
- **29<sup>th</sup> International Applied Geochemistry Symposium (IAGS2020)**  
November 8-13, 2020. Viña del Mar, Chile.  
[www.iags2020.cl](http://www.iags2020.cl)
- **12<sup>th</sup> International Conference on Acid Rock Drainage (ICARD2021)**  
Week of September 20, 2021. Brisbane, Australia  
<https://amdworkshop.com.au/icard>

Please let us know of other events that would be of interest to INAP and GA members.

## INAP MEMBERS



**BHP**



**RioTinto**

**Teck**



**lundin mining**



**AGNICO EAGLE**