

The LOGBOOK of CSP²

The CENTER for SCIENCE in PUBLIC PARTICIPATION

"Technical Support for Grassroots Public Interest Groups"

CSP²/CSP²/CSP²/CSP²/CSP²/CSP²/CSP²/ WINTER 2004 /CSP²/CSP²/CSP²/CSP²/CSP²/CSP²/CSP²

SUBMARINE TAILINGS DISPOSAL

Marine Waste Disposal Update

Even though submarine tailings disposal is not currently in use in North America, **CSP²** has been involved with this mining waste disposal technique for many years due to its potential use in Southeast Alaska, British Columbia and Labrador.

Submarine Tailings Disposal (STD) is the most common term for this mining waste disposal method in North America. The mining industry prefers to use other terms, most commonly Submarine Tailings Placement. In addition, the focus on tailings given by these names is inappropriate, since at many of the mines that have used this method of waste disposal in recent years, most located in the Asia-Pacific island areas, have used the marine environment to dispose of waste rock in addition to tailings.

While there seems to be worldwide consensus that shallow marine waters should not be used for mining wastes disposal, there are unresolved issues for deep water disposal. These unresolved issues include: identifying those marine organisms that could be impacted; the potential range of ecological and ecotoxicological impacts on marine life, the physical processes (such as sedimentation) and geochemical processes (such as dissolution of metals from the tailings) affecting each of the different aquatic marine communities; and, the mechanisms that drive spatial and temporal variability of oceanographic conditions.

The Politics of STD

Because of the well documented problems related to STD like widespread tailings contamination in shallow marine waters, tailings pipeline breaks, and dumping waste rock where it smothers reefs, many environmental and social organizations have taken the position that STD should not be used under any conditions.



Tailings & Saltwater Mixing Tank at the Misima Mine, Papua New Guinea

Governments generally take the position that proposals for STD should be evaluated on a case-by-case basis.

Most companies in the mining industry, like government, would like to maintain the option of considering STD on case-by-case basis. Industry's reasons include the consideration of sites where on-land waste disposal is problematic because of unstable or limited terrain – common problems in the Asia-Pacific islands. Unfortunately, this rational consideration can be clouded by the fact that marine disposal is always significantly cheaper to implement than on-land disposal alternatives.

Interestingly enough one large mining company, BHP-Billiton, has recently announced that it will not consider STD for any of its currently proposed projects. BHP is a past owner-operator of the OK Tedi mine in Papua New Guinea, which used riverine waste disposal, and generated a considerable amount of bad press for the company. BHP evidently wants to avoid even the possibility of bad PR in the future related to mine waste disposal. More recently, the public furor over marine disposal and contamination in Buyat Bay in Indonesia may have provided further incentive to avoid the issue altogether.

(Continued on page 2)

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(Continued from page 1)

CSP² Involvement

CSP² supports the position that riverine and shallow marine disposal should not be used under any circumstances, but that there is still some legitimate argument for deep marine disposal – if peer-reviewed research is done to address the long list of fundamental issues raised by both critics and researchers.

Efforts were made early this year to convene a research group including representatives from industry, government, and the NGO communities. Industry organized this effort, and would provide most of the research funding. Non-industry involvement would be crucial to any legitimate effort to address deep-sea marine waste disposal research from both a peer-review and meaningful public participation standpoint.

A Canadian government agency originally agreed to provide administrative support. However, the process is stalled because that agency withdrew its support for the process because of budgetary considerations.

Although the NGO community has major reservations about STD, and the industry/government project, **CSP²** will likely stay involved because until these fundamental research problems are answered one way or the other, there is a legitimate argument to be made for deep sea STD. But, until these research issues have been addressed, there is also reason to say that even deep sea STD cannot

be sanctioned because of the unanswered questions.

On a related note for those of us the US, the proposed Kensington mine near Juneau, Alaska, would use a lake for tailings disposal. In this case on-land disposal is available – but at a greater cost than using the lake. While use of lakes for mining waste disposal is not presently allowed in the US, the US Forest Service and Army Corps of Engineers under the present administration are likely to support this proposal.

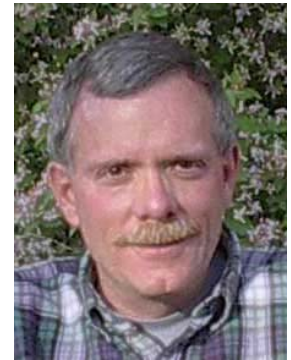
If this is allowed in Alaska, this would make similar projects likely in the lower 48 states.

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From the Executive Director

Staff

Amy Crook, who had been working part time with **CSP²** and part time with the Environmental Mining Council of British Columbia, has rejoined **CSP²** on a full time basis. Amy is now based in Victoria, BC, giving **CSP²** a true international presence.



*Dave Chambers is the
Executive Director of **CSP²***

Amy, who lived in Juneau and worked for the Alaska Department of Environmental Conservation for many years, will be spending about half her time working on technical support for Alaskan groups. Her Alaskan work is funded by grants from the Wilburforce Foundation, Seattle, WA; the Alaska Conservation Foundation, Anchorage, AK; and, the Leighty Foundation, Juneau AK.

She is also working on a project to assist conservation groups in British Columbia analyze potential mining impacts in northern BC, primarily in the Stikine and Taku River drainages, where several new mines and roads are proposed. This work is funded through a grant from the Environmental Mining Education Foundation, Vancouver, BC.

(Continued on page 3)

(Continued from page 2)

We are also looking to expand our work in support of First Nations (tribal governments) in western Canada (British Columbia and the Yukon). Amy has a project with the Taku River Tlingit First Nation to help in the development of mining exploration guidelines.

Amy and Dave have both worked in the past with the Yukon Conservation Society in Whitehorse, Yukon, and Dave has a long association in technical support with the Tr'ondëk Hwëch'in First Nation on the Brewery Creek mine near Dawson City, Yukon.

Earthworks Partnership

For many years **CSP²** has worked closely with Earthworks (formerly the Mineral Policy Center) in providing that organization technical advice and analysis. In order to provide Earthworks with a more responsive technical support, and to provide better access to technical research and analysis, **CSP²** has entered into a partnership agreement with Earthworks to provide technical support and research to Earthworks and its major programs. We have agreed to work together to increase access to scientific and technical analysis and information and to promote greater transparency and information sharing in the sector.

The purpose of the partnership is to provide communities, civil society organizations, and regulators independent scientific and technical research and expertise so that they can make informed decisions regarding natural resource development and protection, and to ensure that extractive industry practices follow the highest standards.

For the past year I have been providing most of the technical assistance to Earthworks, working to support both their national and international campaigns. Amy Crook has also contributed to this effort, analyzing controversial contamination data from the Newmont mine at Buyat Bay, Indonesia, where local villagers have lodged complaints related to contamination from tailings discharged into the bay. I have also been providing expertise to Earthworks on two large research projects they have commissioned. One of these research projects will look at the methods used to predict whether acid mine drainage is likely to occur at a mine, and the other looks at historical effective-

ness of environmental impacts statements in using these techniques for AMD predictions at actual minesites. Results from these studies, which are being conducted by Kuipers & Associates, are due to be released in 2005.

CSP²'s Earthworks support is being funded by the Brainerd Foundation, Seattle, WA.

New CSP² Board Members

At the Board's most recent meeting in Seattle, where the Brainerd Foundation generously allowed us to use their facilities, it was decided to expand the **CSP²** Board from 6 to 9 members.

The Board lost the services of Professor Johnnie Moore, University of Montana, who is taking a position with the US Geological Survey, and will not be able to continue his **CSP²** affiliation. We all thank Johnnie for his diligent participation and savvy advice.

Joining present Board members Steve D'Esposito (chair), Earthworks, Washington, DC; Don Bachman (secretary/treasurer), Bozeman, MT; Alan Young, Ottawa, Ontario; and, Mike Clark, Trout Unlimited, Bozeman, MT are new members Anna Cedarstam, Ph.D, Earthjustice/AIDA, Oakland, CA; Gavin Murray, ANZ Bank, Sydney, New South Wales, Australia; Hank Cauley, Ecos Corporation, Falls Church, VA; and, Michael L. Ross, Department of Political Science, UCLA, Los Angeles, CA. (Affiliations are for informational purposes only. All **CSP²** Board members serve in an individual capacity.)

Board chair Steve D'Esposito expressed his goals in adding Board members as bolstering **CSP²**'s capacity to support multi-stakeholder dialogues and processes; developing a mine-site audit capability (particularly as part of a push towards mine certification); playing a leading role in the development of a responsible-mine certification system; supporting more international work; and looking at adding capacity on economics, mining life-cycle analysis, and oil & gas issues.

I hope this gives you some feeling for what we have been doing at **CSP²** for the past year, and where we are headed in the future. As you can see – we've been keeping busy.



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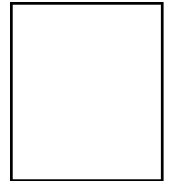
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- Become a Donor to the **CENTER for SCIENCE in PUBLIC PARTICIPATION**. You can help us to provide local public interest organizations with technical analysis and policy support. **CSIP²** is the only organization focusing on providing technical support to local groups on local issues. We realize that there are a lot of good causes, and that everyone is asking for your support. A donation of \$25, or more, would help our efforts in furthering rational debate on natural resource issues.
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