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TSE publishes disclosure standards

New disclosure standards for the Canadian mining industry that govern the content of news releases will be in place this summer.

The standards, which emerged from the 1999 TSE/OSC Mining Standards Task Force final report, were first published for comment in the interim report and have been published again for comment by the Ontario Securities Commission (OSC) in April 1999.

Four comments were received, says Maureen Jensen, director of mining services for the Toronto Stock Exchange, and adjustments were made to the document and recently submitted to the OSC.

The disclosure standards are guidelines setting out the information that must be disclosed in news releases by companies engaged in mineral exploration, development and production in Canada.

For more information about the disclosure standards, contact Maureen Jensen. Tel. (416) 947.4505; Fax (416) 947.4795; email: mjensen@tse.com.



Plan to reopen B.C. mine triggers U.S. opposition

Redfern Resources' attempt to develop a mine on the Tulsequah River in northwestern British Columbia has turned into an international issue.

The project involves reopening the Tulsequah Chief Mine, an old Cominco mine 100 km west southwest of Atlin, B.C.

In 1994, Redfern filed a pre-application for a mine development certificate with the provincial government.

For the next four years, the company held extensive public consultations and spent \$6 million as it completed an environmental impact statement. .

Satisfied that there would be no adverse environmental effects from the mine, the regulatory authorities issued an approval certificate to Redfern in March 1998.

Despite this, a coalition of special interest groups funded in the U.S. is trying to stop development of Tulsequah Chief Mine.

According to Gary Livingstone, president and CEO of the Mining Association of British Columbia, U.S. anti-development groups are spearheading the opposition with funds from large U.S. foundations and family trusts.

"By tapping into this wealth, the groups that are opposing the Tulsequah Chief project represent a formidable threat to the future of the mine, and more importantly, the future of mineral and resource development in B.C.," he says.

The groups have two goals, he adds. First, they want to stop the mine. Second, they want to ensure a developmental moratorium on the Taku watershed.

The main focus of their strategy is to use the International Joint Commission - a Canada-U.S. body that can review proposed developments affecting transboundary waters.

The coalition was helped in its strategy by Alaska Governor Tony Knowles who suggested the mine might harm salmon stocks heading north.

As a result, the U.S. state department has asked Canada to consider referring the issue to the IJC. The Canadian government has not yet responded.

Livingstone calls an IJC review of the Tulsequah project "inappropriate and dangerous."

The project is outside IJC jurisdiction because it is not located on a transboundary water, he says.

As well, there is no evidence to suggest the project will affect transboundary water quality. (Since the project will actually clean up an old mine site, water quality is likely to be improved.)

Finally, Livingstone says, subjecting the project to an IJC review threatens Canadian sovereignty over the control and regulation of its own natural resources.

"It would call into question the validity of Canada's environmental assessment processes and send a very strong negative message to anyone considering Canadian investment in any project which has even the most remote potential to impact upon transboundary waters."

Livingstone is concerned that Canada's foreign affairs minister has not responded to the state department.

"Canada, through Foreign Affairs Minister Axworthy, must take a clear and unequivocal position opposing the American request to have this project reviewed by the IJC," he says.



Conference examines gold industry future

The future of the gold industry was the topic of several presentations at this summer's Financial Times Gold Conference, according to a report in the *Mining Journal*.

One of the presenters at the conference, held in London in mid-June, was David Gulley of PriceWaterhouseCoopers, who examined the movement of the gold market in the past 20 years.

During that period, he pointed out, the gold market has become a high-volume, low-price market, with volume growth outstripping demand, and price and the marginal (mine supply) cost both falling.

Gulley interpreted the continuing low gold price to mean that the market expects the high volume of supply to continue, and he identified future sources of this volume.

He pointed out that although producers are cutting unit costs, output is growing because of productivity improvements. This serves to offset the closure of high-cost capacity.

He predicted further supplies of gold could come from the "post-official sales" era, when central banks that have kept their gold decide to sell.

Other disposals may be made from private stocks, he added.

Following Dr. Gulley's comments, the approximately 100 workshop attendees participated in a straw poll about expectations.

The majority predicted that the future holds more asset write-downs, greater reduction in reported reserves, more cost-cutting, less shareholder value added through hedging and more added by diversifying into non-gold activities.

One option for the future was proposed in a workshop hosted by AngloGold Ltd., the world's largest gold producer.

Simon Ford of Credit Suisse First Boston suggested that rather than persuading central banks to hold or buy gold, the industry should be promoting the consumption of gold jewellery.

Pointing out that the largest component of gold demand is for jewellery, he said that a small increase in demand in this sector could absorb the rising supply.



Convention videos available

Video cassettes of the 1999 PDAC Convention are now on sale. Available in English, the videos cover key presentations at the convention as well as the awards banquet and the opening session.

A full description of the videos and an order form are available on the PDAC web site.



PDAC suggests three alternatives to resolve Ontario land use problems

The PDAC has asked the Ontario government to consider three alternatives in order to resolve the problems caused to the mining industry by its new land use strategy.

To date, the PDAC has identified some 80 companies and individuals that have been "parked," by the Living Legacy strategy, 34 have signed affidavits with the PDAC, and compensatable costs exceed \$23 million.

Developed from the Lands for Life land use planning process, Living Legacy has created 378 new parks and protected areas across mid-northern Ontario and set aside 2.5 million hectares of additional protected land.

After the strategy was unveiled, the government wrote to all mining claim holders, asking those whose claims were affected by the new strategy to sign a contract confirming their rights.

The PDAC, however, has recommended that claim holders withhold their signatures on the grounds that signing might jeopardize their chances of compensation.

In a recent letter to John Gammon, an assistant deputy minister in the Ministry of Northern Development and Mines, PDAC president Gerald Harper has made three requests of the government.

First, he asks that the proposed new park fabric not be allowed to encumber existing licences of occupation, claims, leases or patents. ("Encumber" is interpreted as parks being superimposed on or placed adjacent to pre-existing mineral tenure.)

Failing that, he writes, a contract and legislation should be developed along the lines proposed by PDAC lawyers that would guarantee that exploration, development and mining can proceed in existing licenses, staked claims, leases and patents that pre-exist the designation of the proposed parks and, if necessary, in any adjacent new parks.

If neither of these courses is taken, Harper asks that full compensation be paid to all affected license, claim, lease and patent holders.

Harper notes that the PDAC, as a signatory of the Whitehorse Mining Initiative (WMI), affirms the principle that "certainty with respect to mineral tenure and to acquiring the right to mine as described in legislation is critical to mining investment."

The Ontario government is also a signatory of the WMI.

Harper also points out that one of the fundamental principles of the Lands for Life discussions was the avoidance of superimposing proposed parks or protected areas over existing mineral tenure.

In his letter, Harper says that the government has removed some park sites that affected major corporations from mineral tenure.

While this is encouraging, he adds, "we are concerned with the arbitrary nature and lack of fairness of this process, given that the brunt of the designations falls onto mineral tenure held by junior companies and individuals."

If the government cannot give legislative and contractual certainty to PDAC members who have been "parked," Harper says, then it should honour the provisions of the WMI that "appropriate compensation occurs in a fair and timely manner."



Students match wits in games

More than 140 mining engineering students from nine Canadian universities will match wits at the 10th Annual Canadian Mining Games, to be held at the University of Toronto next year.

The games, which take place from Mar. 3 to Mar. 5, will be one of the kick-off events for Mining Millennium 2000, the joint PDAC-CIM convention and trade exhibition which runs from Mar. 5 to Mar. 10.

Contestants will test their skills in two competitions. The first emphasizes technical and theoretical skills; the second tests knowledge about the practical aspects of mining.

Among the scheduled events are tests on surveying, mineral separation and jackleg drilling.



Trail may cause problems for exploration, mining

The Trans Canada Trail, expected to be opened next year, could pose problems for mineral exploration and mining companies, according to the land use committee of the B.C. and Yukon Chamber of Mines.

A federal government initiative, the trail will cross the country from coast to coast, passing through a variety of landscapes and activities.

Used primarily by hikers, cyclists, cross-country skiers, horseback riders and snowmobilers, the trail is expected to be completed by 2000.

Each province or territory coordinates management of the trail and local groups are responsible for developing and maintaining it.

In British Columbia, the trail falls under the jurisdiction of the Land Use Coordination Office.

Shari Gardiner of the B.C. and Yukon Chamber of Mines says that the office is developing a Guiding Principles document to manage the activities that may take place on and around the trail.

It is her understanding that these principles are not intended to be incorporated into legislation, she says.

Changes have been made to the Owners Liability Act, to ensure that landowners along the trail are not unduly at risk from the activities of trail users, she explains, but it is not clear how issues for crown land users will be resolved.

Problems may arise for the mining industry, she adds.

The Guiding Principles document states that the route may cross areas modified by resource development activities, or resource activities may be underway on the trail or adjacent to it.

In some cases, the trail may need to be moved or temporarily closed in order to preserve public safety and to protect the environment.

"It is important that this is recognized up front, to avoid the expectation that the trail is solely a wilderness experience or a linear park," she says.

Gardiner is urging mineral exploration and mining companies to ask their regional governments about regulation of the Trans Canada Trail in areas where they work or intend to work.

She also suggested that companies ask how conflicts between trail users and mineral tenures will be resolved.

The land use committee of the B.C. and Yukon Chamber of Mines would like to hear from PDAC members regarding these issues.

Contact Shari Gardiner. Tel.: (604) 984-7974; fax: (604) 681-2363; email: neilj@vcn.bc.ca.



Agency offers Mexican mine tour

A fall tour of Mexican mine sites is being offered by Atalaya Tours, a travel agency that has been conducting visits to major international mining regions since 1988.

Under the direction of expert guides, the itineraries cover aspects of mining history, archaeology and the geological setting and, where possible, feature visits to working mines.

The Mexican tour, scheduled from Oct. 29 to Nov. 12, 1999, begins in Mexico City and covers the major mining areas of the central and western highlands. Tourists will visit the main sites from Pachuca to Durango, including Guanajuato, Zacatecas, Fresnillo and Real del Monte.

For more information, contact Atalaya Tours Ltd., Ceinionfa, Capel Dewi, Aberystwyth,

SY23 3HR, U.K. Fax/phone (24 hour service) + 44 (0) 1970 8228989; e-mail: atalaya-jt@aol.com.



PDAC Director Joe Perkin dies at 97

It is with great regret that the PDAC has learned of the death of Joe Perkin on July 8, 1999 at age 97.

One of the association's most loyal and long-time supporters, Joe was an active member of the board of directors from the mid-1970's until June 1993, when he was appointed an honorary director.

Joe was born in Winnipeg in 1902. His love affair with prospecting began when he was 17 and continued throughout his long life.

His prospecting activities took him to every part of Canada and involved him in nearly every staking rush that occurred in Canada after the First World War.

Self-taught, gregarious, fun-loving and always ready to deliver a good yarn, Joe was one of a dwindling group of old-time prospectors. We'll miss him.



Book hotels early

Members who plan to attend Mining Millennium 2000, to be held from Mar 5 to 10 in Toronto next year, are urged to make their hotel bookings as soon as possible.

With 12,000 people expected to attend the convention, hotel space in the downtown Toronto area will be in short supply.



Geoscientists find a home

With the support of the PDAC, the Association of Geoscientists (AGO) has found a temporary home.

The AGO recently moved into a small office within the PDAC's own quarters.

In addition, PDAC administrative assistant Mari Ann Semkiw is providing some administrative help to the association.

The AGO is now located at 34 King Street East, 9th Floor, Toronto, ON, M5C 2X8. Tel: (416) 203-2746; Fax: (416) 362-0101.



International group to foster research on mining's social impact in Latin America

The PDAC is joining the advisory group of the Mining Policy Research Initiative (MPRI), an international project designed to ensure that exploration and mining are supportive of sustainable development in Latin America and the Caribbean.

The project will foster research on issues relating to the impact of exploration and mining on communities and the ecosystem. Participants include the Canadian government, Latin American governments, non-governmental organizations and the mining industry.

MPRI was established by the International Development Research Centre, a Canadian Crown corporation, because of the surge in mineral exploration and development that took place in the 1990s in Latin America and the Caribbean region.

While this activity has brought growth and prosperity to the region, its speed and scope have raised concerns in areas such as social relations between the community and the mining company and the contribution of mining to growth and equity of distribution.

Gaining a social licence to mine is fast becoming the most important issue facing the mining industry worldwide, says PDAC executive director Tony Andrews.

Because Canadian companies are actively exploring in Latin American countries, it is important that the PDAC be represented on the advisory group.

From MPRI's perspective, it is important because most of the social interaction between the industry and the community begins at the exploration stage.

"We certainly acknowledge this perspective, but we are also there to provide a perspective and input from the exploration section," Andrews adds.

An earlier boom of mining investment in the region in the 1950s resulted in a widely held perception that foreign mining investment failed to create economic, social, environmental or cultural benefits commensurate with the burdens it placed on host countries.

This led to a sweeping reaction against foreign investment, the effects of which are still apparent today.

Because of fears that an economic downturn could reignite that reaction, MPRI has launched its initiative to ensure that today's mining investments are sustainable and bring long-term benefits to all stakeholders.

MPRI will focus on four challenges: mining's impact on the community, distribution of

benefits and conflict management; mining's impact on ecosystems and environmental sustainability; mining, ecosystems sustainability and human health; and sustainable economic and social benefits and macro-economic implications.

MPRI points out that there is no articulated vision of a sustainable human future, nor is there a consensus on what the role of mining will be in that sustainable future.

Because these issues are not understood, research is needed and MPRI has been set up with a modest budget to fund such research.

MPRI stipulates that any research it supports must be justified by one of three criteria,

It must contribute to knowledge of the role mining will play in a sustainable future, knowledge of how mining can accelerate its progress toward that future or the development of an information base necessary for a broad social consensus on these issues to emerge.

The advisory group will assist in the development of a research strategy, identification of research priorities, evaluation of proposals and guidance in broad policy questions regarding the conduct of research and its dissemination.

The advisory group has now identified three priority research areas: the legal and policy framework; interaction among communities, mining enterprises and the state; and impact identification, measurement and management.

"Up to this point in time, MPRI has received close to 100 research ideas," says Andrews.

The advisory group has set up an evaluation committee to help MPRI search through and select the proposals.

Those interested in submitting research ideas should contact Luke Danielson, International Development Research Centre, Plaza Cagancha 1335 of. 903, 11100 Montevideo, Uruguay. Tel: 011 598 2 902 2031-34; Fax 011 598 2 902 0223; email: ldanielson@IDRC.org.uy.



Financial guide assists with global reports

PricewaterhouseCoopers has produced a reference guide for the global mining industry that will assist international harmonization of financial reporting.

Financial Reporting in the Mining Industry for the 21st Century contains details of the major accounting practices adopted by the mining industry and the relevant national and international accounting standards.

It is intended for use by executive and financial managers within the international mining industry, investors and other users of mining industry financial statements, accounting

bodies, standard-setting agencies and governments.

The guide is compliant with international accounting standards and covers issues such as exploration, development and construction expenditure; production; business combinations; joint ventures; depreciation and amortization; inventories; recognizing revenue; hedging; income taxes and royalties and national mining pronouncements.

In a recent interview with the *Asian Journal of Mining*, Geoff Cottrell, global lead partner, mining, for PriceWaterhouseCoopers, points to the timeliness of the guide.

"Globalization and the rapid adoption of international standards means it is now imperative to prepare financial reports which are not only understood and accepted in the country of incorporation, but are internationally comparable," he says.

The guide also covers the financial reporting implications of some of the major trends in the mining industry over the past decade.

It looks at the growth in corporate acquisition activity and the continuing increase in exposure to sophisticated financial instruments and transactions.

It also examines the increased focus on mine closure liabilities, including environmental and restoration liabilities, and the existence and recognition of assets, such as exploration expenditure.



B.C. mining industry in the red, says annual survey

The mining industry in British Columbia suffered another bad year in 1998 according to an annual industry survey conducted by PriceWaterhouseCoopers.

The survey, entitled *The Mining Industry in British Columbia - 1998*, found that grassroots or preliminary exploration spending totaled only \$3 million, the lowest level recorded in the 30 years that the report has been prepared.

Total exploration spending by survey participants dropped to \$22 million from \$41 million the previous year.

Although the report did not include junior companies and individuals involved solely in exploration, it noted that comparisons with previous years' findings confirm a downward trend.

The survey covered 18 operating mines and one smelting operation and reflects the most important mining operations in the province - all but one of the major coal operations and all but one of the major metal mining operations.

It found that the industry posted an after-tax loss of \$156 million on gross revenues of \$3.62 billion in 1998, down from a profit of \$154 million on gross revenues of \$3.98

billion in 1997.

It is the industry's first loss since 1993, the report says.

Cash flow from operations declined to \$364 million from \$561 million the previous year and dividends distributed were \$46 million, down from \$77 million.

The survey attributes the 1998 loss primarily to reduced revenues and increased writedowns of mining assets. Writedowns totaled \$109 million, \$24 million more than in 1997.

Low metal prices also had an impact, the survey noted, but this was partially offset by the low Canadian dollar.

Reduced metal prices did affect shipments and revenues. The survey found that zinc shipments remained steady in 1998, but lower prices pushed net revenues down to \$468 million from \$523 million in 1997.

The one bright spot in the picture was molybdenum. Shipments increased sufficiently to offset a price decrease, resulting in a nine per cent revenue increase to \$96.3 million in 1998.

Employment in the mining industry suffered along with revenues, dropping from 9,408 in 1997 to 8,493 in 1998. The decline resulted from mine closures, the absence of mine openings and workforce reductions.

As a result of lower earnings and fewer operations, total payments to governments dropped to \$425 million from \$459 million a year earlier.

However, spending on environmental protection and monitoring, reclamation and compliance reporting increased to \$90 million in 1998 from \$50 million in 1997. Most mines increased their reclamation reserves during the year.



Group to develop exploration standards

A small industry working group has begun the task of developing standards for exploration practices

The group was set up in response to a recommendation of the TSE/OSC Mining Standards Task Force that called on professional engineers' and geoscientists' associations to develop national industry standards for the conduct of mineral exploration programs.

Members of the working group include PDAC representatives Val Spring and Dave Comba, director of issues management; two representatives of the Canadian Council for Professional Geoscientists; two persons representing the regulators; and two from the Canadian Institute of Mining, Metallurgy and Petroleum.

It is expected that the group will take 18 months to complete its work.



Mine financings continue decline

Mine financings are continuing the decline that began last year according to figures compiled by Financial Post Datagroup.

The survey of major miners and junior exploration companies includes firms specializing in base metals as well as gold and precious minerals.

In a recent article, the Financial Post says the Datagroup information reveals that 42 mining financings were completed in May 1999, raising a total of \$919.5 million compared to \$1.64 billion in May 1998.

A significant reason for the drop-off in financings is the poor showing of metal prices, the paper says.

According to David Comba, director of issues management for the PDAC, the picture is even bleaker than that painted by the Financial Post.

If large financings for Inco, Teck and Goldcorp are eliminated, he points out, financings have actually declined by \$1 billion compared to May 1998, leaving only \$300 million for 39 companies.

"That's an average of \$7.7million per company," he adds. "Probably there are some financings that are just keeping companies alive."



GoldBusters targets gold mines

A new international coalition of groups opposed to the unecological mining of gold intends to decrease unnecessary gold consumption around the world.

Specifically, GoldBusters has set its sights on jewelry consumers and national gold reserves.

The coalition intends to depress the price of gold by asking governments and individuals to divest themselves of gold investments, and consumers to embargo gold jewelry.

The coalition claims that mining gold is one of the most environmentally destructive industrial activities on the planet and wreaks havoc on indigenous communities.

There is enough gold in reserves and banks to meet all society's needs, it says, and there is no need for new gold to be mined since the majority of it is used for jewelry.

GoldBusters' campaign can be found at www.forests.org/ric/gold.



Nova Scotia to hold open house

Nova Scotia's annual mining open house will take place at the World Trade and Convention Centre, Halifax on Nov. 8 and 9.

The conference will focus on economic development through effective use of Nova Scotia's mineral resources.

Sponsors are the provincial departments of Natural Resources and Economic Development and Tourism, the Chamber of Mineral Resources of Nova Scotia and the Mining Society of Nova Scotia.



Gold companies move to internet

Low gold prices are causing a number of gold mining companies to shift their focus to the Internet.

In recent months, about two dozen companies have announced that they are abandoning their traditional business for the world of information technology.

Among them are LatinGold Inc., Sikaman Gold Resources and, most recently, Vancouver-based Borneo Gold.

Vice president of Borneo Gold Mike Magrum blamed a combination of the Bre-X scandal and low gold prices for the change in his company's strategy.



Association receives grant

The Association of Geoscientists (AGO) of Ontario has received a \$20,000 grant from the Ontario government.

The grant, from the Ministry of Mines and Northern Development, will be used to defray expenses of the association's current consultation process, says AGO president Bill Pearson.

The association has been holding consultations with the geoscience community and other

stakeholders across the province as it moves toward becoming a self-regulatory professional association.



Environmental legislation to undergo five-year review

Parliament is expected to undertake an evaluation of the Canadian Environmental Assessment Act, passed in 1995, during its next session.

One of the clauses in the legislation calls for a review after five years to determine how well it is working and if it needs to be changed.

The review was deemed necessary, says Gerald Harper, president of the PDAC, because the legislation included some processes that had yet to be developed.

"Parliament couldn't foresee the outcome of these at the time legislation was passed," he explains.

The parliamentary committee on the environment and sustainable development, chaired by Charles Caccia (Lib.), will conduct the hearings.

The joint PDAC/Mining Association of Canada (MAC) committee on the environment will establish a sub-committee to determine what actions it might take in view of the five-year review.

"I think the likelihood is that we'll be making some representation," says Harper.

The MAC has already established an environmental assessment task force to prepare for the review. It's co-chairs are Maxine Wiber of Rio Algom and Bill Napier of Inco. PDAC representative on the task force is Gerald Harper.



Project will reveal Toronto geoscape

The Geological Survey of Canada is launching a project at next year's Mining Millennium 2000 that will provide students and the public with geoscience information about the Greater Toronto Area (GTA).

The project responds to widespread public demand for geoscience information, and is based on a similar successful project, Geoscape Vancouver.

Geoscape Toronto consists of a colorful multi-theme poster and supporting educational materials that promote understanding of the importance of the earth sciences in the GTA.

An Internet site will provide additional text, background information and references to

supplementary information.

The materials will be available in mid-2000.

Students are the primary audience for the project, with a particular focus on students in grades 7, 9 and 11. The project, however, is also directed toward urban planners, naturalists, industry, municipalities, tourists and the general public.

Geoscape Toronto reveals the ways in which the geological landscape affects activities and systems such as urban development, water resources, transportation systems, natural hazards, conservation plans and waste disposal.

With this understanding, land-use decisions can be made wisely, vital resources can be properly managed and the risk of hazards reduced or avoided. As a result, the Toronto area will remain liveable for future generations.

Themes currently under consideration are lakeshore processes, water, landforms, hazards, parklands, geology and resources.

Joining the Geological Survey of Canada as partners in the project are Mining Matters, the Royal Ontario Museum, the Ontario Science Centre, the University of Toronto and the Ontario Ministry of Northern Development and Mines/Ontario Geological Survey.

For more information about the geoscape concept, visit www.vancouver.geoscape.org.



Bacon 'n Eggheads serves up science

Members of Parliament, senators, senior bureaucrats and the media are discovering the excitement and the value of science through a series of breakfast meetings on Parliament Hill.

Called Bacon n' Eggheads, the meetings are held once a month in the West Block and attract an audience of some 80 people to hear a speaker discuss a particular branch of science.

The meetings are co-sponsored by the Partnership Group for Science and Engineering (PAGSE), a consortium of about 25 science and engineering societies in Canada, and the Natural Sciences and Engineering Research Council of Canada, the major funding agency for the physical sciences.

Jim Franklin, who represents the Geological Association of Canada on PAGSE and is an organizer of the breakfasts, says speakers are carefully selected.

They come from across Canada and must be able to talk about their area of interest in terms the lay person can understand.

The 30-minute talks have covered a range of topics: gene-splicing, climate change,

computer technology, discovery of diamonds, robotics.

"We ask the speakers to really emphasize the value of what they do, the application of it, the long-term view of where it fits in, why it's valuable for Canada," Franklin explains.

The intention is to encourage the audience to think about science and science funding, and about what Canada should be doing and what should best be left to other countries to do, he adds.

Speakers often bring their own props. At one meeting, robots scurried around the room, calling people by name; at another, the speaker gave out business cards that changed color in the recipient's hand.

"They illustrate the important things science is doing, but there's also a good sense of humour," Franklin says.



Ministers will exchange ideas at global industry forum

Mining Millennium 2000 will host the first World Mines Ministers Forum, a global gathering where those responsible for mining can share information and views on mining related issues.

The forum will be attended by mines ministers, senior government officials from mining jurisdictions around the world, mining company executives and representatives of non-governmental organizations.

Offering a rare networking opportunity, the forum is expected to be a consultative process that will highlight common issues and aid in the evaluation of policy approaches.

Special sessions will focus on topics such as: mining and the community; geological surveys in the information age; competitiveness of nations - the search for investment dollars; and sustainable mineral development.

Keynote speakers will deliver addresses in plenary session, and a series of interactive workshops will allow for in-depth examination and discussion of the issues raised.

For further details, visit the Mining Millennium 200 web site at www.miningmillennium.org and click on "special events."



Regulations republished this fall

New regulations affecting the form and content of technical reports will be republished for

comment this fall.

Canadian Securities Administrators are reviewing the draft National Instrument 43-101 (NI 43-101) over the summer and it is expected that the revised document will be ready for a second draft publication in September.

A draft of NI 43-101 was first published for comment last summer, following the release of the TSE/OSC Mining Standards Task Force report.

NI 43-101 will replace National Policy Statement 2-A and will have a profound effect on all Canadian public mining and exploration companies.

It regulates the preparation and filing of various technical reports on mining and exploration properties.

It also prescribes the form of technical reports submitted to securities regulatory authorities and standardizes the terms used in them.

Finally, it sets out the required qualifications of the geoscientists and engineers who prepare technical reports.

Meanwhile, work is continuing on other recommendations arising from the Mining Standards Task Force report.

In all, the report contained 66 recommendations, of which 43 affect the Toronto Stock Exchange. The exchange currently has 10 projects underway to implement those recommendations.



Convention dates

The dates for the PDAC conventions from 2001 to 2005 are:

March 11 - 14, 2001

March 10 - 13, 2002

March 9 - 12, 2003

March 7 - 10, 2004

March 20 - 23, 2005



Gold is key to timing of drugs

Gold is the key component in a new device that can release drugs into the body at specific times.

The device, a microchip that can store drugs, contains a gold cap that dissolves when an electrical current passes through it, releasing the medicine. Gold can be absorbed, then flushed from the body without ill effects.

The microchip device could revolutionize drug delivery.

While most implants and patches deliver drugs continuously over a period of time, the new device allows the patient or doctor to control the amount of drug being released and the exact time of delivery.

According to Gold News, the device was developed by scientists at the Massachusetts Institute of Technology .

The manufacturing process is described as being similar to making silicon wafer semiconductor devices that can be filled with any chemical substance.

The top of each reservoir is sealed with a thin layer of gold that contains electrical circuitry. If more than one volt of electricity is applied, the gold dissolves within seconds, releasing the chemical.

It is possible for the dime-sized prototype to contain up to 1,000 reservoirs, each a different size and each containing a different powder, liquid or gel. Each reservoir could be opened individually on command.

As well as being a vehicle for delivering drugs, the device might also be used in medical testing, releasing chemicals at precise moments during diagnostic tests.



Royal Ontario Museum boasts new gallery of earth science

Toronto has a sparkling new attraction to offer those attending Mining Millennium 2000 next spring.

The centrally located Royal Ontario Museum recently opened a 14,000-square-foot gallery of earth science that boasts a host of enticements for adults and children.

The exhibit, the largest ever presented in the museum, combines the traditionally separate disciplines of mineralogy, geology and palaeontology to explore the evolution of the planet Earth.

The overall theme of the gallery is the planet's evolution and formation, and Earth's processes and products.

"Dynamic Earth: Inco Limited Gallery of Earth Science," supported by a \$1 million donation from Inco, contains three theme areas: Earth: the Alien Planet; Restless Earth; and Treasures of the Earth.

Earth: The Alien Planet looks at the contribution of biology and geology to the planet's

formation.

Cartoon panels on the wall depict the story of the start of life on Earth, while a table underneath the mural displays the rocks, meteorites and fossils that took part in the story.

The Restless Earth shows the changing face of the Earth.

Within this area is an earthquake table exhibit that illustrates the effect of seismic waves and a Primordial Earth room, which uses ultraviolet light to depict an evolving Earth glowing with volcanic eruptions.

An interactive map describes patterns of volcanoes, earthquakes, plate boundaries and mountain ranges on the planet's surface.

The third area of the Earth Science gallery, Treasures of the Earth, features a Fluorescents Room and a Crystal Cave, as well as 800 mineral specimens grouped in rainbow-like displays of colour in large glass cases.

Here, interactive displays illustrate the constant shaping of Earth's surface by strong geological forces, and offer opportunities to learn about the colours, shapes and classifications of minerals and gems.

Also within the Earth Science gallery is the S.R. Perren Gem and Gold Room. Opened in 1993, the room displays more than 1,000 magnificent gemstones and pieces of jewellery.

As well as theme rooms, the Earth Sciences gallery contains three theatres, each using an unusual perspective for its presentations.

The circular Earth Theatre uses a rotating projector to present the Earth in Motion film in 360 degrees.

The film depicts images that tell the story of the planet's continuous development through the actions of volcanoes, earthquakes and water.

The Volcano Theatre projects film on the floor, and shows the forces that change the shape of the Earth's surface, such as lava flows.

Finally, the Minerals Theatre uses two screens to show the differences between micro and macro views of minerals and their stages of growth.

Those intending to visit the ROM's newest gallery can see a preview on the museum's web site at www.rom.on.ca/earth.