



MiningWatch Canada

Mines Alerte

A Disaster Waiting to Happen: Prairie Creek Mine

By Joan Kuyek, MiningWatch Canada
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The Prairie Creek mine, located just outside the boundary of the Nahanni National Park Reserve and World Heritage Site, is an environmental and financial disaster waiting to happen. The issues are numerous and somewhat complex. They involve the mine's poor location, toxic substances, regulatory oversight, Aboriginal lands, and the expansion of one of Canada's most famous National Parks. The article below attempts to set out the history of the mine and the company that owns it, problems at the site and other related issues in a manner that will assist people who care about the situation to act on it.

1. The mine, which includes complete mining infrastructure but has never operated, is located in the Northwest Territories on the flood plain of Prairie Creek, a tributary of the South Nahanni River, upstream from world-renowned Nahanni National Park Reserve, and poses serious threats to the ecosystem and wildlife.
2. The mine is in the Deh Cho First Nations (DCFN) traditional territory and poses a threat to traditional livelihoods and to future opportunities to develop their land in a sustainable fashion. The DCFN want the lands around the Park, known as the South Nahanni Watershed (SNW), to be protected.
3. The Canadian Zinc Corporation (CZN), owners of the mine, is a company with no history of operating a mine, and is depending on a sustained rise in the price of zinc and silver to make the mine profitable.
4. There have been environmental assessments on small individual projects and activities at the mine, but there has not been an assessment of the overall impact of this 20 year old site. This despite a history of fuels spills, heavy metals being discharged into Prairie Creek, and the presence of large amounts of toxic substances. Environmental assessments that have been completed have found the likelihood that proposed mining activities would likely cause significant adverse environmental impact, unless subjected to stringent conditions.
5. Parks Canada has identified mining activity as "the single greatest threat to the ecological integrity" of the South Nahanni River Watershed (Ecological Integrity Statement, page 10, September 2001).

¹ With thanks to Greg Yeoman and Jennifer Morin of CPAWS-NWT for review and editing. Errors, however, are the responsibility of the author.

6. The ores that CZN hopes to mine have high levels of mercury, arsenic and antimony. This calls into question the mine's economic viability, as it would be difficult to sell such ore concentrates to smelters.

7. Despite the 20 year old mine facility at Prairie Creek, it appears that no reclamation bond has been posted by the company. Independent analysis estimates the current costs of cleaning up the mine site are between \$3 million and \$5 million.

The Company.

Canadian Zinc Corporation was originally incorporated in British Columbia in 1965 as Pizza Patio Management Limited. In 1991 it changed its name to San Andreas Resources Corporation and then on May 25, 1999 to Canadian Zinc Corporation. Its head office is at Suite 1202, 700 West Pender Street, Vancouver B.C. V6C 1G8 (www.canadianzinc.com).

From 1965 to July 1991, the company was exclusively in the restaurant business as a franchise owner/operator of Pizza Delight Restaurants. In 1991, the Company sold its restaurant business and assets to Pizza Delight for \$53,000, and moved into the resource business.² The current management was not involved in the restaurant business. Present Directors are investment dealers and geologists. Canadian Zinc (CZC) has never operated a mine.

On March 29, 1993, an Asset Purchase Agreement was signed with Nanisivik Mines whereby CZN acquired a 100% interest in the Prairie Creek Property. The mining and surface leases are subject to a net smelter royalty of 2%, in favour of Titan Pacific Resources Ltd. The purchase price for the mineral interests was \$3,250,000 and was allocated \$2,750,000 to the land and \$500,000 to the plant and equipment.

On January 29, 2004, the company purchased back the 2% net smelter royalty interest as well as the 40% interest in the mine's physical plant held by Titan Logistics Corp in return for 300,000 shares and 250,000 share warrants.

According to the Company's 2002 Annual Information Return: "Between 1991 and May 2000, a number of Private and Brokered Placements took place to fund (the Company) and its exploration and development programs, primarily on the (Company's) Prairie Creek Property. At the end of May 2000, the Issuer had 23,959,852 common shares (far more now) issued and outstanding... At the Annual General Meeting held on May 25, 2000, a new board of directors consisting of Robert J. Gayton (CFO, VP Finance), Wayne D. Lenton, John A. MacPherson (Chairman), Dr. Hugh Morris, Dr. David Shaw and Malcolm J.A. Swallow (President and CEO) was appointed by the shareholders."

"During November 2001, John F. Kearney joined the Board and Wayne D. Lenton resigned from the Board. Dr. Hugh Morris resigned from the Board in December 2002 and was not replaced. The Issuer relies on equity financings to fund its financial commitments. Between May 2000 and the date hereof (May 2003), the Issuer has completed a number of financings to fund its on going programs, resulting in a total of \$620,089 being raised net of expenses, with a total of 36,138,169 shares of common stock issued and outstanding. The Company will need to raise additional funds to meet its commitments on the Prairie Creek Property for 2003 and to cover general and administrative expenses. The Directors are actively seeking sources of equity and other funding to ensure that the Company can continue in operation."³

² Company information is drawn from Canadian Zinc Corporation's Annual Information Return, May 15, 2003.

³ Canadian Zinc Annual Information Return 2003 available at www.sedar.com

By February 2004, the Board had undergone more changes. Malcolm Swallow, who had been CEO since June 2000 was gone, and John F. Kearney was CEO and President. At the date of this paper, the Board consists of Kearney, Robert Gayton, David Shaw, Alan Taylor, Alan Savage and John MacPherson.

The company raised considerable money in the fall of 2003 with a \$7 million private placement in October 2003 and another \$6 million in December 2003. \$2.5 million of the shares were supported by the Flow Through Share program of the Federal Government.

In January of 2001, the Company completed a Scoping Study designed to outline and guide the re-development of the existing mine and mill on the Issuer's Prairie Creek property in the NWT. The study identified a number of different development and production scenarios and said that a mining and milling operation on the site was feasible. The operation would take advantage of the existing mine and mill infrastructure put in place by the Hunt Brothers in 1982, but never operated. Indicated capital costs for the new operation are estimated to be CDN \$40.5 million, including the construction of an all weather access road to the site.

Zinc and Silver.

The successful financial operation of the mine is completely dependent upon the commodity prices for silver and zinc⁴. The mine was originally intended for silver production, but the price of silver dropped in the early 1980s when the Hunt Brothers attempted to corner the silver market and to date has never rebounded.

When Canadian Zinc came into play, there was a world over-supply of zinc. The LEM price for high grade zinc fell from \$1023.3 US/t in 1998 to \$780US/t in 2002. In August 2002, the price of zinc reached a 14 year low, and has gone up somewhat since then as larger producers cut back production.

The zinc at Prairie Creek is heavily contaminated with mercury and antimony. The company says that "Discussions with concentrate sales professionals and preliminary discussions with smelters indicate that the Prairie Creek concentrates will be readily saleable, subject to the payment of penalties for elevated impurity levels, including mercury in the vein zinc and copper concentrate."⁵ However, experts who reviewed the scoping study⁶ were not able to identify any smelters that would likely be willing to accept ore with the high amounts of mercury and antimony present in the zinc, silver and copper ores from the site. The concentrations are as high as 2000ppm of mercury in the zinc concentrate, 100 times the typical mercury concentration that is targeted for smelter feed. In the copper concentrate, antimony is 12 %, arsenic 5% and mercury 0.32%.

The same experts found that the cost of shipping ores to smelters – if one could be found to accept them – would be prohibitive.

⁴The Canadian Zinc website states: "Many analysts expect metal prices to improve significantly within the next two years. Zinc, the primary metal at Prairie Creek, continues to hover around its 14 year low. Copper and Lead, the other metals produced have suffered in a similar fashion, with only silver showing some improvement in price. Exchange rates for the Canadian dollar against the US dollar have also reacted unfavourably, with the US dollar value of sales decreasing against the Canadian dollar costs of the project. However, as the metals prices languish near their historical real lows, the recovery in prices when it comes will be sharp and prolonged since the current marginal producers will have been driven out of production. This continues to give the Directors encouragement to bring the Prairie Creek project forward. The Mine remains one of the highest grade undeveloped base metal properties in the world and a major Canadian resource."

⁵ Canadian Zinc Annual Information Return 2003

⁶ Unpublished study for the Canadian Parks and Wilderness Society November 2002.

The company then responded by returning to silver as the metal of focus at the mine, as “recovery in the silver market is expected within the next 18 months as high cost producers are forced out of business due to low prices” (CZN website). However, the silver is likely to face the same contamination issues.

There is no shortage of major companies with interests in high grade zinc in Canada, and even they have been shutting down mines and smelters.

- Myra Falls (British Columbia) was closed for three months in 2002;
- Teck Cominco cut production of zinc at Trail (British Columbia);
- Hudson Bay Mining and Smelting closed the Ruttan Mine (Leaf Rapids, Manitoba); and
- Noranda temporarily shut down the Bell Allard Mine (Matagami, Québec).

Increased demand is most likely to be supplied by these companies, unless CZN can keep its prices very low indeed.

Even if the enormous current reserves of zinc and silver were depleted and the price rose, the price recovery would stimulate more production, creating a new glut, and new falling prices. The boom and bust cycle will play havoc with this mine.

Zinc can also be produced from recycled metal and from refined dust from electric arc furnaces and from de-zincing galvanized steel scrap. Recycling is an increasingly important source of zinc.⁷ Silver can also be recycled and re-used with little difficulty.

The company itself recognizes the serious problems with this dependence and has been seeking to protect itself by diversifying into other products and metals. While a diversification strategy may protect shareholders, it would not, however, protect the Prairie Creek Mine. “The Company’s first step in diversification was to enter into an agreement to acquire a 50% option on the Damoti Lake Gold Project, situated East of Prairie Creek and 200 km North of Yellowknife, in the Northwest Territories. Damoti Lake is a well-developed, high grade, gold exploration play, with over \$14 million spent on it to date. Unfortunately after an extensive examination of the property and a program of re-interpretation of the data, the Company did not feel it could fund an ongoing exploration program from its current resources. As a consequence the property was returned to Doublestar. The Company continues to search for projects of merit and has examined a number of other opportunities during the year, none of which have come to fruition at this time. Gold prices represent one of the few high spots in the metals markets and consequently Canadian Zinc will continue to pursue projects of merit, particularly in gold.”⁸

No Existing Relationship with First Nations.

On December 10, 1996 the company completed the negotiation of the Prairie Creek Development Cooperation Agreement with the Nahanni Butte Dene Band (the “Band”) of the Deh Cho First Nations. The company has frequently referred to this agreement in their communications.

In October 2003, the Nahanni Butte Dene Band withdrew from the agreement with the company, and subsequently issued a press release stating they had terminated the agreement. The Band is concerned about the impacts of the mine⁹, and are supportive of protecting the lands in an expanded Nahanni National Park Reserve. No mention of the termination of the agreement has yet appeared on CZN’s website.

⁷ Patrick Chevalier, International and Domestic Policy Division, NRCAN website, “Zinc” December 2002.

⁸ CNZ website

⁹ Ed Struzik, The Edmonton Journal, 2001.07.11 Worries for Future of a Natural Wonder

The Deh Cho First Nations are closely involved with management of the Nahanni National Park Reserve, and are worried that the mine will damage the environment and revenues from tourism and traditional activities¹⁰

Recently, Nahanni Butte, Pehdzeh Ki First Nations and the DCFN filed for judicial review of the water license issued for a pilot metallurgic plant on the site, out of concern for the integrity of the tailings pond.

Ownership Issues.

The DCFN are currently involved in a land and governance negotiation with the federal government known as the Deh Cho Process. As part of the negotiations, an Interim Measures Agreement (IMA) has been signed, which sets out how lands will be managed during the balance of the negotiations. Over 70,000 km² of culturally and ecologically significant lands have been temporarily protected under the IMA. The Deh Cho sought to have the South Nahanni Watershed within their territory (about 80% of the entire watershed) included in the protected lands, but Canada wanted to leave parts of it open for mining development. The Deh Cho Process is still underway, and management control over the use of lands in the Deh Cho Region remains an issue.

There are questions about the actual rights of Canadian Zinc to the property. “The mining claims in which the (Company) has an interest have not been surveyed and, accordingly, the precise location of the boundaries of the claims and ownership of mineral rights on specific tracts of land may be in doubt”¹¹.

Reclamation Bond.

The mine has been undertaking advanced exploration, producing small amounts of product, without any security deposit or bond being in place. Recently the company was issued a water licence and land use permit to operate a ‘pilot plant’, essentially a small scale operation of the mine for a limited time, and the bond for the licence and permit totals \$100,000. Cost estimates to clean up the mine site are between \$3 and \$5 million.

When the company attempted to renew their surface leases for the mines airstrip and buildings in 1996, negotiations with the federal government did not result in new surface leases, reportedly because they could not reach agreement with the government on the size of a reclamation bond. The company claims that these un-renewed leases are held as a “tenancy at will” or as an “over-holding tenancy”. In late 2003, the federal government suddenly issued the surface leases. Groups who are interested in the issues surrounding the mine have been denied the opportunity to see the leases, on the basis of third party confidentiality.

Environmental Issues.

The mine is located on a flood plain with large boulder flats, immediately adjacent to Prairie Creek, in a mountain valley surrounded by karst landscapes and underground rivers.

¹⁰ Herb Norwegian, assistant negotiator for the Deh Cho First Nation, in an interview with CBC Radio, Sept. 19, 2000.

¹¹ CZN Annual Information Return

1. Water. The company will take water from the Prairie Creek Aquifer. The original 1982 water licence – permit N3L3-0932 – was to take 1,150m³/day and 420,000m³/yr from the Prairie Creek Aquifer. That license has since expired. Water draining from a mine portal, and entering into the creek, has exceeded limits for heavy metals set in the expired licence.

2. Tailings Pond. The tailings impoundment – constructed in 1982 – is located adjacent to Prairie Creek, just upstream of the minesite facilities. It was originally approved by the NWT Water Board under Water Licence N3L3-0932, but the licence has expired. The company claims that there is a thick underlying clay deposit, and that the design takes into account maximum flood potential of the drainage basin. There is a coarse rock berm with a dam that rises 14 feet above the berm. The company acknowledges that there has been some slumping of the dam and berm, and that work will be required to ensure the tailings pond is secure. The company also expects to use paste backfill to minimize the use of the tailings pond, and to include a polishing pond in the water treatment system. The environmental assessment conducted for the decline and pilot metallurgic plant, found that there were outstanding issues that had to be part of a water license:

- the engineering integrity of the tailings pond had not been certified and that there were ‘potentially serious risks of failure... of that facility’. The regulators wanted answers to the following questions: 1) is the tailings pond liner intact and impermeable, 2) is the underlying and surrounding soil stable, in light of ice-rich permafrost melting and subsidence in the tailing facility (particularly with respect to the sliding back slope and dam)?

As a result the Company would be required to file a favourable geo-technical assessment and engineering certification of the suitability of the tailings pond and of the proposed polishing pond before they can be used. The application for a permit was to be rejected if these were not produced. (Reasons for decision, MVEIRB full ref.) The requirement for the geotechnical assessment of the tailings pond was left out of the license issued to the Company, and replaced with prohibition on using the tailings pond. However, this removes a backup water treatment alternative, and the license is now subject to a judicial review brought by the Deh Cho First Nations.

3. Road access and the Nahanni Karst lands

The Company’s website (www.canadianzinc.com) makes many references to their need for an all-weather road into the mine, in order to make the mine profitable. A winter road was permitted in 1980 (Land use permit N80F24), but the permit has long since expired. The company made an attempt to re-open a forty kilometre section of the road in 2000, with its request for a permit to remove a fuel cache. However, the fuel was burned off instead and the permit application was dismissed.

CZN now have an application to the Mackenzie Valley Land and Water Board (MVLWB) for a permit to re-open the old winter road corridor. The MVLWB has performed a preliminary screening of the application, during which DCFN, Parks Canada, the Canadian Parks and Wilderness Society, and karst expert Dr. Derek Ford, along with over one hundred members of the public, expressed their concern about the environmental impacts of re-opening a road through the karst lands.

The proposed winter road would cross lands within the South Nahanni watershed which were recently granted interim protection as part of the Deh Cho Process. The lands are also currently under consideration for inclusion in an expanded Nahanni National Park.

In their permit application, CZN states that “it should be noted that only subdued appearances of karst features exist in the area of the access road corridor.” In fact, the proposed route passes through the heart of the Nahanni karst, and close by (less than one kilometre) specific features such as the assembly of the First, Second and Third Poljes, and within two kilometres of the Raven Lake Sinkhole.

In a paper title “Postscript To The McMaster University 1974 Report On The Nahanni North Karst,” November 5, 2001, Dr. Derek Ford describes the significance of specific features in the Nahanni karst. Several features, including Canal Canyon, Raven Lake Sinkhole, Karst Labyrinth, the assemblage of the First, Second and Third Poljes are described as unique in the world, in that no features of this quality are known to exist anywhere else. Dr. Ford concludes the paper by stating that the Nahanni karst, through which the road travels, “exhibits many features and assemblages that I judge to be unique at the world scale,” and recommends that they be incorporated into the Nahanni National Park Reserve.

Dr. Ford’s paper also notes that water drains underground through the karst formations. This is significant because karst waters flow underground at a much faster rate than water that travels through rock sand or gravel. This means that hazardous materials can spread quickly and without much change to them through the karst aquifers.

Karst drainage is also often much different than surface drainage. This means that contaminant spills on the road could travel quickly through the karst and come out directly into the South Nahanni river in the Nahanni National Park Reserve.

The road travels through sensitive wildlife habitat, which could be impacted by spills or erosion. Based on mapping of known habitat use, the Tetcela river valley has high concentrations of wildlife. The Tetcela river extending north from the east end of the Park Reserve provides habitat for Trumpeter swans, Woodland caribou, Dall sheep, moose, grizzly bear, fish and waterfowl.

CZN are attempting to avoid full environmental oversight, by claiming that their winter road application should be exempt from an environmental assessment, because of a grandfathering clause in the *Mackenzie Valley Resource Management Act (MVRMA)*. The Mackenzie Valley Land and Water Board will decide on the application in February 2004.

The road has been sold as a means to remove toxic chemicals from the mine site including 40 tonnes of cyanide as well as to transport ore concentrates, equipment and workers to and from the site. In places the old road is so steep the bulldozers have to be used to ascend the slopes. The road goes over ancient karst lands rich in caves, underground rivers and aquifers, and any spill is likely to flow underground.

Avoidance of a Full Environmental Assessment (EA).

The company is doing everything in its power to avoid a full EA of the project, making separate applications for each phase of the work¹². and hoping to rely on grandfathering 20 year old permits.

1. Understanding EA in the Northwest Territories

The Mackenzie Valley Resource Management Act (MVRMA) came into force March 23, 2000, and replaces the Canadian Environmental Assessment Act in most of the NWT.¹³ A Citizens Guide is available at http://collection.nlc-bnc.ca/100/200/301/inac-ainc/mackenzie_valley-e/mvrma_e.pdf

The Act established the Mackenzie Valley Land and Water Board (MVLWB) and the Mackenzie Valley Environmental Impact Review Board (MVEIRB). The Boards have representatives drawn from the Aboriginal peoples in the Mackenzie Valley as well as Government of the Northwest Territories appointed representatives. However, the Federal Minister of Indian and Northern Affairs (DIAND) still

¹² The company says it is following the advice of the MVLWB in this regard

¹³ The MVRMA does not cover the Inuvialuit settlement region.

approves the appointments and is required to sign off on Environmental Assessments (EA) conducted by the MVEIRB. There have been occasions where the Minister has sent EAs back for re-consideration, and earlier this year, he dismissed a member of the MVEIRB.

The complicated permitting process for Prairie Creek Mine to date is described below.

2. Permits issued to Canadian Zinc Corporation under Mackenzie Valley Resource Management Act

July 28, 2000 – CZN application to MVLWB to **drill holes and recover a fuel cache** from a its storage site away from the mine at the ‘Cat Camp’ (the diesel fuel had been stored there since 1982). The application (MV2000C0030) for drilling and fuel cache retrieval was submitted under one land use permit application. The MVLWB referred the application to MVEIRB. CZN submitted a detailed project description at the MVEIRB’s request on October 25, 2000. The Review Board decided to split the application into two separate projects for the EA: 1) mineral exploration – **drilling 7 holes** – Class A, and 2) the removal of the **Fuel Cache**, which required upgrade of the old access road to all-weather status.

The permit to drill holes was granted June 27, 2001.

CZN submitted its EA report in regard to the fuel cache on January 26, 2001. The MVEIRB finished the EA on the fuel cache May 9, 2001. They found that the fuel removal can go ahead using a winter – not all-season – road. However, on June 9, 2001 Environment Canada directed DIAND to remove the diesel fuel immediately, because the storage tanks were leaking. DIAND then paid \$400,000 to the Nahanni Butte Dene Band to incinerate the fuel in March 2002. On June 17, 2002 the DIAND Minister ordered the MVEIRB to reconsider the permit application and EA findings, since there was no longer any fuel at the Cat Camp. **The MVEIRB dismissed the EA proceeding on July 11, 2002**, avoiding a determination on the road.

March 5, 2001. CZN submitted applications to the MVLWB for following developments:

1. **Surface exploration up to 60 drill holes** – Class A land use permit application MV2001C0022; this application was referred to the MVEIRB by both Parks Canada and the Pehdzeh Ki First Nation (a member of the DCFN). This application was severed from the other two (see below) by the MVEIRB and the **Permit was granted Dec 6, 2001.**
2. **Portal and underground decline** – Class A land use permit application MV2001C0023, and
3. **Metallurgic plant operation** – Type B Water licence permit application MV2001L2-0003

The three applications were referred to MVEIRB on April 19, 2001. The **EA was completed January 2, 2002**, and sent to the DIAND Minister for approval. He sent it back for reconsideration in September 2002. The reconsidered decision was then submitted to the DIAND Minister **April 4, 2003**, with conditions attached to approval: have to provide a geotechnical assessment certifying that both the tailings pond is secure and the site for polishing pond is suitable for such use. However, **a water license without the tailings pond geotechnical assessment was issued by the MVLWB Sept. 10, 2003.** Instead of the geotechnical assessment, the MVLWB prohibited the use of the tailings pond altogether, which removes an alternative water treatment option; and required that the polishing pond itself be the subject of a geotechnical assessment, not the site to be used for the pond, which is counter to the conditions set by the Minister of DIAND in the EA reconsideration. Deh Cho First Nations, Nahanni Butte, Pehdzeh Ki First Nations then sought **judicial review** of the water licence because it did not incorporate the conditions recommended by MVEIRB and the Minister. The matter is still in the legal process.

Sept. 24, 2003. CZN makes an application (MV2003F0028) to MVLWB for a winter road to the mine site to support site cleanup and advanced exploration activities at the Mine. The MVLWB invited submissions regarding environmental impacts and any public concern related to the application. Submissions by Parks Canada, DIAND, the DCFN, CPAWS and karst expert Dr. Derek Ford called for an environmental assessment of the application.

The MVLWB then conducted a “written submissions only” public hearing on the legal question regarding “the need for a preliminary screening **based on Sec 157.1** of the MVRMA in its entirety.” **Deadline for submissions was Nov 21, 2003.** It is clear that, following the Cantung court decision of January 9, 2003, the Company is testing to see if the permits issued for the former mine and road over twenty years ago are still valid.

“Application of Part 5 of the MVRMA:

157.1 Part 5 does not apply in respect of any licence, permit or other authorization related to an undertaking that is the subject of a licence or permit issued before June 22, 1984, except a licence, permit or other authorization for an abandonment, decommissioning or other significant alteration of the project.”

The MVLWB is expected to make a decision on whether or not the road application is exempt from EA in March 2004.

Chronology of Events

- 1980 – Land use permit N80F249 for a winter road from Liard Highway to PCM (lapsed)
- 1981-3 – Hunt Brother's Cadillac Inc. builds mine, using Cat Camp as staging area
- 1982 – water licence N3L3-0932 to use 1,150m³/day and 420,000m³/yr from the Prairie Creek Aquifer
- 1984 – Cadillac Inc. goes bankrupt
- 1991 – CZN give up Pizza and acquires property.
- 1995 – Environmental and geo-technical studies were carried out to facilitate the pre-production permitting process. A project description report was compiled by Rescan Environmental Ltd. and filed with the Northwest Territories Regional Environmental Review Committee (RERC) in Yellowknife. This report contains details of the environmental work completed on behalf of the Company at the Prairie Creek Property. The report was filed to elicit terms of reference for an initial environment evaluation report. A land use permit application for upgrading the access road to an all-weather road was also filed with the appropriate government agency. No decision was made. It appears that the application was not pursued because the road aspect would have triggered a full review of the project under CEAA.
- 1995 – mining company uses road as far as km 17 under permit N95C373
- 1996 – CZN (then called San Andreas Resources) signs Prairie Creek Development Agreement with Nahanni Butte Dene Band.
- January 2000 – new management agreement at CZN
- March 23, 2000 – MVRM Act comes into force.
- July 28, 2000 – application to MVLWB to 7 drill holes and recover fuel cache from Cat Camp (means rehabilitating 40 kilometres of the old winter road for all weather use)
- March 5, 2001 – Application to drill 60 holes, application for metallurgic plant and application for underground decline all submitted.
- April 19, 2001 – 60 holes, met plant and decline all referred to MVEIRB
- May 9, 2001 – EA on fuel cache finished – MVLWB says okay – but winter road only
- June 9, 2001 – Environment Canada orders DIAND to burn off fuel at Cat Camp to prevent continuing leakage
- June 27, 2001 – drilling 7 holes permit granted
- Dec 6, 2001 – 60 holes permit granted
- Dec 10, 2001 – silver price bottoms out; zinc also low
- January 2001 – CZN completes scoping for feasibility study

February 6, 2002 – MVEIRB finishes EA on metallurgic plant and decline, submits it to DIAND Minister

March 2002 – DIAND incinerates fuel at Cat Camp

June 17, 2002 – DIAND orders MVEIRB to reconsider fuel cache decision

July 11, 2002 – Fuel Cache application dismissed

January 2, 2002 – EA on decline drill and metallurgical plant completed by MVEIRB

August 2002 – zinc prices reach all time low

September 03, 2002 – DIAND Minister sends decision back to MVLB with conditions attached

December 24, 2002 – MVEIRB makes info request re: tailings pond and polishing pond to CZN

January 31, 2003 – response from CZN re: tailings and polishing ponds

September 10, 2003 – land use permits and water licence for metallurgic plant and decline issued without MVEIRB conditions by MVLWB.

September 16, 2003 – zinc prices improve slightly; CZC shares go from 20 cents to 70 cents (silver prices are up to \$5.20 US/ounce),

September 24, 2003 – winter road application filed

October 8, 2003 – CZN announces \$2.5 million private placement of 2.5 million flow through shares

October 22, 2003 – expands private placement to \$7 million

October 10, 2003 – Deh Cho and others file for judicial review of water licence

November 21, 2003 – deadline for winter road submissions on application

December 5, 2003 – further expansion of private placement by another \$6 million in a bought deal with Haywood Securities and McFarlane Gordon Inc.

December 16, 2003 – LME states zinc price is \$.45/lb and inventory is 743,100 MT (up from \$.36/lb with 693,360 MT in June, 2003)

December 31, 2003 – Extraordinary Shareholders meeting where further ‘flow through’ shares approved.