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## What you should know about Exxon/Rio Alcom's proposed mine at Crandon/Mole Lake. 1996

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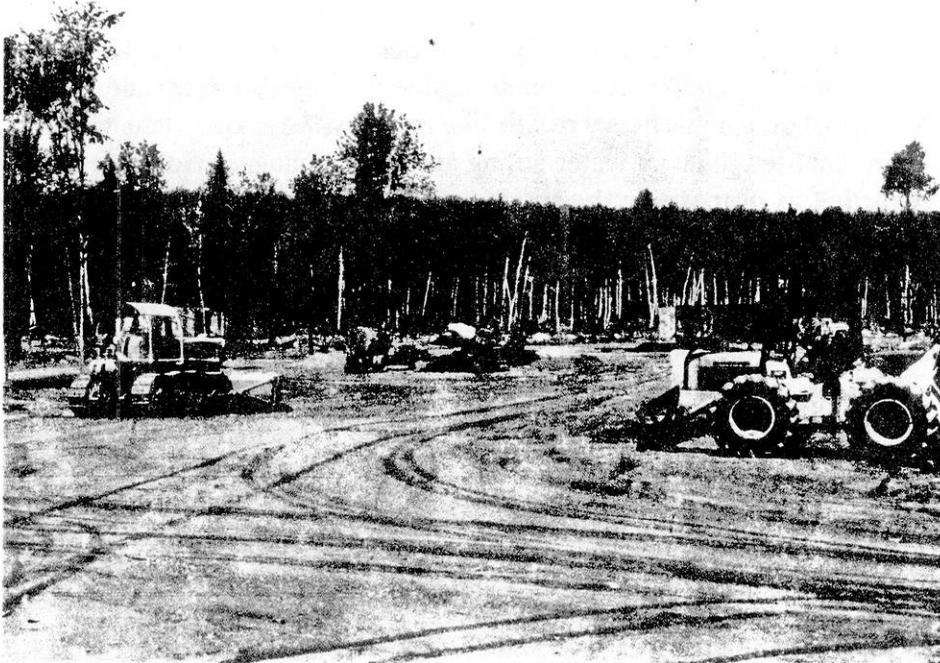
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**WHAT YOU SHOULD KNOW ABOUT**  
**EXXON/RIO ALGOM'S**  
**PROPOSED MINE AT CRANDON/MOLE**  
**LAKE**



**Compiled by Al Gedicks, Exec. Secretary**  
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**Revised and Updated, March 1996**

## Environmental Aspects

### 1. Basic description of Exxon/Rio Algom's (CMC- Crandon Mining Company) proposed mine

a. one of the largest zinc/copper deposits in North America (source: Exxon Coal and Minerals: A Profile, 1991, p. 4) The ore body itself is a vertical slab about one mile in length, averaging 200 feet in width, and extending to a depth of 2800 feet. Exxon proposes to dig an underground mine to extract 55 million tons of zinc-copper over about 25 years.

b. these minerals are found as massive sulfides, or rocks formed by minerals in combination with sulphur. Unlike iron mining, sulfide rock can produce sulfuric acid, as well as high levels of poisonous heavy metals like mercury, lead, zinc, arsenic, copper and cadmium, when exposed to air or water during and after mining. **Acid mine drainage is generally regarded as potentially the single largest cause of negative environmental impacts resulting from mining.**<sup>1</sup>

c. problems of acidity and radioactivity are linked: acid formation will lower the pH of the water and lead to the further dissolution of radionuclides, metals, and other toxic substances.<sup>2</sup> Exxon and the DNR admit there is uranium in the orebody but emphasizes that there are only trace amounts that do not exceed the background levels found in most types of bedrock.<sup>3</sup> However, in a survey of various sulfide mines producing copper, lead and zinc, the U.S. Environmental Protection Agency found that even where the total uranium content was below detection levels, radon daughter concentrations were at levels which posed potential health hazards to mining personnel.<sup>4</sup>

d. mine wastes have poisoned over 10,000 miles of rivers, according to the U.S. Bureau of Mines. The release of mine wastes into the environment has resulted in many cases of fish kills, such as the dramatic trout kill on Montana's Clark Fork River and the recent cyanide spill from a gold mine in Guayana, South America, that resulted in dead fish and hogs floating down Guyana's biggest river.<sup>5</sup> About 60 Superfund sites are abandoned

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<sup>1</sup> Beverly A. Reece, "Acid Mine Drainage: Perpetual Pollution," *Clementine*, Mineral Policy Center, Winter 1995, p. 3.  
<sup>2</sup> Earle A. Ripley et. al., *Environmental Effects of Mining*. Delray Beach, Florida: St. Lucie Press, 1996. pp. 209-210.  
<sup>3</sup> Don Behm, "Study shows little uranium at mine," *Milwaukee Journal/Sentinel*, 2/20/96.  
<sup>4</sup> *Natural Radioactivity Contamination Problems*. Washington, D.C: U.S. Environmental Protection Agency, Office of Radiation Programs. February 1978. p.47.  
<sup>5</sup> Bert Wilkinson, "Cyanide spill Guyana's worst environmental disaster," *Wisconsin State Journal* 8/23/95.

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mines. More than a dozen of these are currently active and pose both human health and environmental problems.<sup>6</sup>

e. Because of the location of the proposed mine at the headwaters of the Wolf River, in an area with high rainfall and numerous wetlands and streams, Exxon's own engineer said "You couldn't find a more difficult place to mine."<sup>7</sup>

## 2. The largest toxic waste dump in the history of Wisconsin

a. over its lifetime, the mine would generate about 44 million tons of wastes. Half of the waste--rocky "coarse tailings" would be dumped to fill up the mine shafts. The other half of the waste--powdery "fine tailings"--would be dumped into a waste pond about 90 feet tall and covering 355 acres. **At a size of about 340 football fields, it would be the largest toxic waste dump in Wisconsin history.** It would be larger than most towns in the state.

b. the wastes would have to be isolated from the environment forever. Exxon proposes to put a cover on the top and a liner on the bottom.<sup>8</sup> Basically, we're talking about a big plastic bag sitting at the headwaters of the Wolf River. All liners leak.<sup>9</sup> The Wisconsin DNR says that as presently designed, the proposed clay liner at the bottom of the mine waste "would not provide adequate protection to the groundwater."<sup>10</sup> According to Jerry Goodrich, president of the Crandon Mining Company, the plastic liner underneath the toxic mine waste will dissolve in 140 years. **"We're saying after 140 years it vaporizes. It's gone."**<sup>11</sup>

c. Exxon has not provided any details about its perpetual monitoring plans in any of its written submissions to the DNR. The U.S. Fish and Wildlife Service criticized CMC for

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<sup>6</sup>Van E. Housman and Stephen Hoffman, "Mining Sites on Superfund's National Priorities List - Past and Current Mining Practices," U.S. Environmental Protection Agency, Washington, D.C., 1992.

<sup>7</sup> Cited in Larry Van Goethem, "Exxon Mine Will Feature Elaborate Waste Water Plan," *Milwaukee Journal*, 3/28/82.

<sup>8</sup>The warranty life of the synthetic material used in the cover system is typically 50 years. Exxon's responsibility for the cover/liner system does not extend beyond 40 years. After that, the costs of monitoring, maintaining and replacing the cover/liner system will fall on the taxpayers. Assuming that replacement is required once every 100 years and the waste dump remains in place for 10,000 years, the 100 cover replacements would cost \$800 million dollars. (see David Blowes's comments to the Public Intervenor, July 1995).

<sup>9</sup> Beverly A. Reece, "Leaks and Liners 101," *Clementine*, Summer 1995, p. 3. Washington, D.C., Mineral Policy Center.

<sup>10</sup> William Tans, "Updated status report on the Department's continuing review of the proposed Crandon mine," January 30, 1996, p.4.

<sup>11</sup> Ed Culhane, "Project pits environment vs. good business," *Post-Crescent* (Appleton), 12/3/95.

failing to take into account **the long term ground water contamination from the mine/mill which could persist for 9,000 years.**<sup>12</sup>

d. future generations will face the ever-present threat of the mine waste ponds either flooding or collapsing. The U.S. Fish and Wildlife Service says that the waste dump "should either be designed for guaranteed protection of the resources in perpetuity, or the project should be postponed until such technology is available"<sup>13</sup> The lesson of the recent mine waste disaster in Guyana is that the best available technology at the time may be inadequate to stand the test of time.<sup>14</sup>

e. there are no examples of successfully reclaimed metallic sulfide mines where the mine is closed, the water treatment plant is shut down and the water runs pure and clean. The U.S. Forest Service says that "there are major technical uncertainties associated with the prediction of acid drainage potential at the time of mine plan approval as well as with mitigation or treatment techniques for post-mining use."<sup>15</sup> In other words, if you can't predict which wastes will result in acid drainage, you can't develop controls to prevent acid drainage. Once started, acid drainage cannot be shut off; it becomes a "perpetual pollution machine."<sup>16</sup>

f. CMC's own plans for containment of the mine wastes have been criticized as inadequate and lacking scientific support by an independent mine waste expert hired by the former Public Intervenor.<sup>17</sup>

g. In April 1995, the national conservation group American Rivers added the Wolf River to its list of the nation's 20 most threatened rivers due to the pollution threat posed by the proposed CMC mine. The Wisconsin State Council of Trout Unlimited has passed a resolution opposing any permits for the proposed mine.<sup>18</sup>

### 3. Groundwater Drawdown

a. Exxon's proposed mine could cause a drastic and irreparable drop in the water levels of lakes and streams in a four-square mile area. Over about 28 years, it would pump out up

<sup>12</sup>see comments of Janet M. Smith on the proposed Crandon project, U.S. Department of the Interior, November 1994.

<sup>13</sup>see comments of Janet M. Smith.

<sup>14</sup> Desiree Kisson Jodah, "Courting Disaster in Guyana," *Multinational Monitor*, November 1995.

<sup>15</sup>*Acid Drainage from Mines on the National Forests*, U.S. Forest Service, Washington, D.C., March 1993, p.3.

<sup>16</sup>Beverly A. Reece, "Acid Mine Drainage: Perpetual Pollution," *Clementine*, Mineral Policy Center, Winter 1995, p. 3.

<sup>17</sup>see comments of David W. Blowes, Ph.D. on CMC's waste characterization studies, July 1995.

<sup>18</sup> "Council opposes Crandon mine," *Wisconsin Trout Unlimited*, Fall 1995.

to 1,000 gallons of water **per minute, over one MILLION a day**, from the half-mile-deep shafts.<sup>19</sup> According to the Public Intervenor, "the protection of public rights in water is an absolute limit on DNR's ability to permit this project, so this issue becomes crucial."<sup>20</sup>

b. there is serious disagreement between DNR consultants, CMC and Dr. Douglas S. Cherkauer, an independent expert on groundwater hired by the Public Intervenor on the key issues of the connection between groundwater and area lakes. CMC and its consultants have argued there is little, if any connection, between the lakes and the groundwater system. If this groundwater model is accepted, the data would seem to show an insignificant water drawdown from mine pumping.

c. this is exactly the scenario that occurred during the permitting process in the 1980s. "Exxon at that time designed its model so as to minimize likely impacts on the lakes. When the model's shortcomings were pointed out, Exxon essentially refused to modify the model to simulate a reasonably conservative set of conditions."<sup>21</sup> Based on an examination of CMC's data, Dr. Cherkauer concluded that the data do not support CMC's argument of minimal connection between the lakes and the groundwater. Quite to the contrary, "The lakes currently provide recharge to the groundwater system. Declines in ground-water heads due to mine pumping will induce more water to flow out of these lakes, thus upsetting the water balance of their water budgets."<sup>22</sup> This is like the bottom of a bathtub when the water is draining out.

d. most recently, divers in Little Sand Lake, less than a mile from the mine site, have confirmed the existence of spring holes in the bottom of the lake. The U.S. Geological Survey has confirmed that rock samples taken from the lake bottom indicate groundwater spring activity fed through the lake bed.<sup>23</sup> The DNR has done further drilling at the site to determine the extent of this connection.

e. in order to mitigate the groundwater drawdown, CMC proposes to pump water from deeper levels of the aquifer. According to Dr. Arthur S. Brooks, a biologist hired by the Public Intervenor, "the net effect of mitigation pumping will be to alter the natural flow of groundwater and to disperse toxic metals from the project site through a diffuse system of streams and lakes."<sup>24</sup>

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<sup>19</sup>CMC Mine Permit Application, May 30, 1995, p. 53.

<sup>20</sup>Waltraud A. Arts, Comments on the DNR's draft EIS on the Crandon Project, June 19, 1986, p. 14.

<sup>21</sup>Dr. Cherkauer, cited in Laura Sutherland's comments to the Army Corps of Engineers, February 24, 1995, p. 12.

<sup>22</sup>cited in Laura Sutherland, 1995, p. 14.

<sup>23</sup> "Mining Impact Group Disputes Lake Study," *The Forest Republican*, 11/8/95.

<sup>24</sup> Dr. Arthur S. Brooks, "Comments on the DEIS' Description of Water Impacts of the Crandon Project," June 1986, p. 9.

f. The U.S. Army Engineer Waterways Experiment Station said that Exxon/Rio Algom's groundwater model is "not suitable" to analyze the potential effects of groundwater drawdown. Instead, they recommended that the modeling be done by independent scientists because "with even state-of-the-art models one could bias the results to show any desired result from the project."<sup>25</sup>

#### 4. Wastewater Discharge to the Wisconsin River

**"If we can't protect the Wolf, there'll be no Crandon mine." Jerry Goodrich, CMC president.** *Appleton Post-Crescent* 4/24/95.

a. the day after American Rivers designated the Wolf River as a threatened river, Exxon announced it was abandoning its plans to dump treated waste water into the Wolf River. Instead, the company said that it would build a 40-mile pipeline and divert the waste water into the Wisconsin River near Rhinelander. Because the Wisconsin River is not as protected as the Wolf, the company would not have to spend as much treating the discharge.

b. this new plan threatens pollution of both the Wolf and the Wisconsin rivers. The threat to the Wolf remains because the mine wastes would still be stored at the headwaters of the Wolf. The discharge of waste water into the Wisconsin could result in the bioaccumulation of heavy metals in aquatic organisms and changes in the natural species composition of the river.<sup>26</sup> The Wisconsin State Council of Trout Unlimited has said that "Wastewater that is unacceptable to an 'Outstanding Resource Water' like the Wolf River is no more appropriate to discharge below a paper mill and hydroelectric dam on Wisconsin's namesake river."<sup>27</sup>

c. the plan could actually increase groundwater depletion in the area of the mine because of the amount of water necessary to pump the wastes to Rhinelander.

d. the DNR has not collected baseline data on the heavy metals already in the river below the Hat Rapids dam and therefore has no scientific basis to conclude that Exxon/Rio Algom's wastewater discharge could meet the state's effluent limits for pollutants that have the potential to accumulate in river organisms.

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<sup>25</sup> "Evaluation of Groundwater Modeling at the Crandon Mining Site," Department of the Army, Waterways Experiment Station, Corps of Engineers, Vicksburg, Mississippi, February 21, 1996.

<sup>26</sup> Dr. Arthur S. Brooks, "Comments on the DEIS' Description of Water Impacts of the Crandon Project," June 1986, p.10.

<sup>27</sup> *Wisconsin Trout Unlimited*, Fall 1995.

e. will other companies that discharge wastewater into the Wisconsin River such as the Rhinelander Paper Company be required to reduce its discharges to make room for Exxon/Rio Algom's new pollution source?

f. Exxon/Rio Algom's pipeline discharge to the Wisconsin River is a substantial departure from the wastewater disposal methods discussed in the company's formal Notice of Intent. Residents downriver from the proposed discharge have not had an opportunity to become informed about what is being planned and to have their questions and concerns become part of the Scope of Study. Despite a formal request for a hearing made by Environmentally Concerned Citizens of Lakeland Areas (ECCOLA), the DNR refused to hold a public hearing. According to DNR Secretary George Meyer, the citizens of Lincoln County are aware of the company's proposal because of "statewide and local media coverage."<sup>28</sup> At the time of Meyer's statement, there had been no mention of the pipeline proposal in either of the county's weekly papers. After ECCOLA decided to hold its own hearing on the pipeline proposal the DNR gave in to public pressure and agreed to hold a public hearing on May 8, 1996. Call ECCOLA for time and place (715) 453-3676 or 453-8769.

### Socio-Economic Aspects

"More than half of state residents don't think the economic benefits of expanded mining in Wisconsin are worth the risks to the environment"

*Results of a recent poll of Wisconsin residents conducted by Cooper & Secrest Assoc. December, 1994*

"All the mining company talks about is jobs and maybe back in the 1970s, jobs were needed. But now, anybody who wants a job in Forest County can get one. The Mole Lake and Carter casinos have changed the county's unemployment situation. For the first time ever, I've seen an employment agency in Crandon."

Duanne Derickson, tribal planner for the Mole Lake Chippewa Tribe. in *Green Bay Press Gazette*, 7/23/95

"The mining companies' economic growth projections weren't worth the paper they were written on."

A former mayor of Craig, Colorado, a coal boom town.<sup>29</sup>

<sup>28</sup> Letter from DNR Secretary George Meyer to Jim Wise, ECCOLA, January 4, 1996.

<sup>29</sup> Freudenburg, William, "Social, Economic and Environmental Impacts of Mining: Lessons for Wisconsin." A report to the Wisconsin State Assembly Committee on Natural Resources, August 1993, p. 18.

## 1. Will Mining Bring Economic Prosperity to Northern Wisconsin?

Exxon and Rio Algom have promised major economic benefits from mining jobs and taxes with no negative effects on the local economy either during or after the project. Unfortunately, these rosy economic projections are not supported by evidence from other mining communities or from the track record of either Exxon or Rio Algom.

a. the predictions used to assess economic impacts are often just "shots in the dark." The literature on socio-economic projections has shown that the margin of error in the past commonly reaches average levels of 100 percent. The main reasons for this high margin are the lack of accurate data for exact employment, poor or inadequate baseline predictions, and assessing areas of impact which cross jurisdictional borders of communities with different decision-making powers.<sup>30</sup> Neither Exxon/Rio Algom, nor its contractors have shown any evidence that the local labor force has the necessary job skills required by Exxon contractors. A number of recent studies of job growth show that, on average, **only about 25% of new jobs go to local residents.**<sup>31</sup>

b. in making these rosy economic projections, CMC has defined the study area to include the entire three-county area including Forest, Langlade and Oneida counties. This broad choice of definition insures that the economic contribution of the project will appear much higher than it would if the analysis were done only on Forest County, only on Mole Lake, or any other subregion of the 3 county area. It also assures that the relative concentration of benefits in certain subareas will be disguised.<sup>32</sup> For example, CMC says the project will be composed of "local area residents and workers that will migrate to the area." CMC does not consider a third category, namely, workers who commute in to the study area to work. These workers, who commute in, but live elsewhere, do not contribute to the direct or indirect economic output of the study area. It is likely that most of the permanent employees will not live at Mole Lake, in the Towns of Lincoln or Nashville, or even in the whole of Forest County.

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<sup>30</sup> Murdock, Steve H., Larry Leistritz, and Rita R. Hamm, "The State of Socioeconomic Analysis: Limitations and Opportunities for Alternative Futures." Paper presented at the annual meeting of the Southern Association of Agricultural Scientists, Biloxi, Mississippi, February 1985. Cited in "The Socioeconomic Impact of Mining in Wisconsin: A Report to the Wisconsin State Legislature, Assembly Natural Resources Committee," with assistance from William R. Freudenburg, Ph.D., University of Wisconsin, Summer 1995.

<sup>31</sup> Timothy J. Bartik, "Who Benefits from Local Job Growth: Migrants or the Original Residents?" *Regional Studies*, Vol. 27, No. 4, 1992, p. 297.

<sup>32</sup> Mike Wyatt, "Review of Crandon Mining Company Environmental Impact Report, Section 3.14 on Socioeconomics, and Section 4.2.13 on Socioeconomic Impacts." August 25, 1995,

## 2. Mining Projects Are Often Associated with Rural Poverty

c. CMC's estimate of the number of in-migrants is based on the number of job slots open. But experience shows that major project areas attract many more than this number of people to relocate there. Mining communities frequently attract more workers than can be employed, creating high rates of unemployment in mining communities.<sup>33</sup> The problem is that "as jobs develop in a fast-growing area, the unemployed will be attracted from other areas in sufficient numbers not only to fill those developing vacancies, but also to form a work-force that is continuously unemployed."<sup>34</sup> This is one of the reasons why resource extraction is closely related to increased poverty in the affected area. A study which looked at the counties of the northeastern U.S. found that unemployment in extractive-based counties was consistently higher than in other types of non-metropolitan counties.<sup>35</sup> Median income levels are often lower than those in non-extractive based local economies.<sup>36</sup> **The weight of available evidence shows that areas dependent on mining have much higher levels of poverty than do other rural regions and communities.**

d Many of the 400 promised "permanent" jobs will likely go to skilled miners who migrate to the area in search of mining employment. As of September 1995, the White Pine copper mine/mill, which is the largest employer in the western Upper Peninsula of Michigan, laid off 1100 miners.<sup>37</sup> These skilled workers will certainly be hired ahead of local people without this experience.

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<sup>33</sup> Tickamyer, A.R. and C.H. Tickamyer, 1988 "Gender and Poverty in Central Appalachia." *Social Science Quarterly* 69(4): 874-891. This finding is not limited to the extreme case of Appalachia. For example, of urban areas where jobs grew 50% faster than average from 1975-1979, almost half had unemployment rates above the national average in 1979. See Thomas Power, *The Economic Pursuit of Quality*, pp.156-158.

<sup>34</sup> Molotch, Harvey. 1976 "The City as a Growth Machine: Toward a Political Economy of Place." *American Journal of Sociology*, 82(2): 309-332.

<sup>35</sup> Krannich, Richard S. and A. E. Luloff, 1991. "Problems of Resource Dependency in U.S. Rural Communities," *Progress in Rural Policy and Planning*, 1: 5-18.

<sup>36</sup> Freudenburg, William R. and Robert Gramling. 1993. "Natural Resources and Rural Poverty: A Closer Look." *Society and Natural Resources* 7:5-22. Also, see Humphrey, Craig R. et. al. 1990. "Theories in the Study of Natural Resource-Dependent Communities and Persistent Rural Poverty in the United States," pp. 136-172 in *Persistent Poverty in Rural America*. Boulder, Colorado: Westview Press.

<sup>37</sup> Paul Peterson, "White Pine Mine to close in September," *Milwaukee Journal/Sentinel*, 7/13/95.

### 3. Mining Does Not Provide a Stable Economic Base for Communities

e. the sudden shutdown of the White Pine copper mine/mill illustrates the dangers of being dependent on a single industry. When a local economy (and the tax base) depend heavily on one industry, the economy in that area is unstable. Exxon says it will operate the mine for about 30 years, but the company is not prevented from shutting down before then. In Ladysmith, the Flambeau Mining Company, only in operation since 1993, has already received permission from the DNR to speed up production in order to shut down its mine a year ahead of schedule.

f. even if a worker has a secure job with Exxon, it is not clear that the employee's health and safety will be assured. In 1989, Exxon had the worst mine safety record among the 20 largest underground mining firms in the U.S.<sup>38</sup>

g. a huge project based on zinc, a metal in its "worst situation since the 1930s," is clearly not a stable or reliable investment.<sup>39</sup> When Exxon withdrew from the Crandon project in 1986, it cited the low price of zinc, which at the time was selling for 44 cents a pound. But when the project was restarted in 1993, the price stood at 44 cents a pound.<sup>40</sup> The Canadian industry newspaper *The Northern Miner* has extensively reported on the low price of zinc, due to a "gross oversupply," and the reduced use of zinc in auto sheeting. It has cited reports stating that "In the longer term, there are no real growth markets for zinc...use is forecast to fall."<sup>41</sup>

h. in 1982, Exxon pulled out of a giant shale oil project near Parachute and Rifle, Colorado, after spending \$400 million to get started. Overnight, 2,100 people lost their jobs, and 7,500 support workers faced an uncertain future. Local business people lost their shirts since they had invested heavily in the new business they expected. Even after Exxon's pullout, outdated job publicity continued to attract a transient unemployed population, and placed added burdens on social service agencies just as those services were being cut back.<sup>42</sup> Big multinational corporations can afford to write off millions of dollars. Local communities can't.

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<sup>38</sup> "Exxon Kills the Canary," *Multinational Monitor*, October 1990.

<sup>39</sup> *Engineering and Mining Journal*, 3/94, p. 19.

<sup>40</sup> *Milwaukee Journal*, 12/11/86; *Wall Street Journal*, 11/8/93.

<sup>41</sup> *The Northern Miner*, 12/12/94 and 4/4/94.

<sup>42</sup> Gulliford, Andrew, *Boomtown Blues: Colorado Oil Shale, 1885-1985*. Niwot, Colorado: University Press of Colorado, 1989.

#### 4. Mining Projects have Significant Social and Economic Costs

i. CMC underestimates the public costs and overestimates the public benefits generated by the project. They say "The project is not expected to place any direct requirements for public services such as fire protection or security upon local governments in the area." This statement seems absurd on the face of it. A huge project like this will have major direct impacts upon municipal service costs. CMC's own data show that most schools are at or near capacity. If excess capacity is not available, the project will be responsible for significant public capital investment costs. The same is true for Crandon municipal wastewater treatment.

j. The best-documented side effect from mining is the boom and bust effect, whereby local communities gain from income during a mining operation, but expend their budgets supporting an increased population, and are left holding the bag after the company closes operations. These post-operation costs include physical clean-up (as in Rio Algom's shutdown of its East Kemptville mine in Nova Scotia <sup>43</sup>, sudden large-scale unemployment, and an inability to pay for enlarged school systems and city services.

k. boomtown residents are more likely to experience "unusually high levels of life stress, which arise not only from the amount of change in their lives, but also from the deficits and frustrations resulting from overworked community services, family needs and difficulties, and a host of other stressors produced by the boomtown environment."<sup>44</sup>

#### 5. Economic Costs may Outweigh Economic Benefits of the Mine

l. although state law would require Exxon and Rio Algom to pay Wisconsin citizens a proportion of their profits *after expenses*, the company can find ways to make their expenses look larger and their profit look smaller. If the price of zinc and copper remain at current levels, or sink even lower, the company would not pay **any tax!** Exxon Minerals Co. losses came to \$430 million in 1980-85; in 1991 they lost \$36 million.<sup>45</sup>

m. a well-known impact of rapid population increase is inflation, especially in commodities such as housing and land. This, in turn, reduces "real" wages, and increases some property taxes. This especially affects those on fixed incomes, such as social security recipients.

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<sup>43</sup> see *Report on the Track Records of Exxon and Rio Algom*, Wisconsin Review Commission, March 24, 1995. Copies available from Midwest Treaty Network, 731 State Street, Madison, WI 53703.

<sup>44</sup> Weisz, Robert, "Coping with the Stresses of a Boom: Mental Health Alternatives for Impacted Communities," in Joseph & Judith Ann Davenport (eds.) *The Boom Town: Problems and Promises in the Energy Vortex*. Laramie: University of Wyoming, 1980.

<sup>45</sup> *Forbes*, 4/29/85, p. 72. Exxon Corporation, 1991 Annual Report, p. 26.

n. the present economies of Forest County and Langlade County are healthy, according to Exxon's own studies. The area's economy is boosted by tourism on the Wolf River, Rollingsstone Lake, Pickerel Lake and other water bodies downstream from the proposed mine. If the mine comes, will the area still continue to attract people wishing to escape the busy city for the pristine quiet of the northwoods?

o. none of the studies being done by Exxon and its contractors consider the potential long-term environmental damage to the economy of the area. ***A dollar amount cannot be put on the loss if our tourism industry is affected by harm to our resources.*** A waste spill could not only damage the resources, but cause expensive legal battles.

p. Wisconsin taxpayers who live nowhere near the mine would have to foot the bill for the costs of the perpetual monitoring and maintenance of the state's largest toxic waste dump at the headwaters of the Wolf River. Replacement costs for the dump's liner could reach \$800 million over a 10,000 year period.<sup>46</sup> The Public Intervenor recently noted that Wisconsin has no way of evaluating whether Exxon's estimates for the costs of reclaiming the mine are accurate. Exxon has every incentive to underestimate these costs so they can reduce the size of the bond they have to post as their financial security for reclamation.<sup>47</sup>

q. the bust that followed the mining and lumber booms in northern Wisconsin communities earlier in this century would be repeated during the bust phase of a gigantic Crandon mine. At this point almost all mining towns face a pattern of unemployment and swollen public service expenses, problems which are almost impossible to solve.

**6. Exxon/Rio Algom is trying to negotiate a local agreement for mining with Forest County behind closed doors and before all the facts about the project have been evaluated in the Master Hearing.**

r. The Mining Committee of the Forest County Board met with representatives Exxon/Rio Algom on February 1, 1996 to negotiate a local agreement that would pave the way for mining. Despite a request from a dozen local citizens from the Crandon chapter of the Wisconsin Resources Protection Council (WRPC) to open the negotiations to the public, the board voted to go into closed session. A second meeting was held on February 7, 1996. About 30 concerned citizens attended the meeting and requested that the negotiations be open to the public. Once again, the board voted to go into closed session. "The question," wrote Mike Monte, publisher of *The Pioneer Express* (Crandon), "is whether or not the elected officials of this county are in the employ of CMC (Crandon Mining Company) or answer to the people who elect them, and if dealing done in privacy, whether it is expedient or not, is in the best interest of the electorate of Forest County."<sup>48</sup> WRPC filed an Open Meeting Law Violation Complaint with the District Attorney of Forest County on February 21, 1996.

<sup>46</sup> See David Blowes's comments on CMC's mine waste studies, 7/26/95, p.20.

<sup>47</sup> See Matthew D. Weber's memo to George Meyer of 8/22/95, pp. 3-4.

<sup>48</sup> Mike Monte, "In Defense of Open Government," *The Pioneer Express*, 2/19/96.

## Cultural Aspects

"The Mole Lake reservation was designed to guarantee forever the Sokaogon's control of the aquatic resources of Rice Lake, its clean water, fish, waterfowl, and, most important, its wild rice."

Robert Gough, "A Cultural-Historical Assessment of the Wild Rice Resource of the Sokaogon Chippewa," in COACT Research, Inc., *An Analysis of the Socio-Economic and Environmental Impacts of Mining and Mineral Resource Development on the Sokaogon Chippewa Community*, Madison, Wisconsin 1980, p. 390.

"The Wolf River is the lifeline of the Menominee people and central to our existence. We will let no harm come to the river."

John Teller, Menominee Tribal Chairman, in *Isthmus* (Madison, WI), 5/26/95

"The mine as proposed would be a serious threat to the Wolf River as a trout stream, recreational river, and tourist economy. The Wolf River is, indeed a very unique river, one of the last clean, large white water trout streams in the midwest. The river is irreplaceable and priceless."

Herb Buettner, Wolf River Chapter, Trout Unlimited

### **1. Threats to Native American Cultures Are Inseparable from Environmental Threats**

"Indian tribes in the northern portions of Wisconsin, Minnesota and Michigan are seriously threatened by sulfide mining operations in ways that are difficult for non-Indians to perceive. For Indian people, natural resource harvest is more than a means to provide food. It is a cultural activity that renews both the Indian person and the resource that is harvested."<sup>49</sup>

a. threats to Native American cultures are primarily environmental. The Chippewa, along with other Indian nations in northern Wisconsin, already suffer a disproportionate environmental risk of illness and other health problems from eating fish, deer and other wildlife contaminated with industrial pollutants like airborne polychlorinated biphenyls (PCBs), mercury and other toxins deposited on land and water. "Fish and game have accumulated these toxic chemicals to levels posing substantial health, ecological, and cultural risks to a Native American population that relies heavily on local fish and game

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<sup>49</sup> *Sulfide Mining: The Process & The Price: A Tribal & Ecological Perspective*. Great Lakes Indian Fish & Wildlife Commission, Odanah, WI, 1996, p. 17.

for subsistence."<sup>50</sup> The importance of subsistence hunting and gathering can be seen in the fact that 86% of Sokaogon Chippewa families rely on hunting and fishing for food, and over 90% rely on gardening, ricing and picking wild plants.<sup>51</sup>

b. the Wisconsin Department of Natural Resources has noted the centrality of wild rice to Chippew culture in their analysis of Exxon's proposed mine: "Rice Lake and the bounty of the lake's harvest lie at the center of their identity as a people...The rice and the lake are the major link between themselves, Mother Earth, their ancestors and future generations."<sup>52</sup> Compare this to Exxon's biologist dismissing Chippewa concern over "those lake weeds."<sup>53</sup>

c. although the Exxon/Rio Algom proposed mine, immediately adjacent to the Mole Lake reservation is still in the permitting process, the pre-mining operation has already threatened important reservation water resources: "As a result of groundwater discharges by Exxon Minerals Company to Duck Lake in the early 1980s, the lake's water chemistry was altered. A state threatened species of pondweed, which was found in the lake before the discharges, has not been found there since."<sup>54</sup>

d. The Mole Lake Reservation (formed in 1939) is a prime harvester of wild rice in Wisconsin. Mole Lake Chippewa leaders fear that Exxon's extensive groundwater pump tests in the area may have already affected the flow of water into Rice Lake and be partly to blame for the failure of the 1995 rice harvest.

e. The Green Bay Regional Office of the U.S. Fish and Wildlife Service said it was the opinion of the U.S. Interior Department "that the proposed Crandon Mining Company project may have a substantial and unacceptable impact on aquatic resources of national importance."<sup>55</sup>

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<sup>50</sup>*Tribes at Risk: The Wisconsin Tribes Comparative Risk Project*, Washington, D.C., October 1992, p. ix.

<sup>51</sup>*Final Environmental Impact Statement, Exxon Coal and Minerals Co. Zinc-Copper Mine, Crandon, Wisconsin*. Madison, Wisconsin. November 1986, p. 108.

<sup>52</sup>*Final Environmental Impact Statement, Exxon Coal and Minerals Co. Zinc-Copper Mine, Crandon, Wisconsin*. Madison, WI. November 1986, p. 108

<sup>53</sup> Al Gedicks, *The New Resource Wars: Native and Environmental Struggles Against Multinational Corporations*. Boston: South End Press. 1993, p. 61.

<sup>54</sup> Great Lakes Indian Fish and Wildlife Commission, Comments on Crandon Mining Company's Notice of Intent to Collect Data and Detailed Scope of Study, Crandon Project, Crandon, Wisconsin, April 23, 1994.

<sup>55</sup> Comments of Janet Smith, U.S. Department of the Interior, November 1994. p.2,

## **2. Mining would interfere with the exercise of Chippewa off-reservation harvest rights**

a. The planned mine lies on territory sold by the Chippewa Nation to the U.S. in 1842, and directly on a 12-square mile tract of land promised to the Mole Lake Sokaogon Chippewa in 1855. Treaties guaranteed Chippewa access to wild rice, fish and some wild game on ceded lands. Any contamination of deer, fish, or wild rice from mine pollution would be a direct assault on Chippewa treaty rights.

b. Threats from mining are not new to the region. Just recently, the White Pine, Michigan smelter, operated by the Copper Range Company, agreed to a multimillion dollar settlement in an air pollution lawsuit. The smelter was emitting mercury, lead and arsenic over the waters of nearby Lake Superior at five times the legal limit.<sup>56</sup> These emissions were seen by the Lake Superior Tribes as a direct threat to their treaty rights "to enjoy consumption of uncontaminated fish."<sup>57</sup>

## **3. Mining would have a disproportionately negative impact upon tribal lands and cultures.**

a. with mining-related population increases the Sokaogon Chippewa can expect increased pressures on their forest resources, particularly deer and fish. While recent court decisions have recognized tribal treaty rights to these resources, mining-related population growth may significantly reduce tribal access to these resources through a reduction in the absolute numbers of fish and deer.

b. the Sokaogon Chippewa community is especially vulnerable to the problems of acid mine drainage coming from the toxic mine waste area because of its extremely small land base (approximately 1900 acres), its delicate ecology of forests and forested wetlands and the direct connection between surface and groundwaters in most of Forest County.<sup>58</sup> The Interior Department concluded that "The drawdown of ground water (cone of depression) which will lower water levels in adjacent lakes, streams, and wetlands and potential contamination of ground water may affect the value of these waterways for fish and wildlife, and the subsequent human (tribal and non-tribal) use of these resources."<sup>59</sup>

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<sup>56</sup> "Environmental groups sue mine over emissions," *Milwaukee Journal*, 8/18/92).

<sup>57</sup> Great Lakes Indian Fish and Wildlife Commission, Comments on Crandon Mining Company's Notice of Intent to Collect Data and Detailed Scope of Study, Crandon Project, Crandon, Wisconsin, April 23, 1994.

<sup>58</sup> COACT Research, *An Analysis of the Socio-Economic and Environmental Impacts of Mining and Mineral Resource Development on the Sokaogon Chippewa Community*, Madison, Wisconsin, 1980. p.64, 177. 455.

<sup>59</sup> Janet Smith, Department of the Interior, Comments to the U.S. Army Corps of Engineers, November 1994. p. 5.

c. there is an environmental justice issue because the long term costs of the project will be borne by the tribes and local residents. The Interior Department has emphasized that "Even if the mining company makes substantial financial commitments for restoration of the site, there will more than likely be damages not provided for with financial assurances. The neighbors, particularly the tribes, will receive a relative meager proportion of the short term economic benefit, but by virtue of the location of their lands, will inherit the brunt of the environmental problems and economic bust cycle. It seems unfair that a large and powerful, but temporarily involved, interested party can reap the benefits, but leave the majority of the costs to less powerful interests who cannot reasonably move from the area to escape long term costs."<sup>60</sup>

d. The Menominee Reservation, located directly downstream from the proposed mine, stands to be negatively impacted. The Tribe has occupied the Wolf River area for 8000 years. The name "Menominee" or "OMAEQNOMENEWAK" means Wild Rice People.<sup>61</sup> The Menominee Reservation, nearly 235,000 acres, features some of the finest managed forestland within the Great Lakes Basin. It is the Tribe's philosophy that actions which affect its natural resources must be judged according to their potential effect on the seventh generation, i.e., future generations.

e. "That seven generation philosophy is the reason the Wolf River, which is both designated an Outstanding Resource Water ("ORW") under state law and designated as a component of the Wild and Scenic Rivers system from the Langlade-Menominee County line downstream to Keshena Falls. is still pristine. The Wolf River runs through the Menominee Reservation and is the heart and soul of this reservation and its people. Any action taken which affects the Wolf River would affect the heart and soul of the Menominee Tribe."<sup>62</sup>

f. The position of the Menominee Tribe, as stated by tribal chairman, John H. Teller, is that "Crandon Mining Co.'s proposed construction and operation of a hardrock metallic sulfide mine at the headwaters of the Wolf River seriously threatens this magnificent river. Water quality and tremendous ecological diversity is imperiled, including bald eagle, wild rice, lake sturgeon and trout habitat. The Wolf River is the lifeline of the Menominee people, and central to our existence. We will let no harm come to the river."<sup>63</sup>

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<sup>60</sup> Janet Smith, Department of the Interior, Comments to the U.S. Army Corps of Engineers, November 1994. p. 3.

<sup>61</sup> *Can the Wolf River Survive the Impacts of Hardrock Metallic Sulfide Mining?* Menominee Tribal Environmental Services, Keshena, September 1995. p. 6.

<sup>62</sup> M. Catherine Condon, Comments of the Menominee Indian Tribe on Crandon Mining Company's Notice of Intent to Collect Data and Detailed Scope of Study. May 1994. p. 1.

<sup>63</sup> *Isthmus* (Madison, WI newsweekly), 5/26/95.

#### 4. Exxon and Rio Algom have demonstrated a pattern of disrespect for and a devastation of Native lands and cultures.

a. despite possible negative impacts upon cultural sites of importance to the Mole Lake, Potawatomi and Menominee Tribes, Exxon's consultant, Wesley Andrews, was pressured to write that there would be no harm to cultural sites. Mr. Andrews refused to go along with this because he believed it was a lie. He said that the material he wrote for an environmental impact report to state and federal agencies was "changed in many ways," including the insertion of a statement that the mine would have no adverse physical impacts to traditional cultural properties of the tribes.<sup>64</sup> In a letter to the tribal chairmen at Mole Lake, Potawatomi and Menominee, Mr. Andrews wrote that the firm he was working for, under contract to the Crandon Mining Company, had a "disappointing lack of respect for traditional culture and values of the tribes."<sup>65</sup>

b. Exxon's huge coal mine in Colombia, South America, has earned it a place on Survival International's Top Ten list of the corporate violators of Native rights.<sup>66</sup> The El Cerrejon mine has brought both environmental and cultural devastation to the Wayuu (Guajiro) Indians, who have lived in the region for over 500 years, and survived the Spanish conquest with a large degree of independence. Wayuu community leader Armando Valbuena Gouriyu testified that Crandon Mining Company President Jerry Goodrich managed El Cerrejon on a day-to-day basis as Vice President of Operations. "Jerry Goodrich promised us jobs and prosperity and instead worked to destroy our traditional ways and forced us from our land. **This must not happen again. To allow this mine is to disappear from the earth.**"<sup>67</sup>

c. In Colombia, the construction of a 95-mile rail and road connection between Exxon's El Cerrejon coal mine and the port of Uribia disturbed the cemeteries of the Wayuu people. Exxon's Intercor subsidiary removed the burials, and initially interred them in large structures without regard for the cohesion of families. The Wayuu, many of whom were relocated for the rail corridor, forced Intercor to rebuild the structures.<sup>68</sup>

d. In Alaska, the Exxon Valdez spilled oil into the waters of the Chugach and Eyak tribes. The Chugach had sold the port of Valdez to the oil companies in 1969 for one dollar, and a pledge that the environment would be protected.<sup>69</sup> As we know now, the spill damaged the fishery in a way that hurt white fishermen, and damaged the resource-based cultures of local Native peoples.

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<sup>64</sup> Robert Imrie, "Indian consultant disputes mining report," *Saint Paul Pioneer Press*, 9/15/95.

<sup>65</sup> Wesley Andrews, Letter to Arlyn Ackley, 8/16/95. p. 2.

<sup>66</sup> Survival International, London, England. 1992.

<sup>67</sup> Testimony to the Wisconsin Review Commission, Mole Lake, 6/18/94.

<sup>68</sup> *Report on the Track Records of Exxon and Rio Algom*, Wisconsin Review Commission, March 24, 1995. p.11.

<sup>69</sup> Gregory Palast, "Broken Promises and the Exxon Valdez," *Chicago Tribune*, 9/21/94.

e. Serpent River Ojibwa band councilor Keith Lewis testified to the Wisconsin Review Commission about Rio Algom's Elliot Lake uranium mines in Ontario, Canada. He said the Serpent River used to be one of the greatest sturgeon producing rivers in the province, but that the fish has almost been wiped out by radioactive and heavy metal poisons from the mines. In 1976, the Ontario Ministry of the Environment reported that 18 lakes in the Serpent River system had been contaminated by Rio Algom and Denison Mines' uranium mining. Despite several years of clean-up efforts, Ontario Ministry of Natural Resources biologist Will Samis says "No one on our staff has indicated that this river system is...fully recovered in all its parts."<sup>70</sup> Survival International named Rio Algom and its parent company, Rio Tinto Zinc, as one of the 10 worst companies in 1992 in terms of damage done to tribal lands in the Americas.

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<sup>70</sup> Ontario Ministry of Natural Resources, letter to Zoltan Grossman (Madison): 1/24/94.