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ENVIR. APPEALS BOARD

BEFORE THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY ENVIRONMENTAL APPEALS BOARD

) NPDES Appeal Nos. 07-08 & 07-09
In re Teck Cominco Alaska Inc. Red Dog Mine NPDES Permit AK-003865-2) DECLARATION OF WALTER G.) SAMPSON IN SUPPORT OF NANA) REGIONAL CORPORATION, INC.'S) MOTION FOR LEAVE TO INTERVENE
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I, Walter G. Sampson, declare as follows:

- 1. I am the Vice President of Lands and Natural Resources of NANA Regional Corporation, Inc. (NANA). My duties as Vice President include the management and oversight of all NANA lands and resources, including the Red Dog Mine. I have personal knowledge of the facts stated herein, and if called to testify I could and would testify competently to the facts set forth herein.
- 2. NANA is a Regional Native Corporation formed pursuant to the Alaska Native Claims Settlement Act, 43 U.S.C. §1601 *et seq.*, and the laws of the State of Alaska to promote the economic, social and personal well-being of the Natives of the northwest region of Alaska.

Heller Ehrman LLP 701 Fifth Avenue, Suite 6100 Seattle, Washington 98104-7098 Telephone (206) 447-0900

- 3. NANA owns the land and resources underlying the Red Dog Mine ("the Mine"), and leases the Red Dog property to Teck Cominco Alaska, Inc. ("TeckCominco"), pursuant to a long term Operating Agreement. The property contains the richest known zinc deposit in the world.
- 4. NANA's interests in the Mine are significant and diverse. First, Teck Cominco pays royalties to NANA. The viability and profitability of the Mine affects those royalties. Second, the Mine is the only major source of non-governmental jobs in the NANA region. It is the centerpiece of NANA's effort to provide meaningful jobs to its native shareholders. On average, 60 percent of the Mine's workforce consists of NANA shareholders or their spouses. Third, NANA subsidiaries provide services to TeckCominco. NANA Management Services, LLC provides food service, housekeeping and maintenance. NANA/VECO performs construction projects. NANA Dyantec Drilling, LLC has done most of the exploratory drilling for the Mine. NANA/Lynden Logistics, LLC transports supplies to the Mine and hauls the zinc and lead concentrates from the Mine to a marine terminal on the Chukchi Sea.
- 5. The Operating Agreement between NANA and Teck Cominco recognizes that one of NANA's core concerns is protection of the subsistence resources in the vicinity of the Mine. NANA shareholders rely heavily on subsistence hunting, fishing and gathering.

 Subsistence activities provide a partial livelihood, a shared community experience and a tie to the cultural heritage of the Inupiat people. The Operating Agreement establishes a Subsistence Committee, composed of eight NANA shareholders from the neighboring villages of Kivalina and Noatak. The Committee advises NANA and Teck Cominco on the interaction between Mine operations and subsistence resources. NANA has the power under the Operating Agreement to direct Teck Cominco to shut down some or all of the Mine's operations if they threaten subsistence resources.

- 6. NANA filed comments on the draft permit and has actively participated in the development of the permit. Attached hereto as Exhibit A are NANA's comments on the draft permit, submitted to EPA Region 10 on March 22, 2006.
- 7. Exhibit B to this declaration is a true and correct copy of the Clean Water Act citizen suit complaint filed by five Kivalina residents in the United States District Court for the District of Alaska.
- 8. Civil penalties paid by Teck Cominco for future violations of the Total Disssolved Solids (TDS) limits in the previous NPDES permit would reduce the profitability of the Mine. If the Board overturned the 2007 permit's TDS limits the economic impact on NANA would turn upon the cost of treating an annual discharge volume of 1.45 billion gallons to achieve a TDS effluent limit that never has been achieved, to NANA's knowledge, anywhere in the world.

I declare under penalty of perjury that the foregoing is true and correct.

DATED this / day of June, 2007, at Korzebu , Alaska.

WALTER G. SAMPSON

SE 2215315 v1 6/18/07 10:50 AM (38576.0001)

EXHIBIT A

March 22, 2006

Ms. Cindy Godsey EPA Alaska Operations Office 222 W. 7th Ave. #19 Anchorage, Alaska 99513-7588

Re: Red Dog Mine NPDES Permit Renewal

Dear Ms. Godsey:

I am writing on behalf of NANA Regional Corporation ("NANA") to provide comments on the draft NPDES permit for the Red Dog Mine. NANA owns the land on which the mine is built. The mine provides high value employment for many of our shareholders, and royalties which provide additional economic benefits to NANA and our shareholders. While the mine provides important benefits, as the landowner, NANA also realize the importance that the mine be operated in a safe and environmentally responsible manner, as that is critical to the current and future welfare of the land and our shareholders.

A citizen suit was filed against Teck-Cominco in 2002 because of compliance problems with permit limits in the current NPDES permit. Since that time, NANA and its consultants have participated in numerous meetings with Teck-Cominco, various Alaska state agencies, and EPA discussing different aspects of the permit and developing means by which the next permit could and should be improved.

As a result of our analyses of the issues, we provide the following comments concerning the draft NPDES permit.

Reasonable Potential to Exceed and Derivation of Specific Limits

NANA is concerned that the Fact Sheet does not provide adequate information to allow a review of the calculations used by EPA to determine if limits are needed, or to allow review of the derivation of specific limits. It is not adequate for EPA to simply describe how they did the calculations, but not provide the calculations. Without seeing the calculations, it is impossible to check them for errors. We understand that Teck-Cominco requested EPA to provide the calculations and that EPA declined. EPA should not withhold this information.

TDS

NANA is pleased with the cooperation between EPA, the State agencies and Teck-Cominco in evaluating and resolving the TDS issues. We encourage EPA to approve the State's new site-specific 1,500 mg/L TDS standard during Grayling Spawning.

Exhibit A

Mixing Zones

NANA supports ADEC's approval of, and EPA's use of, mixing zones for TDS, cyanide and ammonia.

Cyanide

NANA is pleased that the State adopted the use of the weak acid dissociable (WAD) method for cyanide in its standards and that EPA approved the revision. The WAD method is more relevant to the free cyanide water quality standard than the method that was required in the current permit. Based on our review of the WAD cyanide data collected by Teck-Cominco, we concur with EPA that there is no reasonable potential to exceed the cyanide water quality standard in the Middle Fork of Red Dog Creek, and we concur with EPA's removing the cyanide limit.

Natural Condition Based Site-Specific Criterion for Cadmium

NANA concurs with the need for a natural condition based site-specific criterion for cadmium. The natural condition cannot meet the State's new cadmium standard. We are pleased that EPA is willing to accept the approach for cadmium described in the State's draft certification and we believe that to be helpful, and more appropriate than the new statewide cadmium standard. The new statewide cadmium standard is impossibly low for Red Dog Creek. There is nothing the mine can do to bring the receiving waters into compliance with the State's new cadmium standard, because the natural cadmium concentrations are much higher than the effluent or the standard. The mine is already very effective at removing cadmium from the natural system. Red Dog Creek presents an appropriate situation for natural condition based site-specific criteria.

NANA recommends that after the permit is issued, the State and EPA evaluate and refine their approach for setting future natural condition based site-specific criteria. The approach that has been used here for cadmium appears to be more stringent than necessary. NANA recommends the approach described by Idaho's Department of Environmental Quality.¹

Whole Effluent Toxicity ("WET")

NANA recommends that WET limits be deleted from the final permit. They are no longer needed and serve no purpose. Clearly, there are very substantial environmental improvements as a result of the mine's operations. Biological conditions in the mainstem of Red Dog Creek and all downstream waters today are much improved compared to the natural, pre-mine conditions. The biomonitoring studies support this conclusion. The well documented decrease in metals through the system compared to the natural historic levels also supports this

¹ See, Meban, C. and D. Essig. 2003. Concepts and Recommendations for Using the "Natural Conditions" Provisions of the Idaho Water Quality Standards. Idaho Department of Environmental Quality.

conclusion. The increase in hardness and alkalinity (both beneficial) supports this conclusion. The comparison of effluent WET data with the estimated natural WET conditions (derived by NANA from the formula approach EPA developed in the last permit) supports this conclusion. ADEC's draft certificate of reasonable assurance states unequivocally, based on solid analysis, that they believe "there is no reasonable potential for the effluent to exceed the pre-mining natural toxicity of Red Dog Creek." We strongly agree with the state's draft certificate of reasonable assurance and we join ADEC in asking EPA to remove the WET limit from the permit.

In the event that EPA insists on keeping a WET limit in the permit, then EPA should update the water budget component used to develop the WET limits, and then recalculate the limits. Teck-Cominco has provided the updated water budget that should be used, and we agree with their water budget analysis.

Ammonia

NANA recommends that EPA delete ammonia limits from the final permit. The analyses provided by NANA, following guidance in EPA's Ammonia Criteria document, demonstrated that the receiving waters consistently met the ammonia criteria. The Monte Carlo analysis provided by Teck-Cominco clearly demonstrated that there is no reasonable potential to exceed the ammonia criteria. Ammonia is not a water quality problem. There is no need for ammonia limits.

In summary, NANA and its consultants have provided considerable analyses of their own, and have also worked closely with Teck-Cominco and their consultants during the last several years. Much information has been presented to EPA before the draft permit was prepared. At several meetings with EPA and the State agencies, NANA provided presentations concerning the issues of WET, ammonia and metals. For the record, we are attaching our power point presentations to these comments. There is a well-considered, technical basis to support the above comments. We request that EPA revise the permit accordingly.

Sincerely yours,

NANA REGIONAL CORPORATION, INC.

Jacquelyn R. Luke

Vice President & General Counsel

Attachments: Power point presentations re WET, ammonia and metals.

cc: Alaska Department of Environmental Conservation

The need for Natural Condition Based Site Specific Criteria (NCBSSC) for metals

naturally exceeded metals criteria, including Red Dog Creek and downstream waters cadmium before any human activity.

Human activity has actually improved the metals. Although much improved now, these waters continue to exceed metals criteria. The need for Natural Condition Based Site Specific Criteria (NCBSSC) for metals (continued)

Effluent limits were based on meeting state standards at end-of-pipe. State recently changed the water quality standard for Cadmium. Effluent met old standard, but can't meet new standard.

Effluent loading is trivial now.

EPA's position re Natural Conditions

concentration is sufficient to support the level parameter is documented, by definition that of aquatic life expected to occur naturally at the site absent any interference by humans. background concentration for a specific For aquatic life, where the natural

EPA Policy regarding natural conditions November 5, 1997

Historic data provides understanding of the natural condition

drainage before the mine were wel Metals throughout Red Dog Creek characterized.

evaluation of the natural condition The metals data allow a realistic

The historic metals, hardness and flow data allow for multiple evaluations

- Can evaluate frequency distributions for Cadmium at various stations
- Can evaluate average concentrations
- exceed the standards by (exceedance Can evaluate how much the stations factors)
- Can evaluate the mass loading

Recent metals data can be used to compare with the historic data

- concentrations, distribution, exceedance factors over the standards, and loading were all much worse than today. Shows that the natural metals
- Improvements result from the Mine's operations.

Proposed NCBSSC for Cadmium

- concentration of 28 ug/L at Station 10 Should be based on historic median
 - Should be implemented as a median
- Relevant to CWA 303(d) process
- NCBSSC, but NCBSSC assures that limits will Mine permit limits will not be based on not be based on new state standards.
- Permit limits remain nearly same, with small correction

Idaho's approach for natural based metals standards.

- Central tendency values (e.g. median or
 - stream segment would be that no more could exceed the historic median value. than 50% of the samples over a year A natural site-specific criteria for a mean) are a more robust statistic.

Cadmium median values and frequency distribution plots

- 130 ug/L Cd at Sta. 30 (now Sta.140)
- 78 ug/L Cd at Sta. 20
- 28 ug/L Cd at Sta. 10
- 8 ug/L Cd at Sta. 8

Frequency distribution graph follows

Figure 2: Historical frequency distribution of Cachium in Red Dog Creek and Ikalukrok Creek 280 140 212 %06 %08 35 %02 %09 (1981-83 data) 28 percentile 30% 20 %0 Cadmium (egill) 300 250 00 S

Sta 8

Sta 10

■Sta 20

Sta 30

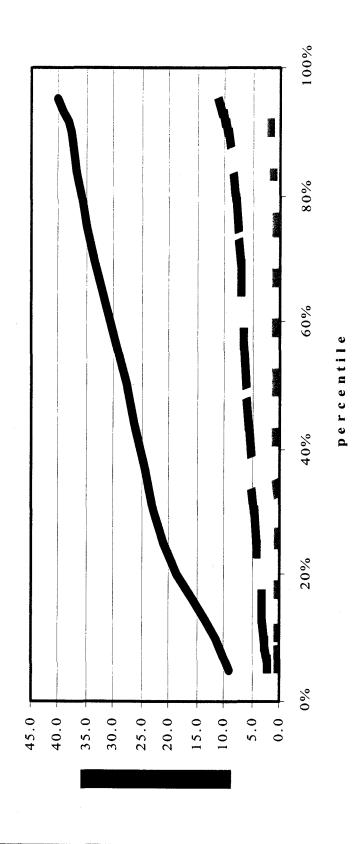
comparison for Cadmium; Sta. 10 historic, Median and frequency distribution Sta. 10 recent, and Outfall 001

- 28 ug/L = historic median Sta. 10
- 6 ug/L = current median Sta. 10
- 1 ug/L = effluent median

Frequency distribution graph follows

Figure 3: Distribution of frequency of occurrence of Cadmium:

Historic Station 10, Current Station 10 and Outfall 001





Average Cadmium Concentrations

Average cadmium concentrations both historic and recent throughout the Red Dog Creek, month of July are shown on the following Ikalukrok Creek and Wulik River for the slide.

with it's capture of much of the worst water river both with its treated effluent and also 30(140), which is upstream of Outfall 001 This illustrates how the mine benefits the Note the substantial decrease at Station of the Middle Fork of Red Dog Creek.

Sta 30 or 23.4 30.9 (Outfall 001) 1.3 Sta 20 83.3 (North Fork) Figure 6: Average cadmium concentrations in July Sta 10 0.4 29.6 **■** 1981-82 □ 1998-2003 Sta 8, 73 (Ik Cr) or 150 Station 13.0 Sta 6 or 160 or 7 5. 17.0 (Wulik R) Sta 2 6.5 Sta 1 100.0 140.0 120.0 80.0 0.0 0.09 40.0 20.0 Cadmium (ug/L)

Exceedance Factor analysis

Cadmium standards

- recoverable cadmium and varied with The former standard was for total hardness
- cadmium, also varies with hardness, and is The new state standard is for dissolved more stringent than the old.

Comparisons with exceedance factor analysis will be made with the new standard

Exceedance Factor analysis (continued)

concentration by the chronic standard An exceedance factor is calculated by applicable to the hardness of the dividing an observed cadmium sample.

Exceedance Factor analysis (continued)

Sample calculation. Station 20 sample from 7-6-82 had a hardness of 59 mg/L and a concentration of 55 ug/L.

- The new chronic cadmium standard for the observed hardness is 0.18 ug/L.
- The exceedance factor is:

$$55/0.18 = 306$$

well as from the lower metals in the effluent. factors results from the higher hardness as hardness and a reduction in exceedance Note that the mine's effluent has a high

Exceedance Factor analysis (continued

- historic data during month of July for Stations 30(140), 20, 10 and 8. Average exceedance Exceedance factors were calculated for all factors were calculated for each station.
- The same computations were performed for recent data for Outfall 001 and for Stations 140, 20, 10 and 8 (also used 150 or 73, which represent the same water).
- well below the old cadmium standard, but The average effluent concentrations were above the new cadmium standard.

Exceedance Factor analysis (continued

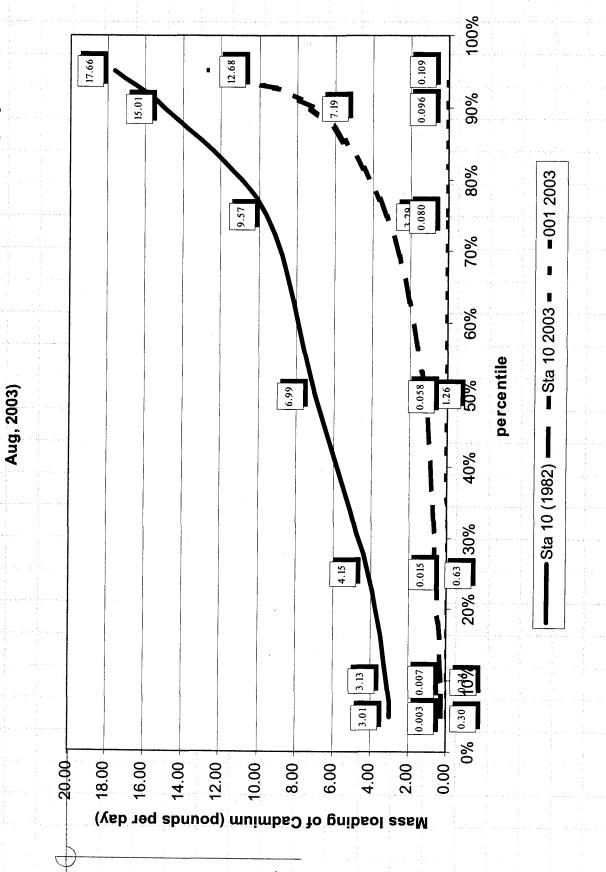
- historic exceedance factors for cadmium throughout the system were very high
- The mine's operations and treatment have combined to greatly reduce the exceedance factors for cadmium.
- The system continues to exceed the cadmium standard, due to natural causes.

Mass load analysis

mass loading of cadmium. These calculations frequency distributions were developed for Using metals and flow data, medians and were possible for 2002 and 2003.

- pounds/day median for historic Sta. 10
- pounds/day median for recent Sta. 10 **♦**1.3
- 0.04 pounds/day median for 001 in 2002
- 0.06 pounds/day median for 001 in 2003

Station 10 (Jul-Sep, 1982), Current Station 10 (May-Sep, 2003), and Outfall 001 (May-Figure 5: Distribution of frequency of occurrence of Cadmium loading:Historic



Mass load analysis (continued)

reduced, and the effluent's contribution It's readily apparent that the mass loading to the system is greatly is trivial

It's also apparent that any tightening of significant improvements to Red Dog Creek or the downstream waters Cadmium limits cannot result in

Other considerations.

A number of other considerations were addressed in the draft paper.

was proposed as it allowed evaluation essentially equal. Total recoverable with the more recent ambient and dissolved cadmium was seen as Total recoverable cadmium vs. effluent data set.

Other considerations. (continued)

Hardness was not incorporated into the effluent imparts a benefit for metals in recognized that the hardness of the considered in the recommended the stream. Hardness does get recommended NCBSSC. It was effluent limits.

Other considerations.

Determining "prevailing highest quality" was considered to be ADEC's responsibility and make sense in the context of CWA Section explanation in regulation. We pointed out 303(d), and it should also pass a common that whatever is determined, it needs to not EPA's. It is the state's regulation to nterpret, and they have no guidance or sense test.

Other considerations.

Method Reporting Level (MRL) issues However, use of median values for percentile value of historic data considers a criteria set at a low NCBSSC makes the MRL issues can be important if the agency insignificant.

Summary

- The natural conditions greatly exceeded the cadmium standard.
- A natural condition based site specific standard for cadmium is needed
- Basing such a standard on median values makes the most sense.
- Implementing such a standard as a median would be consistent.

Summary (continued)

- improved the cadmium conditions in the The mine's actions have greatly receiving waters.
- NCBSSC for other metals would also be appropriate

Whole Effluent Toxicity (WET)

Natural condition can be better described. The treated effluent is much lower in WET than the natural condition

Basis for current limit

- No historic WET data available.
- and 12 and an annual water balance i Used WET data from Stations 140, 9 develop a WET limit.
- condition, but developed a fixed value Attempted to characterize a natural instead of recognizing natural variability.

- A water budget assumed that:
- 0.3 bgy from Middle Fork diversion
- 1.3 bgy from South Fork
- 0.8 bgy from "Additional" water
- Toxicity data were available and used to represent the different contributions in a mass balance approach.

- There were 13 WET data points for station 140 (Middle Fork Red Dog Creek)
- Station 9 (North Fork Red Dog Creek) There were 13 WET data points for
- There were 12 WET data points for Station 12 (Ikalukrok Creek).

- Station 140 was used to represent the 0.3 The lower 5th percentile WET value from bgy Middle Fork diversion.
- Stations 12 and 9 was used to represent the The median WET value from the combined 1.3 bgy South Fork.
- station 9 was used to represent the 0.8 bgy The lower 5th percentile WET value from "additional" water.

The calculation resulted in a Waste Load Allocation of 8.7 Tuc.

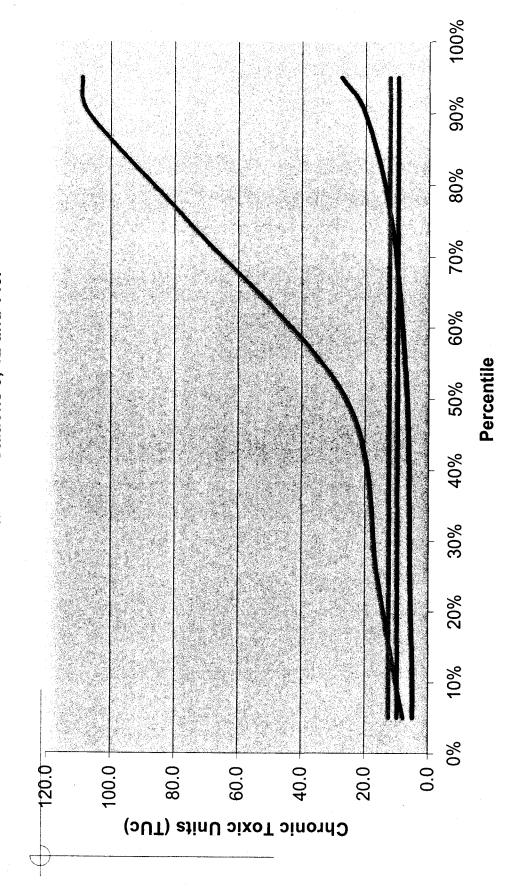
WLA = (0.3 bgy x 35.2 Tuc) + (1.3 bgy x 6.1 Tuc) + (0.8 bgy x 2.9 Tuc)(2.4 bgy)

values rendered the results arbitrary and not approximate the natural WET for the water application of conservative fixed percentile representative of natural conditions. diverted through the tailings pond, While the formula had potential to

- The same formula and WET data can be water body comprised of the assumed used with a Monte Carlo simulation to characterize the "natural" WET of a flows.
- more accurately represent the water A different formula could be used to budget today.

- The WET data for Stations 140, 12 and 9 can each be randomly accessed and used in the formula to calculate a WET value.
 - The process can be repeated many times.
- The "natural" frequency distribution from the multiple simulations can be computed and olotted.
- compared to the effluent limits for WET and The "natural" frequency distribution can be also to the frequency distribution of the effluent WET results.

"Natural" WET based on 92 random calculations with data from Stations 9, 12 and 140.

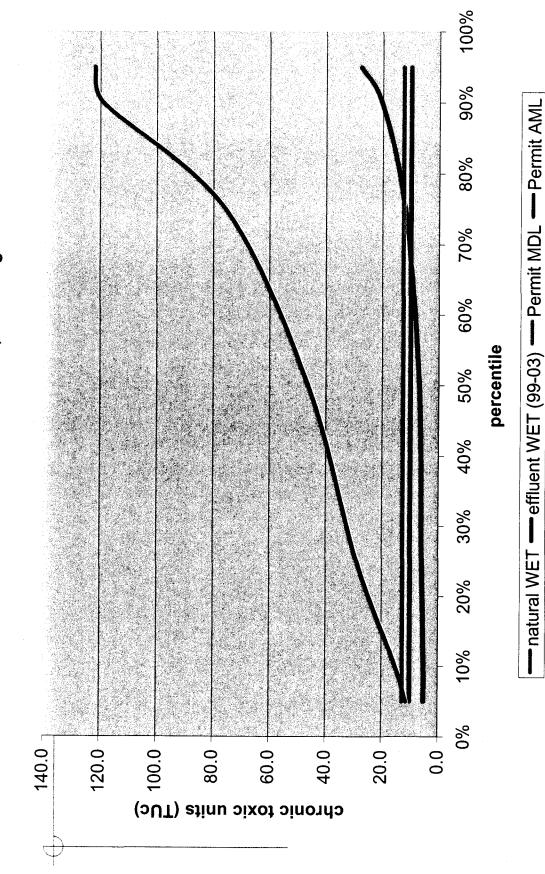


--- natural WET --- effluent WET (99-03) --- Permit MDL --- Permit AML

- The figure illustrated how the limits that were imposed would have been exceeded about 85% of the time under natural conditions.
- achieved by the treated effluent about 70-The figure illustrates how the limits were 75% of the time.
- The figure illustrates how the treated effluent is substantially less toxic than the natural conditions.

- A better water budget is understood now. The budget is:
- 0.4 bgy from Middle Fork diversion
- 1.0 bgy from South Fork
- no "additional" water
- Using the same Monte Carlo simulation with the new water budget results in a greater elevated "natural" WET for the combined waters as shown in the following figure.

"Natural" WET based on 92 random calculations, and using current water flows



- median Tuc value to be achieved over a As with the metals, it is important to understand the natural variability for WET and to implement WET as a discharge season.
- It is readily apparent that the effluent WET is substantially lower than the "natural" WET.

- the Red Dog watershed before the mine The natural metals characterization for supports the WET analysis.
- shown that the biota are much healthier and more diverse than before the mine. Extensive biological monitoring has

(continued)

A natural WET standard based on the 1.4 bgy water budget would be:

frequency distribution must be comparable to "the median Tuc value for the discharge or lower than the 'natural' distribution." season must be less than 45 and the

- There is no reasonable potential to exceed the natural WET standard.
- There is no need for a WET limit.
- WET monitoring should be substantially reduced.

Ammonia

When ammonia data are evaluated with methods spelled out in EPA's criteria, and with use of real time mixing, there is no need for ammonia limits.

Description of ammonia standards

- salmonids are present. The standard varies Most sensitive acute standard is for when with pH and is a 1 hour average.
- both pH and temperature. The standard is a early life stages are present and varies with Most sensitive chronic standard is for when 30 day average, and 4-day average should not exceed 2.5 times the standard.

Description of ammonia standards

- EPA's criteria document describes how to implement the standard.
- temperature, pH and ammonia data Implementation requires matched
- The standard for the pH and temperature is calculated. The ammonia concentration is then divided by the applicable standard resulting in a unitless quotient.
- An example for the chronic standard follows:

Ammonia example

Observed ammonia = 1.68 mg/L

Observed pH = 7.44

Observed Temperature = 17.5 degrees C

Calculated chronic criteria = 3.79 mg/L

Quotient = 1.68/3.79 = 0.44

the quotients is less than 1 and if the 4-day The standard is met if the 30-day average of average of the quotients is less than 2.5

Ammonia example

- Alaska also allows use of real time dilution
- pH, temperature and ammonia data obtained from Station 10 (where aquatic life criteria apply) inherently incorporate the real time dilution.
- 43 matched observations spanning four standards are met. (see next slide for discharge seasons show the ammonia example of calculations)

Station 10 Field Para	Field	Parame	ımeters				
(only for dates where all data present)	s where	all data	present)	chronic NH3 criteria	ratio of NH3		# of
				calculation	for Sta 10 to	running	stations
	Temp	F	NH3	when early life	the criteria	"30" day	-
	ပွ	ns	mg/L	stages present	for Sta. 10	mean	ļ
2000							
6/9/2000	က	7.19	1.06	5.42	0.20		
6/23/2000	80	7.48	< 0.2	4.44	0.05		2
7/11/2000	17.5	7.44	1.68	3.79	0.44	0.23	က
7/27/2000	4.5	7.35	1.69	7.91	0.34	0.28	က
8/4/2000	5.4	6.84	< 0.2	6.23	0.03	0.27	3
8/18/2000	5	7.14	0.863	5.56	0.16	0.18	3
9/1/2000	5.9	7.23	0.71	5.30	0.13	0.11	S
9/22/2000	1.5	7.62	1.39	3.90	0.36	0.22	3
10/6/2000	0.4	7.2	1.47	5.39	0.27	0.25	က
10/16/2000	0.4	7.46	< 0.2	4.51	0.04	0.22	3
10/31/2000	0	96.9	< 0.2	00.0	0.03	0.12	က

Ammonia conclusions

- T-C needs a mixing zone for ammonia
- The mixing zone should be based on real time mixing at Station 10.
- Station 10 data are appropriate to evaluate ammonia.
- the ammonia standard at Station 10 and no need for water quality based effluent limits. There is no reasonable potential to exceed

EXHIBIT B

FILE 38578-0002

1 LUKE W. COLE, California Bar No. 145,505 CAROLINE FARRELL, California Bar No. 202,871 201 NO -3 2 BRENT J. NEWELL, California Bar No. 210,312 J. MIJIN CHA, California Bar No. 218,348 Center on Race, Poverty, & the Environment 450 Geary Street, Suite 500 4 San Francisco, CA, 94102 RECEIVED 415/346-4179 • fax 415/346-8723 5 NANCY S. WAINWRIGHT, Alaska Bar No. 8711071 1APR - 2 2003 6 Law Offices of Nancy S. Wainwright 13030 Back Road, Suite 555 7 Anchorage, AK 99515-3538 Heller Ehrman 907/345-5595 • fax 907/345-3629 White & McAuliffe LLP 8 Attorneys for Plaintiffs Enoch Adams, Jr., Leroy 9 Adams, Andrew Koenig, Jerry Norton, David Swan and Joseph Swan 10 11 IN THE UNITED STATES DISTRICT COURT 12 FOR THE DISTRICT OF ALASKA AT ANCHORAGE 404-0049 CV (JU) 13 ENOCH ADAMS, JR., LEROY ADAMS, ANDREW KOENIG, JERRY NORTON DAVID SWAN and JOSEPH SWAN, Case No. 14 15 COMPLAINT FOR Plaintiffs, INJUNCTIVE AND **DECLARATORY RELIEF** 16 ٧. AND CIVIL PENALTIES 17 TECK COMINCO ALASKA INCORPORATED 18 Defendant. Federal Water Pollution Control 19 Act, 33 U.S.C. §§ 1251 to 1287 20 TACU! OUGUN NO DOCKETING REQUIRE 21 22 23 24 25 **OISTRIBUTED TO:** 26 27 28 HEILER ENRMAN MONTE & MOATH 1995 COMPLAINT

 Subject matter jurisdiction is conferred upon this Court by Section 505(a)(1) of the Federal Water Pollution Control Act, also known as the Clean Water Act (the "Act"), 33 U.S.C. § 1365(a)(1).

2. Pursuant to Section 505(c)(1) of the Act, 33 U.S.C. § 1365(c)(1), venue lies in the District of Alaska because Teck Cominco's Red Dog Mine and the port site are located within the District of Alaska.

II. INTRODUCTION

- 3. Through this action, plaintiffs Enoch Adams, Jr., Leroy Adams, Andrew Koenig, Jerry Norton, David Swan and Joseph Swan seek an injunction, declaratory relief, and civil penalties in response to repeated and continuing violations of the Clean Water Act, 33 U.S.C. §§ 1251 et seq. by Teck Cominco Alaska Incorporated ("Teck Cominco"). Teck Cominco has violated the Clean Water Act by grossly exceeding the discharge limits set by its National Pollution Discharge Elimination System ("NPDES") permits for the Red Dog mine site and port site in northwest Alaska.
- 4. This case is about citizens seeking to enforce environmental laws when state and federal agencies are unable or unwilling to do so. The linchpin of the national effort to clean and preserve our waters is the Clean Water Act. Under 33 U.S.C § 1342, all discharges of pollutants to the waters of the United States must be authorized by a NPDES permit.
- 5. Teck Cominco defeats the purpose of the Clean Water Act and NPDES permits through its continuing disregard of the specified limits in the mine site and port site permits. Under the self-monitoring provisions of its permits, Teck Cominco documents and reports its compliance, or lack thereof, each month to the U.S. Environmental Protection Agency ("EPA") in its Discharge Monitoring Reports. These reports demonstrate that Teck Cominco knowingly violates at least some of its permit limits every month that it operates.
- 6. The six individual plaintiffs bring this action because Teck Cominco's repeated violations have reduced the quality of their lives and changed the way they perform basic

activities such as subsistence hunting and fishing. The plaintiffs are all residents of the Native Village of Kivalina, an Inupiat village on the Chukchi Sea. They are also all appointed members of the Kivalina Relocation Planning Committee, and are referred to collectively as "the KRPC members" in this Complaint. Their homes are at the mouth of the Wulik River, downstream of the mine's Outfall 001 on Middle Fork Red Dog Creek. The community obtains drinking water from the Wulik River, and hunts and fishes in the marine and terrestrial environment adjacent to the port and mine sites. As a result of Teck Cominco's illegal discharges, KRPC members believe their drinking water quality has decreased. The location and quantity of terrestrial mammals, marine mammals and fish that constitute their basic source of food has changed. Teck Cominco's violations of the Clean Water Act deprive KRPC members of the opportunity to exercise their traditional lifestyle without fear of illness or exposure to dangerous contaminants.

7. Neither the EPA nor the Alaska Department of Environmental Protection have

7. Neither the EPA nor the Alaska Department of Environmental Protection have undertaken any enforcement action or imposed administrative penalties in response to the repeated violations of the NPDES permits. EPA's response to the repeated violations has been to issue Compliance Orders by Consent that give Teck Cominco additional time to comply with its permit limits and specify new, less stringent interim limits. Teck Cominco violates these Compliance Orders as well.

III. NATURE OF THE CASE

- 8. This is a citizens' suit for relief brought by the KRPC members under Section 505 of the Clean Water Act, 33 U.S.C. § 1365. This provision allows citizens to bring an action against any person in violation of any effluent standard or limitation. The district court has jurisdiction to enforce any effluent standard or limitation, and to apply civil penalties as authorized by the Act.
- 9. Teck Cominco is routinely discharging a variety of pollutants in violation of the limits established in its mine site NPDES permit (permit no. AK-003865-2, hereafter "mine site permit") and port site permit (permit no. AK-004064-9, hereafter "port site permit"). Teck Cominco's permits, and the conditions of the permits, are "effluent standards or limitations"

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under 33 U.S.C. § 1365(f). KRPC brings this action to enforce the Clean Water Act. KRPC seeks a declaratory judgment, injunctive relief to prohibit future discharges in violation of the established permit limits, the imposition of civil penalties, and other relief for Teck Cominco's violations of the terms of its permits.

IV. PARTIES

10. The plaintiffs – Enoch Adams, Jr., Leroy Adams, Andrew Koenig, Jerry Norton,
David Swan and Joseph Swan – all serve on the KRPC. Each is a long-time resident of Kivalina.
The plaintiffs will be collectively referred to as "the KRPC members" in this Complaint. The
KRPC members have obtained and reviewed copies of Teck Cominco's Discharge Monitoring
Reports for the time period covered by this lawsuit.

11. The KRPC members, and other residents of Kivalina, reside at the mouth of the Wulik River. The Wulik River is the primary source of drinking water for the village of Kivalina. KRPC members also obtain a number of species of fish from the Wulik River and its tributaries. KRPC members hunt for marine mammals and fish in the waters offshore from the port site's discharge point on the Chukchi Sea. The KRPC members and other residents of Kivalina depend on the food obtained from subsistence hunting activities in these locations for a substantial portion of their dietary needs. Teck Cominco's permit violations affect the individual plaintiffs. KRPC members rely on the waters of the Wulik River, which is downstream of Red Dog Mine Outfall 001 in the Middle Fork Red Dog Creek, for their drinking water and as a source of fish for its basic subsistence. Likewise, KRPC members fish and hunt in the waters of the Chukchi Sea into which Teck Cominco's port facility regularly discharges hazardous substances such as zinc, cadmium, and fecal coliform. KRPC members observe that the quality of their drinking water has declined since the mine began operating, noting strange tastes and colors that make the water offensive to consume. Plaintiffs have also seen changes in the location and quantity of terrestrial mammals, marine mammals and fish that constitute their basic source of food. These changes have affected the way that KRPC members conduct their basic life activities, and hampered their ability to ensure an adequate supply of food for themselves and their families. Plaintiffs and other Kivalina residents hunt in the vicinity of the mine, and are

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afraid that the subsistence resources they are hunting may be contaminated from drinking in the streams to which Teck Cominco is illegally discharging. Plaintiffs fear that Teck Cominco's continued illegal discharge will further limit their hunting and fishing. They also fear for their health when drinking the water near the mine during those hunting trips. Teck Cominco's violations of the Clean Water Act expose KRPC members and individual plaintiffs to poor drinking water, threaten the health of the marine and freshwater ecosystems on which the community depends, and deprive the community of the opportunity to continue exercising its traditional lifestyle without fear of illness or exposure to dangerous contaminants. The individual plaintiffs have enjoyed aesthetic, recreational and spiritual interests in the pristine wilderness environment in the general region of the Wulik River watershed, which has been the home of their people since time immemorial. The individual plaintiffs' ability to enjoy their aesthetic, recreational and spiritual connection with this unspoiled area is harmed by Teck Cominco's illegal discharges.

- 12. Defendant Teck Cominco Alaska Incorporated is a subsidiary of Teck Cominco American, Incorporated, which is owned by a partnership of Teck Cominco Metals, Ltd. and Teck Cominco Novia Scotia, Ltd. Cominco Alaska Incorporated changed its name to Teck Cominco Alaska Incorporated in 2001. At that time, Teck Cominco Alaska Incorporated assumed responsibility for the permits issued to Cominco Alaska. Teck Cominco Alaska Incorporated operates the Red Dog mine, and holds the NPDES permits for the mine and port sites.
- 13. As the permit holder, Teck Cominco has a duty to comply with the terms of its NPDES permits. Teck Cominco's authorized representatives sign each Discharge Monitoring Report and certify its accuracy under penalty of law. Teck Cominco's mine site permit authorizes discharges to Middle Fork Red Dog Creek, which flows into the Ikalukrok Creek and then into the Wulik River. Teck Cominco's port site permit authorizes discharges to the tundra and the Chukchi Sea.

V. NOTICE

14. Pursuant to Section 505(b)(A) of the Act, 33 U.S.C-§ 1365(b)(1)(A), on July 3,

2003, Enoch Adams, Jr., Leroy Adams, Andrew Koenig, Jerry Norton, David Swan and Joseph Swan gave notice of the violations alleged in the Complaint sixty days prior to the filing of this Complaint to: A) the general manager and senior environmental advisor of Teck Cominco Alaska Incorporated, as well as its agent for service of process; B) the Administrator of the U.S. EPA; C) the Regional Administrator of the U.S. EPA for Region X; D) the U.S. Attorney General; E) the Commissioner of the Alaska Department of Environmental Conservation; F) the Commissioner of the Alaska Department of Fish and Game; and G) the Attorney General of Alaska. A true and correct copy of this Notice Letter is attached to this Complaint as Exhibit A.

15. Neither EPA nor the State of Alaska has commenced or is diligently prosecuting a civil or criminal action in a court of the United Stated to require Teck Cominco's compliance with the standards, limitations, and orders at issue in this case, the mine site permit and the port site permit.

16. This action is not barred by any prior administrative penalty under § 309(g) of the Act, 33 U.S.C. § 1319(g).

VI. GENERAL ALLEGATIONS

A. Background on the Red Dog Mine

17. The Red Dog mine is the world's largest zinc mine, and its zinc deposit is the largest known zinc resource in the world. The mine is located about 55 miles east of the Chukchi Sea in the western end of the Brooks Mountain Range in the Northwest Arctic Borough of Alaska. The mine has the capacity to produce 1.1 million tons per year of high quality zinc concentrates, constituting seven percent of the world's mined zinc production. The mine has an expected life of forty years. Concentrate production and hauling began in 1989.

18. The Red Dog mine is an open-pit ore mine. After the ore is removed from the pit, it is processed to extract the zinc and lead that are the mine's primary products. First the ore is crushed and ground to a fine powder. The powder is placed in tanks where the zinc and lead are separated from the rest of the ore in a milling process that utilizes a variety of chemicals, including 60 to 70 grams of cyanide per ton of ore. Waste ore and water from processing are placed in the tailings impoundment, an unlined storage area designed to keep the tailings and

water in one place. This water is treated and discharged into Middle Fork Red Dog Creek through Outfall 001. Discharge from the mine site is seasonal, happening only in the warmer months, usually beginning in May and continuing until early October. Mining at the site takes place year-round.

- 19. Concentrates are transported year-round to the port on the 52-mile DeLong Mountain transportation system road, which runs from the mine site to a port site. A portion of the road passes through the Cape Krusenstern National Monument.
- 20. At the port site, the concentrates are stored in two large concentrate storage buildings approximately one mile from the sea. Each building is approximately one quarter mile long. The port site began operations in 1989 with one concentrate storage building. A second building was added later.
- 21. Zinc concentrates produced at the mine are sent to smelters around the world by ship from the port site, which is on the Chukchi Sea, located southeast of Kivalina at 67° 34" N, 164° 03" west. Construction of the port began in 1986, and the first barge was loaded in 1990. Shipping from the port site only occurs in warmer months when the Chukchi Sea is ice-free; most discharge from the port only occurs seasonally as well.
- 22. Teck Cominco mined 5,220,000 tons of ore in 1999, 6,591,000 tons of ore in 2000, 7,294,000 tons of ore in 2001, and 7,257 tons of ore at the Red Dog mine in 2002. Red Dog produced 1,148,000,000 pounds of zinc in 1999, 1,171,000,000 pounds of zinc in 2000, 1,141,000,000 pounds of zinc in 2001, and 1,156,800,000 pounds of zinc in 2002.
- 23. Teck Cominco's pro forma operating profit at the Ted Dog mine was \$117,000,000 in 1999, \$121,000,000 in 2000, and \$4,000,000 in 2001.
- 24. The mine and port are located on lands owned by Northwest Alaska Native Association (NANA) Regional Corporation. Teck Cominco financed the construction of the mine and operates it under an agreement with NANA.

B. Statutory and Regulatory Background

25. Section 301 (a) of the Act, 33 U.S.C. § 1311(a), prohibits the discharge of pollutants from a "point source" into the navigable waters of the United States, unless the discharge is in

compliance with the applicable effluent limitation set by EPA, as required by a NPDES permit issued pursuant to Section 402 of the Act, 33 U.S.C. § 1342.

- 26. The Red Dog Mine and its port site both include point sources under Section 502(14) of the Act, 33 U.S.C § 1362(14).
- 27. Middle Fork Red Dog Creek and the Chukchi Sea are navigable waters under Section 502(7) of the Act, 33 U.S.C. § 1362(7).
 - 28. The U.S. EPA administers the NPDES permit program in the State of Alaska.

C. Permit History, Requirements, Consent Orders and Other Violations

1. The Mine Site

- 29. The first NPDES permit for the mine site (permit no. AK-003865-2) was issued on July 10, 1985, and was reissued by EPA on August 28, 1998. The current mine site permit expired on August 28, 2003, but was administratively extended by EPA and is still in force.
- 30. The mine site permit authorizes Teck Cominco to discharge 2.418 billion gallons of effluent each year from its tailings pond through its treatment plant's "Outfall 001" to Middle Fork Red Dog Creek (Permit Condition I(A)(2)).
- 31. The permit establishes discharge limits for 11 parameters. The permit contains two types of limitations: a daily maximum discharge limit and a monthly average discharge limit.
- 32. The permit limits for total dissolved solids are a daily maximum concentration of 196 milligrams per liter (mg/L) and a monthly average concentration of 170 mg/L (Permit Condition I(A)(1)). EPA issued a permit modification on July 17, 2003 which became effective on August 22, 2003, allowing a higher level of TDS in the mine's discharge, but this permit modification has currently been stayed pending appeal and the old permit limitation is still in effect. As the EPA informed Teck Cominco on October 2, 2003, "Until the appeal is resolved, all conditions of the unmodified 1998 NPDES permit referenced above remain in effect, including the TDS limits and monitoring requirements for Outfall 001 contained in Part I.A[.]"
- 33. The permit limits for cyanide are a daily maximum concentration of 9.0 parts per billion (ppb) and a monthly average concentration of 4.0 ppb (Permit Condition I(A)(1)).
 - 34. The permit limits for whole effluent toxicity are a daily maximum concentration of

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COMPLAINT - 9 -

total dissolved solids (TDS) downstream from the discharge point, and set a significantly higher

concentration for TDS.

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53. The most recent mine site Compliance Order required TDS measurements at Station 10, a water quality monitoring station on Main Stem Red Dog Creek; and Station 7, a water quality monitoring station on Ikalukrok Creek several miles below the confluence with Main Stem Red Dog Creek.

- 54. The first two mine site Compliance Orders limited TDS to 1500 mg/L at Station 10 and to 500 mg/L at Station 160 from July 25 through the end of the discharge season. Teck Cominco's third mine site Compliance Order limits TDS to 1500 mg/L at Station 10 and to 500 mg/L at Station 150 through the end of the discharge season.
- 55. Temporary exceedences of up to 1600 mg/L were permitted at Station 10 if such exceedences did not continue for more than 48 hours in any ten day period.
- 56. EPA issued Compliance Orders relating to discharges at the port site (Docket No. CWA-10-99-0200) on August 24, 1999 and January 12, 2000. A Modified Compliance Order was issued on January 10, 2002. The Modified Compliance Order for the port site states that "As a result of Cominco's unpermitted discharges of chlorine, Cominco is in violation of Section 301(a) of the Act, 33 U.S.C. § 131(a)." It allowed Teck Cominco to discharge chlorine in concentrations of less than 0.1 mg/L until January 28, 2004.
- 57. None of the three port site Compliance Orders modify the terms of the underlying port site NPDES permit. Teck Cominco's most recent Modified Compliance Order for the port site states at paragraph 16: "Nothing in this Order shall be construed to relieve [Teck] Cominco of the requirements of its NPDES permit[.]"

4. Summary of Teck Cominco's Violations

- 58. Teck Cominco's permits require it to file a Discharge Monitoring Report (DMR) for the mine site and a DMR for the port site each month. In these DMRs, Teck Cominco reports to U.S. EPA its discharges. The DMRs are certified as accurate by Teck Cominco representatives under penalty of law.
- 59. By simply comparing the discharges reported by Teck Cominco in the mine site DMRs to the discharge limits found in Teck Cominco's mine permit, plaintiff KRPC members

documented 2,322 violations of the mine site permit from August 28, 1998 until May 31, 2003. Plaintiffs specified each of the 2,322 violations of the mine site permit in the 60-day Notice Letter KRPC members served on Teck Cominco on July 3, 2003. This suit seeks relief from a subset of the mine site violations noticed by plaintiffs, the 2,203 violations KRPC members have determined to be ongoing or capable of repetition.

- 60. By comparing the discharges reported by Teck Cominco in the port site DMRs to the discharge limits found in Teck Cominco's port site permit, plaintiff KRPC members documented1,654 violations of the port site permit from May 13, 1999 until May 31, 2003. Plaintiffs specified each of the 1,654 total violations in the Updated 60-day Notice Letter plaintiffs served on Teck Cominco on July 3, 2003. This suit seeks relief from a subset of the mine site violations noticed by KRPC members, the 42 violations KRPC members have determined to be ongoing or capable of repetition.
- 61. By comparing the discharges reported by Teck Cominco in the mine site DMRs to the discharge limits found in Teck Cominco's mine site Consent Orders, plaintiff KRPC members documented at least 64 violations of the mine site Consent Orders. Plaintiffs specified each of the 64 violations of the mine site's Consent Orders in the 60-day Notice Letter plaintiffs served on Teck Cominco on July 3, 2003. This suit seeks relief from the mine site Consent Order violations noticed by the plaintiffs, the 64 violations KRPC members have determined to be ongoing or capable of repetition.
- 62. By comparing the discharges reported by Teck Cominco in the port site DMRs to the discharge limits found in Teck Cominco's port site Consent Order, KRPC documented 53 violations of the port site Consent Order.
 - 63. The total violations of the permits and Consent Orders alleged in this suit are 2,309.
- 64. The regulations implementing the Clean Water Act, 40 C.F.R. §19.4, authorize a penalty of up to \$27,5000 for each violation of the permits and Consent Orders, or up to \$63,497,500 for the violations alleged herein.

5. Other Violations by Teck Cominco at Red Dog

65. Although neither the U.S. EPA nor the State of Alaska has taken action to enforce the

provisions of the Clean Water Act permits at issue in this case, EPA entered into a \$4,800,000
settlement with Cominco Alaska in July 1997 for more than 1,000 Clean Water Act violations at
the Red Dog mine and port sites, lodged with this Court in United States v. Cominco Alaska,
Inc., No.A97-267CIV (JKS). In addition, Alaska has taken action against Teck Cominco for
violations of other permits and environmental laws at the Red Dog mine site. Most recently, on
December 18, 2001, Teck Cominco, the Alaska Department of Environmental Conservation and
the Alaska Department of Law signed a settlement agreement in which Teck Cominco agreed to
a civil penalty of \$827,000 for 18 alleged violations of its air permit, including knowingly
operating and failing to properly report equipment that exceeded emission limits and failure to
conduct air monitoring.
D. The Village of Kivalina
66. Kivalina, population 383, is located 80 miles northwest of Kotzebue on the tip of a
barrier beach between the Chukchi Sea and the Kivalina Lagoon. Historically, the area was a
stopping place for seasonal coastal travelers and a spring shore hunting base for inland Inupiat.
Kivalina was settled in the early 1900s. The local economy is based on subsistence hunting and
fishing.
FIRST CLAIM
Mine Site: Violations of Total Dissolved Solids Permit Limits
(33 U.S.C. § 1311(a))
67. Paragraphs 1-66 are incorporated by reference.
68. Mine site permit I(A)(1) for TDS specifies a daily maximum discharge of 196 mg/l.
69. Teck Cominco's operations at the Red Dog Mine cause Teck Cominco to discharge
TDS through Outfall 001 in quantities approximately 1500 percent higher than its maximum
laily limits on every day in which the mine discharges.
70. As specified in KRPC members' Notice Letter, Teck Cominco violated mine site
permit condition I(A)(1) for daily maximum TDS on the following days:

COMPLAINT

24, 25, 26, 27, 28, 29, and 30; July 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19,

1999: June 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23,

1 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, and 31; August 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 2 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, and 31; September 1, 2, 3, 4, 5, 6, 3 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, and 30; 4 October 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12. 5 2000: May 22, 23, 24, 25, 26, 27, 28, 29, 30, and 31; June 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, and 30; July 1, 2, 3, 4, 5, 6, 7, 7 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, and 31; August 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, and 31; September 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, and 30; October 1, 2, 3, 4, 5, 6, and 7. 11 2001: May 31; June 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, and 30; July 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 12 13 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, and 31; August 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 14 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, and 31; September 1, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, and 30; October 1, 2, 3, 4, 5, 6, 7, 8, 16 9, and 10. 17 2002: May 26, 27, 28, 29, 30, 31; June 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, and 30; July 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, and 31; August 1, 2, 3, 4, 5, 19 20 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, and 31; 21 September 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 22 27, 28, 29, and 30; October 1, 2, 3, 4, 5 and 6. 23 2003: May 9, 10, 11, 12, 13, 14, 15, 25, 26, 29 and 31; June 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 24 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, and 30; July 1, 2, 3, 4, 5, 25 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, and 31; 26 August 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, and 14. 27 71. KRPC members are informed and believe that the violations of mine site permit 28 Condition I(A)(1) for daily maximum TDS are ongoing to this day or are capable of repetition.

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72. Mine site permit Condition I(A)(1) for TDS specifies a monthly average discharge limit of 170 mg/l per day.

73. Teck Cominco has violated permit condition I(A)(1)'s limits for monthly average for TDS in every month in which Teck Cominco discharges from Outfall 001. Teck Cominco violated its permit limits in May 1999, June 1999, August 1999, September 1999, October 1999, May 2000, June 2000, July 2000, August 2000, September 2000, October 2000, May 2001, June 2001, July 2001, August 2001, September 2001, October 2001, May 2002, June 2002, July 2002, August 2002, September 2002, October 2002, May 2003, June 2003, July 2003, and August 2003.

74. Violations of a monthly average limit mean that the permit was violated on each day the facility discharged in that month. As specified in KRPC members' Notice Letter, Teck Cominco violated its permit limits for TDS on the following days:

1999: June 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, and 30; July 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, and 31; August 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, and 31; September 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, and 30; October 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12.

2000: May 22, 23, 24, 25, 26, 27, 28, 29, 30, and 31; June 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, and 30; July 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, and 31; August 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, and 31; September 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, and 30; October 1, 2, 3, 4, 5, 6, and 7.

2001: May 31; June 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, and 30; July 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, and 31; August 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, and 31; September 1, 13,

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1	14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, and 30; October 1, 2, 3, 4, 5, 6, 7, 8,
2	9, and 10.
3	2002: May 26, 27, 28, 29, 30, 31; June 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16,
4	17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, and 30; July 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12,
5	13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, and 31; August 1, 2, 3, 4, 5,
6	6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, and 31;
7	September 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26,
8	27, 28, 29, and 30; October 1, 2, 3, 4, 5 and 6.
9	2003: May 9, 10, 11, 12, 13, 14, 15, 25, 26, 29 and 31; June 1, 2, 3, 4, 5, 6, 7, 8, 9, 10,
10	11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, and 30; July 1, 2, 3, 4, 5,
11	6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, and 31;
12	August 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, and 14.
13	75. KRPC members are informed and believe that the violations of the mine site permit
14	condition I(A)(1) for monthly average TDS are ongoing to this day or are capable of repetition.
15	76. Teck Cominco has discharged TDS in excess of its daily permit limit at least 615
16	times, and in excess of the monthly average permit limit at least 615 times, for 1230 total TDS
17	violations.
18	77. KRPC members believe and aver that, without the imposition of appropriate civil
19	penalties and the issuance of appropriate equitable relief, Teck Cominco will continue to violate
20	its permit limits with respect to TDS discharges.
21	SECOND CLAIM
22	Mine Site: Violations of Cyanide Permit Limits
23	(33 U.S.C. § 1311(a))
24	78. Paragraphs 1-77 are incorporated by reference.
25	79. Mine site permit condition I(A)(1) for cyanide specifies a daily maximum discharge
26	of 9 pph.
27	80. As specified in KRPC members' Notice Letter, Teck Cominco exceeded its daily
28	maximum permissible concentration of cyanide and thus violated permit condition I(A)(1) for
	COMPLAINT - 15 -

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1	20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, and 31; August 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13,
2	14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, and 31; September 1, 13, 14, 15,
3	16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, and 30.
4	2002: May 26, 27, 28, 29, 30, 31; June 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16,
5	17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, and 30; September 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11
6	12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, and 30.
7	85. KRPC members are informed and believe that the violations of mine site permit
8	Condition I(A)(1) for monthly average cyanide discharges are ongoing to this day or are capable
9	of repetition.
10	86. Teck Cominco has discharged cyanide in excess of its daily permit limits at least 16
11	times, and in excess of the monthly average permit limit at least 407 times, for 423 total cyanide
12	violations.
13	87. KRPC members believe and aver that, without the imposition of appropriate civil
14	penalties and the issuance of appropriate equitable relief, Teck Cominco will continue to violate
15	its permit limits with respect to cyanide discharges.
16	THIRD CLAIM
17	Mine Site: Whole Effluent Toxicity ("WET") Testing Permit Violations
18	(33 U.S.C. § 1311(a))
19	88. Paragraphs 1-87 are incorporated by reference.
20	89. Mine site permit condition I(H)(4) requires that the results for the whole effluent
21	toxicity ("WET") tests of effluent and ambient waters be reported in the Discharge Monitoring
22	Report for the month in which the tests were conducted.
23	90. As specified in KRPC members' Notice Letter, Teck Cominco violated permit
24	Condition I(H)(4) by not reporting the results of required WET testing, or by reporting the results
25	of incomplete or inadequate WET testing, in August 1999 (Outfall 001, Station 9, Station 12);
26	August 2, 3, 4, 2001 (Outfall 001); July 2002 (Station 9); August 2002 (Station 9) and October
27	2002 (Station 9).
28	91. KRPC members are informed and believe that the violations of mine site permit

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1	following days:
2	2000: October 1, 2, 3, 4, 5, 6 and 7.
3	2001: July 1, 2, 3, 4, 5, 6, 7, 8, 9 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24,
4	25, 26, 27, 28, 29, 30, and 31, 2001.
5	107. KRPC members are informed and believe that the violations of mine site permit
6	Condition I(A)(1) for monthly average cadmium discharges are ongoing on this day or are
7	capable of repetition.
8	108. Teck Cominco has discharged cadmium in excess of its daily permit limits at least
9	two times, and in excess of the monthly average permit limit at least 38 times, for 40 total
0	cadmium violations.
1	109. KRPC members believe and aver that, without the imposition of appropriate civil
2	penalties and the issuance of appropriate equitable relief, Teck Cominco will continue to violate
3	its permit limits with respect to cadmium discharges.
4	FIFTH CLAIM
5	Mine Site: Unpermitted Discharges to the Tundra
6	(33 U.S.C. § 1311(a))
7	110. Paragraphs 1-109 are incorporated by reference.
3	111. Mine site permit condition I(C)(2) requires that precipitation falling on the shale
7	pile be directed to the tailings impoundment.
)	112. As specified in KRPC members' Notice Letter, Teck Cominco's discharged to the
1	tundra on May 19, 22, and 23, 2002, when the pumping system was overtopped, resulting in
!	discharges to the tundra.
1	113. KRPC members are informed and believe that the violations of mine site permit
	condition I(C)(2) are capable of repetition.
	114. Teck Cominco has violated permit Condition I(C)(2) at least three times.
	115. KRPC members believe and aver that, without the imposition of appropriate civil
H	penalties and the issuance of appropriate equitable relief, Teck Cominco will continue to violate
ı	its permit limits with respect to unpermitted discharges to the tundra.

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SIXTH CLAIM

Mine Site: Self-Monitoring and Reporting Violations

(33 U.S.C. § 1311(a))

- 116. Paragraphs 1-115 are incorporated by reference.
- 117. Mine site permit condition I(A)(1) specifies a required monitoring frequency for each parameter listed.
- 118. Teck Cominco violated this condition when it failed to monitor discharge at Outfall 001 at the frequencies required by its permit. As specified in KRPC members' Notice Letter, Teck Cominco violated its permit on the following days or during the following months:

 September 1999 (failure to take weekly samples for turbidity); June 2000 (no sample taken for OPPS; no results reported for silver); June 10, 2000 (no grab sample taken for turbidity); June 13, 2000 (no grab sample taken for turbidity); July 10, 2000 (no results reported for total suspended solids); July 22, 2000 (failed to take 24-hour composite sample for turbidity); August 3, 2000 (no results reported for total suspended solids); September 2000 (no results reported for selenium); September 2001 (samples for BOD and organic priority pollutants taken from water that was not discharged through Outfall 001).
- 119. KRPC members are informed and believe that the violations of mine site permit condition I(A)(1) for failing to conduct required monitoring are ongoing to this day or are capable of repetition.
- 120. Mine site permit condition I(D)(1) requires ambient monitoring for specified parameters at seven stations.
- 121. As specified in KRPC members' Notice Letter, Teck Cominco violated permit condition I(D)(1) by failing to conduct required ambient monitoring during the following months: June 2000 (failure to analyze samples for metals at Stations 10, 12, and 140); October 2000 (failure to analyze for cyanide at Stations 10 and 20); June 2001 (failure to analyze ammonia twice, as required, at Station 10; failure to analyze ammonia at Station 73; failure to analyze two samples of weak acid dissociable cyanide from Station 20); July 2001 (failure to take second ammonia sample at Station 73); May 2002 (failure to monitor total hardness at Station

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EIGHTH CLAIM

Port Site: Total Suspended Solids Permit Limit Violations

(33 U.S.C. § 1311(a))

- 140. Paragraphs 1-139 are incorporated by reference.
- 141. Port site permit condition I(A)(3) for total suspended solids (TSS) requires that discharges of TSS to the Chukchi Sea contain less than a daily maximum of 30 mg/L TSS.
- 142. As specified in KRPC members' Notice Letter, Teck Cominco violated its port site permit Condition I(A)(3) for daily maximum discharge of TSS into the ocean in May 2002.
- 143. KRPC members are informed and believe that the violations of port site permit condition I(A)(3) for TSS are ongoing to this day or are capable of repetition.
 - 144. Teck Cominco has discharged TSS in violation of its port site permit at least once.
- 145. KRPC members believes and avers that, without the imposition of appropriate civil penalties and the issuance of appropriate equitable relief, Teck Cominco will continue to violate its port site permit limits with respect to TSS discharges.

NINTH CLAIM

Port Site: Self-Monitoring and Reporting Violations

(33 U.S.C. § 1311(a))

- 146. Paragraphs 1-145 are incorporated by reference.
- 147. Port site permit condition I(A)(1) requires Teck Cominco to monitor discharge from Outfall 001 at specified frequencies.
- 148. Teck Cominco violated this permit condition when it failed to monitor discharges at the frequencies required by its port site permit. As specified in KRPC members' Notice Letter, Teck Cominco failed to properly monitor discharge from Outfall 001, and thus violated port site permit condition I(A)(1), during the following months or on the following days: April 1999 (weekly analysis for BOD not conducted in two weeks); April 1999 (only two samples analyzed for fecal coliform); August 1999 (sample not analyzed for salinity); May 8, 2000 (weekly coliform and BOD samples not analyzed (2 violations)); May 29, 2000 (weekly coliform and BOD samples not analyzed (2 violations)); February 4, 2001 (weekly BOD samples not

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analyzed); July 2001 (failure to conduct adequate WET tests); August 2001 (failure to conduct adequate WET tests); September 2001 (failure to conduct adequate WET tests); April 10, 2002 (weekly sample for coliform not analyzed); May 2002 (failure to monitor total hardness and copper); July 2002 (failure to conduct WET test on *Mysidopsis bahia* or *Holmesimysis costatat*); August 2002 (failure to conduct WET test on *Mysidopsis bahia* or *Holmesimysis costatat*); September 2002 (failure to conduct WET test on *Mysidopsis bahia* or *Holmesimysis costatat*).

- 149. KRPC members are informed and believe that Teck Cominco's failure to properly monitor discharges, and the violations of port site permit condition I(A)(1), are ongoing to this day or are capable of repetition.
- 150. Port site permit condition I (B)(5) requires Teck Cominco to monitor discharge from Outfall 005 at specified frequencies.
- the frequencies required by its port site permit. As specified in KRPC members' Notice Letter, Teck Cominco failed to properly monitor discharge from Outfall 005 and thus violated permit condition I(B)(5) during the following months or on the following days: May 2000 (failure to continuously monitor flow and pH); May 2000 (failure to monitor discharge hardness); June 22, 2000 (failure to monitor total suspended solids); July 7 and 26, 2000 (failure to monitor for total suspended solids); August 9, 2000 (failure to monitor for total suspended solids); June 3, 4, 5, 6, 7, 8, 9, 2001 (failure to monitor for pH); July 2001 (failure to conduct adequate WET tests); August 2001 (failure to conduct adequate WET tests)
- 152. KRPC members are informed and believe that Teck Cominco's failure to properly monitor discharges, and the violations of port site permit condition I(B)(5), are ongoing to this day or are capable of repetition.
- 153. Teck Cominco has violated port site permit Condition I(A)(1) by failing to properly monitor discharges at least 22 times, and has violated port site permit Condition I(B)(5) by failing to properly monitor discharge at least 17 times, for 39 total monitoring violations.
 - 154. KRPC members believe and aver that, without the imposition of appropriate civil

1	penalties and the issuance of appropriate equitable relief, Teck Cominco will continue to violate			
2	its port site permit by failing to properly monitor and report discharges.			
3	TENTH CLAIM			
4	Mine Site: Violations of Consent Order			
5	(33 U.S.C. § 1311(a))			
6	155. Paragraphs 1-154 are incorporated by reference.			
7	156. Teck Cominco must comply with the terms of the Compliance Order by Consent,			
8	Docket No. CWA-10-99-0167, issued by the EPA on July 1, 1999, and modified most recently			
9	on May 17, 2002 ("Mine Consent Order").			
10	157. Under the Mine Consent Order, Teck Cominco was required to measure its			
11	compliance with increased TDS discharge limits at Stations 10 and 160, points downstream of			
12	Outfall 001; until May 17, 2002, the Mine Consent Order required measuring TDS at Stations 10			
13	and 7. Teck Cominco was required to limit its discharge of TDS so that concentrations of TDS			
14	remain below 1500 mg/l at Station 10, with exceedences below 1600 mg/l permissible if these do			
15	not continue for more than 48 hours in any 10 day period. At Station 160 (and formerly at			
16	Station 7), TDS concentrations must not exceed 500 mg/l from July 25 through the end of the			
17	discharging season.			
18	158. As specified in KRPC members' Notice Letter, Teck Cominco violated the TDS			
19	limits at Station 7 on the following dates: July 27, 1999; July 25, 2001; August 27, 28, 29, 2001.			
20	159. As specified in KRPC members' Notice Letter, Teck Cominco violated the TDS			
21	limits at Station 10 on the following dates:			
22	1999: June 24, 26, 27, 28, 29 and 30; July 1, 2, 3, 4, 5, 6, 7, 8, 9 (7 violations), 14, 15, 17,			
23	18; September 12; October 1 and 5.			
24	2000: June 22, 23, 24, 25, 26, 27 and 28; July 5, 6, 7, 8 and 11.			
25	2002: May 28 and 29; June 3, 6 and 24.			
26	160. KRPC members are informed and believe that Teck Cominco's violations of the			
27	TDS limits in the Mine Consent Order are ongoing to this day or are capable of repetition.			
28	KRPC members are informed and believe that the same discharge practices that caused Teck			
	COMPLAINT - 26 -			

Cominco to repeatedly violate the Mine Consent Order at Station 7 will cause it to continue to violate any Modified Mine Consent Order at Station 160.

- 161. Under the Mine Consent Order, Teck Cominco must monitor for certain parameters at the mine site and in streams near the mine site, as well as report certain data and calculations.
- 162. Teck Cominco has failed to conduct monitoring operations in accordance with the Mine Consent Order. As specified in KRPC members' Notice Letter, Teck Cominco violated the monitoring requirements of the Consent Order on July 14, 2000 and May 30, 2001.
- 163. Teck Cominco has also failed to report all data and calculations specified in the Mine Consent Order. As specified in KRPC members' Notice Letter, Teck Cominco violated the Consent Order by failing to timely report data required by the Order for Station 7 for July 25, 26, 27, 28, 29, 30 and 31, 2001 and for Station 10 for May 27, 28, 29, 30 and 31, 2002.
- 164. KRPC members are informed and believe that Teck Cominco's violations of the monitoring and reporting requirements of the Mine Consent Order are ongoing to this day or are capable of repetition.
- 165. Teck Cominco has violated the Mine Consent Order by exceeding the discharge limits at Station 7 at least 5 times, by exceeding the discharge limits at Station 10 at least 45 times, by failing to monitor as required at least 2 times, and by failing to report as required at least 12 times, for a total of 64 violations of the Mine Consent Order.
- 166. KRPC members believe and aver that, without the imposition of appropriate civil penalties and the issuance of appropriate equitable relief, Teck Cominco will continue to violate its permit limits with respect to TDS discharges.

WHEREFORE, plaintiffs Enoch Adams, Jr., Leroy Adams, Andrew Koenig, Jerry Norton, David Swan and Joseph Swan ask for judgment against Teck Cominco Alaska Incorporated as follows:

- 1. A declaration that Teck Cominco has violated the Clean Water Act at its mine and port sites and is in violation of the Clean Water Act at its mine and port sites;
 - 2. An injunction issued by the Court requiring Teck Cominco to comply fully with the

COMPLAINT

NPDES permits currently in effect at the mine and port sites;

- 3. Pursuant to 33 U.S.C. §1319(d) and 40 C.F.R. § 19.4, the imposition of civil penalties of \$27,500 for each of the 2,309 violations alleged in this complaint, totaling \$63,497,500;
- 4. The granting of reasonable and necessary costs and expenses of the investigation and prosecution of this case, including attorneys' fees, as provided for by 33 U.S.C. § 1365(d); and
 - 5. Any other relief the Court may conclude is just and appropriate.

ルカイ Dated this 」 day of March 2004.

Respectfully submitted,

CENTER ON RACE, POVERTY & THE POVINGNMENT

Luke W. Cold Brent Newell J. Mijin Cha

LAW OFFICES OF NANCY S. WAINWRIGHT

Attorneys for Plaintiffs

Enoch Adams, Jr., Leroy Adams, Andrew Koenig, Jerry Norton, David Swan and Joseph Swan