

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
 1992 STATEWIDE WATER QUALITY ASSESSMENT

92 0023

NAME OF WATERBODY: Bear Creek

Location or Lat/Long: Flowing into the South side of Turnagain Arm near Hope Alaska

Is the waterbody in a national or state park, monument, refuge, preserve, or similar area?:

Yes / No / Name: Chugach National Forest, Seward Ranger District

Waterbody Type:	Waterbody Size:	Segment of Waterbody Addressed:
<input checked="" type="checkbox"/> River/Stream	<u>6</u> Miles <u>Main Stem</u>	From: <u>Section 7, T. 9 S., R. 1 W., S. M.</u>
<input type="checkbox"/> Lake	_____ Acres/Hectares	To: <u>Section 28, T. 10 N., R. 2 W., S. M.</u>
<input type="checkbox"/> Fresh Wetland	_____ Acres/Hectares	Other Description: _____
<input type="checkbox"/> Tidal Wetland	_____ Acres/Hectares	_____
<input type="checkbox"/> Estuary	_____ Square Miles	Size of Segment: <u>5 miles</u>
<input type="checkbox"/> Coastal Shoreline	_____ Miles	_____
<input type="checkbox"/> Groundwater	_____ Miles	_____

Period of Assessment, From: _____ To: _____

Type of Documentation (attach if possible):

- | | |
|--------------------------------------------------------------|-----------------------------------------|
| <input checked="" type="checkbox"/> Water quality data | <input type="checkbox"/> Written report |
| <input type="checkbox"/> Documented oil spill | <input type="checkbox"/> Field notes |
| <input checked="" type="checkbox"/> NOV / Enforcement action | <input type="checkbox"/> Overflight |
| <input type="checkbox"/> Photos with documentation | <input type="checkbox"/> Observation |
| <input type="checkbox"/> Photos without documentation | <input type="checkbox"/> Other |

Describe Source and Nature of Pollution, Documentation Provided and Other Comments:

Numerous complaints were received in 1990 about water quality problems in Bear Creek. A joint site inspection with ADEC, ADF&G and the U.S. Forest Service showed water quality degradation during dredging operations.

See attached letter

RESPONDENT INFORMATION:

Name: Stewart Seaberg Phone: 267-2284 Date: 3 April 1992
 Employer: State of Alaska Dept: Fish and Game Title: Habitat Biologist
 Address: 333 Raspberry Rd Anch AK 99588-1599
 Education/Experience: _____

STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION

ANCHORAGE WESTERN DISTRICT OFFICE
3601 C STREET, SUITE 322
ANCHORAGE, ALASKA 99503

STEVE COWPER, GOVERNOR

ALASKA DEPT. OF
FISH & GAME

SEP 06 1990

REGION II
HABITAT DIVISION 563-6775

September 4, 1990

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Tom Williams
P.O. Box 68
Hope, Alaska 99605

RE: Bear Creek Mining operation, NOTICE OF CORRECTIVE ACTION

Dear Mr. Williams:

This is in response to an inspection of your Bear Creek mining operation on August 29, 1990 by Mr. Gary Folley of Alaska Department of Environmental Conservation (ADEC), Mr. Stewart Seaberg of Alaska Department of Fish & Game (ADF&G), and Ms. Donna Kerrigan of U.S. Forest Service (USFS). The inspection was conducted due to citizen complaints of turbid water in Bear Creek from your mining operation. Unfortunately, you were not on-site during the inspection. However, Mr. Ken Hartman, the claim-holder, was on-site and started up your suction dredge to demonstrate it's effect to the water quality. Your mining operation consists of a five (5) inch suction dredge and sluice box placed in the middle of Bear Creek. You also have a backhoe that you use in your mining operation. I reviewed our files and did not observe a current Alaska Placer Mining Application (APMA) for your operation on file.

Because of the size of your suction dredger, five inch, you are classified as a recreational miner, six inches or less, and a National Pollutant Discharge Elimination System permit from the Environmental Protection Agency (EPA) is apparently not necessary (please contact the EPA to exactly determine the status of your operation). However, you still have to meet state water quality standards.

Mr. Folley collected water samples above your mining operation (background samples), at the discharge point, and approximately 1,000 feet downstream of your mining operation. The following are the results of those sampling analyses as reported by Chemical & Geological Laboratories:

Mr. Tom Williams
September 4, 1990
Page 2

Location	Settleable Solids (mg/l/hr.)	Turbidity (NTUs)	Arsenic (mg/l)
Upstream (Background immediately upstream of operation)	N/D 0.1	0.25	N/S
Discharge Pt.	0.1	17.0	N/S
Downstream (1,000 feet downstream of discharge point)	N/D 0.1	28.0	Pending Analysis

N/D = Not detectible to
N/S = Not sampled for
NTU = Nephelometric unit
mg/l = milligram/liter

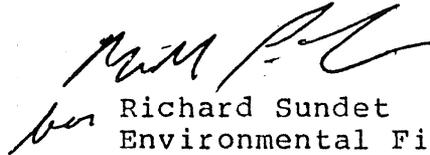
The settleable solids results were within state water quality standards (maximum concentration allowed = 0.2 ml/l/hr.). However, turbidity results were not within these standards (maximum concentrations allowed: within the mixing zone, five NTUs over background). Mr. Folley determined that your mixing zone, area from the discharge point to the area where the "process water" is thoroughly mixed or where a secondary user is located, extends to 1,000 feet below your discharge point. Mr. Folley believes that this was determined as a very reasonable mixing zone for your operation. Unfortunately, the effects of your mining operation resulted in turbidity results at the end of your mixing zone over state water quality standards for turbidity (28.0 NTU, the maximum allowable limit is 5.25 NTUs). Therefore, if you were to commence start-up of your mining operation, you would be in violation with state water quality standards. Suction dredging operations generally do not have problems meeting state water quality regulations. We believe that your operation has had problems because you are using a backhoe. Because of your prior use of the backhoe, the stream has accumulated a substantial amount of fine material. The ADEC requests that you modify your operation to enable you to meet state water quality standards at the end of your mixing zone.

In addition, I submitted the downstream water sample for analysis of arsenic. However, that result will not be completed for approximately ten days. When I receive that result from Chemical & Geological Laboratories, I will mail you a copy, including the turbidity and settleable solids results.

Mr. Tom Williams
September 4, 1990
Page 3

Please do not hesitate to contact me at the Anchorage Western District Office (563-6775) or Mr. Gary Folley at the Soldotna Office (262-5210) if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Richard Sundet". The signature is stylized and written in cursive.

Richard Sundet
Environmental Field Officer

cc Donna Kerrigan, USFS, Seward
Stewart Seaberg, ADF&G, Anchorage
Gary Folley, ADEC, Soldotna
Ken Hartman, Hope