

Division of Air and Water Quality
Watershed Management
610 University Avenue
Fairbanks, AK 99709-3643

Director's Office: (907) 465-5260
Fairbanks Office: (907) 451-2360
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August 15, 1997

Mr. Paul Glavinovich
Thor Gold Alaska Inc.
P.O. Box 111323
Anchorage, AK 95111

Certified Mail
Return Receipt Requested

Re: Waste Disposal Permit Renewal Request
ADEC File No. 9722-DB001, formerly Permit No. 9222-DB003

Dear Mr. Glavinovich:

The Department of Environmental Conservation has reviewed your permit renewal request for the discharge of mine process water to a tailings impoundment. Based on our evaluation, Permit No. 9722-DB001 is hereby granted.

Please note the conditions in Appendices A and B. This permit expires August 1, 2002 and must be renewed by that date for continued operation of the facility. Department regulations require that renewal requests be received at least 30 days prior to expiration of a wastewater disposal permit. Requests not received prior to this date cannot be renewed and must be reissued as a new permit. This process takes a minimum of 60 days, during which time the facility may be prohibited from operation.

The conditions contained in this permit are based on the state regulations for Wastewater Disposal (18 AAC 72), Water Quality Standards (18 AAC 70), and Solid Waste Management (18 AAC 60).

Department of Environmental Conservation regulations provide that any person who disagrees with any portion of this decision, may request an adjudicatory hearing in accordance with 18 AAC 15.200-920. The request should be mailed to the Commissioner of the Alaska Department of Environmental Conservation, 410 Willoughby Ave, Suite 105, Juneau, Alaska 99801-1795. Please send a copy of any such requests to the undersigned. You are reminded that even if an adjudicatory hearing has been requested and granted, all permit conditions remain in full force and effect. Failure to submit a hearing request within thirty (30) days of receipt of this letter shall constitute a waiver of that person's right to judicial review of this decision.

Sincerely,

Tim Wingerter
Wastewater Treatment and Disposal Team Leader
Watershed Management Section

RD/TW/rg {K:\AWQ\WPC\9722-001.PMT}
cc: Robert Dolan, ADEC/Anchorage

Mat-Su Public Service Office, ADEC

**STATE OF ALASKA
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF AIR AND WATER QUALITY
WATERSHED MANAGEMENT SECTION
610 UNIVERSITY AVENUE
FAIRBANKS, AK 99709-3643**

PERMIT NO. 9722-DB001

DATE ISSUED: August 15, 1997

This permit is issued to Thor Gold Alaska Inc., P.O. Box 11323, Anchorage, AK, 99511, for the discharge of mine process water to a tailings impoundment at the Willow Creek Mill located at Mile 23 of the Hatcher Pass Road. This permit is subject to the conditions contained in Appendices A and B which are incorporated herein by reference.

This permit is issued under provisions of Alaska Statutes 46.03, the Alaska Administrative Code as amended or revised, and other applicable State laws and regulations.

This permit is effective on issuance and expires August 1, 2002 unless superseded before that time by State Certified NPDES permit. It may be terminated or modified in accordance with AS 46.03.120.

SIGNATURE ON FILE

Tim Wingerter

Wastewater Treatment and Disposal Team Leader

APPENDIX A – SPECIFIC PERMIT CONDITIONS

A. APPLICATION COMPLIANCE

The Permittee shall comply with all parts of their permit application submittal dated April 1, 1992 except as specified otherwise in this permit.

B. SITE OPERATION

1. The discharge shall be limited to mine process wastewater, and shall not exceed a maximum of 40,000 gallons/day. The wastewater shall be discharged to Pond #4 as identified in the application.
2. There shall be no discharge of floating solids, garbage, grease, foam, oily waste or wastewater containing a visible sheen or which may produce a film, sheen or coloration on surface waters.
3. The disposal shall not cause contamination of surface or groundwaters, and shall not cause a violation of the Alaska Water Quality Standards (18 AAC 70).
4. The disposal shall not cause adverse effects on aquatic or terrestrial plant or animal life, their reproduction, or habitat.

C. SITE CLOSURE

1. Residual Process Water Disposal

Prior to closure of the impoundment pond, additional details of the closure pond need to be submitted to the Anchorage Office for review and approval that will address the following points:

- a. the disposal of residual process fluids in the impoundment pond prior to closure by an area land technique that will not cause erosion problems or adversely effect water quality in the nearby surface water bodies; and
- b. a sampling plan that will adequately characterize the residual process water for the parameters of concern listed in part D.1; and
- c. water treatment processes that will be used if necessary to ensure that the discharge limitations in part D.1. are met prior to discharging the residual water in the impoundment pond.

2. Tailings Impoundment Pond Closure

When the tailings impoundment pond has been filled to the final design elevation the Permittee shall:

- a. top off, compact, and grade over the stabilized pond contents with clean fill material and contour to prevent ponding; and
- b. cover the tailings with a minimum of two feet of earth contoured with a surface slope between three to five percent grade to promote drainage away from the site.

3. Revegetation

The Permittee shall ensure that the uppermost portion of the cover material contains a layer of organic soil and a vegetative ground cover is developed within the first growing season and is sustained in following years.

4. Post closure maintenance

For five years after the entire facility is closed, or longer if the department determines that special circumstances require, the owner of the facility shall maintain the integrity of the final cover, vegetation, slopes and drainage structures.

D. LIMITATIONS AND MONITORING

1. Unless otherwise specified in this permit, during the period beginning on the effective date to the expiration date, the Permittee is authorized to discharge in accordance with the following limitations and monitoring requirements below:

Effluent Characteristics	Effluent Limitation	Monitoring Requirements ¹ Frequency	Sample Types
Flow (gallons/day)	40,000	daily	estimate
Arsenic(mg/l)	.05	2 times/year ²	grab
Barium(mg/l)	1.0	2 times/year	grab
Cadmium(mg/l)	.01	2 times/year	grab
Chromium(mg/l)	.05	2 times/year	grab
Copper(mg/l)	1.0	2 times/year	grab
Lead(mg/l)	.05	2 times/year	grab
Mercury(mg/l)	.002	2 times/year	grab
Selenium(mg/l)	.01	2 times/year	grab
Silver(mg/l)	.05	2 times/year	grab
Zinc(mg/l)	5.0	2 times/year	grab
pH	6.5-8.5	2 times/year	grab
Total Dissolved Solids(mg/l)	500	2 times/year	grab

¹Upon application by the Permittee and review by the Department of three (3) years sampling results the monitoring requirements may be reduced in frequency and number of parameters analyzed. Written approval by the Department is required for any permit modifications.

²Samples will be collected and analyzed for all listed parameters, from the two monitoring wells identified as the North Well and the West Well during the months of July and October of each year. During years before the mine becomes operational a single sample will be collected in July. The twice per year monitoring requirements become effective upon commencement of discharging mine process wastewater to the tailings impoundment.

2. If the Permittee monitors any effluent characteristic identified in this permit more frequently than required, the results of such monitoring shall be included in the calculation and reporting of the values required in the Part D. Such increased frequency shall also be indicated.
3. Test procedures for the analysis of pollutants shall conform to methods cited in 18 AAC 70.020. The Permittee may substitute alternative methods of monitoring or analysis upon receipt of written approval from the Department.
4. All records and information resulting from the monitoring activities required by this permit, including all records of analyses performed, calibration and maintenance of instrumentation, recordings from continuous monitoring instrumentation, and any addition or modification of the facility, shall be retained at the facility for observation by the Department for three years. Upon request from the Department, the Permittee shall submit certified copies of such records.

E. REPORTING

1. Monitoring results as required in Part D shall be submitted to the following offices no later than 15 days after receipt of the laboratory results:

Alaska Department of Environmental Conservation
Watershed Management Section
555 Cordova Street
Anchorage, AK 99501
(907) 269-7565

Alaska Department of Environmental Conservation
Mat-Su Public Service Office
P.O. Box 871064
Wasilla, Alaska 99687
(907) 376-5038

2. If for any reason the Permittee does not comply with or will be unable to comply with any effluent limitations specified in this permit, the Permittee shall report the noncompliance to the Department within 24 hours of becoming aware of such condition by telephone, facsimile, or in the absence of both, by mail. A written follow-up report shall be submitted to the Department within 7 days of the non-compliance. The report shall contain, but not be limited to:
 - a. Times and dates on which the event occurred and, if not corrected, the anticipated time the non-compliance is expected to continue;
 - b. A detailed description of the event including quantities and types of materials involved;
 - c. details of any damage to the receiving environment;

- d. details of actions taken or to be taken to correct the causes of the event; and
 - e. details of actions taken or to be taken to correct any damage resulting from the event.
3. For purposes of this permit, a violation of this permit, or contamination of surface or groundwaters shall be defined as any of the following:
- a. Discharging wastewater other than authorized.
 - b. Discharging wastewater to an area other than authorized.
 - c. Surface or groundwater contaminate levels exceeding levels specified in 18 AAC 70 (Water Quality Standards).
 - d. Non-compliance with any section of this permit.
 - e. Pollution, as defined in AS 46.03.900, resulting from the operation of this permitted facility.

APPENDIX B – GENERAL PERMIT CONDITIONS

A. Access and Inspection

The department's representatives shall be allowed access to the permittee's facilities to conduct scheduled or unscheduled inspections or tests to determine compliance with this permit and State laws and regulations.

B. Availability of Records

Except for information related to confidential processes or methods of manufacture, all application materials and records and reports submitted in accordance with the terms of this permit shall be available for public inspection at the department's Southcentral Regional Office.

C. Location of Permit and Application

The permittee shall maintain a copy of this permit and facility plans at the disposal facility or, if that is not feasible, at the permittee's or operator's place of business.

D. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance, whether or not such noncompliance is due to factors beyond their control, including but not limited to accidents, equipment breakdowns, or labor dispute.

E. Adverse Impacts

The permittee shall take all necessary means to minimize any adverse impact to the receiving waters or lands resulting from a violation or noncompliance with any limitations specified in this permit, including any additional monitoring needed to determine the nature and impact of the activity in noncompliance. The permittee shall clean-up and restore all areas adversely impacted by the noncompliance.

F. Cultural or Paleontological Resources

Should cultural or paleontological resources be discovered as a result of this activity, work which would disturb such resources is to be stopped, and the Office of History and Archaeology, Division of Parks and Outdoor Recreation, Department of Natural Resources, is to be notified immediately (907)269-8715.

G. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, nor does it authorize any damage to private property.

H. Modifications or Changes

This permit authorizes only that operation specified in the application and permit. Any alteration, installation, expansion or modification which was not submitted as a component of the permitted facility plan will require a written plan approval or permit amendment prior to implementation. Any expansion, modification, or other change in a facility process or operation which may result in an increase in emissions or discharges or may cause other detrimental environmental impacts from the permittee's facility requires a new permit.

I. Applications for Permit Renewal, Amendment or Plan Approval

Application for a renewal of or amendment to a permit will be treated in the same manner as the initial application, except that public notice or hearing will not be required for applications for renewal or amendment. Application for renewal or amendment or plan approval must be made no later than 30 days before the expiration of the permit or the planned effective date of the amendment or change.

J. Transfers

Should operation of the facility be contracted or a change in contractors be made, the new contractor shall be notified of the existence of the permit and its conditions. The permittee may request to transfer this permit to another proposed permittee. The written request must include a certified signed affidavit from the proposed new permittee stating that they accept this permit in its entirety. This department reserves the sole discretion to transfer this permit.

K. Termination

This permit terminates upon the expiration date. The department has the authority to terminate a permit upon 30 days written notice if the department finds that there has been a violation of the conditions of the permit.

L. Pollution Prevention

In order to minimize present and future threats to human health and the environment, the Permittee shall make waste management decisions which 1) minimize pollution entering the air, land, and water, and 2) promote the following waste management practices in the following order of priority:

- 1) source reduction
- 2) recycling/reuse
- 3) treatment, and
- 4) disposal