

- (iii) For each area that generates storm water discharges associated with industrial activity with a reasonable potential for containing amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants which are likely to be present in storm water discharges associated with industrial activity. Factors to consider include the toxicity of chemical; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks or spills of toxic or hazardous pollutants. Flows with a potential for causing erosion shall be identified.
- (iv) For each area that generates storm water discharges associated with construction or exploration activities, descriptions of the following components shall be included in the Plan:
 - the nature of the activity;
 - estimates of the total area of the site and the area of the site that is expected to be disturbed by mining activities or related land-disturbing activities;
 - existing data describing the soil or the existing data describing the quality of any discharge from the site;
 - a site map indicating drainage patterns and approximate slopes anticipated after land-disturbing activities, areas of soil disturbance, the location of major control structures identified in the Plan, areas where stabilization practices are expected to occur; and
 - the name of the receiving water(s) and the ultimate receiving water(s).
- c. **Inventory of Exposed Materials.** An inventory of the types of materials handled at the site that potentially may be exposed to precipitation and the materials that have the potential for failure (tank overflow or leakage). The inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water; method, location, and size of on-site storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff; the location and a description of existing structural and non-structural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.
- d. **Spills and Leaks.** A list of significant spills that may occur at the site and at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility. Such list shall be updated as appropriate during the term of the permit.
- e. **Risk Identification and Summary of Potential Pollutant Sources.** The Plan shall identify all activities, sites, and significant materials which may potentially be pollutant sources. The Plan shall also include a narrative description of the potential pollutant sources from the following activities: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; dust or particulate generating

processes; and on-site waste disposal practices. The description shall specifically list any potential source of pollutants at the site, and for each potential source, any pollutant or pollutant parameter (e.g. biochemical oxygen demand, etc.) of concern shall be identified. The Plan shall provide a description of potential sources which may reasonably be expected to add amounts of pollutants to storm water discharges.

- f. **Measures and Controls.** The facility shall develop a description of pollution prevention controls appropriate for the facility and implement such controls. The appropriateness and priorities of controls in the Plan shall reflect identified potential sources of pollutants at the facility. The description of management controls shall address the following minimum components, including a schedule for implementing such controls:
- (i) **Good Housekeeping -** Good housekeeping requires the maintenance of areas which may contribute pollutants.
 - (ii) **Preventive Maintenance -** A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins, pumps, channels, ditch) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems.
 - (iii) **Spill Prevention and Response Procedures -** Areas where spills could result in the discharge of pollutants shall be identified clearly in the Plan. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the Plan should be considered. Procedures for cleaning up spills shall be identified in the Plan and made available to the appropriate personnel. The necessary equipment to implement a clean up must be available to personnel.
 - (iv) **Measures and Controls for storm water associated with construction or exploration activities outside of the area which drains into the tailings impoundment -** The Plan shall describe the relationship between the implementation and maintenance of controls and measures and the various stages or phases of earth disturbance (for example, clearing and grubbing necessary for perimeter controls, initiation of perimeter controls, remaining clearing and grubbing, road grading, remaining site grading, storm drain installation, final grading, stabilization, removal of control measures). The description of controls shall address the following minimum components:
 - erosion and sediment controls;
 - stabilization practices;
 - structural practices;

- storm water management (description of measure to control pollutants in storm water discharges);
 - other controls to eliminate contact of storm water with materials on site; and
 - measures to reduce pollutant loadings.
- g. **Employee Training.** The Plan shall identify dates for annual employee training programs. The training programs shall inform personnel responsible for implementing activities identified in the Plan or otherwise responsible for all levels of responsibility of the components and goals of the Plan. Training shall address topics such as spill response, good housekeeping and material management practices.
- h. **Sediment and Erosion Control.** The Plan shall identify areas which, due to topography, activities, or other factors, have a high potential for soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.
- i. **Specific Best Management Practices.** The Plan shall establish specific best management practices or other measures which ensure that the following specific requirements are met:
- (i) Ensure that berms, including any pond walls, ditches, dikes, dams and similar water retention structures shall be constructed in a manner that they reject the passage of unwanted water.
 - (ii) Ensure that measures are taken to assure that pollutant materials removed from the process water and wastewater streams will be retained and not discharged to waters of the United States.
 - (iii) Ensure that all water control devices, including but not limited to structures and berms, and all solids retention structures such as berms, dikes, and pond structures and dams, shall be maintained to continue their effectiveness and to protect from failure.
 - (iv) Ensure proper management of solid and hazardous waste in accordance with regulations promulgated under the Resource Conservation and Recovery Act (RCRA) and the Alaska Solid Waste Management Regulations (18 AAC 60). Management practices required under RCRA regulations shall be referenced in the Plan.
 - (v) Reflect requirements for Spill Prevention, Control, and Countermeasure (SPCC) plans under Section 311 of the Clean Water Act and 40 CFR 112. The Plan may incorporate any part of such plans by reference.
3. a. Qualified facility personnel shall conduct routine inspections on a monthly basis on areas susceptible to leaks (including leaks from the tailings impoundment), spills and other identified problem areas.
- b. For an inspection, the following conditions shall be met:

- (i) A visual inspection of equipment needed to implement the Plan, such as spill response equipment, shall be made.
 - (ii) Areas impacted by storm water discharge shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the Plan shall be observed to ensure that they are operating correctly.
- c. The permittee shall inspect disturbed areas of the construction or exploration site exposed to precipitation outside of the area which drains into the tailings impoundment as follows:
 - (i) weekly during the months of May, June, September and October; and
 - (ii) within 24 hours of the end of a 24-hour rain event that is 0.5 inches or greater.
- 4. Twice per year, the permittee shall 1) identify areas impacted by storm water discharges associated with construction or exploration activities, and 2) evaluate whether measures identified in the Plan to reduce pollutant loadings generated by storm water discharges associated with construction or exploration activities are adequate and properly implemented.
- 5. Based on the results of the inspections, the permittee shall initiate corrective measures within 30 days of such inspection or as soon as practicable under extenuating circumstances. The permittee shall notify EPA and ADEC of the extenuating circumstances within 15 days of the inspection. Any corrective measures shall be documented and be included in the Plan.
- 6. The permittee shall prepare an annual report summarizing 1) the scope of the inspections, 2) personnel making the inspections, 3) the dates of the inspections, 4) corrective actions taken as a result of the inspection, 5) description of the quality and quantity of storm water discharged, 6) construction activities during the year, 7) employee training conducted during the year, and 8) Plan modifications made during the year.

In addition, the report shall identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report shall contain a certification that the facility is in compliance with the Plan and this permit.

This report shall be signed in accordance with Permit Part IV.E. and shall be submitted to EPA and ADEC by February 10 of the next year.
- 7. The permittee shall amend the Plan whenever there is a change in design, construction, operation, or maintenance, which has an effect on the

potential for the discharge of pollutants to the waters of the United States or if the Plan proves to be ineffective in eliminating or minimizing pollutants from sources impacting water quality, or in otherwise achieving the general objectives of controlling pollutants. Amendments to the Plan are subject to review by EPA and ADEC, and they shall be kept on site and made available to EPA and ADEC upon request.

The Plan shall be updated to include new construction or exploration activities. The update must be completed seven (7) days prior to commencement date of new construction or exploration activities.

J. Annual Water Monitoring Summary Report

All monitoring results for a year must be included in an Annual Water Monitoring Summary Report and submitted by March 1 of the following year. The report must include a presentation of the analytical results and an evaluation of the results of monitoring required in Permit Parts I.A through I.G. The evaluation must include an electronic spreadsheet containing monitoring data from the previous five years, a graphical presentation of the data at each monitoring station, a comparison of upstream and downstream monitoring results (to show any differences) and a comparison of monitoring results for each station over time (to show any trends). The Annual Water Monitoring Summary Report may reference the monthly reports for Quality Assurance/Quality Control (QA/QC) information.

All monitoring results for a calendar year shall be reported in the Report. At a minimum, the report must include the following:

1. Dates of sample collection and analyses
2. Results of sample analysis
3. Relevant QA/QC information.

II. Monitoring, Recording and Reporting Requirements

A. Representative Sampling (Routine and Non-Routine Discharges)

Samples and measurements must be representative of the volume and nature of the monitored discharge.

In order to ensure that the effluent limits set forth in this permit are not violated at times other than when routine samples are taken, the permittee must collect additional samples at the appropriate outfall whenever any discharge occurs that may reasonably be expected to cause or contribute to a violation that is unlikely to be detected by a routine sample. The permittee must analyze the additional samples for those parameters limited in Permit Part I.A. that are likely to be affected by the discharge.

The permittee must collect such additional samples as soon as the spill, discharge, or bypassed effluent reaches the outfall. The samples must be analyzed in accordance with paragraph III.C ("Monitoring Procedures"). The permittee must

report all additional monitoring in accordance with paragraph III.D ("Additional Monitoring by Permittee").

B. Reporting of Monitoring Results

The permittee must summarize monitoring results each month on the DMR form (EPA No. 3320-1) or equivalent. The permittee must submit reports monthly, postmarked by the 20th day of the following month. If mailing of a DMR is delayed by unforeseen circumstances, the permittee send a facsimile of the cover letter and a certification that the DMR is complete to the U.S. EPA Region 10 NPDES Unit Manager at (206) 553-1280. The permittee must sign and certify all DMRs, and all other reports, in accordance with the requirements of Permit Part IV.E. ("Signatory Requirements"). The permittee must submit the legible originals of these documents to the Director, Office of Compliance and Enforcement, with copies to the State Agencies at the following addresses:

US EPA Region 10
Attn: PCS Data Entry Team
1200 Sixth Avenue, OCE-133
Seattle, Washington 98101

copy to: Alaska Department of Environmental Conservation
Division of Water
610 University Avenue
Fairbanks, Alaska 99709-3643

Alaska Department of Natural Resource
Office of Habitat Management and Permitting
1300 College Road
Fairbanks, Alaska 99701-1599

C. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 CFR 136, unless other test procedures have been specified in this permit or approved by EPA as an alternate test procedure under 40 CFR 136.5.

D. Additional Monitoring by Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR 136 or as specified in this permit, the permittee must include the results of this monitoring in the calculation and reporting of the data submitted in the DMR.

Upon request by EPA, the permittee must submit results of any other sampling, regardless of the test method used.

E. Records Contents

Records of monitoring information must include:

1. the date, exact place, and time of sampling or measurements;

2. the name(s) of the individual(s) who performed the sampling or measurements;
3. the date(s) analyses were performed;
4. the names of the individual(s) who performed the analyses;
5. the analytical techniques or methods used; and
6. the results of such analyses.

F. Retention of Records

The permittee must retain records of all monitoring information, including, all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, copies of DMRs, a copy of the NPDES permit, and records of all data used to complete the application for this permit, for a period of at least five years from the date of the sample, measurement, report or application. This period may be extended by request of EPA or ADEC at any time.

G. Twenty-four Hour Notice of Noncompliance Reporting

1. The permittee must report the following occurrences of noncompliance by telephone within 24 hours from the time the permittee becomes aware of the circumstances:
 - a) any noncompliance that may endanger health or the environment;
 - b) any unanticipated bypass that exceeds any effluent limitation in the permit (See Permit Part III.F., "Bypass of Treatment Facilities");
 - c) any upset that exceeds any effluent limitation in the permit (See Permit Part III.G., "Upset Conditions"); or
 - d) any violation of a maximum daily discharge limitation for any of the pollutants in Table 1 of Permit Part I.A.
2. The permittee must also provide a written submission within five days of the time that the permittee becomes aware of any event required to be reported under subpart 1 above. The written submission must contain:
 - a) a description of the noncompliance and its cause;
 - b) the period of noncompliance, including exact dates and times;
 - c) the estimated time noncompliance is expected to continue if it has not been corrected; and
 - d) steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
3. The Director of the Office of Compliance and Enforcement may waive the written report on a case-by-case basis if the oral report has been received

within 24 hours by the NPDES Compliance Hotline in Seattle, Washington, by telephone, (206) 553-1846.

4. Reports must be submitted to the addresses in Permit Part II.B ("Reporting of Monitoring Results").

H. Other Noncompliance Reporting

The permittee must report all instances of noncompliance, not required to be reported within 24 hours, at the time that monitoring reports for Part III.B ("Reporting of Monitoring Results") are submitted. The reports must contain the information listed in Permit Part II.G.2 ("Twenty-four Hour Notice of Noncompliance Reporting").

I. Changes in Discharge of Toxic Pollutants

The permittee must notify the Director of the Office of Water and Watersheds and ADEC as soon as it knows, or has reason to believe:

1. That any activity has occurred or will occur that would result in the discharge, on a **routine or frequent** basis, of any toxic pollutant that is not limited in the permit, if that discharge may reasonably be expected to exceed the highest of the following "notification levels":
 - a) One hundred micrograms per liter (100 ug/l);
 - b) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
 - c) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
 - d) The level established by EPA in accordance with 40 CFR 122.44(f).
2. That any activity has occurred or will occur that would result in any discharge, on a **non-routine or infrequent** basis, of any toxic pollutant that is not limited in the permit, if that discharge may reasonably be expected to exceed the highest of the following "notification levels":
 - a) Five hundred micrograms per liter (500 ug/l);
 - b) One milligram per liter (1 mg/l) for antimony;
 - c) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
 - d) The level established by EPA in accordance with 40 CFR 122.44(f).
3. The permittee must submit the notification to Office of Water and Watersheds at the following address: