STATE OF ALASKA

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF WATER
WASTEWATER DISCHARGE PROGRAM

SARAH PALIN, GOVERNOR

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Soldotna, AK 99669
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April XX, 2007

ADEC File #1516.62.001

Mr. Paddy Nicol, MBA
President
Niblack Mining Corporation
Suite 615-800 West Pender Street
Vancouver, British Columbia V6C 2V6

Certified Mail #XXXXXXXXXXXX
Return Receipt Requested

Subject: Waste Management Permit 2006-DB0037, Niblack Exploration Project

Dear Mr. Nicol:

The Alaska Department of Environmental Conservation (ADEC) has completed its evaluation of your non-domestic wastewater disposal permit application and your application for a permit to temporarily store Potentially Acid Generating (PAG) solid waste on the surface prior to its ultimate disposal underground. The attached permit, 2006-DB0037 covers both the disposal of non-domestic waste water and the management and disposal of PAG solid waste material that are associated with project development activities, exploration adit dewatering and underground drilling. Wastewater from the exploration tunnel will be treated using coagulation and settling by parallel plate separator prior to commingling with water from the PAG site. Water from the adit and the PAG site will then be collected in a lined holding pond for additional settling prior to treatment that will ensure compliance with permit limits. This water will then go to a second pond for further settling and infiltration into the ground. Excess water will be distributed to a drip emitter system within the surrounding woodlands. PAG material will be temporarily stored on a lined pad with rainwater and runoff collected and treated. Best Management Practices (BMP's) will be used to restrict rainwater from entering the pile. Final disposal of the PAG material will be under water at the far end of the main access tunnel, where similar material naturally occurs. A concrete plug will be placed to seal off this material. The project is expected to last approximately 2 years. The project is located on the southern end of Prince of Wales Island about 30 miles southwest of Ketchikan in the Ketchikan Recording District on Craig A-1 USGS Map. The proposed project site is located within Section 34, T. 78 S., R. 88 E., Copper River Meridian; in Niblack Anchorage, off Moira Sound on Prince of Wales Island, southeast Alaska.

The application and draft permit went to public notice, as required in 18 AAC 15.050, during the months of April and May 2007. The Department is issuing the enclosed permit in accordance with AS 46, 18 AAC 15, 18 AAC 60 and 18 AAC 72.

Flow rate, treatment, and disposal are addressed in this permit. This permit is not intended to serve as discharge authorization for production mining activities. Surface and ground waters do not meet state water quality standards. To ensure existing water quality conditions were not further degraded by the project, compliance with State of Alaska Water Quality Standards Site Specific Criteria, 18 AAC 70.235(b), have to be met. This is achieved by comparing the quality of water upstream from the project with that downstream, in each surface water stream.

Please review the conditions and stipulations in this permit and ensure that they are all understood. This permit is effective XXXXX, 2007 and expires XXXXX, 2012.

Any person who disagrees with this decision may request an adjudicatory hearing in accordance with 18 AAC 15.195- 18 AAC 15.340 or an informal review by the Division Director in accordance with 18 AAC 15.185. Informal review requests must be delivered to the Director, Division of Water, 410 Willoughby Ave., Juneau, Alaska 99801, within 15 days of the permit decision. Adjudicatory hearing requests must be delivered to the Commissioner of the Department of Environmental Conservation, 410 Willoughby Avenue, Suite 303, PO Box 111800, Juneau AK 99811-1800, within 30 days of the permit decision. If a hearing is not requested within 30 days, the right to appeal is waived.

If you have questions regarding this permit please contact Kenwyn George at 907-465-5313 or kenwyn_george@dec.state.ak.us.

Sincerely,

DRAFT

David Johnson
Technical Engineer

CC: Ruth Hamilton-Heese, ADOL, Juneau
Bob Tsigonis, ADNR, Fairbanks
Kenwyn George, ADEC, Juneau
Ed Emswiler, ADEC, Juneau
Brenda Krauss, ADEC, Juneau
Joe Donohue, ADNR, Juneau
Steve McGroarty, ADNR, Fairbanks
Jim Vohden, ADNR, Fairbanks
Brady Scott, ADNR, Lands, Juneau
Nicole Hayes, COE, Anchorage
Terri Stinnett-Herczeg, COE, Anchorage

STATE OF ALASKA
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
410 WILLOUGHBY AVE., SUITE 303,
PO BOX 111800, JUNEAU AK 99811-1800

WASTE MANAGEMENT PERMIT
for the
Niblack Exploration Project

Permit 2006DB0037 **Date: XXXXX, 2007**

This Waste Management Permit is issued to Niblack Mining Corporation for:

a) the temporary placement of approximately 14,300 cy of Potentially Acid Generating (PAG) rock in a 0.85-acre lined storage site at a surface site, and ultimately under water at the far end of the exploration tunnel, behind a concrete plug.
b) the treatment and disposal of up to 150 gpm of non-domestic waste water from the exploration tunnel dewatering and the PAG temporary storage pile, as associated with exploration activities for the Niblack Project.
c) placement of PAG waste and inert waste underground in the adit at the termination of the exploration project..
d) monitoring of surface and ground waters to ensure natural conditions are not exceeded from all facilities.

The project is located on the southern end of Prince of Wales Island about 30 miles southwest of Ketchikan in the Ketchikan Recording District on Craig A-1 USGS Map. The proposed project site is located within Section 34, T. 78 S., R. 88 E., Copper River Meridian; in Niblack Anchorage, off Moira Sound on Prince of Wales Island, Southeast Alaska. The Niblack operation is comprised of approximately 6000 ft of underground drift development to provide access for continued exploration drilling on the Lookout and Mammoth massive sulfide mineral zones. Metals in the massive sulfide mineralization include copper, zinc, gold and silver. Non-acid generating (NAG) rock will be disposed of on the hill slope adjacent to the portal. The estimated quantity of NAG rock is 46,600 cubic yards. Potentially acid generating (PAG) rock will be disposed of to a 25,000-ft^2 lined temporary site until ultimate disposal by placing it back underground at the termination of the exploratory phase. The estimated quantity of PAG rock is 14,300 cubic yards. Water from the adit and PAG waste rock site will be disposed of via a two-pond treatment system, each pond being 76ft x 76ft x 8ft deep, then to a drip infiltration system in woodlands. The project is expected to last approximately 2 years.

This permit incorporates under the Waste Management Permit by reference the Niblack Project's Waste Water Treatment and Disposal Application, Application for an Industrial Solid Waste Landfill Permit, Water Quality Baseline and Site Monitoring Plan, Quality Assurance Project Plan,

Operational Characterization Plan and Underground Exploration Plan of Operations. Changes to the documents incorporated herein must be approved by the Department if they affect this permit. If the Department approves the changes, they become part of this permit.

If there are any conflicts between the Underground Exploration Plan of Operations and the detailed appendices and ADEC application documents, the detailed appendices and ADEC application documents shall take precedence. If there are any conflicts between this Waste Management Permit and the Underground Exploration Plan of Operations, detailed appendices or ADEC application documents, the Waste Management Permit shall take precedence.

This permit is issued under provisions of Alaska Statute 46.03, 18 AAC 15, 18 AAC 60, 18 AAC 70, and 18 AAC 72 as amended or revised, and other applicable state laws and regulations.

This permit is effective upon issuance and expires XXXXX, 2012. It may be terminated or modified in accordance with AS 46.03.120.

DRAFT

David Johnson
Technical Engineer

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1 SPECIFIC PERMIT CONDITIONS

1.1 INTRODUCTION

1.1.1 In addition to the stipulations in this permit, the permittee shall adhere to the requirements of 18 AAC 60 Alaska Solid Waste Disposal Regulations, 18 AAC 70 Alaska Water Quality Standards, and 18 AAC 72.500–600 Non-Domestic Wastewater. The permittee shall also adhere to requirements of the Niblack Project Quality Assurance Project Plan and Plan of Operations as approved by the Department.

1.2 INCORPORATION OF OTHER PERMITS AND DOCUMENTS

1.2.1 For the purposes of prevention of pollution this permit incorporates the best management practices of the EPA NPDES storm water permit. A storm water pollution prevention plan must be kept at the site and available for inspection.

1.2.2 For the purposes of protecting water quality and assuring protection of water quality post-closure, this permit incorporates by reference the Niblack Waste Water Treatment and Disposal Application under the Waste management Permit, Application for An Industrial Solid Waste Landfill Permit, Water Quality Baseline and Site Monitoring Plan, Quality Assurance Project Plan, Operational Characterization Plan and Underground Exploration Plan of Operations.

1.3 POTENTIALLY ACID GENERATING (PAG) WASTE ROCK

1.3.1 Prior to the disposal of rock to the NAG or PAG sites, the character of the rock is to be determined and disposed in accordance with the Operational Characterization Plan.

1.3.2 PAG rock is to be placed on a polyethylene lined site during temporary storage at the surface. Specifications for the liner and its installation shall be as shown in the Niblack Application for An Industrial Solid Waste Landfill Permit, Figure 10 and 11.

1.3.3 In an unlikely event small volumes of PAG waste rock is encountered prior to completing construction of the storage site, this material is allowed to be temporarily stored at an interim staging area or underground in re-muck bays. If above ground, this interim surface storage area would be covered daily, graded and diversions would be placed to prevent stormwater run-on. Interim surface storage shall not be longer than 45 days.

1.3.4 The liner shall be placed on a grade no greater than 10 percent.

1.3.5 The protective liner shall be protected from puncture or tears from rocks beneath or above the membrane.

1.3.6 Waste rock is to be placed such that it does not impair the integrity of the membrane.

1.3.7 Seepage water from the PAG rock pile is to be captured and treated before discharge.

1.3.8 Potentially Acid Generating rock is to be removed from the temporary PAG storage site upon completion of exploratory work, when it shall be placed underground in a location where it will not create acid rock drainage or leaching of metals.

1.4 TREATMENT FACILITY OPERATION

1.4.1 During the period beginning on the effective date of this permit and lasting through the expiration or termination date, the Permittee is authorized to discharge treated non-domestic wastewater from exploration activities as specified in this section.

1.4.2 The wastewater shall be dispersed for land infiltration.

1.4.3 The disposal shall be free of any additives such as antifreeze solutions, methanol, solvents, corrosion inhibitors, toxic substances, grease, and oils.

1.4.4 No other treated or untreated wastewater, sludge, or other materials shall be discharged to the lands or waters of the state unless otherwise approved in writing by the Department.

1.5 EFFLUENT LIMITATIONS

In order to comply with 18 AAC 70 the Permittee shall operate the treatment works such that:

1.5.1 The water quality criteria and limits specified in this permit must be met in effluent discharged from the constructed infiltration system. Monitoring will be required as listed in section 1.6 of this permit.

1.5.2 The drainage from the adit will be treated before discharge through settling,

flocculation, precipitation, filtration and clarification, or any combination of these techniques as approved by the Department.

1.5.3 If necessary to ensure proper operation of the treatment works, the flow limits listed in section 1.4.2 shall be achieved through grouting of subsurface flows, as described in the approved Wastewater Treatment and Disposal Application under the Waste Management Permit, or other methods as approved by the Department, as adit development proceeds. Any discharge exceeding the instantaneous maximum flow of 150 gpm in section 1.4.2 shall be reported to the Department within 24 hours.

1.5.4 The intent of the infiltration system is to infiltrate all water into the ground and to not have surface seeps or runoff. The permittee shall notify the department within 24 hours if the system is not operating as designed and shall provide proposals on how to best ensure the infiltration system works as designed.

1.6 MONITORING

1.6.1 Monitoring shall conform to the Niblack Mining Corporation Water Quality Baseline and Monitoring Plan (Appendix E to the Underground Exploration Plan of Operations), except as required in this permit.

1.6.2 The permittee shall submit within either thirty days of the effective date of this permit, or before work commences on the access tunnel portal, whichever is sooner, a Quality Assurance Project Plan (QAPP) for ADEC approval. The plan must be approved prior to construction. The QAPP shall include: data quality objectives, rationale for each sampling point, commercial laboratories to be used, sampling methods, in situ analytical methods, equipment to be used, location of sampling and measurement points and any additional information the permittee deems necessary to achieve quality assurance objectives.

1.6.3 For surface streams, downstream water quality shall not exceed upstream water quality unless the reason for any increase can be shown to be natural. For compliance with concurrent monitoring site specific criteria, monitoring at upstream and downstream sites on the same stream shall be conducted within one hour of each other. Samples are not to be collected for compliance purposes if changes in stream flow volume are expected during the 1-hour sampling window.

1.6.4 For wetlands, water quality shall be maintained at or better than the natural background water quality determined before commencement of any exploratory activity. Should the water quality deteriorate over time, then the cause shall be determined, and if due to activities associated with the exploratory work, appropriate corrective or mitigating actions shall be taken.

1.6.5 Test procedures for the analysis of pollutants shall follow EPA- approved methods or other methods of analysis approved by the Department according to 18 AAC 70.020(c). Specific analysis and field measurement methods, including reporting limits, calibration and maintenance procedures will be included in the QAPP.

1.6.6 The Permittee shall monitor after treatment and before discharge to the infiltration area in the manner as outlined in the monitoring plan and at the frequency specified in section 1.3.2 of this permit.

1.6.7 Water quality monitoring locations are shown on Figures 2, 3, and 4 attached and described in Table A. Additional monitoring sites may be required; this will be determined based on site conditions and monitoring results.

Table A

Monitoring point	**Location**
Surface waters	
WQ4	Waterfall Creek – downstream
WQ6	Camp Creek – downstream
WQ7	Camp Creek – upstream
WQ8	Waterfall Creek – upstream
WQ10	Unnamed Creek 1 – downstream
WQ12	Unnamed Creek 1 – upstream
WQ13	Unnamed Creek 2
	PAG site underdrain
Ground water wells	
MW1	Wetlands below NAG site
MW2	Wetlands below settlement/treatment ponds
MW3	Wetlands below PAG site
MW4	Wetlands below infiltration system area
MW7	Wetlands – offsite and to the east of the project

1.6.8 Water quality shall be monitored in ground water wells at locations and at the frequency specified in Table B. This monitoring serves as information on water quality trends in groundwater within the wetlands area down-slope of the project facilities and components.

Table B / Suite A – Ground water

Monitoring Site	Characteristic	Monitoring Frequency	Sample Type
MW1, MW2, MW3, MW4, and MW7	Total Dissolved Solids (TDS)	See Note 1gw	Grab
	Temperature	See Note 1gw	Grab
	Conductivity	See Note 1gw	Grab
	TDS cations/anions	Quarterly	Grab
	pH	See Note 1gw	Grab
	Nitrogen (TKN)	See Note 1gw	Grab
	Aluminum	See Note 1gw	Grab
	Arsenic	See Note 1gw	Grab
	Cadmium	See Note 1gw	Grab
	Copper	See Note 1gw	Grab
	Lead	See Note 1gw	Grab
	Mercury	See Note 1gw	Grab
	Cadmium	See Note 1gw	Grab
	Zinc	See Note 1gw	Grab

Note 1gw. Ground water wells shall be sampled monthly until 20 valid sample results are obtained, then quarterly thereafter unless any parameter increases more than 10% over the natural level recorded prior to work commencing or after infiltration of treated water commences, whichever is applicable.

1.6.9 Water quality shall be monitored in surface streams, at locations and at the frequency specified in Table C. This monitoring shall provide information to show compliance with Site Specific water quality standards based on concurrent monitoring.

Table C / Suite B – Surface Streams

Monitoring Site	Characteristic	Monitoring Frequency	Sample Type
WQ4, WQ6, WQ7, WQ8, WQ10, WQ12, and WQ13	Total Dissolved Solids (TDS)	See Note 1sw	Grab
	Temperature	See Note 1sw	Grab
	Conductivity	See Note 1sw	Grab
	TDS cations/anions	Quarterly	Grab
	pH	See Note 1sw	Grab
	Nitrogen (TKN)	See Note 1sw	Grab
	Aluminum	See Note 1sw	Grab
	Arsenic	See Note 1sw	Grab
	Cadmium	See Note 1sw	Grab
	Copper	See Note 1sw	Grab
	Lead	See Note 1sw	Grab
	Mercury	See Note 1sw	Grab
	Cadmium	See Note 1sw	Grab
	Zinc	See Note 1sw	Grab

Note 1sw. Surface water sites shall be sampled monthly until 20 valid pairs of upstream and downstream sample results are obtained, (or 20 valid samples for any surface water site that does not have an associated upstream site), then quarterly thereafter unless any parameter is greater at the downstream site than at the upstream site. If the downstream value is greater than the upstream value, then monitoring shall be monthly until either the cause shall be shown to be natural, or corrected if caused by project activity, at which time the monitoring frequency shall revert to quarterly.

1.6.10 If the Permittee monitors any influent, effluent, or groundwater characteristic identified in this permit more frequently than required, the results of such monitoring shall be reported to the Department in the monitoring report.

1.6.11 Post-closure monitoring shall be required to ensure existing water quality conditions are not degraded during the post-closure period.

1.6.11.1 Post-closure monitoring at established monitoring locations shall be conducted as shown in Table D. Parameters to be monitored shall be as shown in Tables B and C for ground water and surface water sites, respectively.

Table D

Monitoring site	**Monitoring periods (post-closure years)**
MW2, MW3, MW4	1 and 2
MW1	1, 2, 5, 10, 20 and 30
WQ4, WQ13	1, 2, 5, 10, 20 and 30

1.6.11.2 Post-closure monitoring of drainage water from the closed adit shall be required should it fill the adit and exit the portal. This water shall be sampled at the portal at years 1, 2, 5, 10, 20 and 30 post-closure. The water quality is to be no worse than the natural condition of ground water from seeps in the general locality of the mine portal. Natural ground water quality shall be determined as specified in ADEC's "Guidance for the Implementation of Natural Condition-Based Water Quality Standards" dated November 15, 2006. 20 valid samples, collected over a two-year period, are to taken at the seeps in order to determine natural conditions under this guidance.

1.6.12 If background quality as determined by previous sampling is exceeded for any monitoring location then the cause of the exceedence shall be determined. If the cause is due to natural causes, no additional monitoring is required other than that stated in Tables B, C and D. If the cause is due to waste rock leachate, then a plan to remediate the cause shall be provided to the department within 90 days of the determination. Remediation or mitigation of the cause of the exceedence is the responsibility of the Niblack Mining Corporation.

1.7 REPORTING

1.7.1 The results from compliance wells and other groundwater quality monitoring well sites and surface water quality monitoring sites will be reported quarterly to the Department, including electronic data submission and graphical presentation of data for trend detection. If freeze-up conditions at monitoring wells prevent sampling, the Permittee will notify the Department. Signed copies of these, and all other reports required herein, shall be submitted to the area office at the following address:

State of Alaska
Department of Environmental Conservation
410 Willoughby Avenue, Suite 303
Juneau, Alaska 99801-1800
Telephone: (907) 465-5313

Knowingly making a false statement, by the Permittee, the operator, or other employees, including contractors, on any such report may result in the imposition of criminal penalties as provided for under AS 46.03.790

1.7.2 An annual report shall be submitted to both the Alaska Department of Natural Resources and ADEC. In addition to the items specified in the Water Quality Baseline and Site Monitoring Plan, the annual report shall include:

1.7.2.1.1 A summary of monitoring results

1.7.2.1.2 Trends, if present, in water quality, in graphical form.

1.7.2.1.3 Volumes of NAG and PAG rock

1.7.2.1.4 Project progress

1.7.2.1.5 Work proposed during the next year.

1.7.2.1.6 Any foreseen changes to the Plan of Operations

1.8 RECORDS RETENTION

1.8.1 All records and information resulting from the monitoring activities required by this permit, including all records of analyses performed, and calibration and maintenance of instrumentation, quality control sheets, field sampling logs, and recordings from continuous monitoring instrumentation shall be retained in Alaska for review by the Department for three years.

1.9 CHANGE IN DISCHARGE

1.9.1 All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant or toxic material, (including oil, grease, sludges, or solvents) more frequently than, or at a concentration or limit not authorized, shall constitute noncompliance with the permit. Any anticipated facility expansions, flow increases, or process modifications which will result in new, different, or increased discharges of pollutants must be reported by submission of a new Waste Management Permit Application, or if such changes will not violate the effluent limitations specified in this permit, by written notice to the Department at the address specified in section 1.7.1, at least thirty days before the implementation of such changes. Physical changes may also be subject to plan review by the Department under 18 AAC 72.

1.10 TOXIC POLLUTANTS

1.10.1 If a toxic pollutant (including oil, grease, or solvents) concentration standard is established in accordance with 18 AAC 70 for a pollutant present in this discharge, and such standard is more stringent than the limitation in this permit, this permit is considered to be modified in accordance with the toxic pollutant concentration standard.

1.10.2 Only those drilling agents and fluids approved by the U.S. Environmental Protection Agency shall be used.

1.11 ACCIDENTAL DISCHARGES

1.11.1 The Permittee shall provide protection from accidental discharges and overflows not in compliance with the provisions of this permit. Facilities to prevent such discharges and overflows shall be maintained in good working condition at all times by the Permittee.

1.12 NONCOMPLIANCE NOTIFICATION

1.12.1 If, for any reason, the Permittee does not comply with or will be unable to comply with any limitation specified in this permit, the Permittee shall report the noncompliance to the Department within 24 hours, or as soon as possible, of becoming aware of such conditions.

1.12.2 A written follow up report shall be sent to the Department within seven days of the noncompliance event. The written report shall contain, but not be limited to:

1.12.2.1 Times and dates on which the event occurred, and if not corrected, the anticipated time the noncompliance is expected to continue.

1.12.2.2 A detailed description of the event, including quantities and types of materials involved.

1.12.2.3 Details of any actual or potential impact on the receiving environment or public health.

1.12.2.4 Details of actions taken or to be taken to correct the causes of the event. If the non-compliance is of such magnitude that a significant corrective action will be needed to correct the non-compliance, then a corrective action plan is to be submitted to the department prior to commencement of the corrective actions.

1.12.2.5 Details of actions taken or to be taken to correct any damage resulting from the event.

1.12.3 It is recognized that influent quality changes, equipment malfunctions, or uncontrollable circumstances may sometimes result in effluent concentrations exceeding the permit limitation, despite the exercise of all possible care and maintenance measures and corrective measures by the Permittee. The Permittee may demonstrate to the Department that such circumstances did exist where, despite all evasive measures, the effluent concentrations exceeded those set forth in this permit. The Commissioner shall consider such evidence in determining departmental actions. The Department does not waive any of its legal rights during such consideration.

1.13 SITE SPECIFIC CRITERIA FOR SURFACE WATERS

1.13.1 Natural water quality in Niblack streams exceeds water quality standards for those parameters shown in Table E.

Table E shows chronic water quality standards and the extremes of values for parameters that fall outside water quality standards. Those parameters marked * have hardness dependent criteria and values are shown at the 25^{th} percentile hardness of 7.1 mg $CACO_3$/l. However, it is to be noted that it is not required that this standard be met in the surface waters because concurrent monitoring is to be used to determine compliance. The values shown are for comparative purposes only.

Table E

Parameter	**Water quality standard**	**Min. recorded value**
pH	6.5-8.5	4.06
Parameter	Water quality standard	Max. recorded value
Aluminum	87 ug/l (Total recoverable)	1470 ug/l (Total)

Cadmium*	0.04 ug/l (dissolved)	27 ug/l (dissolved)
Copper*	0.9 ug/l (dissolved)	4.4 ug/l (dissolved)
Lead*	0.13 ug/l (dissolved)	2.5 ug/l (dissolved)
Nickel*	6 ug/l (dissolved)	10 ug/l (dissolved)
Silver*	0.04 ug/l (dissolved)	0.5 ug/l (dissolved)
Zinc*	12 ug/l (dissolved)	110 ug/l (dissolved)

1.13.2 Compliance with Site Specific Criteria Water Quality Standards

The Water Quality regulations 18 AAC 70.235(b) allows for the water quality to be protected, which for this project is the river quality downstream of any project activity, to equal the quality of the upstream sampling point above any project activity in that same stream when measured concurrently. For the purposes of concurrent monitoring the time between sampling upstream and downstream monitoring points shall be no greater than one hour. Upstream and downstream monitoring locations specified in Table F are shown on the attached Figure 4:

Table F

Stream	**Upstream monitoring point**	**Downstream monitoring point**
Camp Creek	WQ12	WQ10
	WQ8	WQ4
	WQ7	WQ6

1.13.3 Monitoring parameters and frequency

Those parameters to be monitored, and the frequency of monitoring shall be in accordance with Section 1.6.

1.13.4 Should monitoring show that the downstream water quality is worse than the upstream quality, the permittee shall be required to show the cause of the discrepancy. If from a natural cause, such as a natural spring or seep, then no further action shall be required of the permittee. However, if the cause is due to the actions of the permittee, then the permittee will be required to remediate and mitigate the cause such that downstream water quality is at or better than upstream background water.

1.13.5 Monitoring of water quality will be monthly for the duration of the project and for a period of three years after work ceases where there are no likely impacts from waste rock from exploratory work. Where the stream is down-slope of the non-acid generating waste rock, monitoring shall be required annually for a period of 30 years post-closure.

1.14 TYPES OF WASTES ALLOWED TO BE DISPOSED UNDERGROUND AT THE TERMINATION OF THE EXPLORATION PROJECT

1.14.1 waste rock is allowed at the underground facility

1.14.2 drill steel and empty cans

1.14.3 used ventilation tubing,

1.14.4 tires,

1.14.5 geosynthetic liners and tubing,

1.14.6 empty plastic and glass,

1.14.7 empty triple rinsed chemical containers,

1.14.8 settled solids from sumps, ditches and degritting basins,

1.14.9 other wastes only if disposed with written approval of the Department.

1.15 BOND

1.15.1 The permittee shall provide the Department with proof of financial responsibility for closure of the facility and post-closure maintenance and monitoring. This proof shall cover financial responsibility for closure of the facility as required by this permit, and for post-closure monitoring of the facility for no less than 30 years.

As of the date of this draft permit, the amount of financial assurance acceptable to the Department is $1,053,532 which reflects reclamation, closure and monitoring for the entire project site. The details regarding financial assurance are specified in the Reclamation and Closure Plan for the Niblack Underground Exploration Project. A summary of the cost breakdown from the reclamation plan is shown. See the reclamation plan for details of the tasks. Post closure monitoring costs are included in Task 6. Note: this bond amount may change in the final permit.

SUMMARY OF ESTIMATED RECLAMATION COST

Task Number	Reclamation task	Cost
Task 1	Relocation of PAG Material and Reclaim Site (14,300 CYD)	$163,968
Task 2	Portal Closure Including Adit Plug	$170,234
Task 3	Fill Placement and Grading, Final Contouring at NAG Site	$24,202
Task 4	Reclaim Water Treatment Facilities and Sediment Pond Areas	$18,950
Task 5	Stormwater Conveyance and Settling Ponds Below NAG Site	$5,857
	Equipment Mob/Demob	$46,400
	Personnel transport	$12,240
	Equipment standby	$34,114
	Support equipment including barge camp	$167,469
	Direct Costs Subtotal	**$643,436**
	Contractor Overhead (10%)	$64,344
	Contractor Profit (15%)	$96,515
	Engineering Design (5%)	$32,172
	Scope contingency (10%)	$64,344
	Bid contingency (10%)	$64,344
	Agency Oversight	$8,650
	Contract Performance & Payment Bond (3%)	$19,303
	Direct and Indirect Costs Subtotal	**$993,107**
	Inflation (3.2% per year for 5 years)	$169,397
	TOTAL TASK 1 THROUGH TASK 5	**$1,162,505**
Task 6	Reclamation and Water Quality Monitoring Surveys:	
	Year 1	
	Reclamation/revegetation monitoring	$3,842
	Water quality sampling	$7,954
	Year 2	
	Reclamation/revegetation monitoring	$3,964
	Water quality sampling	$8,208
	Year 3	
	Reclamation/revegetation monitoring	$4,091
	Year 5	
	Water quality sampling	$6,690
	Year 10	
	Water quality sampling	$7,831
	Year 20	
	Water quality sampling	$10,730
	Year 30	
	Water quality sampling	$14,702
	TOTAL TASK 6 (including 3.2% inflation per year)	**$68,011**
	Bid contingency (10%)	**$6,801**
	TOTAL TASK 6 (including inflation and bid contingency)	**$74,813**
	GRAND TOTAL	**$1,237,317**

1.15.2 The total amount of $1,053,532 shall be secured before commencement of any exploratory or associated work commences.

1.15.3 The cost for reclamation, closure and post-closure care of the facility shall include but not be limited to all costs for:

1.15.3.1 administrative overhead,

1.15.3.2 equipment mobilization, assuming all required equipment has to be brought to the site by a contractor,

1.15.3.3 the execution of tasks by contractors, including the cost of wages as found in Laborers' & Mechanics Minimum Rates of Pay per Title 36 (State of Alaska, Wage and Hour Administration Pamphlet # 600) for contractor employees,

1.15.3.4 the cost of maintaining an abandoned site until and during final reclamation, and,

1.15.3.5 the long-term care and monitoring costs.

1.15.4 The permittee shall provide details of any changes to the proposed reclamation plan.

1.15.5 The proof of financial responsibility may be in the form of a trust fund, surety bond, letter of credit, insurance, or any other mechanism approved by the Department.

1.15.6 Any interest earned by the bond shall remain with the bond or other form of financial responsibility.

1.15.7 Approved proof of financial responsibility must remain in effect through the post-closure period for no less than 30 years, at a level determined by the Department to be necessary to ensure performance of obligations remaining after closure.

1.15.8 Partial release of the total financial responsibility amount, including accumulated interest, shall occur when closure has been satisfactorily achieved.

1.15.9 Final release of the remaining bond amount, including interest, but excluding those costs for long-term maintenance and monitoring shall not occur until the requirements for post-closure monitoring have been met.

1.15.10 No part of financial responsibility will be released until the Department certifies in writing that the requirements for partial or full release of the bond have been met.

1.15.11 Should another entity assume responsibility for permit compliance and/or post-closure monitoring, release of financial responsibility to Niblack Mining Corporation shall not occur until that other entity provides proof of financial

assurance of the same amount to be released.

1.15.12 If the permittee is unable to continue acceptable proof of financial responsibility, or provide sufficient bonding determined by periodic updates, this permit will terminate automatically at that time, notwithstanding any other approvals to the contrary.

1.15.13 If the permittee fails to comply with the terms and conditions of this permit, as written, renewed, modified or amended, and if the Department concludes that such failure may prevent, inhibit or delay satisfactory closure or post-closure monitoring of the disposal facility, then, following notification and a reasonable time period for the permittee to respond to the Department findings, the Department may exercise its rights under the approved mechanism for financial responsibility to access the funds and use them for appropriate closure and post-closure activities.

2 GENERAL PERMIT CONDITIONS

2.1 ACCESS AND INSPECTION

The permittee shall allow the Commissioner or his/her representative access to the permitted facility at reasonable times to conduct scheduled or unscheduled inspections or tests to determine compliance with this permit, state laws, and regulations.

2.2 INFORMATION ACCESS

Except where protected from disclosure by applicable State or Federal law, all records and reports submitted in accordance with the terms of this permit shall be available for public inspection at the State of Alaska Department of Environmental Conservation, 410 Willoughby Ave., Suite 303, POB 111800, Juneau, Alaska 99811-1800.

2.3 CIVIL AND CRIMINAL LIABILITY

Nothing in this permit shall relieve the permittee from any potential civil or criminal liability for noncompliance with the permit or with applicable laws.

2.4 AVAILABILITY

The permittee shall post or maintain a copy of this permit available to the public at the facility.

2.5 ADVERSE IMPACT

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

2.6 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 State Historic Preservation Office, Division of Parks and Outdoor Recreation, Department of Natural Resources (907-465-4563), is to be notified promptly.

2.7 APPLICATIONS FOR RENEWAL

In accordance with 18 AAC 15.100(d), applications for renewal or amendment of this permit must be made no later than 30 days before the expiration date of the permit or the planned effective date of the amendment.

2.8 OTHER LEGAL OBLIGATIONS

This permit does not relieve the permittee from the duty to obtain any other necessary permits from the Department or from other local, state, or federal agencies, and to comply with the requirements contained in any such permits. All activities conducted and all plans implemented by the permittee pursuant to the terms of this permit shall comply with all applicable local, state, and federal laws and regulations.

2.9 TRANSFER OF OWNERSHIP.

In the event of any change in control or ownership of the permitted facility, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Director of Water Quality. The original permittee remains responsible for permit compliance unless and until the succeeding owner or controller agrees in writing to assume such responsibility, and the Department approves assignment of the permit. The Department will not unreasonably withhold such approval.

As between the State and the permittee, no transfer of this permit shall relieve the permittee of any liability arising out of operations conducted prior to such transfer, regardless of whether such liability accrues before or after such transfer.

2.10 POLLUTION PREVENTION

In order to prevent and minimize present and future pollution, when making management decisions that effect waste generation, the permittee shall consider the following order of priority options as outlined in AS 46.06.021:

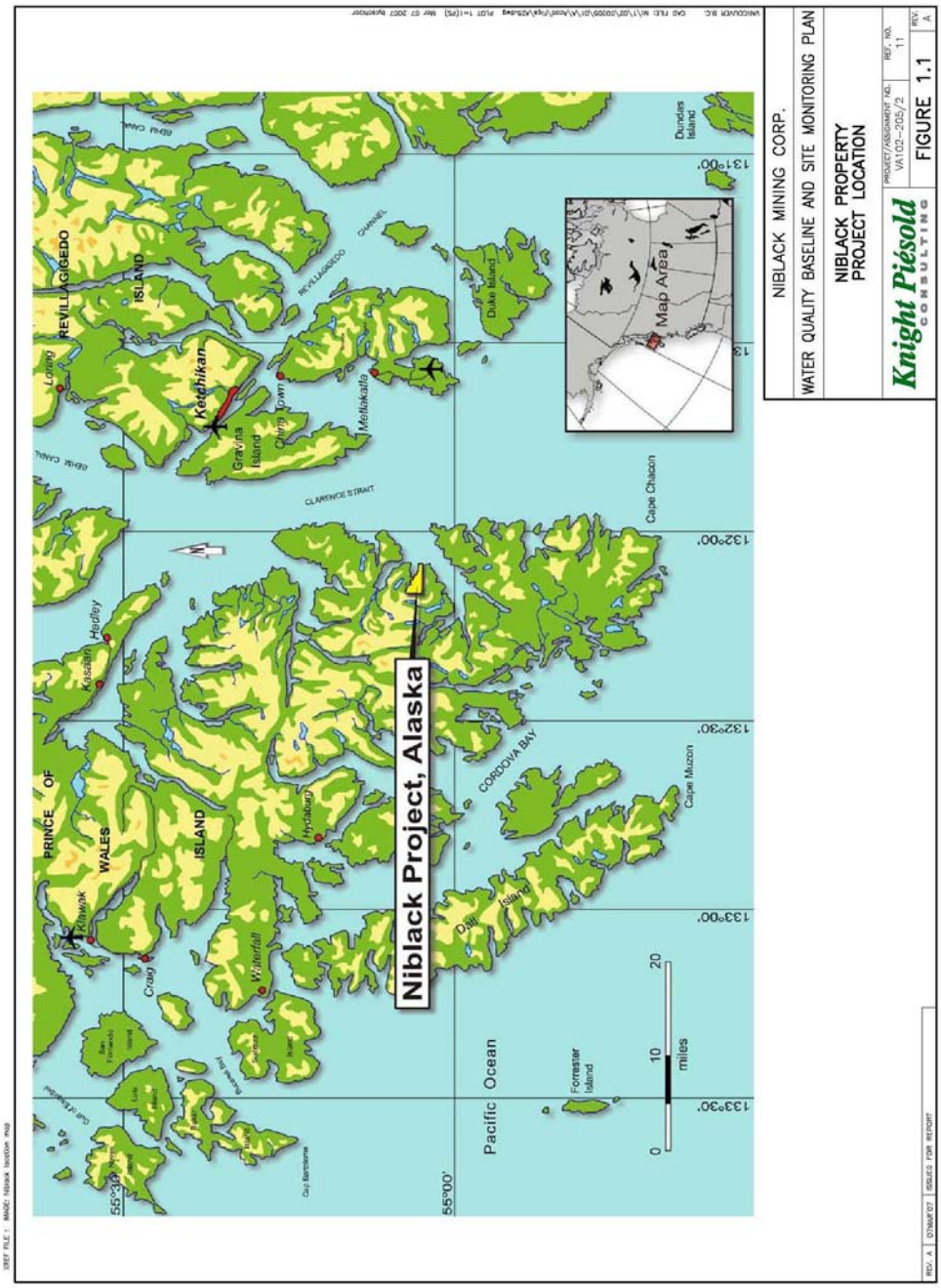
- waste source reduction,
- recycling of waste,
- waste treatment, and
- waste disposal

3 GLOSSARY OF TERMS

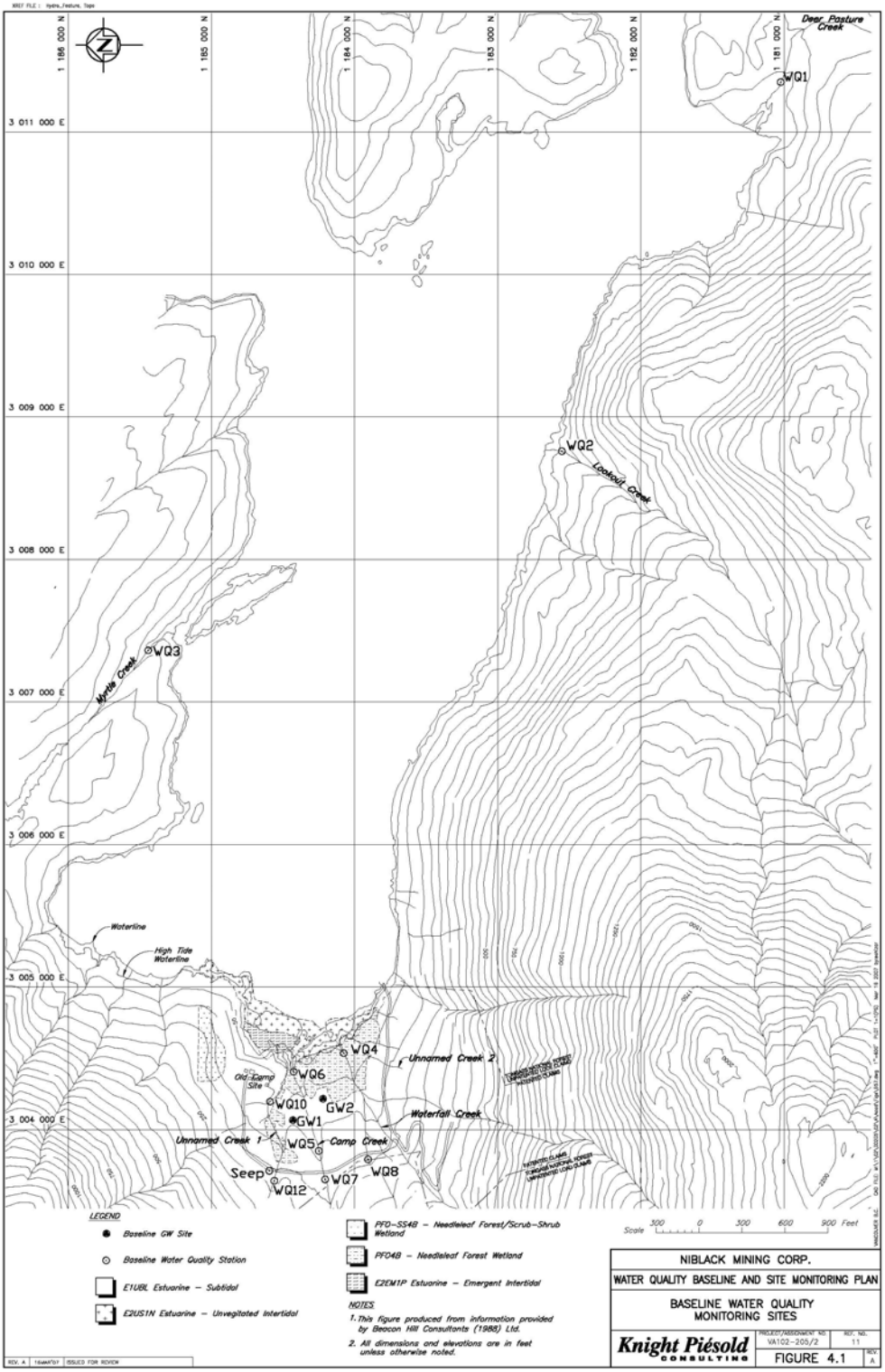
AAC	Alaska Administrative Code
Accidental Discharges	Unforeseen bypass of treatment that may enter and affect discharge quality
ADEC	Alaska Department of Environmental Conservation
C.F.R	Code of Federal Regulations
gpm	Gallons per minute
Hardness	A property of water, primarily due to the presence of ions of calcium and magnesium, expressed as mg/1 of $CaCO_3$, determined using TA EPA method 130.1 or 130.3
mg/l	Milligrams per liter
Natural Conditions	Any physical, chemical, biological, or radiological condition existing in a waterbody before any human-caused influence on discharge to, or addition of material to a waterbody [18 AAC 70.990(40)]
Plan of Operations	The state-approved comprehensive advanced exploration plan submitted by the Niblack Mining Corporation to the Alaska Department of Natural Resources.
QAPP	Quality Assurance Project Plan
Represenative Sampling	The sample represents the characteristics of the discharge, collected under routine operating conditions
Standard Test Inorganics	Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Zinc
Total Dissolved Solids (TDS)	Expressed as "dissolved inorganic substances" in 18 AAC 70.020(b)(1), total dissolved solids (TDS) refers to inorganic cations an anions including chlorides, carbonates, and sulfates in natural and treated waters. It is the unfiltered residue remaining after drying the sample at 103°-105°C
Treatment Works	A plant, disposal field, lagoon, pumping station, constructed drainage ditch, or surface water intercepting ditch, incinerator, area devoted to sanitary land fills, or other works installed for the purpose of treating, neutralizing, stabilizing, or disposing of sewage, industrial waste, or other waste. (AS 46.03.900)
µg/1	Micrograms per liter
WQS	Alaska Water Quality Standards (18 AAC 70)

4 LOCATION MAP AND MONITORING SITES

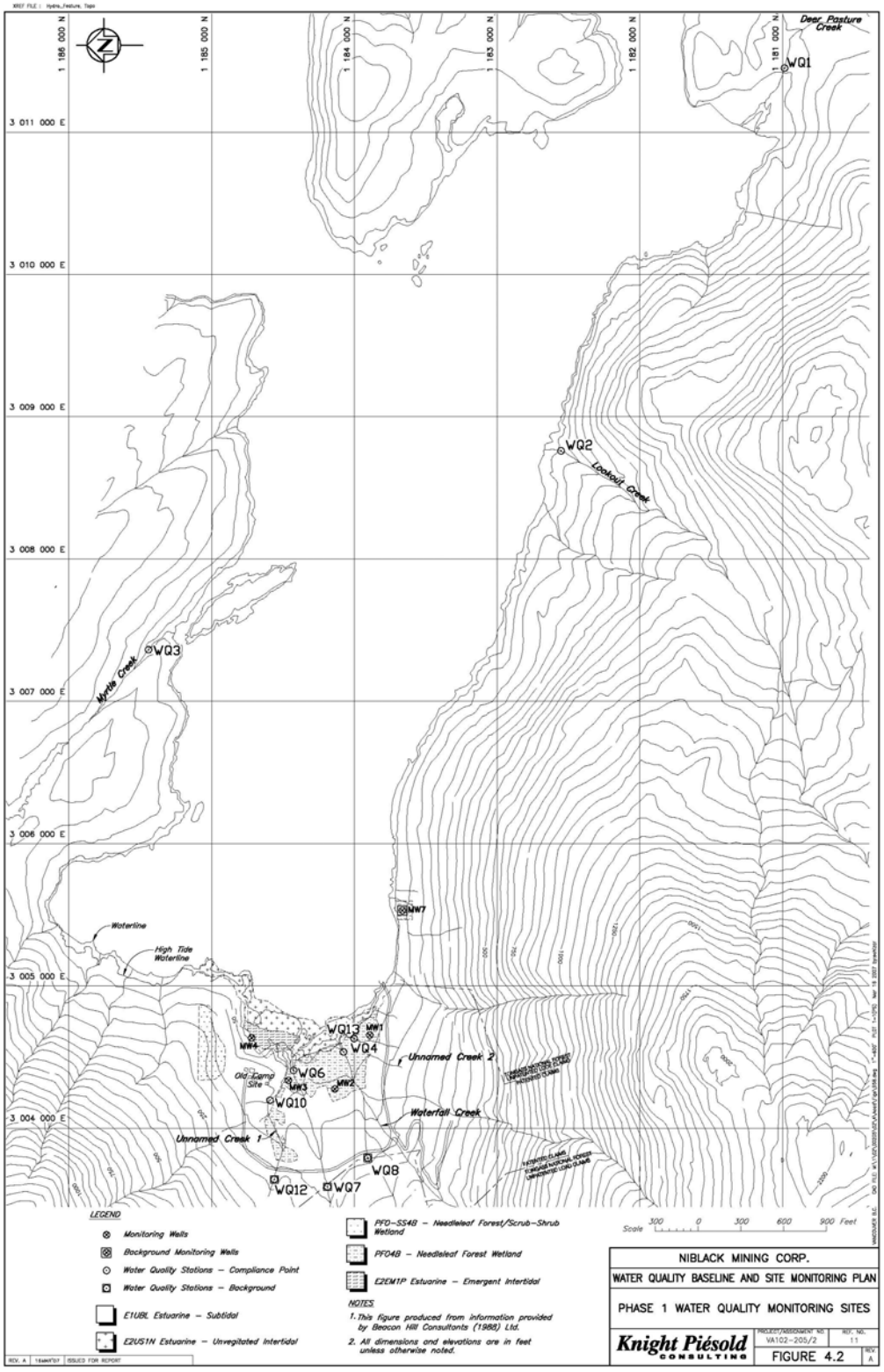
4.1 FIGURE 1 – PROJECT LOCATION



4.2 FIGURE 2 – BASELINE MONITORING SITES



4.3 FIGURE 3 – PROJECT MONITORING SITES



4.4 FIGURE 4 – WATER QUALITY MONITORING SITES CLOSE UP