AK-005057-1
Response to Comments

Coeur Alaska, Inc.
Kensington Gold Project
NPDES Permit

U.S. EPA, Region 10
June 2005

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Introduction

EPA received many written comments on the issuance of the National Pollutant Discharge Elimination System (NPDES) permit for the Kensington Gold Project. Comments came in the form of written, e-mailed and oral comments. The list in Appendix A contains the names of the commentors.

EPA held joint Public Hearings in Juneau on July 26, 2004, and in Haines on July 27, 2004. Copies of the transcripts are part of the administrative record for the permit.

EPA sent letters to Chilkat (Klukwan) Village, Chilkoot Indian Association, Douglas Indian Association, and Tlingit and Haida Central Council on January 23, 2004, informing the Tribes that a preliminary draft permit would be sent to them. EPA also asked if they wished to be consulted in developing the final draft prior to public release. EPA transmitted the preliminary draft permit and draft Fact Sheet to the Tribes on April 8, 2004. EPA received no comments and each Tribe received a copy of the draft permit and Fact Sheet at the start of the public comment period on June 21, 2004.

On June 21, 2004, EPA sent a copy of the draft NPDES permit and Fact Sheet to the National Marine Fisheries Service (NMFS). The Fact Sheet contained the Essential Fish Habitat (EFH) determination that the issuance of the permit was not likely to have an adverse effect on EFH. During Fall 2004, the Forest Service initiated formal consultation with NMFS on all aspects of Alternative D for the Kensington Mine Project, including the discharges covered by this permit. NMFS issued a final Biological Opinion (BO) for the project on March 23, 2005. The BO did not include any specific conservation recommendation applicable to the NPDES permit issuance.

On June 17, 2005, the Alaska Department of Environmental Conservation (ADEC) provided certification of this permit under Section 401 of the Clean Water Act (C.A.).

List of Acronyms

ADEC	Alaska Department of Environmental Conservation
AST	Alaska Science and Technology Foundation
AWQS	Alaska Water Quality Standards
BO	Biological Opinion
CFR	Code of Federal Regulations
CSP^2	Center for Science in Public Participation
C.A.	Clean Water Act
Diss	Dissolved
DHSS	Draft Supplemental Environmental Impact Statement
DAR	Discharge Monitoring Report
EFH	Essential Fish Habitat
EPA	Environmental Protection Agency
FZS	Final Supplemental Environmental Impact Statement
M.C.L.	Maximum Contaminant Level
M.L.	Method Detection Limit
ML	Minimum Level
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
ONR	Outstanding National Resource Water
SEACC	Southeast Alaska Conservation Council
SSC	Site-specific Criteria
TDS	Total Dissolved Solids
TR	Total Recoverable
TSF	Tailings Storage Facility
TU_C	Chronic toxicity units
USFWS	United States Fish and Wildlife Service
WET	Whole Effluent Toxicity
WLA	Waste Load Allocation

Response to Comments

1. Comment: Coeur Alaska, Inc. (Coeur) inquires as to why the Whole Effluent Toxicity (WET) limitations in the permit are the same for Outfall 001 and Outfall 002.

   Response: Alaska's water quality standard for whole effluent toxicity (18 ACC 70.030) states that effluents may not impart chronic toxicity to aquatic organisms, expressed as 1.0 chronic toxic unit (TU_C) at the point of discharge or beyond a mixing zone boundary. The permit contains the same numeric effluent limits for Outfall 001 as the previous permit which are meant to ensure compliance with this standard at the end-of-pipe (no mixing zone). Since neither Outfall 001 nor Outfall 002 have an authorized mixing zone, the limits are the same for both outfalls.

2. Comment: Coeur requests that the permit not include a chronic toxicity limit, since the WET testing has not shown chronic toxicity for Outfall 001 to date and there is no evidence of reasonable potential to exceed the State criteria for WET. Instead, Coeur proposes to conduct testing upon initiation of mining operations to verify that no WET limits would be exceeded. If no toxicity is demonstrated, Coeur suggests that the monitoring frequency be reduced.

   Response: Consistent with the previous permit, EPA has determined that WET limits should be included in the permit. The WET testing conducted to date is not representative of active mining conditions and therefore the results of the WET testing should not be used to determine reasonable potential. EPA included a reduced monitoring schedule for the pre-active mining phase and/or a shutdown phase in the draft permit based on the monitoring results during a non-mining period under the previous permit. Annual WET monitoring is required during non-mining periods as compared to monthly monitoring during mining. These provisions are included in the final permit. EPA would consider a reduced monitoring frequency during the next permit cycle at Outfall 001 and/or Outfall 002 if testing during full-scale mining operations consistently demonstrates no toxicity in the effluent.

3. Comment: Coeur requests that changes made in WET testing protocols due to logistical constraints (number of samples collected and holding times) under the previous permit be extend under this permit.

   Response: Permit Part I.D.3.b. has been changed to reflect the requested change on holding times for WET testing only and thus, effect the number of samples that would be required. These changes were outlined by Coeur in a letter to EPA dated July 6, 2000, which stipulated that the attempt would be made to achieve the requirements and that the changes only apply when

logistical difficulties occur (e.g., flights delayed out of Juneau). The final permit also contains a requirement to report the difficulties when they are encountered.

4. Comment: Coeur points out a redundancy in the reporting requirements for WET testing results with one requirement to submit results, including accelerated testing, with the Discharge Monitoring Report (DAR) and another to submit accelerated test results within 2 weeks.

   Response: Permit Part I.D.6.a. has been revised to address only submittal of the results of routine monthly toxicity testing. The reference to accelerated testing has been removed since it is covered in Permit Part 1.D.6.b. Monthly monitoring data shall be provided with the DAR for the month in which the results are received from the lab.

5. Comment: Coeur expresses concern about not having WET test results from samples taken later in a month back in time to report with the DAR for that month which is due by the 10th day of the following month

   Response: EPA has changed the DAR due date from the 10th day of the month to the 20th. In addition, see the response to Comment 4.

6. Comment: Coeur requests that the permit be changed so that the Permittee may request a change, with written consent by EPA, in the dilution series used for WET testing in order to improve data interpretation.

   Response: Since the permit authorized no mixing zone for WET, EPA has changed Permit Part 1.D.3 of the final permit to reflect that no specific dilution series is required.

7. Comment: Coeur requests that EPA insert clarification into the permit as to how they are to handle data that is suspect if the results of an investigation will not be available until after the DAR for that month is due. Coeur does not want to mislead a reviewer into believing that a number is “real” when it is being investigated.

   Response: Coeur is required to report the results of the monitoring in the DMRs. It is appropriate, however, for Coeur to identify any potential reliability issues that may cause the results to be “suspect” and the steps being taken to investigate and address such issues. EPA will consider this information in evaluating the monitoring data and permit compliance. As a result, no changes have been made to the permit.

8. Comment: Coeur requests that the effluent limitations for hardness-based metals for Outfall 001 include an adjustment for hardness up to 400 mg/L since the hardness of the effluent has approached 300 mg/L. Also, Coeur

believes that the hardness for calculating the effluent limitations should be taken in the effluent and not in the receiving water downstream of the outfall. Also, Coeur comments that Outfall 002 should have similarly tiered limits based on hardness, including up to 400 mg/L.

In a related comment, the Center for Science in Public Participation (CSP^2) requests information as to why the hardness downstream was used instead of the using the upstream hardness as the background level.

Response: Water quality sampling data from Sherman Creek (the receiving stream for Outfall 001) indicates that hardness concentrations fluctuate within the receiving stream and are greatly affected by the contributing flows from the existing discharge at the mine water settling ponds. The water quality data summarized in Table 3-13 of the FZS demonstrate that in upper Sherman Creek (station 109) the natural hardness is relatively low and the 90th percentile values are actually below 50 mg/l. As noted in the comment, the hardness in the effluent has approached 300 mg/L.

This permit provides "tiered" limits that address the likely increase of instream hardness due to the discharges, while protecting against any condition under which the instream hardness is low (e.g. peak flows). EPA has calculated the hardness-dependent water quality standards and permit limits based on tiers of 50, 100 and 200 mg/l of hardness. This tiered system will result in a set of effluent limits based on the measured, downstream hardness within the receiving streams. The Permittee is required to measure the hardness of the receiving stream weekly, immediately downstream of Outfall 001 at the same time as effluent sample collection and must report these data with the DAR for that month.

A measured hardness value of 50 to 100 mg/l will result in criteria calculated based on 50 mg/l hardness. At measured values greater than 100 mg/l but less than 200 mg/l, the criteria will be calculated with a hardness value of 100 mg/l, and at measured values greater than 200 mg/l, the criteria will be calculated at 200 mg/l. Based on the flow and quality of the receiving water and existing and projected discharges, EPA does not anticipate the hardness immediately downstream of Outfall 001 to be below 50 mg/l.

As a matter of policy and practicability, EPA does not generally set effluent limits that are completely variable from sample to sample. Consistent with the previous permit, the tiered limits represent EPA’s recognition that there will be some changes in the hardness downstream of the discharge during high and low flow conditions. There is currently, however, no evidence that the mixed hardness will exceed 400 mg/L. In addition, the monitoring data collected to date, as well as modeling of the projected discharge quality during full-scale mining operations, indicates that the proposed permit limits can be met.

It is not appropriate to base the applicable limit on the effluent hardness but rather the actual conditions in the stream downstream of the discharge from Outfall 001. In response to the CSP[2] comment, an upstream location would not be representative of the mixed receiving water/effluent hardness that aquatic life would be exposed to downstream of the discharge. The downstream hardness monitoring is consistent with the previous permit requirement.

As documented on page 16 of the Fact Sheet, the downstream conditions in East Fork Slate Creek below the tailings storage facility (TSF) will be dominated consistently by natural drainage flow, which has low hardness. EPA does not project the combined hardness to exceed 50 mg/L so tiered hardness-based limits are not appropriate for Outfall 002.

9. Comment: Coeur could not tell from reading the Fact Sheet whether EPA took into account the conversion from total to dissolved numbers when performing the reasonable potential analysis in developing the effluent limitations.

Response: See Section 5.0 of the Fact Sheet for EPA's approach to determining reasonable potential. In determining effluent limitations, EPA used the translators, when available, from the AWQS to convert total recoverable (TR) criteria to a dissolved (Diss) criteria then multiplied the result by the default conversion factor (equal to 1 ÷ translator) to calculate the Waste Load Allocation (WLA) used to determine the total recoverable effluent limitations required by 40 CFR 122.45(c). If the Fact Sheet was not clear on this, mathematically, it does not matter because the equation is:

TR criterion * Translator = Diss criterion
Diss criterion * 1/Translator = WLA
or TR criterion * Translator/Translator = TR criterion * 1 = WLA

When the AWQS did not include a translator for a particular parameter, EPA utilized a default value of 1. Then the equation becomes:

TR criterion * 1 = Diss criterion
Diss criterion * 1/1 = WLA
or TR criterion = Diss criterion = WLA

10. Comment: Coeur believes that the permit should provide for the future incorporation of site-specific metal translators developed pursuant to *The Metals Translator: Guidance for Calculating A Total Recoverable Permit Limit From a Dissolved Criterion*, EPA 323-B-96-007, June 1996, and other applicable EPA guidance.

Response: If Coeur developed and EPA approved site-specific translators for

Sherman and/or Slate Creeks, they could be incorporated into future permit re-issuance and/or modification. The incorporation of metal translators into the permit would be considered a major modification subject to the provisions found in the regulations at 40 CFR 122.62, which requires that a draft permit be prepared for the requested modification, and follow the provisions of 40 CFR 124. 40 CFR 124 requires that EPA prepare a Fact Sheet and give public notice for a comment period on the draft permit. Note that future inclusion of site-specific translators would not violate anti-backsliding requirements since the supporting data would represent new information. Any such action would, however, have to comply with State anti-degradation requirements.

Permit Part V.A. allows the permit to be modified for cause as described in 40 CFR 122.62.

11. Comment: Coeur requests that the final permit contain a specific provision stating that the permit effluent limits for aluminum shall be either the water quality-based effluent limitation (WQBEL) in the draft permit or the site-specific criterion (SSC) developed following EPA guidance because Coeur has stated its intent to pursue an SSC for aluminum. Coeur also asks that specific key elements of a study plan should be stated in the permit.

Response: EPA acknowledges that Coeur may pursue a SSC for aluminum in the future. No application for such a criterion, however, has been submitted to date and development of an SSC would require extensive data collection and analysis, review by the State and EPA, and opportunity for public comment prior to adoption. The inclusion of the adopted SSC would further require a modification of the permit as described in the response to Comment 10. As a result, it is not appropriate at this time to incorporate reference to an unspecified and unapproved SSC in the permit.

The permit also does not include requirements to develop a study plan or conduct studies related to SSC development. Pursuing an SSC is not required by EPA but an option open to a Permittee through the AWQS.

12. Comment: Coeur comments that Permit Part I.A.8. states that chromium is the only parameter with an effluent limitation that is not quantifiable using EPA-approved or approvable analytical methods, but that this statement is incorrect because the same situation is contained in Permit Part I.C.5. for chlorine.

Response: Permit Parts I.A.8. and I.B.7. state that chromium is the only parameter with an effluent limitations that is not quantifiable using EPA-approved or approvable analytical methods, which is true for the outfalls considered in these permit parts because chlorine is not limited in either Outfall 001 or 002. EPA has, however, changed the language in these

permit parts so as not to confuse the reader.

13. Comment: Coeur maintains that there is not an adequate scientific basis for using a number greater than the M.L. but less than the ML as evidence of the actual concentration of the parameter being measured, as is required by the language found in Permit Parts I.A.9., I.B.8., and I.C.7.:

> For purposes of reporting on the DAR, if a value is greater than the Method Detection Limit (M.L.), the permittee must report the actual value. If a value is less than the M.L., the permittee must report "less than {numeric M.L.}" on the DAR. For purposes of calculating monthly averages, zero may be used for values less than the M.L.

Coeur recommends the following language be used instead:

> For purposes of reporting on the DAR for this permit only, for a single sample, if a value is less than the M.L., the permittee must report "less than {numeric value of the M.L.}" and if a value is less than the ML, the permittee must report "less than {numeric value of the ML}." For purposes of calculating monthly averages, zero may be assigned for values less than the M.L., the {numeric value of the M.L.} may be assigned for values between the M.L. and the ML. If the average value is less than the M.L., the permittee must report "less than {numeric value of the M.L.}" and if the average value is less than the ML, the permittee must report "less than {numeric value of the ML}." If a value is greater than the ML, the permittee must report and use the actual value.

Response: The suggested language mirrors a current EPA Region 10 policy decision which has been included in a previous permit (Pogo Mine, Inc. AK-005334-1). The permit will include the language from the new policy.

14. Comment: Coeur requests clarification on the difference between "sulfate" and "sulfates" in Table 1 for the discharges from Outfall 001.

Response: Only the sulfate site specific criterion developed for Sherman Creek - 200 mg/L - should have been included in Table 1 of the permit. The row for "sulfates" with the effluent limitation of 250 mg/L has been removed.

15. Comment: Coeur asks whether the ammonia limitations developed for the draft permit were based on the recently approved revisions to the Alaska Water Quality Standards (AWQS), which contain a standard based on EPA's 1999 ammonia criteria document.

Response: As cited on Page 48 of the Fact Sheet (footnote 1 of Table F-2), the limits are based on the current AWQS.

16. Comment: Coeur requests that the location of the compliance sampling point for turbidity from Outfall 001 be changed from the effluent to a downstream point to reflect the intent of 18 AAC 70.020, which states " . . . the water quality criteria set out in the following table . . . constitute the water quality standards for a particular waterbody" and the table lists an allowable 5 NTU increase above the natural condition.

Response: The NPDES permit is based on a point source program where discharges are measured prior to being influenced by the dilution of the receiving water for compliance with the effluent limitations included in the permit. The term *effluent limitation* means "any restriction established by a State or the Administrator on quantities, rates and concentrations of chemical, physical, and biological, and other constituents which are discharged from point sources into navigable waters, the waters of the contiguous zone, or the ocean, including compliance schedules." As such, EPA applies all criteria at the end-of-pipe because effluent limitations are a means of achieving water quality standards.

17. Comment: Coeur requests that the final permit should not require monitoring of outmigrating pink salmon because:

- mortality to the salmon resulting from monitoring is unavoidable and contrary to the monitoring objective,
- the high natural variability in the salmon population prohibits the ability to detect or explain patterns in pink salmon outmigration and its relationship to adult escapement (without this ability, monitoring is pointless), and
- the water quality monitoring required under the permit provides adequate assurance that impacts to the water quality of Sherman Creek, Slate Creek and Johnson Creek would be detected prior to impacts occurring to the salmon.

Response: EPA acknowledges that there is significant variability in the annual numbers of outmigrating salmonids but the lower Sherman, Slate, and Johnson creek drainages are important spawning habitat for anadromous species. EPA and ADEC have determined that the NPDES permit should include receiving water chemical, physical, and biological monitoring to ensure that the permit limitations and other requirements adequately protect the downstream aquatic life and environment. This monitoring was included for Sherman Creek in the previous permit but no data for full-scale mining operations have been collected to date. EPA and ADEC will consider the data collected during this permit term and evaluate the need for continued and/or modified monitoring during in future permit reissuance.

18. Comment: Coeur requests that the monitoring location requirement for the abundance and condition of Dolly Varden char in Slate Creek should be limited to only Slate Creek below the confluence of the east and west forks because the fish found in East Fork Slate Creek will be those that will be monitored as they are relocated around the TSF.

    Response: The permit requires monitoring in upper, middle, and lower Slate Creek but does not specify exact locations. Coeur should, however, select locations that would allow for determining the potential impacts of the discharge on Dolly Varden char populations. Any fish that are re-located around the TSF will be exposed to the effluent and, therefore, should be considered in establishing the resident fish monitoring program.

19. Comment: Coeur states that the final permit should not require tissue monitoring of Dolly Varden because one of their Fish Passage Permitting requirements from DNR - OPMP is to relocate the Dolly Varden from the TSF. They also state that electrofishing and minnow traps usually yields two or fewer fish and recent attempts have yielded no fish.

    Response: EPA recognizes the difficulties associated with correlating fish tissue data to effects of the discharge on fish populations. This is further complicated by the natural variability in metals concentrations in fish tissue samples in the Slate Creek drainage as shown in Table 3-17 of the Final Supplemental Environmental Impact Statement (FZS). EPA, therefore, has determined that the value of the fish tissue monitoring included in the draft permit does not outweigh the impacts of conducting the monitoring as cited by Coeur. EPA has, therefore, removed this requirement from the final permit.

20. Comment: Coeur requests that sediment monitoring be eliminated from the permit for the Slate Creek drainage because of a lack of fine-grained sediment that is suitable for chemical analysis and biological testing. Coeur states that downstream of the TSF, the stream bottom is dominated by bedrock, cobble and boulders and that quiescent areas tend to have a substrate of coarse organic matter.

    Response: EPA and ADEC have determined that the NPDES permit should include receiving water chemical, physical, and biological monitoring to ensure that the permit limitation and other requirements adequately protect the downstream aquatic life and environment. This includes the sediment monitoring required by the final permit, which was also required by the previous permit. EPA and ADEC will consider the data collected during this permit term and evaluate the need for continued and/or modified during in future permit reissuance. EPA acknowledges the potential lack of fine grain

material downstream of the discharge points, particularly in East Fork Slate Creek. EPA has revised Permit Part I.E.2.a. of the final permit to provide for sampling at the nearest downstream location suitable for sample collection.

21. Comment: Coeur proposes that EPA eliminate set requirements for ambient monitoring because they question the need to include these requirements in the NPDES permit particularly where the data are not needed to determine compliance with any effluent limitation or other requirement related to the permitted activities. Coeur proposes instead the permit require that they develop an ambient monitoring plan to be approved by EPA and ADEC with the requirement of 80% data capture and reporting.

    Response: EPA and ADEC have determined that the NPDES permit should include receiving water chemical, physical, and biological monitoring to ensure that the permit limitations and other requirements adequately ensure compliance with AWQS and protect the downstream aquatic life and environment. This includes the ambient water quality monitoring required by the final permit, which the previous permit also required. EPA and ADEC will consider the data collected during this permit term and evaluate the need for continued and/or modified during future permit reissuance.

22. Comment: Coeur questions the justification of having a flow limit in Table 1 for Outfall 001 and requests that it be removed.

    Response: EPA removed the flow limit from Table 1. This limit should have been in Table 3 based on the maximum flow of the treatment systems proposed by Coeur.

23. Comment: Coeur's understanding of the previous permit was that arsenic did not have the reasonable potential to violate water quality standards and was not included. So they question its inclusion in the draft permit.

    Response: EPA concurs that there is not reasonable potential for arsenic at either Outfall 001 or 002, and has removed the limits from the final permit. Consistent with the previous permit, the final permit requires monthly arsenic monitoring to further characterized arsenic levels under full-scale mining operations.

24. Comment: Coeur questions the need to monitor for manganese since it is only a secondary drinking water standard and none of the monitoring points serves as a drinking water source.

    Response: The level of 50 ug/L of manganese is not only a secondary maximum contaminant level (M.C.L. - drinking water standard) but also is a human health criterion. The most recent approval of the AWQS did remove secondary MCLs from the AWQS but the human health criteria still applies because the designated use of both Sherman and Slate Creeks include

water supply and therefore human health criteria are applicable. The monitoring requirement for manganese will provide data to assess the potential need for permit limits during the next permit reissuance.

25. Comment: Coeur is concerned that Permit Parts IV.E. and F. could be interpreted to require Coeur to operate the water treatment plants on the Kensington and Slate Creek sides even when operation of the plants is not needed to assure compliance with effluent limits. Coeur requests that the permit contain a provision that allows Coeur to petition EPA, and when EPA finds, based on the relevant data, that all or a portion of the treatment process is not needed to consistently comply with water quality criteria, that those portions of the treatment process may be suspended.

Response: The NPDES regulations at 40 CFR 122.41 contains permit provisions that must be included in every NPDES permit, including the operation and maintenance and bypass provisions at Parts IV.E. and IV.F. of the permit. See 122.41(e) and (m). These provisions do in fact require the operation of water treatment facilities at all times, regardless of whether necessary to meet permit limits.

Also, in NRDC v. EPA, 822 F.2d 104, 122-123 (D.C. Cir. 1987) (Permit condition prohibiting bypass falls within broad statutory authority of EPA; countering industries' argument that they should be allowed to bypass unneeded equipment), the court wrote: "In the context of a statute which seeks the elimination of pollution, it is difficult to believe that Congress *intended* that dischargers be entitled to shut off their treatment facilities and `coast' simply because they were momentarily not in danger of violating effluent limitations." Id. at 123 (emphasis in original).

Other provisions provided in the regulations and included in the permit, however, would allow for changes in the treatment facility, without the need for a permit modification, provided the facility could still meet existing permit limits. See permit part IV.I., 40 CFR 122.41(l)(1) and 124.62(a)(1), and 49 Fed Reg 38,037 (Sept. 26, 1984).

26. Comment: Coeur requests flexibility in the final permit to suspend the use of any treatment plant installed to remove aluminum when the concentrations of aluminum in the influent show there is no risk of exceeding water quality criteria at Outfall 002 for aluminum without treatment.

Response: Please see response to Comment 25.

27. Comment: CSP^2 states that the permit is incomplete because it does not include a full discussion of storm water management, yet at the same time acknowledges the integral tie between point source and storm water

discharges on the mine site. Storm water management should remain integrated into the NPDES permit, not handled as a stand-alone issue, because it is not. Excluding the regulations of storm water discharge under this permit, and providing coverage under the MSGP, results in inadequate regulation of contaminants, and a lack of full disclosure to the public.

Response: Storm water runoff from the waste rock piles at the Kensington mine portal is managed along with the treated mine drainage and addressed by the permit requirements for Outfall 001. Storm water associated with the tailings facility in Lower Slate Lake would also be discharged via Outfall 002. EPA has determined that the requirements of the MSGP will adequately address any storm water runoff from other components of the project.

28. Comment: CSP^2 states that the permit is incomplete because it provides inadequate information on the wastewater treatment system. They request that any economic feasibility information that Coeur has provided undergo a public review period of 45 days. CSP^2 and other commentors indicated that the NPDES permitting should consider potential, future expansion of mine operations.

Response: As discussed in the Forest Service's Record of Decision, the selected alternative, Alternative D, includes reverse osmosis treatment for the discharge from Lower Slate Lake. Coeur specifically proposed this system to ensure compliance with NPDES permit limits. Coeur provided a letter dated January 27, 2005, to EPA Region 10 that stated "Coeur is committed to permitting and construction of Alternative D: Modified TSF Design and Water Treatment. This includes the water treatment system outlined in our June 4, 2004 EPA submittal" [the reverse osmosis system]. Based on the above, EPA has assumed that the treatment system will be constructed in issuing the final permit. There is no regulatory or statutory requirement that information related to wastewater treatment system design or economics has to undergo public review prior to issuance of the final permit.

The treatment system would be sized to treat the projected discharge volume associated with the currently proposed mine plan. EPA does not have the authority through the NPDES permitting process to require Coeur to construct a larger wastewater treatment facility at this time based on the speculation that additional reserves could be mined in the future. The permit simply requires that Coeur meet effluent limitations by whatever means are necessary.

29. Comment: CSP^2 raised detailed comments requesting more data and testing to verify that Lower Slate Lake will support aquatic life after closure.

Response: These comments are applicable to the Corps of Engineers Clean Water Act Section 404 permitting process for tailings disposal in Lower Slate Lake and the State's associated Section 401 certification of the 404 permit. They do not apply to the NPDES permit which is for the discharge from Lower Slate Lake to East Fork Slate Creek.

30. Comment: CSP^2 states that a more appropriate location to collect hardness data for outfall 001 would be upstream of the TSF, in an area that is unaffected by the mine operations.

Response: The TSF is not in the same watershed as Outfall 001 so monitoring upstream of the TSF is not an appropriate monitoring point. As discussed in response to Comment 8, the downstream hardness is used to determine which effluent limits are applicable to outfall 001 since downstream hardness is representative of the hardness experienced by aquatic life at the location where it is exposed to the effluent. If however, the commentor meant Outfall 002, the effluent limitations for this outfall were calculated based on a hardness of 25 mg/L $CaCO_3$ because the watershed downstream of the discharge as well as the discharge itself will be dominated by the natural flow in the watershed. Effluent limits for outfall 002 are not tiered for hardness. The hardness of the effluents and receiving waters both upstream and downstream of the outfalls will be monitored in order to verify the assumptions made in determining the effluent limitations.

31. Comment: CSP^2 requests a description of where the point of compliance is for Outfall 001 and where monitoring will be conducted to determine compliance, including a map with these sampling site locations

Response: The point of compliance for Outfall 001 is in the outfall pipe prior to its discharging into Sherman Creek. Effluent samples must be collected at that point. In addition, receiving water samples must be collected to either calculate the applicable effluent limits (hardness) or compare (turbidity) in order to determine compliance at the end-of-pipe. EPA has included a map as an appendix to the final permit.

32. Comment: CSP^2 requests clarification on whether the sewage treatment facility is adequately sized to accommodate the increase labor force at the mine during operation.

Response: Section 4 of the Fact Sheet, Description of Discharges, contains the description for Outfall 003, the domestic wastewater discharge. This section states that there would be no permanent camp at the site during the operation phase of the project. Thus, there is no concern about the size of the sewage treatment facility for a camp during operation. During operations, sewage would be collected from the process area complex and distributed to

a central septic system and leach field as described in Section 4.8.4 of the FZS.

33. Comment: CSP^2 requests that maps be provided containing all sampling sites for monitoring parameters in Outfalls 001 and 002 based on Table 6-1.

In a related comment, CSP^2 requests a map showing all monitoring locations in the NPDES permit based on the Water Column Monitoring.

Response: See the response to Comment 31. The location of Outfall 002 is shown in Figure 2-12 of the FZS. Receiving water monitoring stations, the existing locations Stations 105 and 109 in Sherman Creek and SL-B and SL-C in Slate Creek, are shown in Figures 3-2 and 3-3 of FZS. The maps in Appendix A of the final permit show the locations of the established monitoring location but the exact locations of other sampling stations will be established by Coeur and reviewed by EPA and the Forest Service as the mine development process moves forward.

34. Comment: CSP^2 disagrees with the amount of baseline sampling under the sediment monitoring program required prior to construction of the TSF and facilities in Johnson Creek. They recommend that 3 years of quarterly baseline sampling be required to accurately differentiate impacts from mining and waste disposal from natural variations. They state that without this basis, EPA's ability to determine compliance with the AWQS and judge project impact is completely undermined and enforcement capability is negated by the permit's design.

Response: Much data has already been collected to describe baseline chemical, physical, and biological conditions in Sherman, Johnson, and Slate Creeks. These are presented in the FZS in Sections 3.6 Surface Water, Section 3.9.2 Freshwater Biota, Section 3.9.3 Trace Elements in Fish Tissue, and in Appendix C Ecological Risk Assessment. The water quality monitoring upstream and downstream of discharges/mine disturbance will provide further information to allow identification of impacts. Compliance with the NPDES permit will ensure compliance with all applicable AWQS (as confirmed by the State's 401 certification), including metals and WET at the end of the pipe (no mixing zone is authorized) such that deposition of contaminants that could cause toxicity to aquatic life and wildlife is not expected. EPA, therefore, has determined that the required monitoring is adequate.

35. Comment: CSP^2 states that the study design for benthic invertebrates is completely inadequate for reasons stated above for sediment as well as requiring only annual monitoring. Quarterly monitoring is recommended.

Response: EPA does not expect impacts on macroinvertebrate populations and believes the required monitoring is adequate for the same reasons as discussed in response to Comment 34. The effluent limits are based on meeting AWQS at the end-of-pipe so EPA does not expect impacts on the aquatic life to occur. In addition, WET testing of the effluent is required to show compliance with WET limits. We believe that annual monitoring of benthic invertbrates, combined with the monitoring of water chemistry, sediments, and fish is adequate.

36. Comment: CSP^2 suggests that testing of metals concentration in algae both above and below the discharge site be conducted at least on an annual basis.

Response: With the discharge limitations that are protective of aquatic life, EPA has determined that metals monitoring in algae upstream and downstream of the discharge is not necessary. In addition, the permittee is required to conduct four WET tests each year on the effluent using a green algae species.

37. Comment: CSP^2 notes that in the Fact Sheet, EPA had the wrong limits for mercury in several tables.

Response: EPA agrees with this comment. At the time the Fact Sheet was being developed, ADEC had submitted a revised AWQS package to EPA for approval which contained the criteria used to develop the limits in the Fact Sheet. EPA did not approve the new mercury standard, however, so EPA developed the limits in the permit using the previously approved standard. EPA inadvertently did not change the limits in the Fact Sheet tables to match the limits in the draft permit.

38. Comment: CSP^2 notes that the proposed Alternative B in the Draft Environmental Impact Statement (DHSS) does not contain diversions around the TSF. CSP^2 recommends that EPA require that the maximum amount of fresh water be diverted around the treatment facility to avoid contamination of this water.

Response: In Section 2 of the Fact Sheet, Facility Activity, this portion of the project is described:

> An earth or rock fill berm will be constructed in Mid-lake East Fork Slate Creek above the inflow to the TSF. Collected water will be removed from behind the berm through a 20 inch diversion pipeline

This is consistent with Alternative D in the FZS, which the Forest Supervisor selected in their ROD.

39. Comment: CSP^2 recommends that the neutralization potential and net neutralization potential of the tailings should be used to determine the acid generating potential rather than relying on the sulfur content of the tailings alone. CSP^2 has been provided copy of the cited Jambor et al., 2000 reference and it is available as part of the Administrative Record.

Response: FZS Sections 3.3.2 Ore, 3.3.3 Wasterock, and 3.3.4 Tailings discuss the testing that was done to determine the neutralization potential of the constituents listed. Testing of the tailings is an issue related to the 404 permit for tailings disposal. The State, in their 401 certification of the 404 permit are requiring quarterly acid base accounting testing of the tailings.

The work by Jambor, Blowes, and Ptacek (2000), Mineralogy of Mine Wastes and Strategies for Remediation, EMU Notes in Mineralogy, Vol. 2, Chapter 7, pp. 255-290, states "…most mineral assemblages containing <0.3 weight percent sulfide are unlikely to be acid generating; rates for assemblages with sulfide >0.3% are dependent on NP/AP ratios as determined by static tests." A copy of the Jambor document has been included as an attachment to this response to comments.

40. Comment: CSP^2 states that it is appropriate for EPA to regulate TSS in the discharge because of difference in the operating procedures of Kensington with the comparison project of the Galena Mine in Idaho (Appendix F of the Fact Sheet).

Response: TSS is a technology-based effluent limitation required for gold mines from the regulations found in 40 CFR 440 Subpart J. As such, TSS limitations would be included in the permit no matter what levels of suspended solids were expected in the effluent.

41. Comment: CSP^2 recommends that EPA re-evaluate the site specific criteria for total dissolved solids (TDS) for Sherman Creek. A study conducted by the Alaska Science and Technology Foundation (AST) published in February 2003, looked at the lethal and sublethal effects of exposing juvenile salmon to TDS. The AST study showed that successful egg fertilization was the most sensitive to short-term exposure to TDS with effects seen at levels as low as 250 mg/L but since this was the lowest concentration tested, there could have been measurable responses at even lower concentrations.

Response: On page 4-21 of the FZS, the Forest Service acknowledged the recent studies that have suggested potential chronic effects on fertilization of anadromous fish eggs and fry emergence. Such populations are only found in the lower reaches of Sherman Creek and the FZS indicates that, with the available dilution, the TDS levels in these reaches should be well below 250-500 mg/l and no TDS-related effects on anadromous fish are anticipated

from the Outfall 001 discharge. Comments related to changes in AWQS should be directed to the ADEC.

42. Comment: Many commentors believe that the requirement for treatment of the discharge from Outfall 002 is a contingency plan and is seen as an additional safeguard for the project.

Response: Please see the response to Comment 28.

43. Comment: The Southeast Alaska Conservation Council (SEACC) comments that Berners Bay is considered an outstanding national resource water (ONR) and as such, EPA's guidance on the protection of high quality waters would apply. This guidance - no new or increased discharge to tributaries to ONRWs that would result in lower water quality in the ONR is permitted - comes from the EPA's Water Quality Standards Handbook: Second Edition (1994). SEACC recommends that the permit limitations fully protect existing water quality in East Fork Slate Creek.

Response: While EPA has recognized Berners Bay as an "aquatic resource of national importance," this designation is not formal except as provided for by the MOU between the EPA and the Corps developed under the C.A. Section 404(q). The designation of an ONR is a State process which occurs through the Antidegradation Policy of a State's Water Quality Standards. There have been no ONRWs designated in Alaska. According to an EPA memo regarding "Designation of Outstanding National Resource Waters" (EPA, 1989), it is not EPA's practice to designate waters as ONRWs where a State does not do so.

44. Comment: SEACC commented that the issuance of the draft NPDES permit was premature and potentially prejudiced the Forest Service's decision.

Response: EPA chose to issue the draft permit to afford the public the opportunity to comment on anticipated permit conditions for Alternative D in the FZS. Section 2 of the Fact Sheet clearly states that the Forest Service's decision had not been made when the draft permit was released and that it should not be interpreted as suggesting in any way the results of the NEPA analysis. The Fact Sheet further notes that if another alternative had been selected a revised draft permit would have been issued for public comment.

45. Comment: A number of commentors implied that the draft permit was issued based on Alternative B in the FZS and suggested that the draft permit should be withdrawn because it was not based on the use of reverse osmosis treatment.

Response: This is incorrect. As described in the Fact Sheet and in Comment

28, Coeur amended its NPDES permit application to reflect the components of Alternative D in the FZS, i.e. a modified TSF with water treatment. The use of reverse osmosis was further documented in the Fact Sheet (see section 4 and Appendix B of the Fact Sheet).

46. Comment: Many commentors indicated that the discharge of tailings into Lower Slate Lake should be regulated under Section 402 of the Clean Water Act not Section 404.

Response: The May 17, 2004, Clean Water Act Regulation of Mine Tailings Memorandum issued by EPA and referenced in the Fact Sheet describes the application of Clean Water Act permitting requirements to tailings disposal in and discharge from Lower Slate Lake. According to the Memo, "...mine tailings placed into impounded waters of the U.S., as proposed by the Kensington mine project, are regulated under section 404 of the C.A. as a discharge of fill material, and that effluent discharged from the impoundment to a downstream water, such as Slate Creek is covered by section 402."

47. Comment: A number of commentors generally asked EPA to protect water quality and aquatic life in Sherman and Slate Creeks, Lynn Canal, and Berners Bay.

Response: The final NPDES permit includes effluent limitations and other requirements to ensure water quality protection in each of these waterbodies, including compliance with AWQS for aquatic life and human health.

48. Comment: Many commentors either generally supported or opposed the project and permit issuance.

Response: EPA reviewed all of the comments received prior to issuing the final permit and Record of Decision. Many of the issues raised are outside the scope of EPA's NPDES permitting decision.

49. Comment: A number of commentors indicated that water treatment (i.e., reverse osmosis) should not be required and that BMPs would be adequate to protect water quality.

Response: The final permit is based on Coeur's revised NPDES permit application and their January 27, 2005, letter to EPA, which indicate Coeur's commitment to construct and operate the reverse osmosis treatment system.

50. Comment: One commentor was concerned about the "large" size of the mixing zone in Lynn Canal for the domestic wastewater discharge and indicated Coeur should not be allowed to contaminate Lynn Canal.

Response: In its 401 certification of the draft and final permits, ADEC indicated that the mixing zone authorized for fecal coliform limitations on Outfall 003 will protect beneficial uses, including aquatic habitat, in Lynn Canal. Coeur's proposal specifically includes construction of a biological treatment system, which will need to ensure compliance with BOD and TSS limits included in the permit for Outfall 003.

51. Comment: One commentor asked that amphibian monitoring be included in the permit.

Response: The effluent limits and other requirements in the final permit have been established to protect aquatic life downstream of the discharges. EPA considers the ambient chemical, physical, and biological monitoring in the final permit adequate to detect adverse effects on aquatic life.

52. Comment: The U.S. Fish & Wildlife Service (USFWS) commented that the toxicity testing of the Kensington tailings using macroinvertebrate species showed unacceptable levels of chronic toxicity. The USFWS indicated that these results indicate the potential for toxicity in the discharge from Outfall 002 and that toxicity should not be allowed in any waters that drain to Berners Bay.

Response: The selected alternative, Alterative D, includes placement of a cap over the tailings at closure unless the tailings are shown to be non-toxic. Toxicity testing of the tailings and the tailings cap are appropriate comments for the 404 permit, which addresses the placement of tailings into Lower Slate Lake, not the NPDES permit which addresses discharges from Lower Slate Lake into East Fork Slate Creek. The NPDES permit requires that the discharge from the Lower Slate Lake impoundment (Outfall 002) meet effluent limits based on meeting AWQS at the end of pipe, including limits for WET. Therefore, toxicity due to the tailings will not be allowed to discharge from Outfall 002.

53. Comment: USFWS comments on the ammonia limits included in the draft permit, citing specific studies where toxic effects were observed at ammonia concentrations lower than the permit limits.

Response: The ammonia limits in the permit are based on the applicable, freshwater AWQS for waterbodies with salmonids and early life stages of fish. These standards were adopted by ADEC from EPA's 1999 Update of Ambient Water Quality Criteria for Water. EPA and the State, therefore, have determined that they are protective of the aquatic life found in the receiving waters especially since the salmonids are found in the lower reaches for the creeks. EPA inadvertently did not include in the draft permit the ammonia limits cited in the Fact Sheet for Outfall 002. EPA has

corrected this in the final permit.

54. Comment: USFWS comments that the draft permit does not include trigger or action levels for any of the required ambient monitoring. USFWS also requested formation of interagency task group to review monitoring results.

Response: EPA believes that it would be inappropriate to establish specific trigger levels and required actions for the ambient monitoring program at this time. Rather, these should evolve as the monitoring is implemented and EPA, along with the State and Forest Service, review the data. Although EPA does not have the authority to establish an interagency group to oversee the monitoring program and review results, the agency intends to encourage interagency coordination and information sharing.

55. Comment: USFWS comments that "there are less damaging alternatives in the earlier NPDES permit, and that this project may have substantial and unacceptable impacts on resources of national importance as determined by congressional enactment of Federal laws mandating their protection." USFWS also suggests that EPA not issue the final permit and ROD until a comprehensive environmental impact statement is prepared for the cumulative effects of all current proposals for development in Berners Bay.

Response: EPA does not understand what the USFWS is referring to as less damaging alternatives in the previous permit. NPDES permits do not have alternatives. Further, it is not clear what resources of national importance or specific congressional enactment of Federal laws USFWS are referring to in the comment . Finally, as documented in the ROD and through its participation as a cooperating agency, EPA has determined that the FZS adequately describes the potential direct, indirect, and cumulative effects associated with the Kensington Mine Project. In responding to comments on the DHSS, the Forest Service specifically noted that it is not required, and has no authority, to prepare a single, comprehensive EIS for all unrelated potential development in an area such as Berners Bay.

Additional Changes

EPA made the following changes based on internal review of the draft permit:

1. Added hardness monitoring to Table 1 based on information found in Table 6-1 of the Fact Sheet.

2. Added nitrate limits to Table 1 based on information found in Tables 6-1 and 5-2 of the Fact Sheet.

3. Defined I/E as Influent/Effluent in Table 1.

4. Rearranged the parameters in Table 2 to be in the same order as Table 1.

5. Changed the monitoring for copper and aluminum in Table 2 to quarterly to be consistent with other monitoring for parameters in Table 2.

6. Changed the sample type for WET in Table 2 from a 24 hour composite to a grab for consistency with other sample types in Table 2.

7. Added Iron limits to Table 3 based on information in Tables 6-1 and D-3 of the Fact Sheet.
8. Changed footnote 6 in Table 3 to reference I.D. instead of I.C.

9. In Permit Part I.D., changed "1 through 6" to "1 through 8"

10. Replaced "trigger" with "limit" in Permit Part I.D.4.a. since the permit contains a WET limit not a trigger.

References

Clean Water Act Regulation of Mine Tailings. EPA Memorandum from Diane Regas, Director, Office of Wetlands, Oceans and Watersheds; James A. Hanlon, Director, Office of Wastewater Management; and Geoffrey H. Grubbs, Director, Office of Science and Technology to Randy Smith, Director, Office of Water, Region X; May 17, 2004. Washington, DC.

Endangered Species Act Section 7 Consultation - Biological Opinion. National Marine Fisheries Service, Protected Resources Division, Alaska Region. March 23, 2005.

Kensington Gold Project Final Supplemental Environmental Impact Statement. Prepared by Tetra Tech, Inc. for the Lead Agency, the USDA Forest Service, Tongass National Forest and Cooperating Agencies, the US Environmental Protection Agency, Region 10; The US Army Corps of Engineers, Alaska District; and the Alaska Department of Natural Resources. December 2004

Letter dated July 6, 2000, from Michelle Bonnet, Coeur, to Robert Grandinetti, EPA, regarding Toxicity sample holding time.

Teck-Pogo, Inc. NPDES permit AK–005334-1 signed by Randall F. Smith on March 18, 2004.

Alaska Water Quality Standards (18 AAC 70).

Alaska Water Quality Criteria Manual for Toxic and other Deleterious Organic and Inorganic Substances as amended through May 15, 2003.

Guidance on Water Quality Based Effluent Limits Set Below Analytical Detection/ Quantitation Limits. EPA Memorandum from Cindi Godsey, NPDES Permits Unit; Michael Lidgard, Manager NPDES Permits Unit; and Kim Ogle, Manager NPDES Compliance Unit to the NPDES Permits Unit Consistency Book; April 25, 2005. Seattle, Washington.

Trustees for Alaska and Gilbert M. Zemansky, Petitioners, v. Environmental Protection Agency, Respondent, Alaska Miners Association, Inc., Intervenor; Alaska Miners Association, Inc. Petitioner, v. Environmental Protection Agency, Respondent, Trustees for Alaska, et al., Intervenors. Nos. 83-7764, 83-7961. United States Court of Appeals for the Ninth Circuit.

The Metals Translator: Guidance for Calculating a Total Recoverable Permit Limit from a Dissolved Criterion. EPA 823-B-96-007. Office of Water. June 1996.

EPA Designation of Outstanding National Resource Waters. (Memorandum from Acting

Director, Criteria and Standards Division to Regional Water Management Division Directors; May 25, 1989) Washington, DC.

Water Quality Standards Handbook: Second Edition. EPA-823-B-94-005a. August 1994.

Letter dated January 27, 2005, from Robert T. Richins, Coeur, to Cindi Godsey, EPA, regarding Kensington Mine: Treatment, Tailings Cap, Practicability Ongoing Corps 404 Permit/Related NPDES Considerations.

40 CFR Part 122 - EPA Administered Permit Programs: The National Pollutant Discharge Elimination System.

40 CFR 440 Subpart J

47 FR 52079 November 18, 1982.

48 FR 14146 and 14168 April 1, 1983.

49 FR 38036, 38037, and 38039 September 26, 1984.

261 U.S. App. D.C. 372; 822 F.2d 104, 1987 U.S. Natural Resources Defense Council, Inc., Petitioner v. U.S. Environmental Protection Agency and Lee M. Thomas, Administrator, U.S. Environmental Protection Agency, Respondents, Chemical Manufacturers Association, American Iron & Steel Institute, Edison Electric Institute, et al., Cincinnati Gas & Electric Co., et al., Tenneco Oil Company, et al., Atlantic Cement Company, Inc., et al., National Coal Association, General Motors Corporation, Ford Motor Company, Alabama Power Company, et al., American Wood Preservers Institute, Intervenors.

Appendix A - List of Commentors

Bruce Abel
Don Abel
Becky Achten
Glenn Adams
Robert Adams
David Albert
Irene Alexakos
Rob Allen
Kevin Anderson
Dale Anderson
Don Argetsinger
Susan Armstrong
Tim Arnold
Susan Ashton
Scott Aussman
Todd Bailey
Bruce Baker
Bruce Baker
Agnes & Layton Bennett
Anissa Berry-Frick
Wayne Berthold
Lucinda & Wayne Bertholl
Bob Berto
Robert Blowers
Charles Boddy
Steve Borell
Scott Bradford
Aaron Brakel
James Szierlor Brandie Weldon
Jason Bressler
Margaret & Michael Brown
Emma Brown
Carrie Brown-Bauer
Jason Brune
Donald Burford
Scott Burton
Dave Button
Farlin & Caroline Cameron
Shirley Campbell
Irene Cannon-Geary
Scott Carey
Scott Carey
Ellen Carey-Starr
Sarah Carter
Adrian Celewycz
Dave Chambers
Errol Champion
Susan Christianson
Knikki Cinocco
Al Clough
Debera Cokeley
Chuck Collins
Ted Coughlin
Chuck Craig
Tom Crandall
Amy Crook
Ike Cropley
Mark Crutchfield
Laurie Dadourian
Ron Martin Daniel Martin
George Davidson
S. Kirby Day, III
Ted Deats
Steve Denton
Romer Derr
Ed Devenyns
Bob Doll
Karen Doxey
Kenneth Duckett
Dennis Egan
George Elgee
Andrew Eller
Thomas Ely
Bret Schmiege Emily Kane
Murlin Everson
Richard Farnell
Robyn & John Fields
Troy Fierro
Zachariah Finley
Ron Flint
Eric Forst
Christy Fowler
Bob Fowler
Curt Freeman
Dave Fremming
Friberg
Richard & Sylvia Gard
John Garrard
Lydia Garvey
Chris Gerondale
Paul Glader
Paul Glavinovich
David Goade
David Goade
Richard Gordon
Peggie Gordon
Andrew Grabham
Owen Graham
Skip Gray
Constance Griffith
Wm. David Gross
John Grummett
Rosemary Hagevig
Rosemary Hagevig
Kat Hall
Bruce Halstead
Bob Hamilton
Robert Hamilton
David Hanna
Vince Hansen
Kathy Hansen
Karen Hansen
Ronald Hansen
Kristine Harder
Carl Harmon
Daniel & Janet Harrington
Rick Harris
Richard Harris
Richard Hart
June Hass
David Haugen
Rich Heig
Rich Heig
David & Renda Heimbigner
Marjorie Hermans
Karen Hess
Peter Hildre
Eric Holle
Dixie Hood
Shane Horton
Tyrell Horton
Janis Horton
Larry Houle
John Hudson
William Huggins
Kevin Hulse
Ron Jackson
Gordon Jackson
Robert Jacobsen
Jeanette James
Jim Jansen
Kelly Jessup
David Job
Cathy Leary / John Carey
Henrich Kadake
Michelle & Mike Kaelke
Timi Katzeek
Chris Kent
Katya Kirsch
Harold Knippel
Peter & Christine Koch
Shawn Kroedler
Jim Kulas

Aurah Landou
Diana Lapham
Sharon Larson
Willaim Leighty
Deb Lessmeier
Joyce Levine
Sue Libenson
Erik Lie-Nielsen
Robert Lindekugal
Buck Lindekugal
John Lucas
Chris Lutich
Jack Lyman
Neil MacKinnon
Jane MacKinnon
Robert MacKinnon
Judith Macnak
Judith Maier
Carl Marrs
Daniel Martin
William Massengale
David Matthews
Terry Maxwell
Kathrin McCarthy
Victoria McDonald
Alex McKallor
Connie McKenzie
Brian McNitt
John Melisko
Raymond Menaker
Vivian Menaker
Michael Menzel
Dennis Metrokin
Tom Meyer
Lance Miller
Kathleen & Gary Miller
Melanie Millhorn
Duff Mitchell
Duff Mitchell
John Modrow
Fred Morino
Alan Munro
Dick Myren
Wesley Nason
Paul Nelson
Tom Nelson
Michael Nelson
Cindy & Jim Newton
Mark Nitschke
Bill Northey
Jacques Norvell
Mike Notar
Shannon Nye
Kevin Nye
Ed Nygard
Charlotte Olerud
Kjell Olsson
Bill Overstreet
James Palmer
Merrill Palmer
Lorene Palmer
Larry Paquin
The Pardees
Delbert Parr
Robert & Gretchen Pederson
George Pettit
Sophia Polasky
Tim Polasky
Rob Pollock
Rollo Pool
Jenny Pursell
Maya Raschel
Mike Rawson
Glen Ray
Carl & Evonne Reese
Paul Reese
Don Reid
Marty Remud
Rick Richins
John Robertson
Robert Robinson
Mark Robinson
Mark Rorick
Scott Rossman
John Sandor
Merrill Sanford
Michael Satre
Jeff Sauer
Karen Schmitt
Brad Schulze
Nina Schwinghammer
Roger Shattuck
Rick Shattuck
Russell Shaub
Paulette Simpson
Emily Sjoroos
Susan & Jeff Sloss
Carlton Smith
Joseph Smith
Ron Somerville
Sandy & Scott Spickler
John Standish
Laurie Stats
Zach Stenson
David Stickler
Robert Stickler
James Stickler
Bob Stinson
Maureen Stoll
Andrea & Michael Story
Michael Story
David Summers
Brock Tabor
J.P. Tangen
Karen Tarver
Robin Taylor
Don Taylor
Helen Tengs
William Thomas
Jai Crapella / Thomas Lee
Blaine & Dawne Thomsen
Mike Tobin
Eric Twelker
Robert Van Slyke
Coyne VanderJack
Robert Venables
Marta & Robert Venables
Paul Voelckers
Kenneth Waldo
Barbara Walker
Murray Walsh
Michelle Ward
Thomas Ward, Jr.
Wendell Wassmann
Dennis Watson
Britt Watters
Brandie Weldon
Larry Welk
John White
Evangeline Willard-Hoy
W. Kirk Williams
James Williams
Ken Williamson
Mary Willson
Jim & Dot Wilson
Calvin Wilson, Sr.
Michael Windred
Whitney & Elise Wolf
Michael Wolfe
Brenda Wright
Jan & Sam Wright
W.R. Wuestenfeld
Christine Wyatt
Christine Wyatt
Ann Yates
Jamey Young
Tom Zimmer
Tom Zimmer