

3/26/80

UNITED STATES ENVIRONMENTAL PROTECTION  
BEFORE THE ADMINISTRATOR

In the Matter of:	*	
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539 ALASKA PLACER MINERS, MORE OR LESS, AND	*	Docket Nos. 1085-06-14-402C
415 ALASKA PLACER MINERS, MORE OR LESS	*	and 1087-08-03-402C
	*	
	*	
Permittees	*	

INITIAL DECISION

This matter is before me on the Appeal on what appears to be all of the Gold Placer Miners in the state of Alaska concerning the terms conditions of their National Pollutants Discharge Elimination System (NPDES) permits issued for that activity. The appeals filed by the miners involve the 1985 and 1987 permits.

In his letter dated September 21, 1987, Mr. Robie Russell, the Regional Administrator of Region 10, Environmental Protection Agency ("EPA" or the "Agency") issued a decision which granted in part and denied in part the requests made by the miners concerning the subject permits. 1/ The Issues and Permit Conditions for which request for Evidentiary Hearing were granted or as follows:

1. Does the Imhoff Cone Test monitoring protocol (sampling and frequency requirements) for settleable solids (Parts I.A., I.A.1 and II.A) satisfy 40 C.F.R. §§122.41(j), 122.44(i) and 122.48?

2. Are the Best Management Practices (BMPs) Parts I.B.1, I.B.2, I.B.3., I.B.4 and I.B.5.) adequately described?

1/ Issues raised by Mr. Zemansky and the Trustees for Alaska were also granted. The Trustees have been dismissed as a party and Mr. Zemansky neither presented testimony or appeared at the hearing

2. Are the Best Management Practices (BMPs) Parts I.B.1, I.B.2, I.B.3., I.B.4 and I.B.5.) adequately described?

3. Does the BMP requiring reasonable steps to reduce the amount of organic and inorganic solids reaching the waters of the United States (U.S.) (I.B.1) satisfy 40 C.F.R. §122.44(k)?

4. Does the BMP requiring diversion of the unused stream and runoff water and prohibiting construction or placement of equipment in U.S. waters (Part I.B.2) satisfy 40 C.F.R. §122.44(k)?

5. Does the BMP regulating disposal of removal substances (Part I.B.5.) satisfy 40 C.F.R. §122.44(k)?

6. Does the monitoring requirement of Part II.B.2. satisfy 40 C.F.R. Part 122?

7. Are effluent limitations for mercury required to satisfy §301(b)(1)(c) of the Clean Water Act (CWA), 33 U.S.C. §1131?

8. Are effluent limitations for sediment required to satisfy §301(b)(1)(c) of the CWA, 33 U.S.C. §1131?

9. Are effluent limitations for total suspended solids (TSS) required to satisfy §301(b)(1)(c) of the CWA, 33 U.S.C. §1131?

The Regional Administrator also stated that: "Because these permits conditions are required by regulation, and NPDES regulations are not reviewable, challenges to the minimum monitoring protocol are legally irrelevant and are denied. See 40 C.F.R. §124.64(b)(1) In the Matter of 446 Alaska Placer Miners, more or less, Inc., supra. However, to the extent that the issue is whether weekly monitoring, rather than seasonal monitoring, is

required to assure compliance with NPDES regulations (see 40 C.F.R. §122.44(i)(1); 40 C.F.R. §122.48), the request is granted."

In addition to those nine (9) issues, the Administrator ruled that to the extent that weekly monitoring rather than seasonal monitoring is required for turbidity. The issue is granted.

Subsequent to that Order, the Regional Administrator on July 11, 1988 issued a Revised Decision on Hearing Requests which stated in part as follows:

"On September 21, 1987, Region 10 of EPA issued as decision granting in part and denying part a number of requests for an evidentiary hearing on the above referenced to NPDES permits. Two of the issues for which a hearing was denied related to the effluent limitations for turbidity and arsenic that the permits established. Specifically, EPA did not grant a hearing on whether limitations of 5 NTU above background for turbidity and 0.05 mg/l for total arsenic were consistent with the CWA §301(b)(1)(C) which requires EPA to assure that NPDES permit limits meet the requirements of state Water Quality Standards (WQS). A hearing was denied on these limitations on the ground that they were required by the terms of the certification that the Alaska Department of Environmental Conservation issued on these permits, pursuant to §401 of the CWA."

"The state of Alaska recently has informed EPA that they did not make a determination as to the 1987 permits that the effluent limitations of 0.05 mg/l for total arsenic and 5 NTU above background for turbidity were required to meet state WQS. This

new information removes the basis for denial of an evidentiary hearing on these permit limits. Accordingly, the September 21, 1987 Decision is hereby amended to allow a review of the 0.05 mg/l arsenic limit and the 5 NTU turbidity limit a hearing in this matter."

By Decision dated February 6, 1989, the Regional Administrator issued a second revised decision on evidentiary hearing requests and added to the list of allowable issues to include the 0.2 ml/l effluent limit for settleable solids. It should be noted, however, that this second revised decision applied only to the 1987 permits since there is in the record a state certification apparently still valid concerning certification of the 0.02 ml/l settleable solids limits for the 1985 permits.

Although the Regional Administrator granted approximately twenty-four (24) issues involving both the 1985 and 1987 permits, many of the issues are identical in nature and in an effort to obtain a graphic depiction of the status of the various requests as they applied to the two the sets of permits, the Region, beginning on page 3 of its Brief providing a simplified matrix which sets forth in an orderly manner the status of the various issues and which permits they apply to. The matrix appearing in EPA's Brief reads as follows:

<u>1985 permit issues</u>	<u>1987 permit issues</u>
1. Imhoff cone test	1. same as 1985 issue 1
2. BMPS adequately described	2. same as 1985 issue 2
3. Monitoring water/ponds in stream	3. similar to '85 issue 5

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|------------------------------------|---------------------------|
| 4. Diversion water/ponds in stream | 4. same as 1985 issue 4   |
| 5. Removed substances              | 5. same as 1985 issue 5   |
| 6. Mercury                         | 6. same as 1985 issue 3   |
| 7. Sediment limits                 | 7. same as 1985 issue 6   |
| 8. TSS                             | 8. same as 1985 issue 7   |
| 9. Water Q.S./NTUs                 | 9. same as 1985 issue 8   |
| 10. Water Q.S./arsenic             | 10. same as 1985 issue 13 |
| 11. BPJ/BAT/SS/Turb./Arsenic       |                           |
| 12. 301(b)(1)(C)/SS/Turb./Arsenic  |                           |
| 13. Daily turbidity monitoring     |                           |
| 14. Weekly arsenic monitoring      |                           |

Before beginning a discussion of the issues in this matter, there is one question that must be addressed. Apparently in the individual notifications of the issues granted and denied which was sent to the individual permittees, the question of permit issuance procedures was denied. However, at the hearing it was revealed that the permit issuance procedure was listed as a hearing issue in the public notice of the granting of evidentiary hearing in this matter and therefore the miners argue that it should be addressed.

In my opinion the primary function of a public notice is to notify the general public other than the permittees of the fact that a evidentiary hearing on a given permit or several permits has been granted so that they may if they wish become parties to the proceeding and introduce testimony relevant to any of the issues listed. The notice individually sent to each of the permittees put them on notice as to which of the issues were granted and which

were denied and the issue concerning permit issuance procedures was specifically denied in that notice. The miners argue that the Agency should be held to the language of the public notice rather than the language contained in the individual notices sent to each permittee. I disagree. First of all there is no authority for the proposition that an issue denied for hearing by the Regional Administrator may be addressed as an evidentiary hearing under 40 C.F.R. Part 124 if included in the public notice for hearing. The authority to determine the issues to be addressed at an evidentiary hearing on NPDES permits is vested in the Regional Administrator by language of 40 C.F.R. §124.75. The denial of any issues suggested for hearing by the Regional Administrator may be appealed to Administrator under 40 C.F.R. §124.91. In this case it is interesting to note that the miners appealed the deletion of the issue concerning permit issuance to the Administrator and thus they must have taken the position that the fact that it was included in the public notice was not the governing declaration. The petition of the miners to the Administrator on issues denied by the Regional Administrator was denied by the Chief Judicial Officer by Order dated December 29, 1987. In my opinion the individual notices of granting and denial sent to each of the permittees is the governing document and the fact that some employee of Region 10 inadvertently included in the list of issues the one addressing permit issuance procedures constitutes, in my judgment, harmless error and I do not feel that the miners were prejudiced by their reliance on that public notice. If the reverse were true a different result would

occur. For example, if an issue that was actually granted by the Administrator was deleted from the notice and the parties therefore did not address it in their testimony then one could easily argue that they were prejudiced by this mistake by not having the opportunity to argue their position on that particular issue. In this case some testimony was presented by one of the parties on this issue but the only prejudice that could possibly result from that activity that they were put to the trouble of preparing testimony on an issue which I feel was not properly before the Court.

In addition, the permit issuance procedures issue of most concerns the miners, that is the propriety of the state certification of the 1985 permit has been addressed in a recent Alaska Supreme Court Decision entitled "A Miners Advocacy Council, Inc. The State of Alaska Opinion No. 3473, July 28, 1989." The procedural propriety of that certification was upheld in all substantial respects and thus there is very little of this issue that would have remained for the Court to decide had my decision been that the language of the public notice governed the inclusion of the issue to be heard. I am therefore of the opinion that the issue on permit issuance procedures is not before me at this time.

There is one other matter that I feel is relevant to this proceeding and that is that the very nature of Gold Placer Mining is inherently injurious to the environment because of the procedures used. In most instances the gold bearing ore is found in the beds the streams involved. The usual practices for the

miner is to set up his equipment in the middle of the stream and proceed to load the dirt and rocks into the equipment and ultimately in the sluice box for the recovery of gold. Consequently, the effect of this operation is that since the placer mining procedures have historically taken place in the stream bed itself, it constitutes an operation which generates sizeable amounts of water containing variety of pollutants mostly consisting of suspended and settleable solids and small quantities of mercury and arsenic which were, prior to the issuance of permits governing this industry, simply allowed to run into the stream and continue downstream causing considerable harm to the water quality downstream from the mining operation. Given the nature of the processes involved in gold placer mining, the miners have historically resisted any attempts on the part of the government to regulate their industry and my recollection is that my first involvement with this matter begin in 1976. At that time the miners position was that the federal government had no authority to regulate their industry at all and they vigorously resisted any attempts on the part of EPA to regulate the operation or discharges from their mining operations. In the years that followed the miners have, to a large extent, accepted the fact the federal government has a legitimate interest in their business and that they do in fact possess legal authority to regulate the business of placer gold mining.

Due to the nature of the processes involved it is imperative that the regulating agency craft the permits involved in a very



precise and careful manner and that such permits may contain permits requirements above and beyond those normally associated with NPDES permits for other industries. For example, the inclusion of best mining practices, which are not associated with any affluent numbers, but which the Agency feels are necessary to be included in the permit in order to assure the protection of the waters of the U.S. as required by the CWA. I agree with the Agency's position on this issue and feel that in many instance it's necessary to include in the permits requirements for which there is no numerical value associated but which are necessary for the proper operation of the mining facility to assure the Agency that the mines are operated in a manner consistent with the CWA.

Another matter of primary interest in this case is that the 1985 and 1987 permits are no longer in effect in as much as they have been superseded by permits issued in 1989. The 1989 permits were drafted in considerable part to include the limitations set forth in the recently issued effluent guidelines which the Agency promulgated in 1988. The miners take the position that no reliance should be placed on those numbers since their validity is currently being litigated in the Ninth Circuit Court of Appeals but it should also be noted that the Court refused to Stay the operation of the regulations pending its ultimate decision on their validity. Given that factor, I'm of the opinion that the effluent guidelines promulgated in 1988 are presently valid as applied to the recently issued permits.

In view of this decision, the most important issues not mooted

by the issuance of the guidelines are the arsenic and turbidity limitations. Also remaining viable are the issues on the use of the Imhoff cone, frequency of monitoring for various perimeters and the prohibition of the construction of settling ponds in streams.

Another matter of passing interest is that the ultimate effect of the granting of the issues, described above, legally left most of the miners without any effective permit in the middle of the mining season and therefore it was the duty and responsibility of the presiding officer to issue interim limitations to these miners so that they could continue mining with the knowledge of what legal requirements were placed on such operation so that they could take the necessary steps to assure that the limitations established were met during the mining season. Such interim limits were issued by the Court.

With that background in mind, I will now discuss the individual issues remaining. The first issue concerns whether or the Imhoff cone test monitoring protocol for settleable solids satisfies as 40 C.F.R. §122.41(j), 124.44(i) and 22.48.

The requirement for the use of an Imhoff cone was first set forth in the 1975 mining permits and has been argued and discussed and resisted by the miners since that time. A monitoring protocol is usually described as a requirement that explains the routine steps to be followed when using a particular type sampling device, in this case an Imhoff cone (a transparent cone made of glass or plastic approximately 16 inches long with graduated marks on its side). The requirements of the Federal Register cited above

require that the samples taken be representative of the monitoring activity and be conducted according to approved test procedures and yield results dependent and related to the nature and effect of the discharge.

There is no argument that the use of Imhoff cone for the measuring of settleable solids is a well established scientific protocol which was developed in accordance with the procedures described in Standard Methods, 15th Edition, 1980, page 96, and is a universally accepted authority for water quality sampling principles and techniques. The miners argue that the use of the Imhoff cone is impractical because, in that in many instances, the turbidity of the water prevents them from obtaining an accurate reading and that in some cases the ambient temperature and other factors affect the results obtained to the extent that they do not accurately reflect the conditions of the water being sampled. In view of the long and well established use of the Imhoff cone for measuring water quality, the arguments of the miners in this case are not persuasive and I'm of the opinion that the use of the Imhoff cone for the purpose required in the permit is appropriate and valid. In this regard it should also be noted that the miners have presented no testimony or evidence as to any other viable method other than the use of the Imhoff cone to test the parameter involved.

Another issue of concern to the miners was that the 1987 permits require sampling once per day for each day of discharge. The 1985 permits only required that the sampling be done once per

day for each day of sluicing. This tightening of the regulations was done as a result of studies conducted by the Agency during the years in question and were also based on the fact that in many instances, there occurs discharges from the mining operation to the waters of the U.S even on those such occasions when the miners are not actually sluicing ore. For this reason, the Agency tightened the requirements in the 1987 permit to yield data which is more representative of placer mining discharges. Given the fact that one of the purposes of an NPDES permit is to assure that the water quality of receiving stream is protected, and the fact that inspections and investigations have revealed that in some cases discharges do occur even when the miners are not sluicing, makes the requirement for testing during discharge a necessary and legal requirement and its use will be confirmed.

The next issue to be addressed has to do with the inclusion of best management practices in the permits "BMPs". The miners argue that the Agency has no authority to include such requirements in the permit and in any event they are not sufficiently precise so that a miner may know in every instance what activity is prohibited and what is allowed. As indicated above the 1985 and 1987 permits have expired and the permittees are operating under permits issued in 1989, which are based to large extent on the above-mentioned national Effluent Guidelines which govern the conditions and requirements of permits involving the gold mining industry. As all of the parties know one can not legally challenge the validity of a national effluent guideline in an administrative hearing such as

the one had Fairbanks in 1989. Since the Effluent Guidelines as published by the Agency set forth five (5) BMPs, which are considered to be binding upon the miners and whose inclusion in the permit cannot legally be questioned in an administrative proceeding, I will not spend a great deal of time discussing their inclusion.

To the extent the miners are correct in their argument that the Effluent Guidelines are not relevant to this proceeding. A brief discussion of the authority for the inclusion of such practices will be made.

The genesis of inclusion of conditions in the permit called BMPs are contained in 40 C.F.R. §122.44(k). This regulation directs EPA to impose such conditions when regulation directs EPA to impose such conditions when the practices are reasonably necessary to achieve effluent limitations and standards or to carried out the purposes intent of the CWA. Other than an objection by the miners that the BMPs are not understandable, they make no suggestions as to what specific changes should be made to clarify the substantive content of these permit conditions. Additionally, it is interesting to note that apparently most of the miners adequately understand the language of the BMPs, since only one miner ever called an EPA official to ask for an explanation of as to what they mean. There is nothing in the transcript which indicates a need for any additional interpretation of any of these BMPs and the miners likewise have produced no evidence as to what alternative there should be to the use of these conditions. For

the reasons given above I find that the use of the BMPs in the permits is a valid exercise of the Agency's authority and that the language is sufficiently clear so that the miners know precisely what activity and practices are allowed and which are prohibited in the operation of their mines.

The next issue addresses the monitoring requirements of Part II.B.2 of the permit which requires the permittee to measure such parameters and operational characteristics of their waste treatment system on a monthly basis and submit these monthly summaries to EPA once a year.

40 C.F.R. Part 122 has within it a variety of general requirements on monitoring reporting but more specifically the regulation obligates the permittee to provide such information to the Agency as will enable it to determine whether or not the permittee is in compliance with the permit. Mr. Loisel testified that based on his experience the information required by the monitoring conditions is necessary to appropriately access to self-monitoring that a facility is in compliance with the law. The miners were in their testimony unable to identify any specific conditions relative to the monitoring requirements that were superfluous are excessive. In my opinion of regulatory agency through the use of its expertise and discretion is entitled to make reasonable requirements upon the regulated community and the monitoring requirements set forth in the permits in question are not burdensome or excessive. The Agency could just as easily required daily monitoring of the parameters involved if they felt,

based upon their years of experience in association with the industry, felt that such a requirement was necessary to demonstrate compliance with the permit conditions. However in this instances they have only required monthly sampling and have taken the position that such monitoring frequency is the minimum required to demonstrate that the permittees are in fact in compliance with the requirements of their permits. Under the circumstances, I'm of the opinion that the monitoring frequency required by the permits is reasonable and their establishment is clearly within the authority of the Agency to determine and the miners in their testimony were unable to identify any specific conditions that they felt were superfluous or excessive.

The BMP requiring diversion of the unused stream and runoff water and prohibiting construction or placement of equipment in U.S. waters contained (Part I.B.2) of the permit satisfies 40 C.F.R. §122.44(k).

Since this BMP is almost identical to the BMP contained in the National Effluent Guidelines appearing 11(a), I will not spend a great deal of time discussing this issue since I feel that its inclusion in the permit is required and not subject for discussion in this forum since it has its genesis in the National Effluent Guidelines. The language in the Guidelines that established this requirement states "surface water diversion: the flow of surface waters into the plant site shall be interrupted and these waters diverted around and away from incursion into the plant site."

Aside from the fact that the inclusion of this requirement is

authorized and required by the National Effluent Guidelines, common sense dictates its inclusion since as indicated in the discussion above, the prior practice of the miners was to simply dig a hole in the river bed and construct their mining facilities therein thus allowing the effluent from the operation to travel directly from the upstream through the processing and sluicing equipment and directly into receiving waters. Such a practice is completely inimicable to the philosophy of the CWA and cannot be permitted. Current practice requires the installation of a settling pond or series of settling ponds downstream from the mining operation and the placing of these ponds in the stream bed constitute a direct hazard to the downstream water quality in the case of overflow or damage to the settling pond which will allow untreated sluiced water to be directly discharged to the downstream waters. In one instance a miner complained that this prohibition would render his mining claim unusable since it is located in a deep "V" valley and that he has no alternative available to him but to place his settling ponds in the stream bed. The record indicates that an average placer miner claim in Alaska is 660 feet wide and 1,320 feet long or approximately 20 acres. The record also reflects that in many situations, the claims are in excess of 100 and are strung together so that a single mining interest will control long reaches of the stream system. Mr. Mullikin who was the primary contestant of this requirement stated that he has about 10 miles of claims on Boulder and Skookim Creeks, but he doesn't think its feasible to mine on some of that ground because the narrowness in some places



and the expense and difficulty of building settling ponds would be prohibited. Given the size of the claims involved it is obvious that even in those situations where the mining operation is taking place in a "V" shape valley, there is room to divert the waste to a settling pond located downstream in such a manner as not to commingle it with the naturally flowing waters of the stream bed being worked. I am therefore of the opinion that the inclusion of this BMP in the permits is both practical, logical and also required by National Effluent Guidelines and therefore not subject to attack in these proceedings.

Issue 5 concerning the BMP regulating disposal of removed substances contained in Part I.B.5 of the permit satisfies 40 C.F.R. §122.44(k). The inclusion of this BMP is both legally valid and required by the National Effluent Guidelines under §§ c, which states that "measures shall be taken to assure that pollutants materials removed from the process water and waste streams will be retained in storage areas and not discharged or released to waters of the U.S." For the reasons stated above this requirement is not subject for discussion in these proceedings in as much as it is required by the National Guidelines. In addition there to, its inclusion in the permit is based on the simple proposition that there is no way one can protect the water quality of the waters of the U.S if the miner is allowed to redeposit the pollutants collected in his settling ponds back in the waters of the U.S since that would be contrary to the general requirements conditions of the CWA. Mr. Loiselles who was the witness testifying on this issue

on behalf of the Agency also stated that it was placed in the permit for the reason that he had seen this practice at several mining sites in the state of Alaska and that its inclusion in the permit was simply a good faith effort on his part to inform the permittees that such practices were unacceptable and violation of the law.

For the reason stated I'm of the opinion that the above cited requirement is clearly within the discretion of the Agency, required by law and authorized by the provisions of 40 C.F.R. §122.44(k).

Issue 6 has to do with the facts that the permits do not require effluent limitations for mercury. It is the Agency's position that although mercury is a dangerous pollutant its discharge when it occurs is in very minute amounts and based upon the data collected by EPA in Alaska, it is the Agency's position that when settleable solids are controlled to the amount of 0.2 ml/l or less, the discharge of mercury will be controlled to an acceptable level.

It should be observed that this issue was raised by the Trustees for Alaska and Mr. Zemansky. As noted in the record the Trustees for Alaska were dismissed as parties to this proceeding for variety of reasons and Mr. Zemansky neither appeared at the hearing or presented any testimony and his whereabouts are at this time are unknown to the Court. For these reasons alone I'm of the opinion that the issue as to the failure of the permits to contain limitations on mercury is not before the Court but even if it were,

for the reasons indicated above I find that their absence from the permits is valid, given the rationale of the Agency as to the reduction of mercury in the downstream waters which occur when the miner achieves the settleable solids limitation required by the permits. I'm therefore of the opinion that the failure of the permit to contain a limitation for mercury is a valid decision on the part of the Agency and the permits are therefore not defective because of the absence of such parameters.

Mr. Zemansky and the Trustees for Alaska also raised the issue that the permits were invalid because they did not contain an effluent limitation for sediment. The exclusion of a specific limitation for sediment is not one which renders the permits invalid for a variety of reasons. One is that the Agency has determined through its investigations and research that the control of settleable solids and turbidity, which are controlled by the permits, will also control discharge of sediments and that the inclusion of effluent limitations for these two parameters would control the discharge as sediments to within an acceptable range. The Agency having explained their rationale for the exclusion of a specific limitation for settlement have in my judgement established a prima facie case for such exclusion and as indicated above, neither of the Trustees for Alaska or Mr. Zemansky were present at the hearing and presented no testimony to rebut the prima facie case established by the Agency and therefore they have failed to sustain their burden which the regulations place on them and I am therefore of the opinion that effluent limitations for

sediment are not required to satisfy §301(b)(1)(C) of the CWA.

Paragraph 8 attacks the validity of the permits because of the failure of the Agency to place in the permits an effluent limitation for total suspended solids. Once again this issue was raised by a Trustee for Alaska and Mr. Zemansky and therefore technically not even before the Court for decision. However, in addition thereto, the Agency in its direct testimony explained that there is no Alaska water quality for total suspended solids and the closest parameter to that criteria is contained in the Alaska Standards designated relating to sediment and turbidity. Turbidity is regulated by the permit and settleable solids and are a more direct measure of sediment impact on the receiving water than total suspended solids. EPA's rationale and reasons for making the decision not to include an effluent limitation for this parameter were clearly described by the Agency's witness and as indicated above, therefore established a prima facie case for their absence. The failure of the Trustees for Alaska or Mr. Zemansky to appear at the hearing and present evidence on this issue indicates their failure to meet their burden of proof on this matter and therefore I'm of the opinion that an effluent limitation for total suspended solids is not required by the language of the CWA and its absence from the permit in no affects its validity.

Issue 9 concerns the inclusion in the permit of a instantaneous maximum limitation of 5 NTUs above background for turbidity which is contained in Part 1.A. of the permit. This limitation is based directly upon Alaska WQS and for that reason

is required to be included in the permit. The miners have contested this limit on several grounds one being that the limit is not needed to avoid adverse water quality impacts and that the cost of treating to this level is prohibitive. The argument as to cost is invalid since the requirements of 33 U.S.C. §1311(b)(1)(c) requires that the Agency impose WQS base effluent limitations regardless of impact considerations or costs. Additionally, Mr. Geren, an EPA employee, in his direct testimony stated that the limitations are required for several reasons as follows:

1. effluent limitations for turbidity are required to comply with WQS criteria;

2. the 5 NTU above background limit will assure compliance with WQS;

3. where site specific information is provided by the permittee less stringent limits have been imposed to allow for the dilution affects of the receiving stream; and

4. in calculating the dilution capabilities of the stream, the entire stream flow was used which means a maximum possible size mixing zone was assumed to exist.

As stated above, the miners' arguments that it is too expensive to comply with the turbidity requirements are invalid because costs are not a factor in establishing water quality based effluent limitations. In addition, the miners offered no valid arguments in support of their position and therefore the inclusion of the Water's Quality Standard establishing an instantaneous maximum limitation of 5 NTUs above background for turbidity is a valid

limitation. In my judgement the miners did not sustain the burden placed on them by the regulations in attacking this requirement and therefore its inclusion in the permit is both legally required by the Alaska WQS and the Agency correctly interpreted such standard and its inclusion in the permit both required and legally valid.

The miners attacked the turbidity limitation on several grounds, one of which is apparently based on their interpretation of the language of Trustees for Alaska v. EPA 749 F.2d 549 (1984). On page 557 of that case the Court states that in regard to state WQS that "Effluent limitations are a means of achieving WQS." The Court then goes on to say that: "Thus we hold that §1311(b)(1)(c) requires the Administrator to include in placer mining permits whatever effluent limitations it determines are necessary to achieve the state WQS." The Court then criticizes the Agency for not placing effluent limitations for arsenic and mercury in the older permits and states on page 557 as follows:

"The Trustees assert that this denial of their rights continues to cause them harm in the context of succeeding permits which still fail to restrict effluent limitations on arsenic and mercury discharges and require no monitoring for these pollutants. We find that this argument is meritorious. Thus, we direct the Administrator on the remand to conduct a hearing for the purpose of a allowing the Trustees to present evidence on effluent limitations for arsenic and mercury and on appropriate monitoring requirements."

It is clear from a reading of that case that the Court

required the Agency to place in the permits specific effluent limitations for turbidity and arsenic and their inclusion in the permits is both required and proper. The Agency also argues that where the language of the state WQS are clear it has no authority to look behind such limitations and use its own judgment as to what effluent limitations are required to meet such standards. I agree with EPA's rationale in this regard.

Issue 10 concerns whether EPA correctly applied state WQS in establishing the instantaneous maximum limitation of .5 mg/l for arsenic contained in Part 1.A. of the permits. The miners argue that the limitation is invalid since the 0.5 mg/l WQS established by the State of Alaska is to be met only after treatment of the water supply. The miners also argue that a mixing zone should be allowed. The Agency argues that the inclusion of this condition in the permit is based upon Alaska WQS. Mr. Geren, page 13 of his testimony, stated that the limit on arsenic was established through direct application of the Alaska WQS which require, at a minimum, the toxic substances shall not exceed Alaska Drinking Water Standards. The Alaska Drinking Water Standards set the maximum contamination concentration on arsenic at 0.5 mg/l and that this drinking standard establishes maximum contaminant level for arsenic at that number. The miners also argued that the cost of reducing arsenic to the required levels is prohibitively expensive, once again failing to recognize that costs are not to be consideration when establishing water quality base limits. As for the miners' argument that a mixing zone should be allowed, the Agency points

out that the Alaska standards prohibit mixing zones for toxicants like arsenic and therefore the Agency could not legally include a mixing zone in the permits as written.

The miners also argue that no limitation for arsenic should be placed in the permits since the activities of the miners do not add any arsenic to the water. This argument fails to recognize the well-established fact that arsenic is commonly found in conjunction with gold ores as a natural constituent of the geologic formations associated therewith and are frequently discharged by placer miners operations and should therefore be a controlled substance in the permits. This finding is likewise consistent with the above-cited case of Trustees v. Alaska. The miners also argue that the arsenic limitation was improperly applied and interpreted by EPA since it applies only to drinking water as it comes out of the tap or as supplied to a public drinking water system. The miners also argue that under the regulations, the measurement of arsenic should only be made after filtering the sample down to a 1 NTU turbidity level. As to this argument the Agency points out that the state has certified that the permits arsenic limit will meet the state standard and that the miners have provided no evidence that an alternative less stringent limit will also guarantee compliance. As to the argument that the standard only applies to drinking water, the Agency takes the position that application of the drinking water criteria in a manner urged by the miners does not make any sense as it would shift the burden for treatment from the discharger to the user of the water supply. The state's drinking



water regulations also allow treated water supplies to contain turbidity of up to the 5 NTUs and in as much of the permits under review contain a turbidity limit of 5 NTUs compliance with the permits turbidity limit would satisfy most of the miners concern over this issue of diluting the sample down to a 1 NTU prior to testing.

In view of all of the above, I find that the arsenic limitation placed in the permits by EPA is both legal and proper and in conformity with the state of Alaska's WQS. A requirement which the Agency is not allowed to alter.

Issue 11 has to do with whether or not stricter effluent limits for settleable solids, turbidity, and arsenic based on best professional judgment (BPJ) or best available technology (BAT) economically achievable should be imposed.

This issue was raised by Trustees for Alaska and Mr. Zemansky, neither one of which appeared at the hearing to produce any testimony and therefore this issue will not be discussed at any length except to say that the basis for the existing limitation on these parameters was explained in great detail by Mr. Geren in his direct testimony and in as much as no evidence was presented by either Mr. Zemansky or the Trustees for Alaska, who have been subsequently dismissed as parties to this case, was presented they have therefore not met their burden of persuasion on this issue and therefore I find that the limitations contained in the permit are appropriately strict and were properly determined by the Agency.

Issue 12 raises the question of whether more stringent effluent limitations for settleable solids, turbidity, and arsenic are required to satisfy §301(b)(1)(C) of the CWA. Once again this issue was raised by the Trustees for Alaska and Mr. Zemansky and since no evidence was placed in the record by either or these two parties due to their absence at the hearing I'm satisfied based upon testimony of Mr. Geren that the limitations contained in the permits are sufficiently strict to meet the requirements of the CWA. It should also be noted that the final promulgated guidelines which are considered to be binding in this case require recirculation of all sluice water, a permit limitation which is much more stringent than the simple settling pond requirements in the 1987 permits.

The 0.2 ml/l settleable solids limits in the 1987 permits is also water quality based and therefore a limit above that number will not assure compliance with the Alaska WQS for sediment which requires no increase in settleable solids above natural conditions.

Although the miners claim that the limit cannot met at many sites and that the limit is not necessary to assure compliance with WQS, it is not well-taken since the Agency presented evidence to suggest that the failure to meet the limit is because of inadequately sized ponds and failure to clean ponds when they fill with sediment. The miners were not able to identify a single operation with pond size to provide six hour detention time that could not comply with the 0.2 ml/l.

It should also be pointed out that the 0.2 ml/l limit is

mandated by the recently promulgated National Effluent Guidelines, which I consider to be binding in this matter since all of the permits currently in existence were based on such guidelines. For all practical purposes arguments on this issue have been mooted by the issuance of the 1989 permits and need not be further to discussed as they relate to the 1985 and 1987 permits which are no longer in effect.

Issue 13 suggests that daily monitoring rather than seasonal monitoring for turbidity is required to assure compliance with the NPDES regulations such as 40 C.F.R. §127 and 40 C.F.R. §122.48. Although not so stated in the Agency's brief, I would suggest that this issue was also raised by the Trustees for Alaska and Mr. Zemansky who I consider to be non-participants in this hearing, but in any event Mr. Loiselle in his direct testimony on page 15 stated that monitoring once a season per turbidity is sufficient if the samples are collected correctly and analyzed by a competent laboratory. There was no evidence presented in the record that would suggest that a more frequent schedule for monitoring of turbidity should be required. Based on the above I'm of the opinion that the once per season monitoring for turbidity is a proper exercise of the Agency's judgment in this matter and that no evidence was presented which controverted that decision, and it is therefore a proper and legal requirement of the permit and need not be made more stringent as suggested.

Issue 14 argues that a weekly monitoring frequency, rather than a seasonal frequency should be required for arsenic pursuant

to the same regulations cited above. Although not so stated I assume that since this issue would cause a more stringent requirement to be placed in the permits this question was raised by the Trustees for Alaska and Mr. Zemansky. The Agency, in any event, presented testimony through its witness Mr. Loiselle which states that analysis for arsenic must generally be conducted in a laboratory and it was EPA's intent in setting the monitoring frequency containing the permit to obtain data that is representative of the monitoring activity and to assure compliance. Once again there was no evidence presented in the record by any party to suggest or support the notion that a more frequent monitoring schedule for arsenic should be required. I therefore find that the seasonal monitoring requirement for arsenic as contained in the permit was properly determined and its inclusion therein is valid exercise of the Agency's discretion in determining what monitoring frequency is required in order to produce reliable results which will demonstrate compliance with the terms of the permit and the relevant WQS.

The briefs prepared by the miners were both well-crafted and thorough, however, they contained a discussion of several issues which were not granted by the Regional Administrator in his notice of the holding of the hearing and therefore will not be discussed by the Court. These issues involved such questions as whether or not EPA failed to issue new draft permits when making major modifications to the permit and whether the state certification failed to comply with §401, whether or not EPA fail to develop

technology and whether or not the permits were issued on a case-by-case basis as required by the mandates of 40 C.F.R.

§125.3.

The miners also argued as to the issue of turbidity that the state improperly adopted regulations for this parameter, however, EPA correctly points out that issue is not one that is properly before the Court but rather one that must be contested in a state Court.

On the issue of settleable solids, the miners also argue that EPA fail to properly consider the effect of background settleable solids in establishing the limit and that background settleable solid levels have an impact on settling pond efficiency. Several studies done by the Agency and reported by Mr. Geren suggested these arguments are not valid in that there is no observable demonstration to suggest that the levels of settleable solids in the intake water effect removal efficiency of the demonstration ponds. The miners also argue that flow augmentation should be considered as a means of meeting the WQS, however, the settleable solids limit is technology-based as well as water-quality based and 40 C.F.R., §125.3(f) the regulation prohibits the use of non-treatment techniques such as flow augmentation to satisfy technology-based limits. The regulation goes on to say that: "However, these techniques may be considered as a method of achieving WQS on a case-by-case bases when:

- (1) The technology-based treatment requires applicable discharge are not sufficient to achieve the standards;
- (2) The discharger agrees to waive any opportunity to request a variance under §301(c),(g) or (h) of the

CWA; and

(3) The discharger demonstrates that such a technique is the preferred environmental and economic method to achieve the standards after consideration of alternatives such as advanced waste treatment, recycle and reuse, land disposal, changes in operating methods, and other available methods."

This language appears to put the burden of demonstrating such factors upon the discharger and my review of the record demonstrates that the miners failed to do so.

The miners also argue that the effectiveness of settling ponds is not based on detention time, since the effluent guidelines (see page 8(a) now require recirculation of all sluice water this issue is, in my judgment, now mooted. In addition to this position, the record demonstrates that well designed pond that will maximize the time that sediment laden water is retained will meet the permit requirements. For example, if a pond is built too deep or constructed so that the sluice water can "short circuit" through the pond the theoretical detention time calculated using total pond capacity would be higher than actually experienced. A pond that is constructed too shallow would also not be likely to achieve the standard, since there would be little time for the particles to settle. I am therefore of the opinion that the permit conditions related to retention time in the ponds is valid.

Based on all of the above I'm of the opinion that the permits in question are proper in all regards and their issuance is consistent with the existing laws and regulations applicable to the issuance of permits under the NPDES law.

The proposed findings of fact and conclusions submitted by the parties have been considered. To the extent they are consistent

with findings of fact and conclusions herein, they are granted, otherwise they are denied.

In many instances the arguments put forth by the miners are unavailing because they are contrary to the provisions of the law and existing regulations, including the WQS issued by the state of Alaska. The arguments of the miners concerning the cost associated with the requirements of the statute are unavailing for the reasons set forth above. In many instances the miners simply found permit requirements basically objectionable and burdensome and did not provide any viable alternatives to the existing permit conditions and that failure constitutes in my judgment, a fatal defect in their position.

Having considered the entire record and based on the findings of fact and conclusions herein, it is proposed that the following Order be issued.

THE FINAL ORDER

Pursuant to §402 of the Federal Water Pollution Act as amended 33 U.S.C. 1342, commonly known as the Act, pursuant to §12481 of the Rules of Practice issued thereunder (40 C.F.R. 124.81) it is my decision that the permits in question are legal

and proper as issued and that the conditions therein should be maintained and not altered or deleted. 2/

Dated: \_\_\_\_\_

3/26/90

  
\_\_\_\_\_  
Thomas B. Yost  
Administrative Law Judge

2/ There is presently before me another case involving Alaska Placer Miners for the 1989 permits designated as NPDES Docket No. 1089-07-29-402. The EPA Region 10 staff is hereby directed to compare the findings and conclusions contained in this Decision with the issued granted in the immediately above-mentioned case and decide which of those issues have been mooted or otherwise disposed of by the language of this decision and issue a notice to the permittees and the undersigned as to their findings in regard thereto.

\* Pursuant to §124.91 the parties have 30 days after the initial Decision to appeal to the Administrator.



CERTIFICATION OF SERVICE

I hereby certify that, in accordance with 40 C.F.R. § 124.89(a), I have this date forwarded via certified mail, return-receipt requested, the Original of the foregoing INITIAL DECISION of Honorable Thomas B. Yost, Administrative Law Judge, to Ms. Mariane Atkinson, Regional Hearing Clerk, Office of Regional Counsel, United States Environmental Protection Agency, Region X, 1200 6th Avenue (Mail Code S 0125), Seattle, Washington 98101, and have referred said Regional Hearing Clerk to said Section which further provides that, after preparing and forwarding a copy of said INITIAL DECISION to all parties, she shall forward the original, along with the record of the proceeding, to:

Hearing Clerk (A-110)  
EPA Headquarters  
Washington, D.C.,

who shall forward a copy of said INITIAL DECISION TO THE to the Administrator.

Dated: \_\_\_\_\_

3/26/90

Jo Ann Brown

Jo Ann Brown  
Secretary, Hon. Thomas B. Yost