ARIZONA MINING ASSOCIATION

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Sydney Hay
President

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Via Electronic Mail (conard.shirley@azdeq.gov)

Ms. Shirley J. Conard
Water Quality Division
Arizona Department of Environmental Quality
1110 W. Washington Street
5415A-1
Phoenix, Arizona 85007

Re: Comments of Arizona Mining Association on Proposed Revisions to Surface Water Quality Standards

Dear Ms. Conard:

This letter constitutes the comments of the Arizona Mining Association ("AMA") on ADEQ's proposed revisions to the surface water quality standards rules, published at 14 A.A.R. 1281 (April 25, 2008). Some comments also relate to draft implementation procedures developed for some of the narrative standards, but because these were made available in their current form only within the last two weeks and because they are not specifically referenced in the rule, the AMA's review time with respect to these documents was limited.

AMA is a non-profit business league comprised of entities engaged in mining and mineral processing in Arizona. Its members include: ASARCO LLC; BHP Copper Inc.; Carlota Copper Company; Chemical Lime; Drake Stone Products; Freeport-McMoRan Copper & Gold, Inc.; Peabody Energy; Resolution Copper Company; Rosemont Copper Company; Swallow Mining, LLC. In 2006, the member companies produced 65% of the nation's newly-mined copper, along with significant amounts of associated byproducts (gold, silver, molybdenum), and had an estimated direct and indirect impact on the Arizona economy of $4.7 billion. AMA members typically possess individual or general AZPDES permits, and periodically obtain Section 404 permits requiring Section 401 certification from ADEQ. Because of these activities, among others, AMA members have a keen interest in all aspects of the surface water quality standards, including designated uses, narrative and numeric standards, antidegradation, and other provisions. AMA and its member companies have been active participants in all recent triennial reviews.

The AMA supports the comments submitted by the Surface Water Quality Standards Coalition ("Coalition"). We will endeavor to not simply reiterate those comments, but rather to raise additional points and/or highlight issues of particular importance to AMA members.

Comments

Jurisdictional Issues: As reflected in the existing and proposed definition of "surface water," the standards in A.A.C. R18-11-101 *et seq.* are intended to apply to waters of the United States as that term is defined pursuant to the Clean Water Act ("CWA"). As ADEQ is aware, the extent of CWA jurisdiction is uncertain after the decision of the United States Supreme Court in *Rapanos v. United States*, 547 U.S. 715 (2006). Subsequent to that decision, EPA and the Corps of Engineers issued guidance entitled "Clean Water Act Jurisdiction Following the U.S. Supreme Court's decision in *Rapanos v. United States & Carabell v. United States* (June 2007) (the "Guidance"). Pursuant to the Guidance "traditional navigable waters" ("TNWs"), reasonably permanent tributaries of TNWs, and other tributaries with a "significant nexus" to TNWs remain regulated under the CWA. By contrast, swales or erosional features (*e.g.*, small washes characterized by low volume, infrequent, or short duration flow) are generally not considered jurisdictional.

In a state such as Arizona, where many "waters" are ephemeral washes, the Guidance may result in some waters previously considered jurisdictional no longer being so considered. In fact, ADEQ has expressed its concern that the Guidance could be interpreted as eliminating CWA protections for non-perennial waters, which it estimates at 96% of all stream miles in Arizona. *See* letter from Stephen Owens to Benjamin Grumbles (December 5, 2007) and written testimony of Joan Card before the U.S. Senate Environment and Public Works Committee (April 9, 2008). Although the AMA believes it is exceedingly unlikely that the Guidance would be interpreted to eliminate jurisdiction over 96% of stream miles in Arizona, we believe it equally unlikely that *Rapanos* has no significance whatsoever on CWA jurisdiction in Arizona. At this point, it is simply too early to tell what the ultimate ramifications of the decision and the Guidance will be in Arizona. For example, the agencies have not yet fully identified the extent of TNWs within the state, nor clearly defined how the presence or absence of a "significant nexus" to such TNWs will be measured.

The AMA believes that the triennial review needs to account for this jurisdictional uncertainty. Currently, the definition of "surface water" is actually broader on its face than the corresponding EPA and Corps definitions (*e.g.*, by specifically including "ephemeral" streams in the "other waters" category), and ADEQ has not proposed any changes to that definition. *See* A.A.C. R18-11-101(43)(c). The blanket inclusion of ephemeral streams is unwarranted, particularly after *Rapanos*. Including a definition that is based on federal regulatory definitions that are themselves in doubt after *Rapanos* is equally unwarranted. Although the AMA believes that the current definition of "surface water" is overbroad in light of *Rapanos*, we are also aware of the possibility of federal legislation that will potentially expand CWA jurisdiction to or beyond pre-*Rapanos* levels (*i.e.*, the "Clean Water Restoration Act of 2007").

In light of the foregoing, the AMA suggests that the most efficient way to address the issue in the triennial review is as follows: (1) modify the definition of "surface water" to simply provide that a surface water means a "navigable water" as that is the term is defined in A.R.S. § 49-201(22), since "navigable water" is the term used in the governing statutes, specifically A.R.S. §§ 49-221(A) (authority to adopt surface water quality standards) & 49-255(2) (definition of "discharge" for AZPDES program); and (2) add language clarifying that the designated uses in Appendix B apply "if and to the extent that each listed water or reach constitutes a surface water."[1]

The advantage of this approach is that it allows maximum flexibility. To the extent that the current understanding of "waters of the United States" expands or contracts as a result of agency guidance, court decisions or federal legislation, the standards would adjust accordingly and would not require revision. It also avoids ADEQ having to undertake the virtually impossible task of doing a reach-by-reach review of every water currently listed in Appendix B to determine whether it constitutes a TNW, a reasonably permanent tributary to a TNW, or a water with a significant nexus to a TNW.

The AMA recognizes that ADEQ has authority to adopt surface water quality standards for non-navigable waters pursuant to A.R.S. § 49-221(B), but the Department has not proposed doing so and any such proposal would need to be accompanied by a separate analysis of the economic, social and environmental costs and benefits associated with any such standards. Absent such a proposal and accompanying analysis, the AMA believes that the approach suggested above is the most logical one given the current climate of uncertainty.

Effluent Dependent Waters Provisions; Non-Applicability to Storm Water Discharges: The proposed revisions to the definition of "effluent-dependent water" (A.A.C. R18-11-101(17)) would delete the term "treated" before "wastewater-," which is itself an undefined term. ADEQ has stated on numerous occasions in stakeholder meetings that the provisions of proposed A.A.C. R18-11-113(D)-(E) are not intended to apply to storm water discharges (i.e., that storm water is not wastewater), but that intent is not clearly expressed in the proposed rule language. In the existing rule, use of the qualifier "treated" before "wastewater" makes it clear that storm water is not included, but removal of that qualifier could create uncertainty. Any final EDW rule should make clear in the text of the rule itself (not merely the preamble) that its provisions do not apply to discharges of storm water or discharges of non-storm water that are authorized by an applicable storm water permit, such as the construction or multi-sector general industrial permits. The AMA also supports the Coalition comment that these provisions should not apply to discharges authorized under ADEQ's de minimus general permit.

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[1] The tributary rule (A.A.C.R. 18-11-105) already applies on its face only to a "surface water" and so would not need to be modified if the changes to the definition of "surface water" outlined above were adopted. Absent those or similar changes, however, the tributary rule would be subject to challenge by virtue of its apparent classification of every single tributary as a regulated "water of the United States" under the CWA.

Outstanding Arizona Waters; Proposed Designation of Davidson Canyon: The AMA has several comments on this provision generally, and on the proposed listing of Davidson Canyon in particular. With respect to the rule generally:

(a) The AMA concurs with the Coalition's comment that the proposed new definition of outstanding Arizona water ("OAW") at A.A.C. R18-11-101(28) suggests that waters may qualify as OAWs even without being classified by rule, which is inconsistent with the text of A.A.C. R18-11-112(A). The AMA supports the Coalition's suggested revision to that definition.

(b) ADEQ has proposed extending potential OAW status to intermittent waters, not just perennial waters. ADEQ has provided no explanation or rationale whatsoever for this change, and in fact does not even note the change in the preamble discussion of the rules. Given that the Department in the last triennial review adopted the requirement that OAWs must be perennial waters and emphasized repeatedly that intermittent waters were not eligible for listing, this unexplained change in course is puzzling. See 8 A.A.R. at 1299, 1302 (preamble statements) & 1421 (rule change imposing requirement a water be perennial in order to be eligible for designation).

The lack of explanation makes it very difficult to comment on this aspect of the proposal. Nevertheless, given the broad and vague definition of "intermittent" waters found in the rules (those flowing continuously at certain times of the year), and the fact that intermittent waters, unlike ephemeral and effluent dependent waters, are not specifically identified in Appendix B, the AMA is concerned that this proposal potentially dramatically expands the universe of OAWs in Arizona. Rather than protecting only the truly unique and rare waters in the State, this proposal moves toward allowing OAW status to be conferred anywhere water is sometimes present, even if infrequently. This is not, and never has been, the intent of the unique water (now OAW) program.

Moreover, given the potentially draconian consequences of OAW designation (primarily the imposition Tier 3 antidegradation provisions forbidding any change in water quality, which has enormous land use implications), this proposal could have significant ramifications on a statewide basis. Given the potentially dramatic limits on land use activities stemming from an OAW designation, such designation should be limited to perennial waters exhibiting one of the specified characteristics and not extended to the much broader and less well-defined category of intermittent waters.

Only one of the proposed two new OAWs is identified as intermittent - Davidson Canyon. The other potential explanation for the inclusion of intermittent waters in the rule is to facilitate the listing of this particular water. However, even if intermittent waters are properly deemed eligible for OAW status, there are problems with the proposed designation:

(c) Davidson Canyon is subdivided into four reaches in Appendix B. It appears that the lower three reaches are intended for designation as an OAW (although there is some uncertainty over the scope of the proposed designation, as noted below). However, it has not been

adequately demonstrated that these segments qualify for listing even under the revised criteria set forth in the proposed rule.

The second (uppermost) segment proposed for OAW designation (from the unnamed spring at 31°59'00"/110° 38' 46" to confluence with unnamed tributary at 31°59'32.5"/110°38'43.5") may not possess the requisite "good water quality" required under proposed A.A.C. R18-11-112(D)(3) (i.e., water that meets or is better than applicable surface water quality standards). The nominating petition includes water quality data from four events, the most extensive (and the most recent) sampling being from February 3, 2005. The three earlier events (in 2002 and 2003) sampled only general water quality parameters and did not sample for most metals (with the exception of arsenic). The February 3, 2005 sampling event was the only one to analyze for a wider range of metals. In this event, it appears that samples were collected just below the unnamed spring marking the beginning of the second reach of Davidson Canyon (i.e., at the top of the first reach proposed for OAW designation). Designated uses for that reach are A&W (warm water), fish consumption, full body contact and agricultural livestock watering.

Results for most metals were reported as non-detect, but this data is actually not very informative as it does not appear that the analytical techniques used were sensitive enough to allow meaningful comparison to applicable standards. Based on the lab reports, the relevant PQLs were in many cases above the applicable water quality standards, in some cases significantly so, meaning that water quality cannot be accurately assessed despite the reported "non-detect" results. For example, the PQL for selenium (100 ug/l) is 50 times higher than the applicable surface water quality standard of 2 ug/l (the chronic standard for the aquatic and wildlife (warm water) use). Moreover, the water quality standard for selenium is expressed for total selenium, but the sampling was only for the dissolved fraction, making the results even less helpful. Likewise, the lead PQL of 150 ug/l is 10 times higher the most stringent applicable standard (15 ug/l for the FBC use), and again the standard is expressed as total whereas the sampling was only for the dissolved fraction. In addition to lead and selenium, other parameters where the PQL for the February 2005 analysis is above the most stringent applicable standard are antimony, arsenic, beryllium, cadmium, copper and zinc.

This data is insufficient to demonstrate with any certainty that the uppermost stretch of Davidson Canyon proposed for OAW classification possesses the "good water quality" necessary for such designation. The lowermost reach proposed for OAW designation (from the unnamed spring at 32°00'54"/110°38'54" to Cienega Creek) likewise lacks sufficient data to accurately assess water quality. No sample was collected there in February 2005, so the only available data is three samples from 2002-03 of major anions/cations and a few other parameters. Most metals have not been analyzed for even once. In the preamble to the 2002 final rules, ADEQ stressed the importance of adequate data to establish existing water quality and implement Tier 3 antidegradation protection as a practical matter. 8 A.A.R. at 1300. Although not data provided in support of the nomination does demonstrate the existence of water quality problems, it is insufficient to allow an evaluation of overall existing water quality.

The middle reach of Davidson Canyon proposed for OAW designation (the third of four delineated in Appendix B) extends from the confluence with the unnamed tributary at 31°59'32.5"/110°38'43.5" to the unnamed spring at 32°00'54"/110°38'54". No water quality results appear to have been provided for this reach of the Creek. However, the reach is listed in Appendix B of both the current and proposed rules as ephemeral. As an ephemeral reach, it cannot qualify for OAW designation under the current or proposed rules. It therefore should be removed from the proposal.

(d) The listing criteria for OAW designation (A.A.C. R18-11-112(D)) make clear that it is the attributes of the surface water that should determine whether listing is appropriate. As noted above, the water quality data regarding Davidson Canyon is not conclusive. Moreover, the preamble (as well as the nomination and supporting letters) focuses heavily on preservation of the area as a local corridor for wildlife migration, particularly as a means for wildlife to cross I-10. The AMA does not question this characterization, but believes it is irrelevant with respect to the question of classifying Davidson Canyon as an OAW. The areas adjacent to the surface water presumably provide that migration corridor today, even without OAW status, and there is no suggestion that the wildlife corridor functions of these areas would be diminished by *any* change in water quality (i.e., that Tier 3 antidegradation protection is needed to preserve the wildlife corridor). It is not clear why Tier2 II antidegradation protection (requiring that all standards be met and, as proposed, that important social or economic benefits be demonstrated through a public process if more than 20% of assimilative capacity is proposed to be taken up by a discharge) would be insufficient to protect the functioning of the existing migration corridor. In short, classification of Davidson Canyon as an OAW is not essential to one of the primary stated purported benefits of the designation.

Similarly, the recreation benefits cited in the nominating petition are hiking, biking and birdwatching in the vicinity of the surface water. These are benefits of the surrounding land, not the surface water itself – no mention is made of boating, swimming, fishing or other water-based recreation. It is therefore unclear why these recreational uses require imposition of Tier 3 antidegradation protection for the nearby surface water, or why Tier 2 protection would not be sufficient to allow those uses to continue.

The preamble also states that the stream provides habitat for "threatened and endangered species or species of concern identified by the U.S. Fish and Wildlife Service, including the lowland leopard frog and the long fin dace." 14 A.A.R. at 1288. These species are not listed as threatened or endangered, nor are they candidates for listing.[2] The phrase "species of concern" does not appear to have any legal significance or definition. The two species identified are priority vulnerable species under the Sonoran Desert Conservation Plan, but that County-specific plan should not alone be sufficient to elevate a water to status as an outstanding *Arizona* resource water.[3]

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[2] The candidate species list is available online at http://ecos.fws.gov/tess_public/SpeciesReport.do?listingType=C

[3] One of the stated goals of the Sonoran Desert Conservation Plan is to "maintain or improve the status of unlisted species whose existence *in Pima County* is vulnerable" (italics added). This highlights the County-specific nature of the Plan.

For all the foregoing reasons, the AMA questions whether Davidson Canyon meets the criteria for listing set forth in A.A.C. R18-11-112(D).

(e) More generally, the AMA is concerned that the proposed OAW designation may be driven more by a desire to limit land use in the vicinity (even if not directly adjacent to the reaches proposed for OAW designation) than by anything else. An internal ADEQ memorandum[4] notes that "[w]ildlife habitat and migration corridors in larger ecosystem processes benefit when landscapes are less fractionated and connectivity between segments is maintained." This is likely true, but has little or nothing to do with the characteristics of the surface water itself, and everything to do with controlling land uses in the vicinity of that water. Some public comments in support of the nomination are even more explicit about the reasons for the nomination. For example, a comment letter from Lainie Levick (November 17, 2005), after stating that the classification of Buehman Canyon Creek as an OAW "protected it from the threat of a copper mine," goes on to note that Davidson Canyon is also "threatened by various mining proposals."

OAW designations unquestionably have a limiting effect on land use in the area of the designation (because of Tier 3 antidegradation protections, limits on use of some general permits, etc.), and such designations should be judiciously made and limited to situations where the truly unique characteristics of a surface water require it. In other words, the land use restrictions that flow from an OAW designation should be the *result of* an otherwise appropriate designation, not the *reason for* such a designation. The nomination of Davidson Canyon appears to be an example of the latter approach.

Land use decisions are best made at the local level, not indirectly via state rulemaking. In fact, in this case, such decisions *are* being made at the local level. Pima County already controls much land around the reaches proposed for designation, and is purchasing private lands and trust land grazing leases in the area in order to augment the Cienega Valley Reserve system.[5] Thus, the nomination of the Creek as an OAW is unnecessary to prevent the "fragmentation" of the area and its loss of function as a wildlife corridor.

(f) The potential impact on nearby land uses is relevant in another respect. Tier 3 antidegradation protection prohibits any change in water quality, even if all standards are met, which for the reasons noted above has a significant limiting influence on potential land use in the area (e.g., some activities may be precluded, others may be ineligible for a general permit). These results have economic implications that were not even mentioned in the draft economic impact analysis included with the proposed rule. For example, an AMA member (Rosemont

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[4] Memorandum of Sam Rector to Steve Pawlowski, *The Nomination of Davidson Canyon Creek as a Unique Water* (April 24, 2006).

[5] See letter from C. H. Huckelberry, Pima County Administrator, to Steve Pawlowski (February 4, 2005).

Copper) was denied coverage under the de minimus general permit for well development water discharge on the basis of the proposed OAW designation of Davidson Canyon, even though the proposed mine (and the proposed points of discharge) are in excess of 10 miles away from the closest upstream portion of the proposed designation (and are located on a tributary, not Davidson Canyon itself). This decision alone has led Rosemont to incur an estimated $75,000 or more in additional costs (i.e., costs to utilize water trucks and other measures to avoid any discharge).[6] Clearly, there are economic impacts that ADEQ has not considered relating to the proposed designation.

Moreover, if the designation were to be used in an attempt to block a mining operation from ever opening, as is clearly the intent of at least some of the proponents of the designation, then the costs imposed by the designation are potentially enormous.[7] In short, if ADEQ proceeds with the proposed designation, it must make a good faith effort to assess the probable costs of the designation in light of potential limits on activity in the watershed, as required by A.R.S. § 41-1052(C). See also 8 A.A.R. at 1303 (identifying as a factor that ADEQ can use in exercising its discretion concerning whether to designate a qualifying water as unique the social and economic impact of Tier 3 antidegradation protection, such as: limits on existing or new point sources, restrictions on land use in the watershed (including possible limits on mining), stricter § 401 certification requirements, and impact on private property rights, including the potential for regulatory takings).

(g) The proposed listing of Davidson Canyon is confusing. As noted above, Davidson Canyon is subdivided into four reaches in Appendix B. The first reach is defined as "headwaters to unnamed spring at 31°59'00"/110°38'46". However, the proposed listing in A.A.C. R18-11-112(G)(22) reads as follows: "Davidson Canyon, from its headwaters at the unnamed spring at 31°59'00"/110°38'46" to its confluence with Cienega Creek." The specified latitude and longitude mark the end of the first (headwater) segment, not its commencement. The nominating petition sought OAW designation only for the lower three reaches and not the upper (headwater) reach. We presume ADEQ intended to propose the same thing. If any OAW listing is finalized for Davidson Canyon, which the AMA does not believe is appropriate for the reasons outlined above, ADEQ needs to be more clear in identifying the delineated segment.

Selenium Criteria: (a) The AMA supports the removal of acute water quality criteria for selenium for aquatic and wildlife uses for the reasons outlined in the proposal (i.e., repeal of the EPA § 304(a) criteria recommendations on which Arizona's acute criteria were predicated).

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[6] The only alternative to this approach would have been to attempt to secure an individual AZPDES permit, which likely would have taken six months to a year based on licensing time frame requirements for individual AZPDES permits. This delay would have been more costly to Rosemont Copper than the cost of proceeding as it has done.

[7] In addition to the previously cited letter of support, see also the Vail Sun article entitled *Huckelberry Responds to Forest Service* (March 17, 2008). In that article, it is stated that Pima County is considering "other plans of attack" to stop Rosemont's proposed mine and that the proposed OAW designation is one of the options being considered. Mr. Huckelberry is the County Administrator for Pima County, which is the entity proposing the OAW designation.

(b) The AMA strongly supports the comments of HAF Inc., on behalf of the Pinal Creek Group, requesting that ADEQ conform the chronic selenium standard of 2 ug/l to EPA's § 304(a) criteria recommendation of 5 ug/l, possibly in conjunction with monitoring of fish tissue to determine if sediment is actually bioaccumulating in biota in those waters where the 5 ug/l criterion is being exceeded in the water column. An approach like this would help reduce the number of waters incorrectly identified as impaired because of very low selenium levels that may stem from natural conditions or out-of-state sources, or waters where selenium is not to bioaccumulation in tissue, which the U.S. Fish and Wildlife Service has indicated is the primary concern when dealing with selenium. (On that latter point, the AMA notes that ADEQ has not identified identified selenium as a persistent bioaccumulative pollutant in A.A.C. R18-11-114(K) and specifically rejected a request to do so in the 2002 triennial review, see 8 A.A.R. at 1389.) Given that mining operations are of necessity located in areas with high mineralization, this issue is of great concern to AMA members.

Applicability of New Narrative Biological Standard Implementation Procedures: On their face, the new implementation procedures ("IPs") associated with the narrative biological integrity criterion apply to any wadeable perennial stream with a cold water or warm water aquatic life use designation (i.e., any water that is not ephemeral or EDW). See proposed A.A.C. R18-11-108.01(A). However, the draft implementation procedures themselves (p. 3) include additional applicability factors that are not, but should be, specified in the rule. These criteria are: (1) presence of fast-flowing riffle or run habitat; (2) water is not dominated by bedrock or travertine; and (3) sampling occurs during the spring index period. The rule should make clear that these factors must be present in order to assess compliance with the biological criterion. Failure to do so could result in the criterion being applied to waters that will not be able to meet it because of factors not considered in developing the implementation procedures (for example, at least if they are considered wadeable and perennial, the tunnel and lined channel at the Asarco Ray Mine, which currently – and somewhat paradoxically - carry an aquatic life (warm water) use designation).

Applicability of New Narrative Bottom Deposits Standard Implementation Procedures: A similar issue applies to the new IPs for the bottom deposits narrative standard. The standard applies on its face to any wadeable, perennial stream. See proposed A.A.C. R18-11-108.02(A). The draft IPs make clear that the standard only makes sense in the context of riffle and run habitat, as that is the environment in which high sediment can adversely affect benthic macroinvertebrates and other organisms using stream bottoms (e.g., fish laying eggs). This should be made explicit clear in the applicability section of the rule (R18-11-108.02(A)). Absent such clarification, the procedures could be applied to a "water" such as the tunnel and lined channel at the Asarco Ray Mine (which as noted above carry an aquatic life designation), even though those areas lack riffle or run habitat and thus logically should not be subject to these IPs.

New "Rubbish" Narrative Standard: The proposed new standard prohibiting refuse and similar materials being placed in surface waters or on their banks (proposed A.A.C. R18-11-108(D)) suffers from numerous problems. (1) The proposed standard is awkwardly worded,

starting out as a "free from" standard but ending with the words "or onto its banks," which do not fit with anything preceding that phrase. (2) ADEQ admits that this is intended as a "tool to prevent dumping," see 14 A.A.R. at 1287. As such, it is best addressed in the solid waste rules currently in process at ADEQ, not the water quality standards. (3) To the extent the standard applies to the "banks" of surface waters, such areas are likely outside the jurisdictional surface waters and thus are not subject to surface water quality standards. (4) Such a provision is unnecessary, as dumping of refuse or solid waste today is likely in violation not only of the AZPDES program, but also the APP program and the existing solid waste rules. There is no "gap" that needs to be filled by adopting a new standard. (5) The standard, if adopted, could have unintended (and undesirable) consequences; for example, it could be construed to prohibit the use of waste rock or overburden from a mine site in any capacity in bank stabilization efforts.

For all these reasons, this proposed new standard should not be adopted.

Proposed New Discharge Prohibitions: The proposed rule includes a complete prohibition on discharges of wastewater to four washes upgradient of the Ak-Chin Indian Reservation. See proposed A.A.C. R18-11-123(A)(2)-(5). The preamble provides no explanation whatsoever of the basis for this complete ban on discharges to these ephemeral washes, although it can be inferred that it is in response to the wishes of the Tribe.

There are several issues with this proposal. First, as noted above, it is unclear what is meant by "wastewater," so the precise scope of the proposal is difficult to discern, especially given ADEQ's complete lack of explanation for the proposal.

Second, and of greater concern, the legal basis for these proposed prohibitions is unclear, and ADEQ provides no explanation in the preamble. Insofar as the AMA is aware, the Tribe has not been granted status to be treated as a state for CWA purposes, and thus has not adopted EPA-approved standards that ADEQ is honoring. Absent that status, we are aware of nothing in the CWA or Title 49 that authorizes ADEQ to simply ban discharges to select waters (presupposing that these are jurisdictional waters at all after *Rapanos*) merely due to the wishes of a downstream entity. The Act and its implementing regulations require states to designate uses and adopt standards to protect those uses, which ADEQ has done. Having done that, ADEQ would not appear to have authority to ban discharges that comply fully with those standards and uses, merely because of the wishes of a downstream entity on the water in question. The four washes in question could not be classified as OAWs because they are ephemeral, but ADEQ is offering what is in some senses an even greater degree of protection to these ephemeral washes (a discharge ban, regardless of effect on water quality), with no explanation whatsoever of the basis for the ban.

Third, ADEQ has made no attempt to quantify the economic costs of these discharge prohibitions. Presumably, planned wastewater treatment plants in the vicinity would be prohibited from any discharge whatsoever into the washes, and would have to find an alternate method of effluent handling. It is unclear how existing discharges, if any, would be affected. There is unquestionably a cost involved in making these waters "off-limits" to any discharges of

wastewater, which ADEQ has not even acknowledged the existence of, much less attempted to quantify.

The AMA is extremely concerned about the precedent set by these new discharge prohibitions and how that precedent could apply in the future, by ADEQ's failure to offer any explanation whatsoever for the proposal, and by the lack of apparent legal authority for ADEQ to ban certain discharges outright. The proposed discharge prohibitions should be removed from the final rules.

Antidegradation Issues: The AMA has several comments on various aspects of the proposed changes and additions to the antidegradation rules:

(a) The AMA fully supports the Coalition comments on antidegradation, particularly the comment that antidegradation review should apply only to new or modified discharges (i.e., increased or new pollutant loadings), not to renewals of existing permits with no changes (or to aspects of an existing discharge that will not be changed). To the best of the AMA's knowledge, that is how EPA and neighboring states implement antidegradation reviews. The AMA does not even understand how an antidegradation review of an existing discharge would be conducted, especially given that applicable standards likely would have changed over the life of the discharge (making analysis of assimilative capacity in the past a moving target).

(b) The AMA also agrees with the Coalition that the language in proposed A.A.C. R18-11-107.01(C)(1), applying Tier 3 antidegradation protection to any tributary to an OAW, is overbroad. This provision potentially greatly expands the universe of Tier 3 protection, since a single OAW may have numerous direct tributaries and those tributaries may not possess the characteristics of the OAW. Moreover, not every activity in a direct tributary will affect an OAW. The expansion of Tier 3 protection, and the requirement to demonstrate no impact on the OAW as a result of activities occurring in a direct tributary (proposed A.A.C. R18-11-107.01(C)(3)), should apply only to activities occurring within a reasonable proximity of the nearest reach designated as an OAW.

(c) Antidegradation review for Section 404 permits involving the discharge of fill material should focus on the effect of the fill on water quality in surface waters outside the area of fill. In one sense, the fill itself could be considered degradation, but such activities have been explicitly authorized under Section 404 of the CWA if the relevant regulations are complied with (Corps regulations, EPA's Section 404(b)(1) guidelines). This is how antidegradation reviews have been conducted in the past, but with the significantly expanded rule language on this topic, this point should be explicitly stated in the rule language itself.

(d) The provision requiring individual antidegradation review of general permit authorizations for activities that "may affect" an OAW or an impaired water (proposed A.A.C. R18-11-107.01(F)) is vague and overly broad (e.g., for impaired waters, the provision should be limited to activities discharging the pollutant for which the water is listed).

Use of Draft Implementation Procedure Guidance Documents: It is not clear how ADEQ intends to utilize the draft IP guidance documents made available a few weeks before the comment deadline on the proposal. The proposed rule text does not mention the guidance documents or incorporate them by reference. As such, they must be considered only non-binding documents. This should be clarified in the final rule or preamble.

In addition, we note that these documents include for the first time suggestions on how the IPs and new narrative standards should be used in making impaired water determinations. It should be clarified that these suggestions are just that, and that the new narrative standards should not be used in making impaired water determinations until the impaired water identification rules themselves are revised to explain how impairment will be assessed. See A.R.S. § 49-232(C)(4).

Economic Impact Analysis: It is admittedly difficult to quantify costs and benefits of environmental rulemakings. However, ADEQ must make at least a good faith effort to demonstrate that the proposed benefits of the rule exceed its costs. See A.R.S. §§ 41-1052(C)(3) & (H). Specifically, with respect to private business, ADEQ must prepare a cost benefit analysis that addresses the "probable costs and benefits to businesses directly affected by the proposed rule making, including any anticipated effect on the revenues or payroll expenditures of employers who are subject to the proposed rule making." See A.R.S. §§ 41-1055(B)(3)(c). If adequate data is not reasonably available, ADEQ must "explain the limitations of the data and the methods that were employed in the attempt to obtain the data and . . . characterize the probable impacts in qualitative terms." See A.R.S. §§ 41-1055(C).

In this case, ADEQ's entire analysis of the proposed costs of the rule on private business consists of three sentences that concede that businesses such as mines, utilities and private wastewater treatment plants "may be directly affected by this rulemaking" because changes in standards may affect their discharge permits. See 14 A.A.R. at 1333. No attempt is made to quantify or even explain in qualitative terms these costs, or explain why data is not reasonably available. The analysis cannot be deemed to rise to the level of a good faith effort.

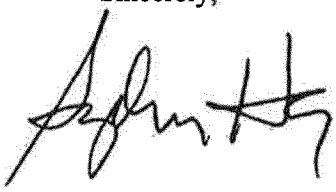
The AMA can readily identify at least four manners in which private businesses could face increased costs based on these proposed rules: (1) the proposal to apply EDW criteria to discharges to ephemeral washes will require many discharge to meet stringent chronic aquatic life criteria for the first time; (2) as noted above, the proposed OAW designation of Davidson Canyon has already imposed costs on at least one entity, and the designation could impose potentially far greater costs in the future based on Tier 3 antidegradation requirements; (3) also as noted above, the ban on wastewater discharges to four ephemeral washes upgradient of the Ak-Chin Indian Reservation (this presumably was adopted in light of specific concerns with one or more existing or proposed discharges, so some cost information on the effects of the ban should be obtainable by ADEQ); and (4) the general tightening of numeric water quality criteria

contained in the rule[8] and the adoption of new implementation procedures for narrative criteria, including the new biological criterion.

The foregoing is not intended to be an exclusive summary of the potential increased costs, just an identification of some of the more obvious cases of increased costs that could be imposed by the proposed rule. These costs are likely to be significant, and while they are not easy to quantify, ADEQ is legally obligated to do more than acknowledge in three sentences that some such costs may exist. The economic impact analysis must be substantially expanded to satisfy ADEQ's statutory duties.

Thank you for the opportunity to comment on these important proposed rules. Please contact us if you have questions on any of these comments.

Sincerely,



Sydney Hay
President

2070601

[8] For example: (1) the methodology change that will result in PBC criteria being set generally equal to FBC criteria, which will result in more stringent human health criteria for ephemeral streams (equal to those applicable to perennial waters); (2) the increase in assumed fish consumption rates, which results in more stringent criteria for the fish consumption use; and (3) use of a relative source contribution factor of 20% for the human health uses.