

July 30, 2010

Ms. Carrolette Winstead  
Arizona Department of Environmental Quality  
APP & Drywell Unit Manager, Groundwater Section  
1110 West Washington Street  
Phoenix, AZ 85007  
[Cw6@azdeq.gov](mailto:Cw6@azdeq.gov)

**Re: Comments on Notice of Intent to Issue AZPDES Permit (AZ0020389) to Resolution Copper Mining, LLC**

Dear Ms. Winstead:

Thank you for the opportunity to comment on the draft Arizona Pollutant Discharge Elimination System (AZPDES) Permit for the proposed Resolution Copper Mining-Superior Operations facility. On behalf of the Coalition itself and the members of the Arizona Mining Reform Coalition individually, we submit in a timely fashion the following comments and objections to these draft permits. These comments also incorporate the comments of the San Carlos Apache Tribe and the Inter Tribal Council of Arizona by reference as if fully set forth herein.

The **Arizona Mining Reform Coalition** works in Arizona to improve state and federal laws, rules, and regulations governing hard rock mining to protect communities and the environment. Members of the Coalition include: The Grand Canyon Chapter of the Sierra Club, Earthworks, Save the Scenic Santa Ritas, The Dragoon Conservation Alliance, the Groundwater Awareness League, Concerned Citizens and Retired Miners Association, the Center for Biological Diversity, and the Sky Island Alliance.

**Background**

The Arizona Department of Environmental Quality (ADEQ) proposes to issue AZPDES Permit (AZ0020389) to Resolution Copper Resolution Mining, LLC (RCM), a wholly owned subsidiary of Rio Tinto and BHP, two giant multi-national mining companies. The permit would regulate the discharge of stormwater and polluted water from the Superior Operations mine site. Water would be discharged from two point sources. One point source, Outfall 001, would discharge storm water from the Superior Operation mine site. The second point source, Outfall 002, would discharge treated water from mine dewatering operations from Shaft No. 9 of the old Magma Copper Mine. The fact sheet states that discharges from both outfalls are to a tributary of Queen Creek, a water body on the §303(d) list of impaired waters due to copper contamination.

ADEQ administers a variety of programs to improve the health and welfare of our citizens and to ensure that the quality of Arizona's air, land and water resources meet health-based standards that also protect natural resources. ADEQ indicates that it is

committed to leading Arizona and the nation in protecting the environment and improving the quality of life for the people of our state. It is clear that, as written, the draft NPDES permit is inconsistent with ADEQ's mission and contrary to the Clean Water Act, 33 U.S.C. §§ 1251 *et seq.* Therefore, we ask that ADEQ modify the draft permit and require the company to meet standards and include provisions in the permits that fully protect the environment and the health and welfare of our citizens, and that are consistent with the provisions of the Clean Water Act

The National Pollutant Discharge Elimination System permit program was established as part of the Clean Water Act and the provisions allow for delegation of the program to the states, which the Environmental Protection Agency has done with Arizona. Pursuant to that delegation, any AZPDES permit issued by Arizona must comply with the Clean Water Act and EPA regulations, in addition to all state requirements. 40 CFR § 123.25.

### **The discharge of additional copper into a stream already impaired for copper violates the CWA**

ADEQ and RCM apparently are under the assumption that as long as a discharge complies with water quality standards, the discharge must be permitted. That is not the law. Even if the discharge itself will not violate water quality standards (which has not been shown to be the case here), the Clean Water Act prohibits discharges of a pollutant into an impaired water body if that pollutant is the reason for the impairment (i.e., the reason why the stream is on the 303(d) list), unless certain stringent planning and stream remediation efforts are in place – which has not been done in this case.

In this case, the receiving water is 303(d) listed for copper, and the discharge will contain copper (among other pollutants). Under the Clean Water Act, such a discharge will “cause or contribute” to water quality violations and cannot be permitted without a plan in place to ensure that the stream can and will achieve the standard. EPA's long-standing regulations prohibit the issuance of an NPDES permit for a new discharge where the discharge may “cause or contribute to” the violation of water quality standards:

§ 122.4 Prohibitions. No permit may be issued:

- (i) To a new source or a new discharger, if the discharge from its construction or operation will cause or contribute to the violation of water quality standards.

This is a flat-out prohibition against any new discharge that would cause or contribute to a violation of a water quality standard.

This EPA regulation allows for one limited exception – in 40 CFR § 122.4(i) – to this prohibition of discharges into impaired waters that already are violating the standard. In order for a discharge of the pollutant in question to be allowed, the EPA regulations require strict assurances that (1) the stream can handle the new discharge and still meet the standard and (2) that specific plans are in place to ensure that the stream will be brought back to health—i.e., achieve the applicable water quality standard for that waterbody. Specifically, the EPA regulations require that:

The owner or operator of a new source or new discharger proposing to discharge into a water segment which does not meet applicable water quality standards or is not expected to meet those standards even after the application of the effluent limitations required by sections 301(b)(1)(A) and 301(b)(1)(B) of CWA and for which the State or interstate

agency has performed a pollutants load allocation for the pollutant to be discharged, must demonstrate, before the close of the [NPDES permit] public comment period that:

- (1) There are sufficient remaining pollutant load allocations to allow for the discharge; and
- (2) The existing dischargers into that segment are subject to compliance schedules designed to bring the segment into compliance with applicable water quality standards.

40 C.F.R. § 122.4(i).

Thus, the permit applicant has the dual burden of demonstrating that “there are sufficient pollutant load allocations to allow for the discharge” and that “existing dischargers into that segment are subject to compliance schedules designed to bring the segment into compliance with applicable water quality standards.” That has not occurred here.

The Ninth Circuit Court of Appeals has directly affirmed this reading of the CWA and its regulations. In *Friends of Pinto Creek v. United States E.P.A.*, the court overturned a water quality discharge permit issued by the federal EPA to a large copper mining project in Arizona. *Friends of Pinto Creek v. U.S. E.P.A.*, 504 F.3d 1007 (9<sup>th</sup> Cir. 2007), *cert. denied*, 129 S.Ct. 896 (2009). The critical issue in the case was whether a discharge permit could be issued that would add a pollutant to Pinto Creek, a water body that did not meet the applicable water quality standard for that pollutant—in that case, dissolved copper. The court vacated and remanded the EPA-issued permit on the ground that such a discharge violated the impaired waters provision of the CWA.

In *Pinto Creek*, the Ninth Circuit framed the fundamental issue in the case as: “Whether the issuance of the permit to discharge a pollutant, dissolved copper, into Pinto Creek, which already exceed the amount of dissolved copper allowed under the Section 303(d) Water Quality Standards, is in violation of the Clean Water Act and applicable regulations?” *Pinto Creek*, 504 F.3d at 1009. The court said that such a discharge would violate the CWA.

The Ninth Circuit’s decision squarely rejected the “offset” defense raised by EPA, the discharger, and ADEQ (which had certified the discharge under CWA Section 401). *Id.* at 1012. Relying on the stated objective of the CWA “to restore and maintain the chemical, physical, and biological integrity of the nation’s waters,” the court held that “[t]he plain language of the first sentence of the regulation is very clear that no permit may be issued to a new discharger if the discharge will contribute to the violation of water quality standards.” *Id.*

The court held that: “[T]here is nothing in the Clean Water Act or the regulation that provides an exception for an offset when the waters remain impaired and the new source is discharging pollution into that impaired water.” *Id.* The court noted that 40 C.F.R. § 122.4(i) allows for exception to this strict rule “where a TMDL has been performed.” *Id.* “[T]his exception to the prohibited discharge by a new source provides that the exception does not apply unless the new source can demonstrate that, under the TMDL, the plan is designed to bring the water into compliance with applicable water quality standards.” *Id.*

The court noted that, in addition to the requirement that a TMDL be performed, the discharger must demonstrate that two conditions are met. These two conditions are contained in the two numbered clauses in 40 C.F.R. § 122.4(i): (1) There are sufficient remaining pollutant load allocations to allow for

the discharge; and (2) The existing dischargers into that segment are subject to compliance schedules designed to bring the segment into compliance with applicable water quality standards. 40 C.F.R. § 122.4(i). The Ninth Circuit specifically held that, in order for the “exception” to the prohibition of new discharges into impaired waters to apply, both clauses needed to be met by the permit applicant. 504 F.3d at 1013.

The Ninth Circuit required that these compliance plans must not only show *what* pollutant load reductions are needed to bring a water body back to health, but also actually *how* these reductions will be achieved.

The error of both the EPA and Carlota is that the objective of . . . [40 C.F.R. § 122.4(i)(2)] is not simply to show a lessening of pollution, but to show how the water quality standards will be met if Carlota is allowed to discharge pollutants into the impaired waters.

*Pinto Creek*, 504 F.3d at 1014.

The *Pinto Creek* court further found that “compliance schedules” must be established for all “existing dischargers” into Pinto Creek, so that the stream could accommodate the new and increased copper discharges from the mine. *Id.* at 1012-13. The court held that all point sources must be subject to these compliances schedules (i.e., plans designed to reduce the pollutant loading from each source so the stream segment would be brought into compliance with water quality standards). *Id.* The court specifically rejected EPA’s argument that only currently permitted point source discharges were subject to the “compliance schedule” requirement. *Id.* at 1013. The *Pinto Creek* court established the basic procedure that must be followed before a new NPDES permit is issued for a discharge into an impaired water:

If point sources, other than the permitted point source, are necessary to be scheduled in order to achieve the water quality standard, then EPA must locate any such point sources and establish compliance schedules to meet the water quality standard before issuing a permit. If there are not adequate point sources to do so, then a permit cannot be issued unless the state or [the discharge permit applicant] agrees to establish a schedule to limit pollution from a nonpoint source or sources sufficient to achieve water quality standards.

*Id.* at 1014. On this point, EPA had correctly argued that nothing in the CWA compelled it to act against other dischargers. However, the *Pinto Creek* court noted that its ruling did not force EPA to take any action requiring existing discharges to reduce their pollutant loadings. Rather, “[t]he EPA remains free to establish its priorities; it just cannot issue a permit to a new discharger until it has complied with [40 C.F.R.] § 122.4(i).” *Id.* at 1015.

The fact that Arizona has not completed the required TMDL for the impaired water in this case does not mean that the discharger or the agency is free to bypass the strict requirements of the CWA as held by the court in *Pinto Creek*. Indeed, under the CWA, the discharge into an impaired water is prohibited, unless, pursuant to a valid TMDL for that stream, the compliance schedules are established for the various discharges as held by the *Pinto Creek* court. For example, in *Friends of the Wild Swan*, the Ninth Circuit upheld a Montana federal district court’s stay of the issuance of NPDES permits for new sources or discharges to impaired waters pending completion of TMDLs. 74 Fed. Appx. 718, 723-24, 2003 WL 21751849 (9th Cir. 2003). The court prohibited EPA from issuing any new NPDES permits

“until all necessary TMDLs are established for a particular WQLS [water quality limited stream]”). *Friends of the Wild Swan, Inc. v. U.S. EPA*, 130 F. Supp.2d 1199, 1203 (D. Mont. 1999), *affirmed in relevant part*, 74 Fed. Appx. 718; 2003 WL 21751849 (9<sup>th</sup> Cir. 2003). The district court’s action was taken pursuant to 40 C.F.R. § 122.4(i) and was set forth as a remedy to compel the state of Montana to complete TMDLs for a number of impaired waters. *See also Friends of the Wild Swan v. United States Environmental Protection Agency*, 130 F.Supp.2d 1207, 1209 (D.Mt. 2000).

**There is insufficient characterization of the water coming into the water treatment plant.**

The draft permit and fact sheet are unclear about the characterization of the water coming into the treatment plant. The fact sheet for the AZPDES permit talks about one sample of the mine water taken in July of 2008 and possibly another sample taken in December of 2008. It is not clear where the sample was taken nor is it clear whether the sample is actually representative of the more than two billion gallons of water that would be treated and released. How can the agency and the public make an informed decision about the effectiveness of the water treatment if we have no idea as to the actual composition of the polluted water coming from the mine? The agency must require additional and adequate characterization of these waters prior to proposing to approve the permit(s), subject to public notice and comment.

**The permits are unclear about the amount of water released at Outfall 002 that would be fully or only partially treated.**

RCM is currently discharging polluted mine water through a pipeline to the New Magma Irrigation and Drainage District that has been partially treated using High Density Sludge (HDS). The permit requires additional treatment of the polluted water by Reverse Osmosis (RO) before discharge at Outfall 002. However, the permit allows RCM to blend water treated only by HDS and water treated by both methods before release at Outfall 002. The permit does not specify the amount of the blend, or the actual final treatment requirements before release to Queen Creek. Since the permit only requires RCM to test once a month, there is no way to assure that there will not be permit violations without knowing the final composition of water before discharge into Queen Creek.

**Exceedances above lowest standards are allowed for copper and other metals**

Although the tables and data in the fact sheet and the AZPDES draft permit are confusing and use several different units of measure, it appears that RCM will be allowed to exceed the standards for several metals. The lowest standard for cadmium is 0.63 ug/L, but the limit at Outfall 002 for the monthly average is 50 ug/L. For mercury, the lowest standard is 0.01ug/L, but the limit at outfall 002 in the draft permit is 1 ug/L. (This would make the allowable amount of mercury released a hundred-fold more than the lowest standard. Mercury is a terribly toxic and hazardous substance once released into the ecosystem especially when it is allowed to change from elemental mercury to methylmercury.)

The permit only requires testing for metals once a month. It would be very easy for RCM to adjust the flow coming from Outfall 002 the day of the test to assure that the permit limits are met and then exceed those limits the rest of the month. In cases like that with copper, where the monthly average limit appears to be slightly under the lowest standards (8 ug/L in the draft permit as opposed to the lowest standard or 10.5 ug/L) it would be extremely easy to fudge the test period to meet the standard on that day only. Because Queen Creek is already impaired for copper, the allowable copper discharged should be zero.

It would also be helpful if ADEQ standardized units of measure to make it easier for the public to understand the draft permit and make appropriate comparisons.

### **Conclusion**

Overall, the draft permit suffers from a number of factual and legal errors that must be rectified prior to the issuance of any of the proposed permits. Due to these errors, ADEQ must revise the draft permit and submit the revised draft permits for public comment. We welcome the opportunity to participate in that process.

Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read "Roger Featherstone", written over a horizontal line.

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CC: Benjamin H. Grumbles, Director, Arizona Department of Environmental Quality, [bhg@azdeq.gov](mailto:bhg@azdeq.gov)