RESPONSE TO PUBLIC COMMENTS

Permit No.	Arizona Pollutant Discharge Elimination System (AZPDES) AZ0020389
Applicant:	Resolution Copper Mine, Superior Operations 102 Magma Heights, Superior, Arizona 85173
Permit Action:	Final permit decision and response to comments received on the draft permit during the following public comment period: June 8, 2016 – September 7, 2016.
Prepared By:	Swathi Kasanneni, AZPDES Project Manager AZPES Individual Permits Unit Arizona Department of Environmental Quality 1110 W. Washington St. Phoenix, AZ 85007
Date:	November 18, 2016

Comments received during the public comment period are summarized below. The comments are followed by ADEQ's response shown in blue *italics*. Comments may have been shortened or paraphrased for presentation in this document. A copy of the unabridged comments is available upon written request from the ADEQ Records Center, recordscenter@azdeq.gov.

Public Notice and Public Hearing Comments

The public comment period began on June 8, 2016 and ended September 7, 2016. Public hearings were held in Superior at the Superior Junior / Senior High School on July 12, 2016 and at the Superior Town Hall Auditorium on September 7, 2016.

Comments received during the public comment period are summarized below. The comments are followed by ADEQ's response shown in blue italics. Comments are organized as follows:

Commenter #	Source	Method
1.	Roger Featherstone, Director -Arizona Mining Reform Coalition	Written
2.	Roy Chavez – Concerned Citizens and Retired Miner Coalition	Written
3.	John Krieg – Save Tonto National Forest	Written
4.	Sandy Bahr – Chapter Director – Sierra Club – Grand Canyon Chapter	Written
5.	Montgomery & Interpreter, PLC Attorneys at Law representing the Inter Tribal Association of Arizona	Written
6.	Richard Blei	Written

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7.	John/Karen Krieg	Written
8.	D Sohocki	Written
9.	David Wright	Written
10.	Tim Stone	Written
11.	Elizabeth Sablad (EPA)	Written
12.	McKeon, Casey (RCML)	Written
13.	Larry Langstaff	Written
14.	San Carlos Apache Tribe	Written
15.	Lynn Ashby	Written
16.	C Gene McCormick	Written
17.	Sylvia Barrett	Written
18.	Lori Lehman	Written
19.	Cynthia Anderson	Written
20.	Maria Phipps	Written
21.	D Sohocki	Written
22.	Jackie Watkins	Written
23.	Michael Quinlan	Written
24.	Andrea Hamel	Written
25.	Nancy Wilson	Written
26.	Cindy DiCarlo	Written
27.	Sara Parker	Written
28.	Deborah Vath	Written
29.	Tom Taylor	Written
30.	Scott Egan	Written
31.	Eric & Cedra Spragett	Written
32.	Bettina Bickel	Written
33.	Patrick Arnold	Written

34.	Mary Ownby	Written
35.	Cliff Wilkinson	Written
36.	Melinda Weisser-Lee	Written
37.	Blair McLaughlin	Written
38.	Brett Nelson	Written
39.	Helen Greer	Written
40.	Eron Lee	Written
41.	Christine Blunt	Written
42.	Keeley Nielsen	Written
43.	Violet Leslie	Written
44.	Sherri Gerlach	Written
45.	Michael Shores	Written
46.	Mary Ann and Frank Graffagnino	Written
47.	Cathy D	Written
48.	Kathy Kuyper	Written
49.	Marc Severson	Written
50.	Taza Guthrie	Written
51.	Neal Hanna	Written
52.	SanSkrit A DellErba	Written
53.	Dona LaSchiava	Written
54.	Jennifer Waters	Written
55.	C. Whitfield	Written
56.	Sally Rings	Written
57.	Jan Dowling	Written
58.	Evelyn Peat	Written
59.	Annette Pedersen	Written
60.	Linda Mooney	Written

61.	Roger Baron	Written
62.	Mary DeGeoso	Written
63.	Fred Binder	Written
64.	Dara Rider	Written
65.	Earleen Andrews	Written
66.	MasSaSeen	Written
67.	Eileen Dailey	Written
68.	Mitch Stevens	Written
69.	Kathleen Vasvary	Written
70.	Mark Hotz	Written
71.	David Robinson	Written
72.	Jere Sponagle	Written
73.	Cyndi Tuell	Written
74.	Efrem Thomas	Written
75.	John Eastwood	Written
76.	Alice Stambaugh	Written
77.	Al Preciado	Written
78.	Maria Nasif	Written
79.	Brit Rosso	Written
80.	Jacqueline Miniuk	Written
81.	Leslie Glass	Written
82.	Leslie Epperson	Written
83.	Jeff Weber	Written
84.	Nancy Santori	Written
85.	Francis Arana	Written
86.	Judy Howe	Written
87.	Pat Anderson	Written

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88.	Dorothy Chao	Written
89.	Melissa Okimoto	Written
90.	Ben Peck	Written
91.	Robert Huff	Written
92.	Janice Dewey	Written
93.	Veronica Heron	Written
94.	Dr. Richard Collison	Written
95.	Bob and Andrea Longo	Written
96.	John Shaw	Written
97.	Carl Kanun	Written
98.	Jean Rios	Written
99.	Carmen Pacheco	Written
100.	Kelly Lundblad	Written
101.	Denise Turner	Written
102.	Sylvia Leonard	Written
103.	Michael Snyder	Written
104.	Laurie Nessel	Written
105.	Jeff Giek	Written
106.	Jay Ruby	Written
107.	Robert Fields	Written
108.	Donna Bennet	Written
109.	Liz Nicklus	Written
110.	Michael Stabile	Written
111.	Therese de Vet	Written
112.	Shondora Halter	Written
113.	Julia Mehrer	Written
114.	Terry Tedesco-Kerrick	Written

115.	Mr. Munoz	Oral
116.	Noel Benoist	Oral
117.	Faulene Main	Oral
118.	Jennifer Martin	Oral
119.	Don Steuter	Oral
120.	Henry Munoz	Oral
121.	Roy Chavez	Oral
122.	Sylvia Barrett	Oral
123.	Hank Gutierrez	Oral
124.	Bob Barrett	Oral
125.	Tom Macias	Oral

Written Comments

Written comments received on the official record were received during the Public Comment Period

Commenters 1-4: (Roger Featherstone, Director -Arizona Mining Reform Coalition; Roy Chavez – Concerned Citizens and Retired Miner Coalition; John Krieg – Save Tonto National Forest; Sandy Bahr – Chapter Director – Sierra Club – Grand Canyon Chapter)

Improper conduct of the one scheduled public comment meeting

Before getting into our comments, we have been notified by one of our members that the public meeting scheduled on July 12, 2016, in Superior, Arizona, was closed early without notification to the public and the he was not able to give oral comments.

This is troubling as the public notice for comments found on your website at: *https://ww.azdeq.gov/public-notice-call-comments-azpdes-az0020389* clearly states that a Public hearing will be held at the Superior Junior / Senior High School, 100 W. Mary Drive, Superior, AZ 85173, on July 12, 2016, from 6:00 p.m. to 9:00 p.m. The purpose of the public hearing is to allow the public to make comments for the record. Yet our Coalition member arrived at the Superior Junior / Senior High School, 100 W. Mary Drive, Superior, AZ 85173, on July 12, 2016, at 7:00 p.m., well within the scheduled time of the meeting, and found no one at the High School from ADEQ and certainly no public meeting where he could give testimony. He states that there was no notice anywhere visible that the meeting had ended before the allotted time. There may have been other members of the public that tried to attend the meeting to give testimony, but were unable to do so since you had ended the meeting early.

We request that you convene another public comment meeting that is duly and properly scheduled and advertised and that remains in session form the entire scheduled time and that you reopen the comment period until the close of that meeting. We further request the right to supplement these comments until the end of this new comment deadline.

ADEQ Response # 1

ADEQ extended the public comment period, and another public hearing was held on September 7, 2016 at the Superior Town Hall (Auditorium).

The Discharge from Outfall 002 is a New Discharge from a New Source Which Requires RCM to Secure a Separate AZPDES Permit, among other Requirements

Under the proposed AZPDES permit (as in the 2010 Permit), ADEQ once again treats RCM's discharge of mine water through Outfall 002 (which is a product of mine dewatering stemming from the installation of new mine shafts sunk to extraordinary depths (below 7,000 feet) and new tunnels, wells and related structures which have been recently built to facilitate development of totally new mine facility and project), as an "existing discharge," and not a "new discharge" as contemplated in the Clean Water Act and 40 C.F.R. §§ 122.2 and 122.29, presumably because (in its view) any discharges of pollutants from the site predate 1979. For this same reason, ADEQ also apparently concludes that RCM's new mine project (which is presently the subject of a recent Mining Plan of Operation filed with the Tonto National Forest Service) is an "existing facility" and not a "new source," under these same regulations.

At this point, ADEQ's continued insistence that the seepage pumping and mine dewatering effluent to be discharged from RCM's mine project through Outfall 002 is nothing more than an "existing discharge" from an "existing facility" is simply not credible and strains the imagination beyond what the law permits. It is well documented that RCM is planning on developing a totally new mine project. Indeed, RCM's Mining Plan of Operations is presently the subject of ongoing public scoping comments under the National Environmental Policy Act (NEPA) – plans that include certain of the new activities, facilities and structures discussed in the instant Draft Permit, ADEQ Fact Sheet and Public Notice. ADEQ's continued conclusions to the contrary, despite the known facts about this project, violate the law. The RCM project should be acknowledged as a new source that presents a new discharge and it should be required to apply for and receive a new AZPDES permit for the discharges associated with Outfall 002. As discussed below, RCM should also be prohibited from discharging additional copper to Queen Creek since this receiving water is already impaired for copper.

ADEQ Response #2

The definition of New Discharger, New Source and Site in Arizona Administrative Code (A.A.C) R18-9-A901 and in 40 CFR 122.2 and 122.9 is stated as follows:

> *New Source means any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced;*

a) After the promulgation of standards of performance under section 306 of the Clean Water Act that are applicable to the source, or
b) After the proposal of standards of performance in accordance with section 306 of the Clean Water Act that are applicable to the source, but only if the standards are promulgated under section 306 within 120 days of their proposal.

New Discharger includes an industrial user and means any building, structure, facility, or installation:
a) From which there is or may be a discharge of pollutants;
b) That did not commence the discharge of pollutants at a particular site before August 13, 1979;
c) That is not a new source; and
d) That has never received a finally effective NPDES or AZPDES permit for dischargers at that site.

Site means the land or water area where any "facility or activity" is physically located or conducted, including adjacent land used in connection with the facility or activity.

The standards of performance under section 306 of the Clean Water Act applicable to ore mining are listed in 40 CFR 440, Sub Part J. The technology-based effluent limitation guidelines and the new source performance standards for ore mining were both promulgated in 1982. The current RCML site was previously the Magma mine that was in operation from 1912 to 1995. The RCML operations and construction is not a New Source because the operation is on a site that was active as an ore mine prior to 1982.

The discharge from the RCML site is not a new discharge because (1) the discharge of pollutants from the site predates August 13, 1979, (2) it is not a New Source, and (3) the Site has already been issued a finally effective NPDES and AZPDES permit.

The Discharge of Additional Copper to Queen Creek, which is Already Impaired for Copper, Violates the Clean Water Act

Several reaches of Queen Creek remain listed on Arizona's 303(d) List of Impaired Waters due to exceedances in dissolved copper, while other segments are impaired for lead (total) and selenium(total). Dissolved copper loading has been found to exceed ADEQ surface water quality standards at least since 2002 in Queen Creek. See Queen Creek (TMDL) Maximum Daily Load Fact Sheet.

ADEQ disregards the fact that Queen Creek is impaired for copper (and also selenium and lead), based on the apparent assumption that as long as RCM's discharge complies with water quality standards, the discharge must be permitted. That is not the law. The obvious objective of the Clean Water Act is to restore and maintain the chemical, physical, and biological integrity of our Nation's waters. 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

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stream is on the 303(d) list), unless certain stringent planning and stream remediation efforts have been finalized and are in place – which (as discussed below) has not been done in this case.

Here, Queen Creek is listed as impaired for copper and the discharge permitted under the renewed AZPDES permit, which is a "new discharge" from a "new source" under 40 C.F.R. §§ 122.2 and 122.29 (as discussed above), will contain copper (among other pollutants). Under the CWA, 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. See 40 C.F.R. § 122.4(i) ("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 regulation is a flat-out prohibition against any new discharge that would cause or contribute to a violation of a water quality standard.

Furthermore, this regulatory requirement of the CWA allows for only one limited exception – in 40 CFR § 122.4(i) – to the 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. 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.

As noted in prior comments on the 2010 AZPDES (which are still applicable today, if not more so given the new mine activities at issue), 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. *See Friends of Pinto Creek v. U.S. E.P.A.*, 504 F.3d 1007 (9th Cir.2007), *cert. denied*, 129 S.Ct. 896 (2009). The critical issue in that 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 as: "[w]hether 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 further 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 an exception to this strict rule only "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 also noted that, in addition to the requirement that a TMDL be performed, the discharger must demonstrate that two conditions discussed in 40 C.F.R. § 122.4(i) have also been met. That is, (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). See Pinto Creek, 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. Specifically, the Court pointed out that the error of both the EPA and the mining company was 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 the mine was 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. In this regard, the Court noted 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 to 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.

To be sure, the fact that ADEQ has not completed the required TMDL for the impaired water in this case does not mean that the discharger or ADEQ is free to bypass the strict requirements of

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the CWA as held by the court in Pinto Creek. Indeed, under the CWA, the discharge to an impaired water is prohibited still, unless, pursuant to a valid and completed TMDL for that stream, the compliance schedules are established for the various discharges as held by the Pinto Creek court.

Interestingly, ADEQ has been working on a TMDL Study for Queen Creek for a number of years – since well prior to ADEQ's issuance of the 2010 AZPDES permit to RCM. It is difficult to understand precisely why this study has not yet been completed. Certainly, ADEQ's failure to complete the study is an abdication of its responsibilities under the CWA.

Furthermore, the fact that the ADEQ Draft Fact Sheet acknowledges that the receiving waters of Queen Creek are listed as impaired under 303(d) for copper (2002), lead (2010) and selenium (2102) and then goes on to suggest (almost in passing) that "[t]he TMDL has not yet been completed but the discharges from the facility have been included in the TMDL study" cannot not obviate the violations of the CWA discussed above. Indeed, to the contrary. The fact that ADEQ may have completed or come close to completing a TMDL study for Queen Creek and may have even included RCM's anticipated discharges as part of this study (without any public review or disclosure as part of this permit process) calls for ADEQ to stay its consideration of RCM's AZPDES permit for Outfall 002, at least until the TMDL is fully completed and has been fully examined and reviewed by the public and EPA.

Interestingly, this reference to a completed (but not disclosed) TMDL study, inserted by ADEQ in the Fact Sheet, indicates that ADEQ plainly understands that its failure to finalize the long anticipated TMDL for Queen Creek is a problem under the CWA. ADEQ's understanding is also acknowledged in the permit reopener provision of the prior AZPDES permit issued in 2010, which provides that "[t]his permit shall be reopened when the Total Maximum Daily Load (TMDL) for this water segment…is completed." *Final Authorization to Discharge Under the Arizona Pollutant Discharge Elimination System* at 22, dated December 6, 2010. In sum, ADEQ's flagrant disregard or the fact that Queen Creek is impaired for copper violates the CWA.

ADEQ Response #3

The RCML AZPDES permit sets limits to meet the water quality standards of Queen Creek and any exceedance of a permit limit is prohibited. Because the discharge is required to meet the standards, it will not cause or contribute to the violation of water quality standards.

The decision in the Friends of Pinto Creek v US EPA does not set a precedent for the RCML renewal permit. The Carlota Copper Company was permitted by the EPA as a New Source and New Discharger because operations at the site began after 1979. As detailed in ADEQ Response #2, the discharge from the RCML site is not a New Source or New Discharge, thus showing the differences between the two permitted sites.

ADEQ fully evaluated the status of Queen Creek and the current 303(d) listings as with all other AZPDES permits. The facility is an existing discharger and as such, the AZPDES copper permit limits will be evaluated and incorporated into the TMDL calculations. RCML will be assigned

waste load allocations for its general and individual AZPDES permits. The renewal permit was written to ensure that the discharge meets applicable surface water quality standards. This is the same basis used in developing and assigning load allocations in TMDLs. If the permit limits do not allow for the TMDL to be achieved, the permit will be reopened per Part IV(F).

It is anticipated the draft TMDL will be available for public comment by February 1, 2017. Stakeholders will be notified when the draft TMDL public comment period has begun.

The fact sheet language in Section III has been changed to state, "The TMDL has not yet been completed. The facility is an existing discharger and as such, the AZPDES copper permit limits will be evaluated and incorporated into the TMDL calculations."

ADEQ Should Not Remove the Existing Limit on Total Dissolved Solids of 1200mg/l Required by the 2010 AZPDES Permit; This Violates the CWA

In 2009 RCM began operating the mine water treatment plant (MWTP) utilizing ADEQ lime and soda ash in a high density sludge (HDS) process to remove metals in the mine water from Shaft #9. *See* Memo to Casey McKeon, RCM from Patty McGrath, SRK Consulting, dated June 26, 2015, Subject: AZPDES Permit No. A0020389; Revision of TDS Limit (SRK Memo) (obtained via ADEQ public records request (2015)). However, as the result of previously submitted public comments regarding the potential discharge of high levels of TDS received by ADEQ in 2006 in reference to a draft AZPDES permit for the MWTP, ADEQ began to engage RCM about the potential to limit the discharge of TDS to Queen Creek. Specifically, concerns about the potential discharge of high levels of TDS to Queen Creek were raised by the Director of the Boyce Thompson Arboretum (located downstream on Queen Creek) and University of Arizona Soil Scientist, Dr. James Walworth, who warned that the discharge of water containing high TDS levels "is a major concern" as it "will likely cause serious long-term ecological damage." Dr. Walworth also suggested that the water "should receive additional treatment, or be used for another purpose."

After discussions with RCM, both in reference to the 2010 AZPDES Permit for Outfall 002 and in reference to the related APP (APP #P-105823), ADEQ included a daily maximum TDS limit in the 2010 AZPDES Permit of 1200 mg/L for Outfall 002. Because the HDS treatment process does not remove TDS, RCM committed to treat a portion of the HDS treated water to remove TDS through the construction of a reverse osmosis (RO) plant as a component of the MWTP. See ADEQ 2010 AZPDES Permit Fact Sheet at 2; SRK Memo at 2. The ADEQ 2010 Fact Sheet explains that "during wet months when the NMIDD [New Magma Irrigation and Drainage District] has a lower demand for the mine water, it will be treated with HDS and RO before being discharged through Outfall 002…." Fact Sheet at 2. The Fact Sheet went on to note that RCM "has the ability to adjust the ratio of HDS raw effluent to RO effluent for the final blended effluent at the outfall in order to meet permit requirements." Id.

However, despite RCM's commitment to construct the RO treatment plant in both the 2010 AZPDES and the 2010 APP (#P-105823) (a factor that was considered by ADEQ in issuing both permits and reflected the understanding of the protective measures reviewed by the public as part of the public review process for the permits), the RO treatment plant was never constructed by

RCM. For this reason, (or perhaps due to other benefits to RCM of sending the mine water to NMIDD), RCM purportedly has not discharged to Queen Creek through Outfall 002 under the 2010 AZPDES Permit. In the SRK Memo (which was provided to ADEQ as part of the current permit application packet) SRK Consultant, Patty McGrath, suggests that ADEQ should remove the TDS limit found in the current AZPDES permit, despite acknowledging that without the RO process, TDS levels in the MWTP effluent are still greater than the 1200 mg/L limit set in the 2010 AZPDES Permit. See SRK Memo at 4.

ADEQ has apparently adopted the rationale of the SRK Memo and now proposes to provide no limit whatsoever for TDS in the proposed AZPDES Permit. For the reasons set forth below, ADEQ should revisit this issue and, at the minimum, maintain the existing permit limit of 1200 mg/L in the new AZPDES Permit for Outfall 002.

The decision to remove the TDS limit is not permissible under the CWA, as it violates the strict anti-backsliding requirements found in existing law, including Section 402(o) of the CWA. Generally, the anti-backsliding requirements prohibit ADEQ from reissuing an AZPDES permit containing interim effluent limitations, standards or conditions less stringent than the final limits contained in the previous permit, with limited exceptions. To be clear, this requirement of the CWA also prohibits, with some exceptions, the reissuance of permits originally based on best professional judgment (BPJ) that incorporate limits less stringent than those in the previous BPJ based permit. This is the rule.

In an effort to get around the anti-backsliding requirements of the CWA, ADEQ suggests that backsliding is permitted with regard to the TDS limit pursuant to 40 C.F.R. § 122.44(l)(2)(i)(B)(1), which provides that a less stringent limit can be applied if information is available which (1) was not available at the time of permit issuance; and (2) which would have justified the application of a less stringent effluent limit at the time of the permit's issuance. See ADEQ 2016 AZPDES Permit Fact Sheet at 6; see also SRK Memo at 4. ADEQ rationalizes its position by suggesting that because the prior TDS limit was purportedly based on failures of whole effluent toxicity (WET) tests from a bench-scale study performed with simulated effluent and we now have WET sample results from actual MWTP effluent which show that all three surrogate WET species passed acute and chronic toxicity testing criteria with samples ranging from 1900 to 2140 mg/L, the justification for a TDS limit of 1200 mg/L no longer exists and no TDS limit need be set in the proposed permit. 2016 AZPDES Permit Fact Sheet at 6.

While it is true that ADEQ now has the benefit of 10 WET testing sample results submitted by RCM with sample dates ranging from 2013-2105, see id., this handful of results cannot be accurately characterized as available new information under the first prong of 40 C.F.R. § 22.44(l)(2)(i)(B)(1). This is particularly so when it appears that the above described WET testing was based on very limited sampling of the MWTP effluent by RCM over a 3 year period – only 10 WET sample results were submitted by RCM – with the date and timing of these samples unknown. Id.

Indeed, a review of the SRK Memo shows that while average yearly TDS levels have declined over time at the MWTP (both effluent samples and influent samples), these samples are marked by significant spikes in TDS levels both in the effluent from the MWTP and in the influent to the

MWTP. SRK Memo at 3. For example, the effluent shows significant TDS spikes as recently as 2014-2015 well above 3000 mg/L, while the influent entering the MWTP shows spikes above 6000 mg/L in 2012-2013 and spikes above 3000 mg/L in 2014-2015. Yet, the samples used for the WET testing appear to have never exceeded 2140 mg/L. See Fact Sheet at 6. This convenient result and the limited nature of testing undermines ADEQ's conclusion that TDS in the effluent will not causing toxicity. Accordingly, this does not constitute sufficient new information within the meaning of the first prong of 40 C.F.R. § 122.44(l)(2)(i)(B)(1).

Under the second prong of 40 C.F.R. § 122.44(l)(2)(i)(B)(1), the new information (had it been available at the time of the prior AZPDES permit) must support the application of a less stringent effluent limit (or in this case, no limit whatsoever) to fit within the enumerated exception to the CWA's strong anti-backsliding requirements. This is not the case here, since the very real concerns about TDS possible impacts to Queen Creek, its habitat and vegetation and on downstream water users and important places like Boyce Thompson Arboretum, still remain. Indeed, even assuming that the TDS levels in the effluent have leveled off to a yearly average of 2000 mg/L (which masks the extreme spikes witnessed throughout sampling year), as discussed below, EPA recommends a TDS limit of 500 mg/L for public drinking water systems. ADEQ and RCM have failed to show that discharges to Queen Creek with a TDS of 2000 mg/L will not be harmful and that a less stringent limit (meaning no limit) would have been appropriate.

RCM has noted that the estimated maximum discharge capacity of Outfall 002 is 3.6 MGD. 2016 AZPDES Permit Fact Sheet at 3. Under the proposed AZPDES Permit, RCM can elect whether to send the treated effluent to NMIDD or to discharge the mine effluent into Queen Creek, which could result in significant TDS loading to Queen Creek over the life of the Permit. This presents numerous concerns, some of which are briefly summarized below:

- It is not clear from the materials we have reviewed precisely what the elements of the Total Dissolved Solids are. TDS is a measure of all constituents, or elements, dissolved in water. This can include inorganic anions (negatively charged ions) like carbonates, chlorides, sulfates and nitrates. The inorganic cations (positively charged ions) include sodium, potassium, calcium and magnesium. Without knowing more about the composition of the TDS that will be discharged from the mine, it is difficult to analyze the potential impacts from the discharge of high levels of TDS to Queen Creek's receiving waters or to conclude that the discharge is "free from pollutants in amounts or combination" that might harm or inhibit aquatic life, cause an objectionable odor or offflavor in aquatic organisms, become toxic to animals, livestock, plants or other organisms (particularly over time with limited dilution), impair recreational uses of Queen Creek, including at Boyce Thompson, or change the color of the surface water from natural background levels of color. See, e.g., draft AZPDES Permit at Sec. D at 7. This should be analyzed and clarified.

ADEQ Response #4

The RCML AZPDES permit sets effluent limitations to protect the water quality of all designated uses of Queen Creek. Based on the data submitted in the RCML application, the major TDS constituent of the mine drainage is sulfate. There is not an Arizona surface water quality standard for sulfate. Sulfate is a pollutant that can be toxic to humans, plants and animals at

varying concentrations. Part 1(D)(4) of the permit states that the discharge shall be free from pollutants in amounts or combinations that are toxic to humans, animals, plants and other organisms. ADEQ uses whole effluent toxicity (WET) analysis to determine compliance with this narrative toxicity criteria. RCML submitted 10 passing WET samples that would be representative of a discharge to Queen Creek from Outfall 002. The passing WET samples demonstrates the effluent is not toxic and will not impair the recreational uses of Queen Creek, including the Boyce Thompson Arboretum.

See also ADEQ Response # 10 below

- Sulfate is a constituent of TDS and may form salts with sodium, potassium, magnesium and other cations. Sulfates are a particular concern in this instance (the RO plant was originally intended to address sulfates) but this has not been discussed in the current permit documents or addressed in any way. Indeed, ADEQ has not even set alert levels for sulfates under the permit. This should be clarified and corrected.

ADEQ Response #5

See ADEQ Response # 4

Because there is not an Arizona surface water quality standard for sulfate, there is no numeric alert level to set in the AZPDES permit.

- Under the Federal Safe Drinking Water Act, the EPA classifies TDS as a secondary maximum contaminant level (sMCL) with a recommended maximum level of 500 mg/L. Even at 500 mg/L, these elevated levels of TDS can impact the taste of water and damage water treatment equipment. The minimum TDS levels we can expect from the RCM MWTP are 2000 mg/L. This is a significant difference. Many states have prohibited discharges of TDS beyond the sMCL of 500 mg/L due to the varying harms associated with the discharge of TDS. The downstream community of Queen Valley relies on shallow wells located in the alluvium along Queen Creek. We have seen no information showing that ADEQ has examined possible impacts of elevated levels of TDS on Queen Valley's water supply and water treatment equipment.

ADEQ Response #6

The designated uses of Queen Creek are listed in Part III (page 3) of the fact sheet. The Clean Water Act protects a surface water used as a domestic water source by assigning a domestic water source (DWS) designated use. Queen Creek does not have a domestic water source (DWS) designated use; therefore no Safe Drinking Water Act standards or contaminant levels are applied in the AZPDES permit.

- Queen Creek is an intermittent stream at best with a limited capacity to assimilate (dilute) the TDS discharged from Outfall 002 to acceptable levels (less than 500 mg/L). There is no evidence in the materials we have reviewed that shows that ADEQ has considered this problem. In addition, because of Queen Creek's limited flows and the arid nature of the region,

it is unclear whether there will be a sufficient amount of sudden freshets to flush the salt, sulfates and other TDS elements out of the riparian zone or whether these elements will collect in the root zones of the riparian plants and trees located along Queen Creek and eventually kill this vegetation, including potentially the special and unique vegetation at Boyce Thompson or at the golf course in Queen Valley.

ADEQ Response # 7

There is not an Arizona surface water quality standard for TDS. The effluent from the RCML mine water treatment plant has passed all WET tests demonstrating the effluent will not be toxic to humans, plants and animals.

See Response # 4 & 6 written above and # 10 below for more details about TDS.

- RCM is presently planning to locate the mine tailings from the RCM mine just outside Superior, Arizona, at an unlined site up gradient of Queen Creek. This could result is significant acidic drainage entering Queen Creek. This could adversely impact the capacity of Queen Creek to assimilate the high levels of TDS contemplated under the permit.

ADEQ Response # 8

The AZPDES permit regulates a discharge of stormwater that exceeds the 100 yr, 24 hour rain event through Outfall 001 and treated mine drainage through Outfall 002. The permit does not regulate a potential discharge from tailings that are not yet present. Containment of acidic mine drainage from any future tailings will be regulated through the AZPDES General Permit for Stormwater Discharges Associated with Industrial Activity, otherwise known as the Mining MSGP. As part of the MSGP permit, RCML will be required to have an updated Stormwater Pollution Prevention Plan. Any violation of Queen Creek surface water quality standards are prohibited.

- Under the 2010 AZPDES Permit that limited TDS to 1200 mg/L, RCM was required to monitor for TDS once a month (1x/month). Under the current proposal, which does not have any TDS limit, RCM is merely required to take a sample one time every six months (1x/6 months). This monitoring requirement is grossly insufficient to protect the human health and environment of Queen Creek. With no TDS limit in the permit, monitoring should be much more vigorous.

ADEQ Response # 9

ADEQ has considered the concerns in the comment and has increased monitoring of TDS to 1x/month in the permit.

For all of the reasons discussed above, there can be no doubt that the removal of TDS limitations in the proposed Permit violates the CWA anti-backsliding requirements and it is simply a very bad idea. ADEQ should exercise its authority to protect water quality and downstream water supplies and not abdicate this obligation under the CWA and its agency mission for the benefit of RCM.

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ADEQ Response # 10

As stated in the fact sheet, the TDS limit was set in the 2010 permit as a technology-based effluent limit based on best professional judgement (BPJ). The rationale used in setting the limit was based on failures of WET tests from a bench-scale study performed on simulated effluent. WET data from simulated effluent was evaluated because effluent from the mine water treatment plant (MWTP) was unavailable due to the plant not being operational at the time. The concentration of 1200 mg/L was chosen because that was the concentration threshold where the bench scale effluent WET samples failed.

The MWTP became operational during the permit term. RCML submitted 10 WET sample results from the MWTP effluent. The sample dates ranged from 2013-2015 and the results demonstrated that all three surrogate WET species (fathead minnow, green algae, and water flea) passed acute and chronic toxicity testing criteria. The subsequent TDS concentrations of the passing samples ranged from 1900 to 2140 mg/L. Specific to the concern of the impacts of the discharge to vegetation, the green algae is representative of higher order vascular plants. This data suggest the TDS is not toxic to vegetation or other aquatic and wildlife.

RCML also submitted TDS influent and effluent data from 2009-2015. The TDS concentration of the MWTP effluent has steadily declined from an estimated average of 6000 mg/L in 2009 to the current average concentration of 2100 mg/L. The permit requires RCML to monitor the TDS levels monthly and to perform WET monitoring 1x/3 months while discharging from Outfall 002 to demonstrate the TDS is not causing toxicity. As mentioned in the comment, the TDS concentrations of the effluent data has shown some short-duration spikes. ADEQ has accounted for this and added a new special condition for Outfall 002 in the permit for additional WET monitoring to be performed based on the effluent TDS concentration. The new permit language is in Part IV(b) of the permit and is described in Part X of the factsheet.

There is not an Arizona surface water quality standard for TDS and there is no promulgated effluent limitation guideline. The removal of the TDS limit is allowed pursuant to the exception listed in 40 CFR §122.44(l)(2)(i)(B)(1) that states a less stringent limit can be applied if information is available that was not available at the time of permit issuance and would have justified the application of a less stringent effluent limit.

ADEQ has concluded the additional 10 passing WET samples of the MWTP taken across 10 different months from 2013-2015 constitutes new information to justify the backsliding exemption.

A new table showing all 10 WET results, the subsequent dates and TDS data has been added in the fact sheet. As mentioned above, a new permit condition for additional WET monitoring has been added to the permit.

ADEQ Fails to Adequately Analyze the Potential Impacts to Queen Creek Resulting from a Simultaneous Discharge of Stormwater Through Outfall 001 and Mine Water Through Outfall 002

ADEQ has failed to analyze the potential impact to Queen Creek and the human environment from the simultaneous discharge of stormwater through Outfall 001 and mine water through Outfall 002. While it is true that Outfall 001 and Outfall 002 are separate points of discharge, they both discharge into Queen Creek at virtually the same place. Indeed, the AZPDES permit provides the same longitude and latitude for both Outfalls. Thus, wintertime rain events that could necessitate a stormwater discharge at Outfall 001 could easily correlate to discharges of mine water at Outfall 002, resulting in the co-mingling of these discharged waters almost immediately in Queen Creek.

Given RCM's expressed desire to begin discharging through Outfall 002 (particularly when the water is not needed for irrigation by NMDD) it is very likely that there will be a number of significant and powerful rain events that could cause RCML to significantly exceed discharge limitations from Outfall 001. If this discharge is commingled with existing discharges mine water from Outfall 002, the adverse impacts to Queen Creek and the surrounding aquifers could be magnified substantially. Nevertheless, the possible collective impact and loading to Queen Creek from the co-mingling of these discharged waters and the possible impact to downstream aquifers and surface waters does not appear to have been analyzed by ADEQ. This concern is elevated in light of the potential TDS issues discussed above.

In conclusion, the draft AZPDES Permit is fatally flawed and its issuance would violate the CWA, Arizona law and other applicable authorities. ADEQ should refrain from issuing this Permit until a complete and proper permitting process can be undertaken and adequate protections for the environment, the public health and the waters of Arizona can be developed.

Please include the Arizona Mining Reform Coalition, Concerned Citizens & Retired Miners Coalition, Save Tonto National Forest, the Sierra Club, and John Krieg as interested parties and direct all future public notices and documents to us at the address below.

ADEQ Response # 11

Outfalls 001 and 002 contain effluent limitations to protect the water quality (designated uses) of Queen Creek. Outfall 001 is for stormwater only and the permit contains a prohibition to discharge during storm events that are less than the 100 year, 24 hour rain event.

The AZPDES permit does not regulate or limit the amount of discharge from each Outfall. RCML noted the estimated maximum daily discharge from Outfall 002 is 3.6 MGD. ADEQ evaluates the discharge from the perspective that all discharges must meet their applicable permit conditions and not cause or contribute to an exceedance of a surface water quality standard.

The TMDL WLAs assigned to these permitted outfalls will be based upon attaining the applicable copper surface water quality standard in Queen Creek.

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Commenter 5: (Montgomery & Interpreter, PLC Attorneys at Law representing the Inter Tribal Association of Arizona)

This Firm represents the Inter Tribal Association of Arizona (ITAA), a non-profit inter tribal consortium of 21 Member Tribes in Arizona who have been working together to advocate on matters of Tribal concern since 1952. ITAA has directed me to submit the following written comments on ITAA's behalf to the Arizona Department of Environmental Quality (ADEQ) pertaining to ADEQ's proposal to renew the Arizona Pollutant Discharge Elimination system (AZPDES) Permit No. AZ0020389 for Resolution Copper Mining (RCM) in order to facilitate new mining facilities and activities and new sources of discharge associated with its mining project near Superior, Arizona, located in the ancestral lands of certain of ITAA's Member Tribes.

ITAA previously provided written comments to ADEQ in 2010, in reference to the prior version of this AZPDES permit. See *Inter Tribal Council of Arizona, Inc.* Comments to AZPDES permit No. AZ0020389, dated July 30, 2010. Because many of ITAA's prior concerns remain relevant to ADEQ's current proposal to renew RCM's AZPDES permit, these comments are expressly incorporated here by reference.

ADEQ Response # 12

ADEQ reevaluated ITAAs comments to the 2010 draft AZPDES permit. ADEQ's position on those comments has not changed. A copy of the 2010 ADEQ responsive summary is available upon request.

As discussed in greater detail below, the proposed AZPDES permit would allow discharges of mine stormwater from existing Outfall 001 and discharge of treated mine project water from existing Outfall 002 (as of 2010) to an unnamed wash, tributary to Queen Creek, located upstream of Boyce Thompson Arboretum and the local community of Queen Valley as well as other downstream communities. As written, the proposed AZPDES permit is contrary to the Clean Water Act, 33 U.S.C. §§ 1251 *et seq.*and applicable law, including the CWA's anti-backsliding requirements, 40 C.F.R. § 122.4(i) and standards that protect the receiving waters of Queen Creek, which is listed as impaired under Sec. 303(d), and other requirements. The permit renewal also proposes to remove important permit requirements, including specific limits on Total Dissolved Solids (TDS) and to retroactively approve RCM's failure to construct the mandatory Reverse Osmosis (RO) system required by RCM's current Aquifer Protection Permit (APP) No. P105823 (which is directly associated with this AZPDES permit), among other failures.

ADEQ should revisit the draft AZPDES permit to institute robust standards, limitations and permit requirements in conformance with existing law that are truly protective of the environment, public health, and the receiving waters of Queen Creek. ITAA's specific comments and objections to the currently proposed AZPDES permit are set forth below:

The Discharge from Outfall 002 is a New Discharge from a New Source Which Requires RCM to Secure a Separate AZPDES Permit, among other Requirements

ADEQ Response # 13

See ADEQ Response # 2

The Discharge of Additional Copper to Queen Creek, which is Already Impaired for Copper, Violates the Clean Water Act

ADEQ Response # 14

See ADEQ Response #3

ADEQ Should Not Remove the Existing Limit on Total Dissolved Solids of 1200mg/l Required by the 2010 AZPDES Permit; This Violates the CWA

ADEQ Response # 15

See ADEQ Response #4-10

ADEQ Fails to Adequately Analyze the Potential Impacts to Queen Creek Resulting from a Simultaneous Discharge of Stormwater Through Outfall 001 and Mine Water Through Outfall 002

ADEQ Response # 16

See ADEQ Response #11

Commenter # 6: (Richard Blei)

It is my understanding that AZDEQ will soon decide if it should or should not grant Resolution Copper a permit to discharge waste water with contaminants into the Queen Creek drainage, and that the permit now being sought after by Resolution will replace the earlier plan for a reverse osmosis facility and limitations of less than 1600 mg/liter of total dissolved solids, TDS.

As a concerned citizen of Arizona and a very concerned home owner in Queen Valley, Arizona I ask that you do whatever is within in your prerogative to protect us from any possibility of contamination from mercury, thallium, arsenic, antimony, nickel, sulfides and whatever other dangers may issue from Resolution's waste water. I believe that the public should expect the best, state of the art protections for health where they are available. Resolution Copper, Rio Tinto, and BHP have the means to do what is right, but they will not unless they are made to.

I have been to many Resolution Copper sponsored meetings in Queen Valley and Superior. Theirs is a constant refrain: You need not fear our doing anything to harm your community because we are regulated by strict and stringent government offices. Again and again it is

Resolution's answer to any tough question. We who drink the water very much need AZDEQ to provide those tough and serious protections now.

Please hold Resolution to the earlier requirements.

ADEQ Response # 17

See ADEQ Response # 4-10 in regards to the removal of the TDS limit.

The RCML AZPDES permit sets effluent limitations and monitoring requirements to protect the water quality of Queen Creek. The standards assigned to Queen Creek are based on the designated uses listed in the fact sheet on page 3. Queen Creek does not contain domestic water source designated uses and therefore drinking water standards do not apply to this AZPDES permit. The aquifer in Queen Valley is protected and regulated through the requirement of RCML to have an updated APP permit.

Commenter 7: (John Kreig)

We in Queen Valley are very concerned about the AZPDES Permit No. AZ0020389 now being considered.

Queen Valley is dependent on the Queen Creek drainage as it provides both surface and ground water for the community. The water from Outfalls 1 and 2 is known to have dissolved solids including mercury, thallium, antimony, arsenic and nickel along with sulfides. In the 2010 permit limits were established and nothing has changed since then. Resolution Copper would be putting these contaminates in our water sources with no limits and or recourse should they exceed the limits.

Rio Tinto, which is the majority owner of Resolution Copper, has a well documented record of clean water violations and has been sued successful over the years for these violations. This April the new CEO of Rio Tinto, Jean-Sebastian Jacques, was handed a legal document at the annual shareholders meeting in London asking if they would agree to be responsible for any harm that might come to Queen Valley as a result of the Resolution Copper Mine project. Not surprisingly we haven't heard back from them.

I ask you to not approve this permit as ADEQ was established to protect the citizens of Arizona and not coddle to the wishes of foreign mining companies who have no interest in the welfare of the people of Arizona.
Thank you for your consideration.

ADEQ Response # 18

See ADEQ Response # 17 in regards to the permit protecting the water quality of Queen Creek.

Per 40 CFR 122.44(d)(1)(ii), (iii) and (iv), discharge limits must be included in the permit for parameters with reasonable potential (RP), that is, those parameters known to be or expected to

be present in the discharge at a level that could potentially cause any applicable numeric water quality standard to be exceeded. ADEQ performed an RP analysis for Outfall 001 and 002. Outfall 001 is for stormwater over the 100-yr, 24 hour rain event and there were no reported discharges in the previous permit term. There also were no reported discharges from Outfall 002. RCML submitted approximately 65 samples from the effluent of the mine treatment plant that would be representative of discharge from Outfall 002. ADEQ found there to be no RP for the parameters listed in the comment.

RCML is required to submit discharge monitoring reports (DMRs) to demonstrate compliance with the discharge limits in their permit. Failure of RCML to maintain compliance with their AZPDES permit would cause ADEQ to take any necessary enforcement action to return the facility to compliance.

Commenter 8 (D Sohocki)

Please find attached our comment against granting the Proposed Arizona Pollutant Discharge Elimination System Renewal Permit to Resolution Copper.

Let me know if you are unable to open the attachment and I will send it another way.

As Queen Valley homeowners, we urge the Arizona Department of Environmental Quality (ADEQ) to NOT issue the AZPDES permit requested by Resolution Copper Mining to discharge pollutants.

Resolution Copper is trying to avoid the 2010 requirement that they build a Reverse Osmosis plant to reduce total dissolved solids (TDS). Why do they want the 1,600 mg/liter TDS limit removed from the new permit? Once again, they want to use their political influence to change the existing rules and regulations and receive special treatment.

It is your agency's job to protect the public's water supply, not to serve Resolution Copper's financial interests.

Their pumping of mine site "stormwater" (AKA groundwater) has already lowered the groundwater table that is the source of Queen Valley's drinking water. It has been so negatively impacted that they decided "out of the goodness of their heart" to help pay for a new, deeper well. And, if you believe it wasn't done because they knew they were responsible for the lowering of the groundwater table, I have some Arizona ocean-front property you might be interested in buying -- to coin a phrase.

Thank you for your consideration. Please protect our water and our citizens first!

ADEQ Response # 19

Please see ADEQ Response # 4-10 in regards to the TDS limit.

The AZPDES permit issued in 2010 did not require RCML to construct an RO plant; it set a TDS limit of 1200 mg/L. RCML submitted new information that demonstrated the TDS was not causing toxicity.

The AZPDES permit does not regulate the ground water levels potentially impacted by mine dewatering operations.

Commenter 9: (David Wright)

I oppose to granting Resolution Copper Mining, LLC with the permit in the subject heading of this email. For justification see the letter John Krieg wrote to Cecil Fendley and the Queen Valley Water Board Members on June 20th, 2016. I've included it here for your convenience.

" To: Cecil Fendley

Queen Valley Water Board Members

When I spoke at the January water board meeting, I mentioned Resolution Copper Mining (RCM) had applied for a permit to pump from Out Falls 1 and 2 into Queen Creek. They received a permit in 2010 that was much different than the one they are applying for at this time. In the 2010 permit ADEQ required them to build a Reverse Osmosis (RO) plant to reduce the total dissolved solids (TDS) to less than 1600 mg/liter. In the new permit they do not want to build the RO plant and eliminate the limit of TDS. TDS are sometimes not a problem, but when they contain, mercury, thallium, antimony, arsenic, nickel and sulfides they are a major problem.

In the treatment process (see the forwarded permit attachment) RCM claims "use chemical precipitation and a high density sludge process with hydrated lime and soda ash to remove the dissolved metals and san filtration to remove suspended solids." If this is true, why do they need the 1600 mg/liter limit removed from the new permit? They also, claim that the amount of TDS has come down recently, but you can see that it is still not down to the level ADEQ required in 2010.

I understand that RCM doesn't want to spend the money for an RO plant and they don't want to face penalties, and possible fines, if they go over 1600 mg/liter TDS, but I think our water supply is very important to Queen Valley. It may take years for these contaminates to reach Queen Valley, but in the same sense, it would take the same amount of years to get the water quality back to where it was as these contaminates continue to work their way to Queen Valley.

Do not believe that you will be protected by the Clean Water Act as many communities have fallen into this trap. Read what a mining newsletter, www.londonminingnetwork.org, says about Rio Tinto and the Flambeau Copper Project in Wisconsin. For more information, go to www.minesandcommunities.org/article.php?a=9321 or www.wrpc.net/court/lawsuit.htm.

The second site talks about the lawsuits. Does the QVWD have the money for this? On a very much related note, Jean-Sebastien Jacques was recently named C.E.O. of Rio Tinto at the annual shareholders meeting in London. He was personally handed a legal document asking Rio Tinto

to agree to be liable to any harm that would result from Resolution Copper Mine project to Queen Valley.

Not surprisingly, I haven't heard anything back.

I strongly urge you to take a position against this permit and protect the water sources of Queen Valley.

There is an ADEQ meeting at Superior High School on July 12, 2016 from 6 p.m. to 9 p.m. for public comment on this permit application.

Thank you for your consideration in this matter,

ADEQ Response # 20

See ADEQ Response # 4-10 in regards to the removal of the TDS limit, and # 19 in regards to the construction of an RO treatment plant.

Commenter 10: (Tim Stone)

This comment concerns the Renewal Permit AZPDES # AZ0020389 requested by Resolution Copper Mine.

It has been brought to my attention that the original permit of 2010 required RCM to construct and utilize a Reverse Osmosis plant to help reduce the solid particulate matter in their discharged water to a level below 1600 ppm.

I believe there is no mention of this requirement in the "Renewal" permit and it should be included. Resolution Copper seeks to use huge areas of the Sonoran Desert for tailings storage and will require huge amounts of water to slurry ore and tailings to their final destination. The addition of polluted storm water can only add to the possibility of underground aquifer contamination.

Please require RCM to treat all water before it is released from it's facility.

ADEQ Response #21

Please see ADEQ Response # 10 in regards to the particulate matter, response # 19 in regards to the construction of the RO plant and response # 8 in regards to the tailings storage.

Commenter 11: (Elizabeth Sablad – EPA)

The RPA table for outfall 002 still states N/A for results for WET testing, but also that there were 10 samples. This information conflicts. Please clarify whether there were results for WET testing at outfall 002 and whether or not there is RP. If RP is determined, effluent limits must be included in the permit pursuant to 40 CFR 122.44(d)(1)(iii).

Less stringent TBELs were included for mercury, since there was no RP (so the WQBELs are no longer required). The fact sheet must provide a discussion of the appropriate exception to antibacksliding for mercury pursuant to section 402(o) of the CWA.

The fact sheet states there is no RP for barium, boron, or manganese based on BPJ – the fact sheet should include more information to justify this determination. Has monitoring been conducted for these parameters as part of the effluent characterization?

ADEQ Response # 22

ADEQ changed the RPA table in the fact sheet that states there is no RP for WET for Outfall 002. The original NA in the draft fact sheet was stated in error. ADEQ has concluded that 10 passing WET results constitutes no RP and therefore no limits for WET are included in the permit. RCML is still required to perform WET monitoring 1x every 3 months while discharging through Outfall 002. If any WET failures are reported, RCML will be required to perform follow-up testing that is described in Part III of the permit.

ADEQ included mercury as a parameter that became less stringent in the anti-backsliding considerations on page 6 of the fact sheet. This was an error in the draft fact sheet.

The monitoring data for barium and manganese that RCML submitted was included in the reasonable potential analysis (RPA) table on page 13 of the factsheet. The data submitted for these parameters justified no RP. The boron standard for the most stringent designated use (Partial Body Contact) applied in this permit is 186777 µg/L. The actual standard is well above what would be expected in mine drainage and boron does not have an effluent limitation guideline, therefore no monitoring is required.

Barium, boron and manganese were added to the RPA table starting on page 13 of the factsheet. The draft fact sheet language referenced in the comment has been removed.

Commenter 12: (Casey McKeon – RCML)

This letter formally submits Resolution Copper Mining LLC's comment on the draft Arizona Pollutant Discharge Elimination System (AZPDES) Permit and Fact Sheet renewal for the Resolution Copper Mining LLC (RCML) Superior Operations published by ADEQ on June 8, 2016. The comments are related to corrections that need to be made to the referenced sections within the Permit and Fact Sheet.

ADEQ Response # 23

ADEQ has made the applicable changes to the referenced sections within the permit and fact sheet.

Commenter 13: (Larry Langstaff)

There is a Law called the Clean Water Act that the Arizona Department of Environmental Quality should abide by, in addition to Arizona State water quality laws! Giving a permit to Resolution Copper without a full analysis of the possibilities of contaminating Queen Creek with high levels of heavy metals and toxic levels of trace substances should not be allowed. The health of humans and plants and animals downstream will be affected by hazardous levels of any of these elements or compounds introduced to the watershed! Giving a permit to Resolution Copper based on previous permits for a mine that has been shut down in the Superior area for many years is illegal. ADEQ needs to follow the law and require a total new analysis before allowing approval of discharges from mine shaft # 9 and #10! The health of Arizona citizens, Queen Creek residents, US citizens, and the plants and animals of this state should be priority number one, not the profits of Resolution Copper, while they disregard the health of the citizens. Abide by the Clean Water Act! It was enacted to prevent polluters from benefitting while others are harmed. Hold Resolution Copper to the highest standards, not the lowest standards, lest they live like kings while the rest of us suffer the maladies of toxic discharges!

ADEQ Response #24

See ADEQ Response # 2 in regards to the RCML site being an existing discharger and response # 4 & 18 in regards to the permit protecting the health of the people, plants and animals.

Commenter 14: (San Carlos Apache Tribe)

The discharge from Outfall 002 is a new discharge from a new source, which requires a new permit.

This is a new mine project. RCM has not yet begun the extraction of ore. Indeed, RCM cannot extract any ore because the copper deposit is located under land currently owned by the federal government. Of course, this will change once the land exchange occurs pursuant to Section 3003 of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 Act ("the Act"). Section 3003 of the Act requires the Tonto National forest ("TNF") to exchange approximately 2,422 acres of Forest Service land located in Pinal County, Arizona ("the Federal Land") for land currently owned or controlled by RCM.

RCM is constructing on land which it owns certain new facilities to operate its new mine. Additional facilities, including additional shafts, tunnels, support facilities and other related structures have yet to be constructed. RCM's Mining plan of operation is presently the subject of public scoping comments under the National Environmental Policy ACT ("NEPA") – plans that include many of the new activities, facilities and structures discussed in the instant Draft Permit, ADEQ Fact sheet and Public Notice.

It begs credulity to state that RCM's discharge of mine water through outfall 002, under the proposed AZPDES permit, is an existing discharge. RCM's operation instead represents a new source and anew discharge within the meaning of 40 C.F.R § 122.29. For ADEQ to conclude otherwise amounts to a violation of the CWA and its applicable regulations. Accordingly,

RCM's project should be required to apply for a new AZPDES permit for the new discharges associated with outfall 002.

ADEQ Response #25

See ADEQ Response # 2 that describes how the RCML site is not a New Discharger or New Source.

Queen Creek is an impaired water and the discharge of additional copper by RCM into Queen Creek violates the CWA.

Queen Creek is listed on Arizona's 303 (d) List of Impaired Waters due to exceedances of dissolved copper. Other sections of Queen Creek are impaired for exceedances of lead and selenium. Copper loading has been found to exceed ADEQ surface water quality standards at least since 2002 in Queen Creek. See Queen Creek ("TMDL") Maximum Daily Load Fact Sheet. The goal of the CWA is to "restore and maintain the chemical, physical, and biological integrity of our Nation's waters" 33 U.S.C. § 1251 (a). The CWA prohibits discharges of a pollutant into an impaired water body if that pollutant is the reason for the impairment.

Dissolved copper is the reason Queen Creek is listed as an impaired water. The discharge of copper from a new source, as is the case here, is prohibited under 40 C.F.R. § 122.4 (i), which prohibits the issuance of a permit to a new source or contributor if the discharge will contribute to the violation of water quality standards. The additional discharge of copper from RCM's new mining operation violates the CWA and its applicable regulations. See friends of Pinto Creek v. U.S. E.P.A., 504 F.3d 1007 (9th Cir. 2007), cert. denied, 129 S. Ct. 896 (2009)

All water bodies listed as impaired under Section 303 (d) are required to go through the TMDL process until they are delisted; a water body would only be delisted if the TMDLs were successfully implemented and water quality standards achieved. 33 U.S.C. § 1313 (d). Queen Creek has not been delisted and the water quality standards have not been achieved. ADEQ has yet to complete a TMDL study for Queen Creek. A TMDL specifies the maximum amount of a particular pollutant that can be discharged or loaded into the waters from all sources without exceeding water quality objectives. 40 C. F.R. §130.2 (i); Pinto Creek, 504 F.3d at 1011. ADEQ cannot disregard the fact that Queen Creek is impaired for copper and that additional new discharges of copper by RCM would violate the CWA. The renewal of permit No. AZ0020389 should therefore be denied at this time.

ADEQ Response #26

See ADEQ Response # 2 & 3

Aquifer Protection Permit No. P105823 and AZPDES Permit No. AZ0020389 should be considered together.

The AZPDES permit renewal proposes to approve RCM's failure to construct the mandatory Reverse Osmosis ("RO") system required by RCM's current Aquifer Protection Permit ("APP")

No. P105823. By engaging in such a proposal, RCM and ADEQ have inextricably linked the renewal of permit No. AZ0020389 and APP No. P105823. RCM committed to construct the RO treatment plant in both the 2010 AZPDES and the 2010 APP (#P-105823). The RO treatment plant has never been constructed by RCM. RCM now seeks to have that requirement removed. ADEQ should require full and transparent public disclosure of the connectivity of these two permits. The public is entitled to a full and complete disclosure of RCM's water pollution activities, the protections required to maintain the quality of Arizona's waters and ADEQ's enforcement, or lack of enforcement, of those protections. If ADEQ allows RCM to regress from mandated protections, the public should fully informed.

ADEQ Response #27

The AZPDES permit issued in 2010 did not mandate the construction of the RO system; it set a TDS limit of 1200 mg/L. RCML submitted new information with the AZPDES application that demonstrated the TDS in the treated mine water treatment plant effluent was not causing toxicity and could therefore be removed from the permit. Please see ADEQ response # 10 for more information about the removal of the TDS limit.

The AZPDES and APP program are separate programs that are administered independently. RCML will be required to amend their APP permit to reflect any changes to the treatment technologies utilized at the site. RCML will be required to demonstrate how removal of the RO treatment in the APP permit passes the Arizona Best Available Demonstrated Control Technology (BADCT) requirements to assure both the numeric and narrative aquifer protection water quality standards are being achieved.

The public participation process is detailed in Arizona Administrative Code R18-1-401. ADEQ recommends all interested parties to sign up for the ADEQ Water Quality Division's 'Permits in Process' topic on the ADEQ Gov Delivery list serve. To sign up click on the 'Subscribe' button located at the bottom of the ADEQ website. The web link is also listed below.

https://public.govdelivery.com/accounts/AZDEQ/subscriber/new

ADEQ should not remove the limit on Total Dissolved Solids.

The Tribe is a member of the Inter Tribal Association of Arizona ("ITAA"). The ITAA has previously submitted comments and objections to ADEQ regarding a number of RCM permit applications. On July 12, 2016, ITAA submitted specific comments and objections to AZPDES Permit No. AZ0020389, which the Tribe fully endorses and incorporates as its own comments and objections.

More specifically, it is apparent from ITAA comments regarding the removal of Total Dissolved Solids ("TDS") in the proposed AZPDES permit at issue that a number of documents were obtained through multiple public records requests. The Tribe will be making its own public records request to ADEQ for documents. In the interim, the Tribe ratifies ITAA's position on the abolition of the TDS limitations. The Tribe thus reserved its right to supplement its objection based upon any new information derived from its public records requests.

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In conclusion, the draft AZPDES permit it flawed. Its issuance would violate the CWA. Arizona law and other applicable authorities. ADEQ should desist from issuing this permit until a complete and proper permitting process, including full and transparent disclosure to the public of all relevant information, can be undertaken and adequate protections for the environment, the public health and safety and the waters of Arizona can be developed.

The Tribe appreciates the opportunity to provide these comments.

ADEQ Response #28

See ADEQ Response # 4-10

Commenter 15: (Lynn Ashby)

The scope of the proposed mine, not only in size, but because it is an entirely different mining process, requires that ADEQ treat all permitting requests as new permits. There is not adequate analysis of current environmental systems to issue new permits on the bases of existing permits. How much water, and how polluted, is currently permitted and has any current environmental assessment been done to establish a baseline for the requested changes in the permits?

It is unacceptable that the water treatment plant proposed in the original permit is now removed from the new permit request. It appears that Rio Tints has already begun putting profit ahead of community well-being. The new permit request weakens existing prohibitions and attempts to "legalize" future problems. This is not acceptable. I am a multi-generational Arizonan with degrees in range and resource management. NOTHING about this proposed mine meets any national, scientific requirements for existing. ADEQ is charged with monitoring and protecting Arizona previous resources of which WATER is the most precious. It's bad enough that the proposed mine will be pulling millions of gallons of water out of the ground. Now they want to pollute what remains. The mine sits on the eastern edge of the watershed for the fifth largest city in the US. Sorry, but there is no way in hell that ADEQ can responsibly permit any aspect of the mine.

I have read the letter sent to ADEQ in July that was mentioned at this hearing and signed onto be the Sierra Club, The Mining Coalition, and others. Add my name to the list as I agree with everything brought up in the letter.

ADEQ Response #29

See ADEQ Response # 2 in regards to the RCML site being an existing discharge, Response # 19 & 27 in regards to the construction of the RO water treatment plant and Response # 4-10 on the TDS not being toxic.

Commenter 16: (C Gene McCormick)

This comment pertains to the proposal by the Arizona Department of Environmental Quality (ADEQ) to renew the Arizona Pollutant Discharge Elimination System (AZPDES) Permit No. AZ0020389 for Resolution Copper Mining (RCM) in order to facilitate new mining facilities and activities and new sources of discharge associated with its mining project near Superior, Arizona.

Both the ADEQ Fact Sheet and the Draft Permit appear to be simply rewrites of previous versions, and do not account for unique conditions of the proposed new mine. In particular, storm water seems to be considered only for runoff in the vicinity of surface facilities, and the discharge flow does not adequately account for storm water intercepted by the subsidence crater.

The Draft Permit, PART IV, A. Storm Water Exemption, a., states that Pond CP-105 is designed to contain the maximum volume of wastewater resulting from a 100-year, 24-hour storm event. This statement obviously does not account for rainfall intercepted by the subsidence crater. Due to the large area of the subsidence crater, the quantity and flow rate of rainfall intercepted by the crater, funneled into the lower workings of the mine, and thence pumped to discharge during a 100 year event could overwhelm the capacity of Pond CP-105 and its associated facilities. The size of the crater will, of course, grow during the life of the mine. With a 100 year rainfall of 5.04 inches in 24 hours, and a crater capture area of 1000 acres, the quantity of water intercepted would be 420 acre feet, substantially greater than the 68 acre feet capacity stated for Pond CP-105 in the ADEQ Fact Sheet.

The flow of storm water down through the crater and into the mine will be slowed by percolation through the caved rock. No estimates have been published showing the rate of flow of such storm water into the proposed mine, and the rate of flow will depend on local rock characteristics. Even if the flow of water captured in 24 hours from a 100 year event were spread uniformly over two weeks (336 hours), the flow rate of water reporting at the lower mine workings would be an average of 7,000 GPM. In percolating downward, the storm water captured by the crater could come into contact with and be contaminated by potentially acid generating rock.

According to the ADEQ Fact Sheet the normal flow from the Mine Water Treatment Plant would be sent to Outfall 002, while storm water from the West Plant Site would normally be sent to Outfall 001. The Fact Sheet says nothing about storm water from the subsidence crater at the East Plant Site. The Draft Permit states that mine site storm water would be discharged from Outfall 001. It is unlikely that these outfalls and associated dewatering facilities would be adequate to handle the above mentioned volume and flow rate of storm water of a 100 year event captured by the subsidence crater.

The ADEQ Fact Sheet and the Draft Permit need to be completely rewritten to redefine the entire water handling system, which in addition to normal dewatering functions, must provide pumping, storage, chemical treatment, and discharge capable of handling the storm water of a 100 year event captured by the subsidence crater. This must include restrictions on the quantity and quality of such storm water discharged by the mine.

ADEQ Response #30

The Best Management Practices listed in Part IV of the permit contain provisions that require RCML to maintain the stormwater containment ponds at the site. RCML also has coverage under the AZPDES MSGP. RCML will be required to maintain an updated Stormwater Pollution Prevention Plan (SWPP) as part of their coverage under the MSGP permit. The SWPP outlines the elements that need to be addressed to prevent pollutants in stormwater water run-off leaving the site.

The block-caving mining technique proposed by RCML at the site has not begun. RCML is required to get the necessary federal permits under the National Environmental Policy Act before ore extraction at the site can start again. The crater mentioned in the comment will be caused by the ground subsiding where the block caving is taking place. Any stormwater that collects and percolates into the ground on the mine site and is pumped to the surface is no longer considered stormwater; this would be considered mine drainage. Mine drainage that is discharged to Queen Creek would need to meet the mine drainage effluent limitation guidelines set in 40 CFR 440 Sub Part J; not violate the water quality standards assigned to Queen Creek; and not exceed any wasteload allocations that would be assigned to RCML as part of the Queen Creek TMDL.

Commenter 17: (Sylvia Barrett)

These comments are submitted to the Arizona Department of Environmental Quality (ADEQ) pertaining to ADEQ's proposal to renew the Arizona Pollutant Discharge Elimination System (AZPDES) Permit No. AZ0020389 for Resolution Copper Mining (RCM) in order to facilitate new mining facilities and activities and new sources of discharge associated with its mining project near Superior, Arizona.

ADEQ should rewrite the draft AZPDES permit to institute measures that conform to existing law and are truly protective of the environment, public health, and the receiving waters of Queen Creek.

The following point must be addressed and corrected:

- The Discharge of Additional Copper to Queen Creek, which is Already Impaired for Copper, Violates the Clean Water Act.

In conclusion, the draft AZPDES Permit is fatally flawed and its issuance would violate the CWA, Arizona law and other applicable authorities. ADEQ should refrain from issuing this Permit until a complete and proper permitting process can be undertaken and adequate protections for the environment, the public health and the waters of Arizona can be developed.

ADEQ Response #31

See ADEQ Response # 2 & 3 in regards to the RCML site being an existing discharger and how the RCML discharge does not violate the Clean Water Act.

Commenter 18: (Lori Lehman)

I am writing you in protest of the renewal of Rio Tinto's current water quality permits to discharge polluted mine water that is being drained from their mining shafts near Oak Flat.

The proposed renewal would significantly weaken water quality protection in the current permit.

The new permit would:

- Weaken protections in the existing permit
- Make the #10 shaft discharge legal.
- Remove the requirement to build an additional water treatment plant to treat water discharged directly into Queen Creek.

In addition, it would violate the Clean Water Act, Arizona law and other applicable authorities.

The points at which the discharges enter Queen Creek are upstream from Boyce Thompson Arboretum and the local community of Queen Valley, not to mention other communities located along Queen Creek that could be impacted during severe flooding and storm water runoff, including San Tan Valley subdivisions in Pinal County, and the Town of Queen Creek. Any flow in Queen Creek eventually enters the Maricopa County Flood Control District canal in south Gilbert which discharges into the Gila River channel on the Gila River Indian Reservation south of Chandler. So you see, this potentially impacts a huge area.

Please take the time to perform a thorough study of the existing violations and perform a complete and proper permitting process to ensure adequate protections for the environment, the public health and the waters of Arizona. In addition, I would like to be included as an interested party and receive all future public notices and documents at the address below.

ADEQ Response #32

ADEQ disagrees that the proposed permit significantly weakens the water quality regulations that existed in the current permit. Both permits contain limitations and regulations that protect the water quality of Queen Creek and exceedances of surface water quality standards are prohibited.

See ADEQ Response # 11 in regards to the stormwater flow and maximum discharge flows from Outfall 002. The AZPDES permit does not regulate the flow of stormwater run-off into Queen Creek that does not come into contact with pollutants at the mine site.

See ADEQ Response # 10 and 19 in regards to the removal of the TDS limit and the RO treatment plant.

Commenters 19 - 114: (Names listed on table above)

These comments are submitted to the Arizona Department of Environmental Quality (ADEQ) pertaining to ADEQ's proposal to renew the Arizona Pollutant Discharge Elimination System (AZPDES) Permit No. AZ0020389 for Resolution Copper Mining (RCM) in order to facilitate new mining facilities and activities and new sources of discharge associated with its mining project near Superior, Arizona.

The proposed AZPDES permit would allow discharges of mine site stormwater from an existing point (Outfall 001) and a new point (Outfall 002) into Queen Creek, located upstream of Boyce Thompson Arboretum and the local community of Queen Valley as well as other downstream communities. As written, the proposed AZPDES permit is contrary to the Clean Water Act (CWA) and applicable law, including the CWA's anti-backsliding requirements, and standards that protect Queen Creek. Queen Creek is already contaminated due to copper. The permit renewal also proposes to remove important permit requirements, including specific limits on Total Dissolved Solids (TDS) and to not require Resolution Copper to build a Reverse Osmosis water treatment mandated in the expired permit, among other failures.

ADEQ should rewrite the draft AZPDES permit to institute measures that conform to existing law and are truly protective of the environment, public health, and the receiving waters of Queen Creek.

The following points must be addressed and corrected:

- The Discharge from Outfall 002 is a New Discharge from a New Source Which Requires RCM to Secure a Separate AZPDES Permit, among other Requirements.

ADEQ Response #33

See ADEQ Response # 2

- The Discharge of Additional Copper to Queen Creek, which is Already Impaired for Copper, Violates the Clean Water Act.

ADEQ Response #34

See ADEQ Response # 2 & 3

- ADEQ Should Not Remove the Existing Limit on Total Dissolved Solids of 1200mg/l Required by the 2010 AZPDES Permit; This Violates the CWA.

ADEQ Response #35

See ADEQ Response # 4-10

- ADEQ Fails to Adequately Analyze the Potential Impacts to Queen Creek Resulting from a Simultaneous Discharge of Stormwater Through Outfall 001 and Mine Water Through Outfall 002.

ADEQ Response #36

See ADEQ Response # 11

Oral Comments

Commenter 115: (Henry Munoz)

Okay. Henry Munoz, born and raised in Superior, former three-term councilman for the town of Superior, four generations of mining. I was an underground miner for 23 years.

A couple of questions. I know that they're going to start -- or they want to start releasing water here. And just to note the fact that we already know that percent of the water sheds in the western United States are already contaminated with some types of contamination of either sort.

First of all, this process, does it meet all the provisions of the Clean Water Act or is it going to?

Being the fact that the Queen Creeks are already on the 303(d) list due to being already impaired with copper, are they going to make provisions to meet that?

Are they going to be putting copper also in that water when it's discharged?

What metals will be released through the Water?

Knowing that it's already impaired, they're not allowed to do that under the provisions.
What will be the lead or the contaminants in the water coming out versus after it's been treated?
What will be the difference on it being treated?

What will be the mercury levels, the kg/m levels?

Testing, how many times is it going to be tested? It is once a month, twice a month, three times a month, four times a month?

And that's basically the questions that I wanted to ask from you people, if we can get some clarification on that for those in Superior.

And how many acre feet per gallons per minute will be treated and released into the creek if they go forward? Okay. Thank you.

ADEQ Response #37

See ADEQ Response #3 in regards to the comment about the 303(d) list.

The AZPDES permit meets the requirement of the Clean Water Act. Specifically, it provides authorization to discharge in compliance with the provisions of Arizona Revised Statutes (A.R.S.) Title 49, Chapter 2, Article 3.1; the Federal Water Pollution Control Act, (33 USC §1251 et. seq., as amended), and Arizona Administrative Code (A.A.C.) Title 18, Chapter 9, Articles 9 and 10, and amendments.

The monitoring requirements are listed in the Tables 1a, 1b, 2a and 2b in the permit. The monitoring frequency for Outfall 001 is once per day while discharging. The monitoring frequency for parameters listed in Outfall 002 is once per month.

The maximum concentrations of the pollutants of concern are listed in the table on page 6 and 7 of the fact sheet.

The maximum discharge capacity to Queen Creek from Outfall 002 is 3.6 million gallons/day (11 acre-foot/day).

Commenter 116: (Noel Benoist)

And for the record I was Internal Affairs for National Security (MEDCOM). Every director answered me if there was a problem. And I learned to investigate (transcription unintelligible) totally neutral because if you form an opinion and then try to investigate to prove your opinion true you've prejudiced your investigation from the get go.

I investigated this company and the entire affair. And you have here a slick weasel. Be careful. They have actually five projects. When Iran knew we were going to hit them with sanctions they were clever. They went and bought an English Australian run company, et cetera. Then they restructured it and if you look at purchase of Freeport-McMoRan you'll see the Iranian names there. They issue preferred shares and then they issued common stock.

Preferred shares gets the money and they vote as far as who runs the company. The common stock gets its profit by more value. They're actually was running Freeport-McMoRan and then Freeport-McMoRan did the same thing with the other (transcription unintelligible). It was only two companies but now they're actually controlled by the same controlling people. That was Asarco and El Grupo. And the only reason they didn't get involved there is because the cartel had El Grupo and they didn't want to mess with them.

But they've got projects in New Guinea, in Australia and in Chile, et cetera. The same problems there. The bond is normally an insurance policy. And what they would do is when they get closer and closer to disaster as each company made money they would sell it to the next company in line -- all of them LLCs, Limited Liability Corporations so you have nothing more than basically the bond to grab a hold of.

Then when the disaster happens like in Chile, et cetera, and I think in New Guinea then the company that has it says we haven't made any money. They file bankruptcy, they don't pay the bond. The bond company says, "Oh they did make their payment, there's no bond." The country is left with the bill. That's what they'll do here if you don't stay on top of them and stay about ten steps ahead of them so you're going to have to watch that and watch it very carefully. That's number one.

Number two I moved actually to Apache Junction because especially DC and all that my lungs everything don't exactly take the air anymore. And when I go into Phoenix I can within hours I'm coughing. I can tell the difference in the air. Coming through Apache Junction just to here I can tell the difference in the air. It's almost like I can feel the acid in my throat of my lungs. And that is a direct cause of mining operations that have gone on that's got to be watched very carefully and taken care of and it hasn't been not even in the present day because I checked it out and since the mining started up again more or less about seven years ago or so now the tailings in Miami in that area are stacked up to about the 7000-foot level. I've been up there at high winds.

The winds take that dust right up into the jet airstream, acid, Mercury, heavy metals -- all of them going up into the jet airstream. So I said, "'Kay let me check this out." I checked the national cancer stats for those years all the way up to today nationally cancer is going up 126% a year and that's going to have everybody with cancer before too terribly long in the future. That's got to be taken care of and cleaned up and a lot of the other stuff has got to be taken care of and cleaned up. All that's got to be prevented in the future.

That said that's because I look after everybody's benefit I hope. That's when I went from national security into what I now do which is ministry. And I try to look after all of the people and everybody concerned because we all live together. Like John Donne said in his 18th sermon, "I'm involved in mankind. Any breach to any man's death diminishes me." And that's the way I am.

So for all of the people of Arizona, all of the people of this nation and now with the jet airstream stuff really the world we've got to get after these things. What was done here in the past is a black mark against government. And actually the way this was done in the midnight hour it's another black mark against government. It goes completely against the Constitution of the United States, Fort Laramie and other treaties and the Apache people were actually lied to in order to get there told they had no treaty powers, etcetera.

So I'm hoping and praying number one as we go forward see to everybody's safety to the max. And number two, try to get things done peacefully and back a few things up to get things within the law because when lawmakers violate the law they nullify the law. And is in the line for a man for all seasons the magistrate said, "For those who make or enforce the law break the law they nullify the law and the devil can run rampant." So we must all obey the law. That's why I was internal affairs.

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ADEQ Response #38

The AZPDES permit regulates the discharge of pollutants to a water of the United States. The AZPDES program through the Clean Water Act does not have Clean Air Act authority. RCML is required to obtain all the required air quality permits to operate.

Commenter 117: (Fauline Main)

I'm here too because I don't know a lot of what you're doing. I've read that the mine is asking for a dispensation on the approval of the permit to allow them not to have to do a treatment plant for the outflow Number 2 which is the mine water. And I just wanted to post my request that they have to treat that water. That water has to be treated before it is let out into the groundwater. And so that was just my comment okay.

ADEQ Response #39

See ADEQ Response # 19 & 27 in regards to the RO treatment plant.

The RCML AZPDES permit regulates the discharge of pollutants to Queen Creek. The APP program regulates the discharge of pollutants to the groundwater. As stated in the fact sheet, RCML treats mine drainage with an industrial treatment plant in order to meet the discharge limitations required in the AZPDES permit.

Commenter 118: (Jennifer Martin – Sierra Club)

Good evening. Thank you for the opportunity to comment. My name is Jennifer Martin and I'm here representing the Sierra Club Grand Canyon Chapter. You guys should have received written comments, a letter dated July 12, 2016 signed onto by the Arizona Mining Reform Coalition, the Concerned Citizens and Retired Miner Coalition, Save Tonto National Forest and the Sierra Club Grand Canyon Chapter so I'm not going to read that letter. I know that you guys have seen it.

But just by way of summarizing I'll state that there are a number of issues that we pointed out in that letter. We don't feel that TDS limits should not be removed. We don't feel there was adequate analysis of impacts between Queen Creek resulting from simultaneous discharge of storm water and mine water. So there were a number of issues that we pointed to in that letter but all of it could kind of fall under the umbrella of or be boiled down to the fact that this Resolution Coppermine is appears to be being handled through renewals of existing permits. And we view this as a whole different ballgame in terms of the depth of the volume that we're talking about.

Everything about this project is just at a completely different scope from what we've seen in the past. So we don't feel that it's appropriate to permit it under renewals of existing permits. We think the permitting process should really be starting from scratch looking at this is a new mine not existing facilities.

ADEQ Response #40

See ADEQ Response # 2, 3, and 4-11

Commenter 119: (Don Steuter)

Don Steuter also with the Sierra Club and the Conservation Chair for that organization. And I would just like to echo what Jennifer said about that this really is a new mine. It's a new or by a newly defined or body. It's at the same place geographically but it's in a different elevation. It's a different mining kind of operation so this really should be treated as a new permit and not in the issuance of an existing permit. And that's critical because when it comes to the TMDL process, Total Maximum Daily Load which has never been established for Queen Creek what we're talking about doing with this permit is simply adding those pollutants that Resolution Copper Mine is going to put into the creek into whatever permit that we finally come up with or whatever TMDL that we ever finally come up with whereas in reality we should be doing a new TMDL first recognizing that this is a new, a completely new project, a new permitting process and then Resolution Copper should have to conform to whatever this new TMDL numbers whatever numbers we come up, you know, the loading standards that we come up with (transcription unintelligible).

And then wrapped into this also is the whole matter of the Pinto Creek 2007 court decision which basically says this had to do with Colorado mine about 10 miles away from here. And it basically said that you cannot add pollutants to an already impaired stream. Queen Creek is impaired for copper, for selenium and for lead. And according to the court decision I'm not sure how you're going to finagle this in the end but we really cannot under that court decision add new contaminants until that creek is first cleaned up. And what was envisioned in that court decision was that the proponent in this case the mining company would have to enter into a compliance schedule with whatever entities or parties are involved in this area here and figure out first how you're going to clean up Queen Creek and then how the mine is going to be able to discharge and still maintain those TMDL standards.

So I just haven't heard a satisfactory answer yet as far as how the requirements of that court decision are going to be made in regards to this discharge permit. Also I don't understand the mine wastewater treatment plant. Originally Resolution Copper was supposed to install a reverse osmosis system but now that is gone and the total national daily load standards which I think now is something like 1600 ppm or micrograms - milligrams per liter not standard somehow or (unintelligible). I don't understand why we - our (transcription unintelligible) system project has been moved to the wayside.

And then just a question Number 10 water and water from the Number 10 shaft I'm not sure if that is now being included in this outfall 002. Is that where this is all going? Has that water been going to the food and irrigation water district as well?

And then lastly I'm not clear, is tonight the comment deadline now for this permitting process or has the comment deadline been extended from here tonight? Talking to you folks in a public

meeting we have never seen a comment that would end the night that we have a public meeting. So thank you.

ADEQ Response #41

See ADEQ Response # 2 & 3 about the how the RCML site is an existing discharge and how the 2007 Ninth Circuit court decision does not set a precedent for this renewal permit.

The process flow diagram of the facility has been added as an appendix to the permit. The diagram indicates the mine water from shafts 9 and 10 ultimately end up being treated through the MWTP. The effluent from the MWTP can either be sent to agricultural irrigation to the NMIDD or can be discharged from Outfall 002.

The public notice posted on August 3, 2106 stated the last day ADEQ would receive comments on the draft permit would be on September 7, 2016. The public hearing officer stated in his opening remarks of the hearing that comments on the draft permit would be accepted up until midnight on the night of the hearing. The public hearings were conducted in accordance with administrative procedures described in A.A.C. R18-1-401&402. The public hearing typically ends the public participation process and allows anybody interested in the permit to submit their final comments on the record. ADEQ must consider all comments before issuance of the permit.

Commenter 120: (Henry Munoz)

First of all, good evening. Henry Munoz, born and raised in Superior, Arizona and as I mentioned at the last meeting seem to be the only one there at the meeting at the time but I'm back on again. First of all water's a big issue and has been a big issue either in the Southwest or throughout the United States.

Most recently it's been Flint, Michigan to where the residents of Flint, Michigan depended on a state governmental agency to make sure they had good clean safe drinking water. And we know what happened. Right now the EPA estimates that 40% of the watersheds in the Western United States are contaminated from hard rock mining. One estimate just related to the Bristol Bay area in Alaska where they've lost all their salmon fishing due to contamination of their largest open pit mined in that area.

One of my questions is first does it meet the provisions of the Clean Water Act? Specifically Queen Creek itself has been listed under the 303D list due to already impaired waters due to copper contamination. The Clean Water Act prohibits discharges of pollutants into an impaired water body. And if that pollutant is the reason for the impairment the reason the stream is on the 303D list then that means it was for mainly being on high concentrates of copper in the water itself. That was a Ninth Circuit decision that was conducted in 2007.

My only question is who's is going to be monitoring, how many times are they going to be monitoring the water? How many gallons per minute or acre feet are they going to be pumping out whether it be monthly or yearly or daily? Are the test results going to be made public? And

once the testing is done can they change the flows on us, say they want to increase the flows once the permit is issued?

Now my concern is like I was telling you is water. I live here, the community drinks this water and for it to affect us eventually down the years could have a severe impact on the health on the individuals and the residents that live in Superior. And I hope that when you do come to a decision it's in the best interest of the people that live here in Superior and anybody else who lives downstream. Thank you very much.

ADEQ Response #42

See ADEQ Response # 3 about the status of Queen Creek and the 303(d) list and how the 2007 Ninth Circuit court decision does not set a precedent for this renewal permit. Please see ADEQ Response # 37 for all the other comments.

Commenter 121: (Roy Chavez)

And I am a resident here in Superior 106 West Palo Verde Drive, a former mayor and council member mayor and town manager and also been a lifelong resident and a miner at this (plant). I'm also the spokesperson for Concerned Citizens and Retired Miners Coalition. I'm not going to get into any real detail. Jennifer mentioned already that we've signed in Concerned Citizens with there's (transcription unintelligible)Miner (transcription unintelligible)coalition.

I mentioned at the beginning when I got in and you asked the question - I have a serious question here. Was this public hearing conducted six years ago when application was made? I'd really like to know about that. I believe it wasn't.

Tying to Don's comment about comment deadline I'm hoping tonight is not the drop-down deadline for comments. When we're talking about TDS, Total Dissolved Solids what's actually in there, I'm just asking because I know some of these answers but I am asking the questions that the laypeople in the community have brought up. What's actually in the water that's being released? How much water is going to be released. That's been mentioned? When is it going to be released?

I understand that plans are to release more water in the wintertime when they'll obviously have more rainfall. And they mentioned this already, Queen Creek is already aggregated under 303 with other metals and high levels of metals. The reverse osmosis system as many times these mining industries claim they're going to do something and inevitably within the years that go by it doesn't happen. This is a prime example and they haven't even started operations.

We issue in reference to monitoring the water, the levels, the amounts of materials and toxins and any impact or effect that will take place down the route of creek stream. And I don't know if anyone's here from the Arboretum and referencing or speaking of their behalf but I believe when the original application was made the Arboretum had some concerns if not and the content of the, water the volume in the amount of water in this direction.

There's a lot more technical issues and aspects that I could bring into the picture of today's comments but they're all listed in our written comments. Thank you.

ADEQ Response #43

See ADEQ Response # 4-10 in regards to the TDS and how the discharge will not cause toxicity to downstream users.

The draft renewal permit was published in the Superior Sun and Silver Belt on June 8, 2016, and a public hearing was held at the Superior Junior/Senior High School on July 12, 2016. ADEQ extended the public comment period and conducted another public hearing on September 7, 2016, at the Superior Town Hall. Comments were due at midnight on September 7, 2016.

The AZPDES permit does regulate the amount of flow and timing of a discharge. The permit requires all discharges to meet the permit requirements at the Outfall(s).

A public hearing for the AZPDES permit signed on December 6, 2010, was held at the Superior Senior Citizens Center, Superior, AZ, on July 19, 2010.

Commenter 122: (Sylvia Barrett)

Sylvia Barrett 19807 East (Tappy) Road in Queen Creek. I don't know much about this so and I'm going to ask some of the same questions I guess that they did. And some of my concerns I'd like to know what the background of the pH of the water is coming out of the mine? And what is the pH of the water before blending with water and what's the pH of the water after the blending?

Also looking at designated uses why would Resolution Copper want to do away with the reverse osmosis plant especially since the receding waters listed as impaired for copper, lead and selenium? And how often is the water being tested because as I looked at some of these graphs it really throws me off because I'd like to know is it testing daily, monthly, and where do I find the results?

And then as I was also looking at the proposed permit changes I want to know why there's so many permit changes. Like let's see, like the metals translator study that applied for arsenic, cadmium and copper for the Outfall of 1 and copper on outflow - Outfall 2. It says metal translator applied and limits adjusted. And then where it says proposed permits it says no metal translator applied. I'd like to know what that means because I'm really at a loss. I'm not - I don't know any of this stuff.

And there are so many changes where I see that it was the existing permits where they asked for a lot of things or they were going to do a lot of things and now the old - their new proposed permits it doesn't seem like they want to do much of anything. And so I also want - would like to know more about this anti-backsliding considerations and I think that's it for me. Thank you.

ADEQ Response #44

See ADEQ Response # 19 & 27 in regards to the RO treatment plant.

The data submitted in the RCML application was from the effluent of the mine water treatment plant that would be representative of a potential discharge from Outfall 002. The data RCML submitted had a minimum pH of 6.96 and a maximum of 8.17. pH is a required testing parameter for both Outfalls. The minimum can not be below 6.5 and the maximum can be greater than 9.0 standard units.

The AZPDES permit requires RCML to sample when discharging. If there is no discharge from either Outfall 001 or 002, then no monitoring is required and the DMR will be reported as No Discharge. The DMR summary data submitted by RCML is accessible via the EPA's Enforcement and Compliance History Online (ECHO) website. The link to RCMLs DMR data is found here:
https://echo.epa.gov/effluent-charts#AZ0020389

A metal translator is a calculation that determines the fraction of metal in the effluent that will be dissolved in the receiving water. In the previous RCML AZPDES permit, a metal translator study was conducted and the resulting partitioning coefficients (the ratio of total versus dissolved metal) were applied to the arsenic, cadmium and copper limits. RCML did not resubmit a translator study in the renewal application and thus the permit limits were listed as the total recoverable metal.

More information about metal translator studies can be found here:
https://www3.epa.gov/npdes/pubs/metals_translator.pdf

Commenter 123: (Hank Gutierrez)

Well, apologize for coming late. I kind a get the gist of it, kind of hearing this over and over. I'm - I live in the community and I remember of - I'm representing myself today. But I'm also a member of the Community Workgroup that meets once a month to work out actually not just as you do but a lot of things related to the mining from the public point of view. And I think this group has been meeting over probably three years.

And one of the things that came out of this group was we were aware of the request for the discharge. And one of the things that this group was really actually is going to be involved in is appointing a community monitoring group totally separate from whatever resolutions are going to be going and determining what's actually going to be released into the Queen Creek.

Now I'm not a chemist. I know we - I can sit here and kind of read off kind of things that are kind of interesting to some of it but I'm not pretending to be a chemist. All I'm interested in is based on what I'm hearing on what we've come up with the Community Work was to the scope of what they're planning on doing. I don't know anything about the RL part but I think that was the discussion sometime back. But, you know, if you're looking at a project change - there's always changes.

I think what's important to me and what's important to the Community Workgroup and myself and others is that we do have a separate group of people unrelated to the monitoring of the water because it's very important. And the nice thing about it is that they're making a commitment to our group to fund that. And we can go out and submit an RFQ or RFP so we can hire our own scientific group to do that. I think that's an important step forward. And the Arboretum is aware of it a lot of this is going on so I don't think they're in the dark because the Arboretum (Mark Saidworth) is actually part of the Community Workgroup so he's - they're not operating in the dark. I think the most important thing to realize that we do or there is going to be a community group to monitor the water we put down Queen Creek.

ADEQ Response #45

The AZPDES permit will regulate the discharge of pollutants to protect the water quality of Queen Creek.

Commenter 124: (Bob Barrett)

Okay, well thank you. I'm Bob Barrett. I live in Queen Creek as well. My comment is more of a question. I'm very concerned more and more all the time about the downwind or downstream effect of the water, the air and everything but primarily today through water.

I live in Queen Creek. I'm concerned about what is - what's going to happen to the quality of my water down there as this water comes towards us in increasingly bigger volumes I'm assuming and for a period of five years both for and beyond that. So I'm very concerned.

Right now we're on well water. We're on (transcription unintelligible) water but Queen Creek District water which is well water. And I'm concerned about what this project might mean for myself as well as the residents of Queen Creek and what do we call it, Copper Valley or whatever, Johnson Ranch area. I'm worried about all of us for the future if this comes about. That's it, thanks.

ADEQ Response #46

See ADEQ Response # 11 in regards to the volume of water that could be discharged and about how any discharge must meet the water quality standards of Queen Creek. The AZPDES permit is for five years. RCML will be required to apply for a renewal permit six months prior to the expiration date.

Any discharge to the aquifer from RCML will be required to meet aquifer protection water quality standards. If the communities that supply the drinking water in the area are Public Water Systems, the federal Safe Drinking Water Act requires the water system to monitor and treat the water to meet the safe drinking water standards.

Commenter 125: (Tom Macias)

My name is Tom Macias. I'm a longtime resident of Superior, Arizona. I am - I just have concerns of, you know, the quality of the water that's going to be discharged. If it's a water that has been treated and meets a certain standard, you know, I would like to see it at least discharged in a way that it might reinstate the riparian area that used to exist there in Queen Creek.

I have some experience in this. I was for about eight years I was a - the wastewater treatment operator in Superior for our water treatment plant. We used to run tests and we used to have all kinds of wildlife in the Queen Creek area. And we used to have bluegill fish, different turtle species like it's a type of musk turtle. And it's still there but it was widespread through Queen Creek. And we used to have leopard frogs. We used to have a bunch of different wildlife there in the creek.

And I've seen the adverse effects that have happened to the creek now. I know I don't see any of these animals hardly at all. And I'm sure I don't know what the impact the mine has had on it but I feel that there should be steps taken so that we can restore what was here before so that we has a (sic) better riparian area and just like what we used to have and that would be a very welcome thing. So if there's something that can take place that addresses this I'd be really glad to see. And that's all my (statement).

ADEQ Response #47

See ADEQ Response # 11 in regards to the discharge meeting water quality standards and Response # 4 about how RCML has demonstrated the discharge is not toxic to aquatic life of Queen Creek. The AZPDES permit does not regulate the physical restoration of the stream bed.

Everyone who commented during the public comment period has the right to file an appeal and request a hearing on the final decision as an appealable agency action under A.R.S. § 41-1092.03 by filing a written Request for Hearing or Notice of Appeal within 30 days of receipt of this notice. A Request for Hearing or Notice of Appeal is filed when it is received by ADEQ's Hearing Administrator as follows:

Hearing Administrator
Office of Administrative Counsel
Arizona Department of Environmental Quality
1110 W. Washington Street
Phoenix, AZ 85007

The Request for Hearing or Notice of Appeal shall identify the party, the party's address, the agency and the action being appealed and shall contain a concise statement of the reasons for the appeal. Upon proper filing of a Request for Hearing or Notice of Appeal, ADEQ will serve a Notice of Hearing on all parties to the appeal. If you file a timely Request for Hearing or Notice of Appeal you have a right to request an informal settlement conference with ADEQ under

A.R.S. § 41-1092.06. This request must be made in writing no later than 20 days before a scheduled hearing and must be filed with the Hearing Administrator at the above address.

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