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From: Brush, Jason
Sent: Sat 4/29/2017 2:34:43 AM
Subject: EPA Regional Administrator's letter to SPD re Rosemont
Helmlinger Rosemont Copper Mine 042817.pdf

Stu and William – Thanks again for including me in the meeting last Tuesday. Attached is a letter of thanks to the Colonel from our Regional Administrator, Alexis Strauss.

Having reflected on our meeting, a few summary considerations came to mind. Modelling is of course all about making complex things more simple, which we must do, but some important oversimplifications in our discussion did stand out to me:

1. HudBay talked about their observed runoff data from limited collection sites in recent drought years. This is unlikely to be appropriately representative of long-term hydrology, and the calculations of the project site's relative contribution to stormwater discharges currently do not consider temporal and spatial variation (like the orthographic effects Pima discussed). The Corps should cast a very critical eye on assertions that these data demonstrate the applicant is "conservative" in their impact estimates.

2. There's interesting isotopic research out of U of A that the Corps might want to review to gain greater clarity on the sources of base flows (shallow alluvium vs. deeper, "older" water seeping from bedrock fractures in the mountain front aquifer). The more is known about that, the better the confidence on nature/extent of downstream indirect impacts.

3. Discussion often touched on an assumption that distance will attenuate any potential increases in metals or other contaminants, but the opposite is at least equally probable. The existing landscape's capability to assimilate contaminants will be diminished by filling 18 miles of waters, while at the same time, concentrations of contaminants will increase in certain locations (like compliance dam) where they become more vulnerable to mobilization in large episodic stream flows.

4. Finally, I did not hear anything from Hudbay suggesting they have secured a reliable, verified water supply that could potentially mitigate modeled reductions in surface flows. We did not discuss compensatory mitigation at all, but certainly projects on the other side of the mountain range won't do anything to help local farmers or the OAWs in this regard.

I made the suggestion at the meeting that ADEQ provide a briefing to SPD on the scope and capabilities of their various permits, since it was reliance on these permits that gave the state such comfort. In particular, I recall ADEQ mentioning the APP (Aquifer Protection Permit), which Misael said many states do not have. Such a briefing would give the Corps a better idea of what state authorities can and cannot do in this case, and help inform a more complete picture of all water quality aspects.

Thanks again, and please do not hesitate to reach out to discuss the project any time.

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