

Danielle R. Taber

From: Blanning Sue E <Sue.Blanning@srpnet.com>
Sent: Wednesday, January 14, 2015 3:51 PM
To: Danielle R. Taber
Subject: SRP's Comments on RID's Feasibility Study 1-14-15
Attachments: SRP's Comments on RID's Feasibility Study 1-14-15.pdf

Attached please find SRP's Comments on RID's Feasibility Study. Original sent via USPS First Class Mail.

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KELLY J. BARR, ESQ.
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January 14, 2015

(via E-mail (taber.danielle@azdeq.gov) and First Class Mail)

Ms. Danielle Taber
Arizona Department of Environmental Quality
Waste Programs Division
1110 W. Washington St.
Phoenix, AZ 85007

Re: Salt River Project Agricultural Improvement and Power District's Comments on Roosevelt Irrigation District's Feasibility Study

Dear Ms. Taber:

In response to the Arizona Department of Environmental Quality's (ADEQ) Notice of Availability and 30 Day Public Comment Period (extended until January 14, 2015), the Salt River Project Agricultural Improvement and Power District (SRP) appreciates the opportunity to provide comments on the Feasibility Study (FS) submitted to ADEQ by the Roosevelt Irrigation District (RID). The RID FS was prepared by Synergy Environmental and Montgomery & Associates and is dated July, 2014. SRP is a member of the West Van Buren Working Group (WVBWG or Working Group) and submitted comments to ADEQ on the RID FS dated November 6, 2014, which were re-submitted on January 14, 2015. SRP hereby incorporates those comments in this document, as well as the Working Group's January 14, 2015 comments to RID's September 30, 2014 submittal to ADEQ.

Consistent with SRP's prior comments on RID submittals, including, but not limited to RID's proposed Early Response Action (ERA) and dated April 22, 2010, the RID Well Investigation Work Plan and dated September 7, 2010 and this FS, SRP believes that the remedy proposed by RID in the FS for the West Van Buren WQARF site (WVB Site) should be rejected by ADEQ because (1) RID continues to propose a costly and unnecessary groundwater treatment system for its large capacity irrigation wells even though a formal risk assessment screening and full risk assessment performed by the WVBWG, as well as a January 8, 2015 Health Consultation prepared by the Arizona Department of Health Services (ADHS), individually and collectively demonstrate that there is no public health threat that warrants immediate treatment of the RID wells; (2) approval of the remedy proposed by RID would be inconsistent with WQARF and ADEQ's approach at other WQARF sites; (3) the RID FS contemplates continued groundwater pumping after 2026 even though RID will not be able to legally pump and transport groundwater from the wells within the WVB Site for use outside of the Salt River Reservoir District (SRRD) boundaries; and (4) the remedy proposed by RID

in its FS is cost prohibitive when compared with the reference remedy proposed by the WVBWG in its FS submittal. In short, the remedy proposed by RID is not reasonable, necessary, cost-effective, or technically feasible and should therefore be rejected.

Each of the foregoing points is discussed separately below.

THE REMEDY PROPOSED BY RID IS NOT NECESSARY

RID has claimed repeatedly that its proposed remedy seeks to address “an imminent and substantial endangerment” to the public health, notwithstanding numerous studies that conclude otherwise. Such claims are false and irresponsible.

RID has pumped groundwater from the WVB area for decades, delivering this water for irrigation purposes through a system of pipelines and canals. Any groundwater pumped from affected RID wells is blended with treated effluent (from the City of Phoenix 23rd Avenue wastewater treatment plant) as well as water from unaffected RID wells, and then transported several miles west of the WVB area for irrigation deliveries within the RID service area. To SRP’s knowledge, no groundwater pumped from the WVB Site is currently (or historically has been) used for drinking water.

Contrary to RID’s claims, there is no reason to treat water pumped from the RID wells to drinking water standards when it is not clear when, if ever, that water will be used for drinking water purposes. There is no risk in continuing the use of the groundwater pumped from the WVB area for irrigation purposes. RID never conducted a quantitative risk assessment to confirm its endangerment claims. RID’s own air quality sampling and public health exposure assessment confirmed that there are no acute health risks associated with potential exposures to the WVB Site.¹ A 2010 screening level risk assessment of RID wells performed by AMEC confirmed that there is no public health threat that warrants immediate treatment of RID wells.² In addition, the WVBWG, as part of its FS, conducted a quantitative human health risk assessment, using both EPA and ADEQ guidance, to assess potential human health risks associated with possible exposure to chemicals within the surface water in the RID canal system and groundwater beneath the WVB Site via air inhalation of vapors, incidental ingestion, dermal contact and fish consumption.³ The assessment revealed that estimated

¹ Synergy Environmental, LLC, *Public Health Exposure Assessment and Mitigation Summary Report*, September 16, 2011.

² AMEC, *Evaluation of Human Health Risks Associated with Volatile Organic Compounds in the Roosevelt Irrigation District Canal System*, August 16, 2010.

³ Haley & Aldrich, *West Van Buren Working Group Feasibility Study Report*, Appendix D, July 2014.

health risks to receptors potentially exposed to chemicals in WVB due to operation of the RID wells are below EPA's carcinogenic risk range.⁴

The foregoing findings are entirely consistent with the January 8, 2015 Health Consultation prepared by the Arizona Department of Health Services (ADHS).⁵ In response to requests to evaluate whether there are potential health risks from exposure to water for domestic use and residential irrigation within RID, ADHS analyzed potential health risks associated with exposure to an RID well as if it were used for potable purposes, and concluded that exposure to contaminants of concern (COC)⁶ would not be expected to harm health under typical conditions of household water use. ADHS also evaluated 29 other RID wells to determine potential public health risks associated to exposure to groundwater collected from RID irrigation wells and canal water, concluding ingestion exposure to TCE and PCE in these media would not be expected to harm health.⁷

Because groundwater pumped from RID wells is used for irrigation purposes, contaminant levels are suitable for that use, and there is no evidence of risk associated with that use, the remedy proposed by RID which contemplates immediate treatment of RID wells to drinking water standards is unnecessary and should be rejected by ADEQ.

RID'S PROPOSED REMEDY IS INCONSISTENT WITH WQARF AND REMEDIAL APPROACHES BEING PURSUED AT OTHER WQARF SITES

Both in its written FS and verbally at the Community Advisory Board meeting on December 1, 2014, RID claims that its proposed remedy to seek immediate treatment of groundwater pumped from its wells to drinking water standards is consistent with approved remedial approaches at other WQARF and CERCLA sites in Arizona. In particular, RID makes reference to the North Indian Bend Wash site, a CERCLA site with EPA oversight authority. The CERCLA approach to clean up differs substantially from cleanups under the WQARF program and NIBW is not appropriate for comparison because WVB is a WQARF site and RID has opted to proceed under WQARF for its remedy selection.

The Arizona legislature enacted WQARF as the State alternative to CERCLA, rejecting the federal approach to hazardous substance cleanup as rigid, inflexible and unfair. Upon enactment, WQARF was recognized as an innovative and science-based approach to cleanups that is more deliberative, fact based, and reflecting sound economic principles to ensure that groundwater is cleaned up to the

⁴ *Id.* EPA's carcinogenic risk range is 1×10^{-6} .

⁵ ADHS, *Health Consultation: Evaluation of Water Sampling Results in the Roosevelt Irrigation District*, January 8, 2015.

⁶ Specifically, trichloroethane (TCE), tetrachloroethane (PCE) and 1,1-dichloroethane (1,1-DCE).

⁷ *Id.*

quality necessary to meet current uses, while planning for treatment, when needed, for future uses. Indeed, A.R.S. § 49-282.06.D states specifically that:

“ . . . the director may approve a remedial action that may result in water quality exceeding water quality standards after the completion of the remedy if the director finds that the remedial action meets requirements of this section.”

Nevertheless, RID insists that it is necessary to treat water it uses today for irrigation, to drinking water standards, claiming that all groundwater should be restored to such standards, notwithstanding cost. No provision of WQARF requires immediate aquifer restoration. Because RID opted to use the WQARF process to propose and implement its proposed remedy, it is imperative to the WQARF process that RID be required to comply with the rules and policies created to implement WQARF, not inapplicable CERCLA policies.

Requiring immediate aquifer restoration is not only inconsistent with WQARF's general approach, but it also is inconsistent with the approach being pursued at other WQARF sites. For example, at the South Mesa WQARF site, SRP irrigation wells are affected by VOC contamination; no drinking water wells have been impacted at the site. Source control measures have been taken by ADEQ. The selected remedy includes continued groundwater monitoring of the residual regional plume, with contingencies to be implemented when and if the current irrigation use changes to a drinking water use. Unlike RID's justification for its proposed remedy, treatment is not likely today at the affected irrigation wells in South Mesa even though the technology is available to conduct such treatment. Treatment has been identified as one possible contingent measure that may be implemented when and if the current use changes to drinking water and levels exceed maximum contaminant levels. The current concentrations levels in the SRP irrigation wells in South Mesa are acceptable for the current end use and pumping is in accordance with an established risk-based action level for irrigation uses.

Groundwater beneath the WVB Site is an important resource for SRP, the City of Phoenix and others for long-term sustainable water supplies, and SRP is committed to the development and implementation of an appropriately scaled, targeted remedial action that is reasonable and protective of current water uses, and that includes contingencies to protect reasonable foreseeable future uses of water. RID's proposed remedial approach, however, is not warranted by risk or science and should be rejected in favor of an approach that contemplates treatment, but treatment that is targeted and only when it is demonstrated that the water will be used for drinking water purposes.

RID'S PROPOSED REMEDY IS FRAUGHT WITH LEGAL AND PRACTICAL IMPEDIMENTS

The remedy proposed by RID ignores legal and practical impediments which will preclude its ability to implement its remedy in the future, not the least of which include its contractual dispute with SRP and lack of infrastructure capable of delivering water.

RID's contractual dispute with SRP is well known and unresolved. In the 1920s, SRP executed a contract with RID's predecessor for a fixed term that authorized RID to drain groundwater from within the SRRD, to alleviate a serious water logging problem that existed at the time. The term of that authorization is limited by the contract which expires no later than 2026. The SRP/RID agreements were approved by the United States Secretary of Interior in accordance with the Secretary's responsibilities to the Salt River Federal Reclamation Project. After the expiration of the agreement, RID may not legally pump and transport groundwater from the WVB area for use outside of the SRRD.

RID disagrees with SRP's position and claims, contrary to basic tenets of contract law, that its right to pump groundwater from the WVB Site lasts in perpetuity. Indeed, RID recently filed a declaratory judgment action against SRP, asking the Court for a determination that SRP's legal position is incorrect and that RID may continue pumping the water past 2026. The Court dismissed RID's action, leaving the dispute intact.

Most notably, RID intentionally neglected to take into account in its FS that it may not be able to pump WVB groundwater past 2026. As stated in the WVBWG's FS, RID's irrigation pumping has created a "hydraulic trough," which is containing the groundwater plume. However, given its contractual dispute with SRP, it is not prudent for RID to assume that it will continue pumping past 2026. The lack of RID pumping post 2026 could affect groundwater wells owned and operated by other water providers and RID's failure to include any contingencies in its FS for these water providers demonstrates another significant flaw in RID's FS which mandates its rejection by ADEQ.

On a related note, RID claims repeatedly that groundwater pumped from its wells must be treated to drinking water standards because it has buyers ready to use such water now. However, RID has no infrastructure in place to transport the water to potential buyers and no apparent means to fund such infrastructure. Importantly, as of the date of these comments, RID has not produced any executed contracts demonstrating that it has a buyer for its remediated groundwater. To the contrary, the City of Goodyear has informed RID that support from SRP is critical and that too many issues remain unresolved concerning RID's legal authority to implement its proposed remedy.⁸

Absent a definite buyer and use for the remediated groundwater, among other things, there is no need to treat current irrigation water to drinking water standards and no need for the remedy proposed by RID.

⁸ Letter, March 17, 2014, City of Goodyear to Synergy Environmental, LLC

RID'S PROPOSED REMEDY IS NOT COST EFFECTIVE

RID's proposed remedial approach has a net present value at a staggering \$63.7 million⁹ and contemplates treatment of water extracted from six RID wells to drinking water standards with no contingencies to protect water providers such as SRP and Phoenix. As reported in the November 6, 2014 WVBWG comments, as a groundwater remedy, the mass removal efficiency of treating RID wells is low compared to other Phoenix area groundwater sites, especially as a starting remedy. Most of the significant cost associated with implementation of the RID remedy concerns treating the water to drinking water standards, which is, as set forth above, wholly unnecessary.

In contrast, the net present value of the WVBWG FS is \$23.25 million, which is comprised of \$8.67 million in capital costs. The remedy proposed by the WVBWG in its FS includes installation of a targeted well to pump the most highly contaminated groundwater. In the event of a drinking water need or change in other site conditions, the Group's FS contains up to eight contingencies with a net present value of \$14.58 million. The cost effective approach contained in the WVBWG FS is similar to the approach being pursued at South Mesa.

The lack of cost efficiency for the RID remedy is directly related to another important point concerning who pays for the proposed remedy. This question was specifically asked by CAB members at the December 1, 2014 meeting. While RID believes such costs will be paid by potentially responsible parties (PRPs), the reality is that only a portion of those costs could be paid by PRPs.

Under WQARF, the liability of PRPs is limited to their proportionate share. The State is required to pick up orphan shares, plus a 25% discount for those who settle early. At the WVB Site, orphan shares are conservatively estimated to be 50%, which translates into a \$22-25 million share to the State if RID's remedy is selected. Even though RID is bringing a CERCLA suit, ADEQ is still statutorily required to conduct a WQARF allocation and the State is required to absorb the orphan share. The State can hardly afford to provide a \$20 million plus payment for RID's scheme.

CONCLUSION

SRP appreciates the opportunity to provide comments on the RID Feasibility Study. For the foregoing reasons, in addition to those submitted by the WVBWG, SRP respectfully requests that ADEQ reject the RID FS as not reasonable, cost effective, necessary or technically feasible.

⁹ RID estimates that its initial capital costs are about \$9.445 million, with annual operation and maintenance costs of \$2,049,500. Synergy Environmental, LLC, *RID Feasibility Study*, Table 7.

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We would be pleased to meet with ADEQ to discuss these comments in greater detail.

Sincerely,

A handwritten signature in black ink that reads "Kelly J. Barr". The signature is written in a cursive style with a large, prominent "K" and "B".

Kelly J. Barr
Senior Director, Environmental Management, Policy and Compliance