City of Phoenix
OFFICE OF ENVIRONMENTAL PROGRAMS

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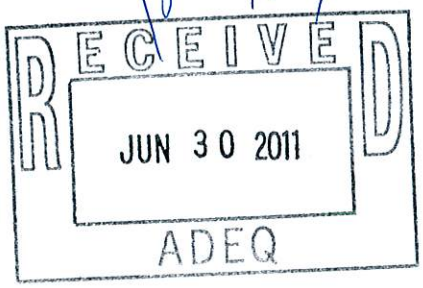

June 30, 2011

Mr. Kevin Snyder
Remedial Projects Unit, Waste Programs Division
Arizona Department of Environmental Quality
1110 West Washington Street, MC4415B-1
Phoenix Arizona 85007

Re: Proposed Remedial Objectives Report for the West Van Buren WQARF Registry Site in Phoenix, Arizona

Dear Mr. Snyder:

The city of Phoenix appreciates the opportunity to comment on the ADEQ Proposed Remedial Objectives Report for the West Van Buren WQARF Registry Site dated May 16, 2011 (Draft Report). As you know, Phoenix is a participant in the West Van Buren WQARF Site Working Group, which intends to prepare a Feasibility Study for the site, consistent with the final Remedial Objectives. Phoenix has signed and joins with the June 30, 2011 letter from the Working Group (Working Group Letter) to ADEQ with consensus group comments on the Draft Report.

I write to elaborate further on the city's concerns regarding the description of current and reasonably foreseeable land and water uses from the city's perspective as the municipal water provider and primary land use regulatory agency for the West Van Buren WQARF site. We have attached a redlined revision of sections 3.1 (Municipal Groundwater Use) and 3.2 (Agricultural Groundwater Use) for your consideration. The revisions primarily relate to updated information and differences between the Phoenix 2000 Water Resources Plan, which ADEQ apparently relied upon, and the Phoenix 2005 Water Resources Plan. Phoenix requests that ADEQ incorporate these suggested revisions into the Draft Report.

We likewise appreciate the fact that ADEQ has acknowledged that a key Remedial Objective is "to protect the supply of groundwater for municipal use and for the associated recharge capacity…". As the municipal water provider, Phoenix joins with the Working Group request that ADEQ not recognize RID's speculative intention to export groundwater from the basin to unnamed municipalities as a reasonably foreseeable use. There are numerous legal, policy, and practical barriers to this proposal, not the least of which is that it may be adverse to Phoenix's service area rights to the groundwater. WQARF was not intended to, and is not able to, recognize or

provide funding in support of unlikely concepts that are not consistent with current law and regulation, such as the RID proposal.

As stated in the Working Group letter, Phoenix believes that the WQARF Remedial Objective process is best used to address uses of land and water rather than current or potential risks. Phoenix seeks to ensure that the local land uses as currently existing or permitted by applicable zoning regulations are maintained without impairment. The Working Group Letter makes the key distinction that the Remedial Objective should be to restore and preserve those permitted land uses. The Feasibility Study is the process by which soil, soil gas and groundwater data is assembled, all current and reasonably foreseeable exposure pathways are evaluated, and a remedy is selected for any risk determined to be associated with those exposure pathways. Where an approved WQARF remedy is necessary to ensure that exposure to hazardous substances does not impair those permitted uses of the land, that remedy must be selected and implemented. We request that ADEQ adopt the following land use remedial objectives:

- Protect against the loss or impairment of current uses of land as a result of releases of hazardous substances.

- Protect against the loss or impairment of all reasonably foreseeable future uses of land, provided for by the regulations and planning documents of local land use authorities, as a result of releases of hazardous substances.

These proposed Remedial Objectives would encompass all legal uses of land that do or could result in exposures to the contaminants of concern in the West Van Buren WQARF site. The narrow specific reference to property "development" that is presented in the Remedial Objectives of the Draft Report is not sufficiently protective and should be replaced.

Thank you for your consideration of the city's comments. Please contact us at 602-256-5669 if you have any questions or comments.

Sincerely,

Donn M. Stoltzfus
Environmental Programs Specialist

c: Phil McNeely

3.1 Municipal Groundwater Use

The COP Water Services Department's 2005 Water Resources Plan references the need for additional groundwater within the service area, primarily as a supply to mitigate surface water shortage conditions. This 2005 Plan does not include specific plans for groundwater development within the WVBA, though a subsequent "Groundwater Management Plan" developed by WSD includes potential wells within portions of the service area that overlap RID service territory. Since 1985, groundwater use by the COP steadily declined due to the availability of Central Arizona Project water, the development of several SRP-based surface water supplies, and provisions of the State's Groundwater Code which mandates groundwater use limitations. In effect the Code and COP's corresponding policy, rely on groundwater as an essential supply to mitigate future water shortages. The COP currently meets over 95 percent of its demand with surface water sources that could be curtailed significantly due to long-term drought in source watersheds. The COP also relies on groundwater to accommodate water system maintenance and as a backup during temporary outages. Projected groundwater use in normal supply years is assumed to be 15,000 acre-feet per year (AFY) in the Plan, but it could be substantially greater during shortage conditions.

In 2010, the Arizona Department of Water Resources (ADWR) approved the COP's application for a designation of assured water supply. This designation, a re-validation of the original approval by the ADWR in 1998, signifies that the COP has sufficient renewable water supplies to support projected demand levels for the year 2025, and can maintain these supplies through the year 2110. A portion of these water supplies includes groundwater.

The COP has 20 active wells currently in production that can generate up to 28 million gallons of water per day. These wells are located at least one mile from WVBA boundaries. Due to water quality degradation and the establishment of more stringent maximum contaminant levels (MCLs), wells within the WVBA WQARF site were placed on inactive status. The total loss of COP well production for normal use from 1981 to 2010 due to elevated contaminant concentrations exceeds 90,000 AFY from the closure of over 60 wells. This represents more than 60 percent of the total production capacity of COP wells in 1981.

Degraded groundwater constitutes a vast reserve of water for use in meeting the COP's future water needs. The COP maintains several wells within or adjacent to WQARF sites within the COP for emergency use and future use in meeting service area water needs; these wells could be placed back in service with the addition of wellhead treatment systems or approved blending programs. Also, the COP holds "Special Pump Rights" with SRP, which are rights to groundwater well capacity developed by SRP. In order for the COP to maintain and use these rights in the future, it may be necessary to connect SRP wells directly to the COP water distribution system. This may require the addition of wellhead treatment systems.

According to COP's Water Resources Plan, the use of potentially degraded groundwater is likely to be somewhat limited within the next decade, but the COP will depend more heavily on this groundwater to provide for service area water demands later in the 50-year planning horizon. Specifically, new groundwater production capacity is needed starting in the year 2020 at 20,000 AFY, increasing to more than 40,000 AFY in 2035. Assuming average production of two million gallons per day and a 65 percent utilization factor, this equates to 13 new wells beginning in 2020, with an additional 14 wells added by 2035.

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3.2 Agricultural Groundwater Use

Groundwater is pumped from the WVBA by RID and transported off-site for agricultural purposes. RID has indicated that agricultural use of this water could change in the foreseeable future to drinking water use. SRP has wells near the WVBA which are used to pump groundwater for agricultural purposes but none of these wells are located within WVBA boundaries.

The RID was formed in 1928 after securing an agreement with SRP to pump and deliver water in 1923. RID provides its members with water for agricultural irrigation. RID production wells typically are pumped from March through September. There are currently two sources of RID water. Approximately 30,000 to 40,000 AFY is currently obtained as effluent from the 23rd Avenue Wastewater Treatment Plant and approximately 135,000 AFY is obtained from groundwater.

Up to 30,000 AFY of additional reclaimed water from the 23rd Avenue plant could be provided to RID in lieu of groundwater pumpage. RID, in cooperation with the COP, holds a groundwater savings facility (GSF) permit for this additional reclaimed water. The GSF permit will allow the COP to accrue water storage credits for pumpage elsewhere. The COP currently applies the credits to groundwater pumped to supply the planned Rio Salado Habitat Restoration Project along the Salt River from 19th Avenue to 24th Street; which is outside the WVBA. Thus, implementation of the GSF will result in the reduction of groundwater pumpage within the WVBA.

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