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File No. 6923-1

Arizona Department of Environmental Quality  
Attention: Jennifer Edwards Thies  
WQARF Unit Manager – 4415B-1  
1110 West Washington Street  
Phoenix, AZ 85007

Re: Notice of Request for Approval of Early Response Action for the West Van Buren  
Water Quality Assurance Revolving Fund (WQARF) Site

Dear Ms. Thies:

Representatives of ArvinMeritor, Inc. (“Arvin”) and Cooper Industries, Inc. (“Cooper”) attended the Arizona Department of Water Quality’s (“ADEQ”) Public Hearing on March 23, 2010 concerning the Roosevelt Irrigation District’s (“RID”) Early Response Action (“ERA”). Specifically, these comments are on the RID’s **ERA Work Plan (February 3, 2010)**. This ERA Work Plan supplements the RID’s Draft Groundwater Response Action Implementation Plan (September 25, 2009). Please include these comments in the Public Record.

Inclusion of Prior Comments

My clients generally agree with the numerous technical and legal comments presented at the hearing on March 23, 2010 which **opposed** the ill-conceived proposal by the RID as an ERA under the Arizona Administrative Code (AAC) Regulations R18-16-405. Specifically, my clients support the opposing position and comments submitted on behalf of the Salt River Project, the Arizona Chamber of Commerce, Honeywell, Inc. and the City of Phoenix and incorporate them by reference. An ERA is intended to provide relatively quick, short-term remedial action that addresses current risks to public health, welfare and the environment. RID has operated these last 25 years with knowledge of the limited groundwater contamination in the vicinity of its wells. As recently as 2008, RID acknowledged that its current and future operations are irrigation (non-potable) uses. Contaminant concentrations today are lower than in the past.

Comment – The ADEQ Draft Remedial Investigation Report (October 2008) identified no current risk to public health, welfare or the environment and RID demonstrates no unique risks associated with its current operations which were not previously reviewed by ADEQ. In short, an ERA is not necessary and should not be approved by ADEQ based upon unsubstantiated risks. There is no legal mandate for ADEQ to approve this action.

In particular, my clients wish to focus upon the following issues or problems concerning the RID's proposed ERA.

#### Consistency with the Arizona Groundwater Code

In review of the RID's Draft Implementation Plan and this proposed Work Plan, RID gives some general details and a description of a conceptual system to pump groundwater from existing RID wells and treat approximately 20,000 gallons per minute (gpm) of contaminated water using a central groundwater treatment system ("CGTS") using liquid granulated active carbon. However, the Draft Implementation Plan and the Work Plan are missing the specific details as to how RID plans to use or manage the treated water as required by Arizona Revised Statutes (A.R.S.) § 49-282.06, Remedial Action Criteria, (F) which states, "Remedial actions required by this article shall be consistent with the requirements of Title 45, Chapter 2 (commonly referred to as the "Arizona Groundwater Code") except as provided in Section 49-290.01."<sup>1</sup> In some presentations, RID has alluded to a complex water exchange which would be limited under the Arizona Groundwater Code by A.R.S. § 45-1002, Water exchanges; conditions. RID should be required to provide details for the CGTS so that ADEQ and the public can evaluate any proposed action.

Comment – RID's failure to provide specific details of future water use and compliance with the Arizona Groundwater Code makes it impossible for the general public, ADEQ or the Arizona Department of Water Resources ("ADWR") to provide meaningful comments on RID's proposal. It is likely that RID cannot use the water outside their current irrigation use or outside their service area based upon ADWR's administration of the Arizona Groundwater Code. Groundwater management is a critical element to the RID's proposed ERA and for this lack of specificity the ADEQ should deny the RID's ERA proposal.

#### RID Litigation/Orphan Share

Arvin and Cooper are currently named as defendants in the case titled *Roosevelt Irrigation District v. Salt River Project Agricultural Improvement and Power District, et al.*, Case No. 2:01-CV-00290-ROS, United States District Court, District of Arizona (02/09/2010). Allegedly, these companies are named by RID as defendants because of historical operations at a facility located at 500

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<sup>1</sup> A.R.S. § 49-290(B) does not exempt RID's compliance with [the Arizona Groundwater Code] Title 45.

South 15<sup>th</sup> Street in Phoenix, Arizona which is approximately 4.3 miles from the RID's closest well, RID #100. My clients are not within the geographic confines of the West Van Buren Water Quality Assurance Revolving Fund (WQARF) Site administered by ADEQ and do not believe they have any liability to RID.

Comment – My clients acknowledge that the ADEQ cannot determine the direction of the RID litigation; however, if ADEQ does not approve the ERA under AAC R18-16-405, it will surely make the litigation less attractive to all parties – including the plaintiffs and numerous defendants. In addition, the protracted litigation expense and supporting environmental/consulting fees will bankrupt many of the small defendants leaving a presumably large orphan share for the State of Arizona to make up under the ADEQ's WQARF program.

#### ADEQ's Position

My clients assert that RID has misstated the ADEQ's position concerning the proposed ERA from the beginning. In the following response to one identified defendant, RID stated:

A **No Further Action Letter** from the State does not provide a defense to Penn's cost recovery liability under federal law, specifically CERCLA. A No Further Action Letter simply means that the State will not require additional work at Penn's facility once certain health-based standards are achieved. A No Further Action Letter from the State does not address liability to third parties including RID under state or federal law. For example, liability under CERCLA arises from a facility's contribution to contamination regardless if Arizona health-based standards are achieved. Furthermore, the No Further Action letters you provided with your November 19, 2009 letter all relate to the "remediation of soils at the Penn facility," and not to the groundwater contamination that has impacted or threatens to impact RID's wells.<sup>2</sup>

Comment – ADEQ has many programs where companies can perform investigation and remediation work under ADEQ review to complete the legal requirements found in federal and Arizona environmental laws. If ADEQ is unwilling to stand behind and support the ADEQ issued "Closure Letters" or "No Further Action Letters" issued under state statutes then public support by the environmental community for these ADEQ environmental programs will clearly be damaged.

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<sup>2</sup> Email dated December 2, 2009 from Stuart S. Kimball, Esq. to Jerry D. Worsham II, Esq. at 11:06 a.m.

### Technical Comments

My clients have retained ARCADIS to assist them with a technical analysis of the RID's ERA Work Plan. The RID's proposed ERA Work Plan generally states that RID believes that funding shortfalls within ADEQ are expected to delay the remedy selection of the West Van Buren (WVB) WQARF Site. As an alleged beneficial use of groundwater, RID wants to use their wells to control the contaminant plume and remove contaminant mass by constructing a Liquid Granular Activated Carbon (LGAC) treatment system and an elaborate conveyance piping network to treat up to 20,000 gpm of groundwater.

Based on our review of these RID plans, ARCADIS offers the following technical comments:

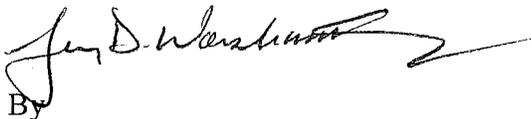
- A fundamental challenge of the proposed ERA is the age and construction of the RID wells and the technical well integrity and annular seal problems that may exist. As described in Section 4.2.3 of the Work Plan, several well modifications will be made to the 14 impacted RID wells. However, prior to the establishment of a pump and treat system, a significant level of effort will be required to hydrophysically test each of the 14 RID wells to determine flow zones of groundwater contribution and depth specific water quality to ensure that efficient capture and contaminant mass removal is occurring in the Upper Alluvial Unit (UAU) 1 and UAU2 aquifer units. Additionally, the structural integrity of these wells will need to be determined and significant modifications may need to be made to determine sealing options and to prevent some of the RID wells from acting as conduits that will convey the downward vertical migration of contaminants into the deeper aquifer units. Furthermore, any well rehabilitation activities should proceed with caution since these activities could exacerbate the conduit well aspects of the RID wells by exposing holes created by long term corrosion of the well casing. Since the majority of the contamination exists in UAU1 and UAU2, ARCADIS believes that a more effective remedial strategy would be to not use the RID well field but instead design and install a separate groundwater treatment system that includes new extraction wells and injection wells specifically designed to maximize plume capture, maximize VOC mass removal, and control the movement of contamination in the UAU1 and UAU2 aquifer units.
- In order to design an effective groundwater "pump and treat" remediation system, an accurate groundwater regional model needs to be developed to ensure that it can be used as a predictive tool to understand the long term performance of various remediation scenarios. ARCADIS believes that without an effective groundwater model that is calibrated to current hydrogeologic data and conditions, it is difficult for ADEQ to determine that the ERA prescribed by the RID will be effective in plume capture and mass removal.

- In addition to VOC contamination, the UAU1 and UAU2 aquifer units typically have high levels of total dissolved solids and high nitrate concentrations that are generally above Arizona's drinking water quality standards. The proposed LGAC treatment system will not treat these other identified compounds and therefore RID cannot provide water that meets Arizona's drinking water quality standards.
- In RID's proposed Work Plan, it is stated that the ERA is necessary to mitigate current risks to public health from exposure to hazardous substances present in the groundwater and to hazardous substances that may volatilize into the air. However, the cursory evaluation of risk presented by the RID in the proposed Work Plan lacks current data and does not fully identify alleged potential complete exposure pathways. ARCADIS asserts that the current and available data does not support the RID's contention that the implementation of its ERA is necessary. As such, before a definitive conclusion on the risks to public health can be ascertained, it would be prudent to collect and analyze additional surface water samples along the length of the RID conveyance system and a formal Risk Assessment be conducted by a certified professional with the Arizona Department of Health Services.

**An ERA is not necessary and should not be approved by ADEQ.** Please contact me with any questions.

Sincerely yours,

GAMMAGE & BURNHAM P.L.C.



By

Jerry D. Worsham II

JDW/ald

cc: Director Ben Grumbles, ADEQ  
Julie Riemenschneider, ADEQ  
Linda Furlough, Esq., Arvin Meritor  
Keith Odenweller, Esq., Arvin Meritor  
Rob Mongrain, Arcadis



**MONTGOMERY  
& ASSOCIATES**

Water Resource Consultants

# Work Plan

February 3, 2010

Prepared for:

Gallagher & Kennedy, P.A. and  
Roosevelt Irrigation District

## Roosevelt Irrigation District Early Response Action

West Van Buren Water Quality Assurance  
Revolving Fund Site



**MONTGOMERY  
& ASSOCIATES**

Water Resource Consultants

# Implementation Plan

September 25, 2009

Prepared for:

Gallagher & Kennedy, P.A.

## Roosevelt Irrigation District Groundwater Response Action

West Van Buren Water Quality Assurance  
Revolving Fund Site

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