



Janice K. Brewer
Governor

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

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Benjamin H. Grumbles
Director

Registered Mail/Return Receipt

October 7, 2010

RPU11:044

Mr. Stanley H. Ashby
Superintendent
Roosevelt Irrigation District
103 W. Baseline Road
Buckeye, AZ 85326

Re: Review of Public Health Exposure Assessment and Mitigation Work Plan
Roosevelt Irrigation District Early Response Action
West Van Buren (WVB) Water Quality Assurance Revolving Fund (WQARF) Site
Phoenix, Arizona

Dear Mr. Ashby:

The Remedial Projects Unit (RPU) of the Arizona Department of Environmental Quality (ADEQ) has reviewed the above referenced work plan received via email by ADEQ on July 26, 2010. The work plan was prepared by Synergy Environmental, L.L.C. on behalf of the Roosevelt Irrigation District (RID). This work plan was requested by ADEQ as part of ADEQ's approval of the proposed Early Response Action (ERA) to be conducted in the West Van Buren Area (WVBA) Water Quality Assurance Revolving Fund (WQARF) Registry Site. The work plan was to identify how and where data/information would be collected to demonstrate the existing risk to the public as stated in the ERA Implementation Plan and other documents supporting the need for the proposed ERA and how to mitigate the risk(s). RPU reviews this work plan under a working agreement dated October 8, 2009 and signed by both Roosevelt Irrigation District (RID) and ADEQ.

The RPU has the following comments:

1. The work pan has no date, signature, or State of Arizona registered professional stamp. These are basic requirements of the ADEQ when documents of such importance are submitted to ADEQ for review and approval.
2. The work plan lacks the four components of a site-specific human health risk assessment as described in Arizona Administrative Code (AAC) R18-16-401. These components need to be included in the work plan. They are:
 - A. Identification of potential contaminants,
 - B. An exposure assessment,
 - C. A toxicity assessment, and

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- D. A risk characterization.
3. The work plan should identify the contaminants present and the harmful effects caused by the contaminants including the expected dosage that the public may be exposed to. To determine this, the following need to be completed:
 - A. The quantity of chemicals of concern (COCs) released to the air through volatilization at the point of well discharge to the canals,
 - B. The quantity of COCs released to the air due to volatilization of VOCs from the surface of the canal,
 - C. The potential exposure to each of these COCs to nearby residents (Adult and child) from the point of well discharge to the canals and the surface of the canal,
 - D. The potential exposure to each of these COCs to nearby industrial workers from the point of well discharge to the canals and the surface of the canal,
 - E. The potential exposure to each of these COCs due to swimming in the canals, as appropriate,
 - F. The potential exposure to an individual that ingests fish caught in the canal, and
 4. Sampling methods/techniques of the various media that contain the contaminants need to be identified and thoroughly described. The collection of data may be supplemented by the use of existing data where available.
 5. The work plan is just as vague when explaining how the data will be interpreted and used to determine the level of risk caused by the presence of VOCs contained in the groundwater. The work plan should describe techniques/modeling to be used to calculate risk if any.
 6. The work plan is vague in describing what, if any, procedures will be proposed to mitigate risks to human health and the environment. The work plan should present engineering procedures/remedial activities to be used to determine the most effective method to be utilized to mitigate the risk.
 7. The work plan states that the scheduling of the risk analysis is contingent upon receipt of project funding. The Working Agreement with RID and approval of work is not based on RID's funding source.

The work plan should be resubmitted with the edits requested above.

Sincerely,



Kevin Snyder, Project Hydrologist
Remedial Projects Unit

Mr. Stanley H. Ashby
October 8, 2010

RPU11:044
Page 3 of 3

Cc: Dennis Shirley, Synergy Environmental
Amanda Stone, WPD Director
Julie Riemenschneider, RPS Manager
Jennifer Thies, RPU Manager