



NEW MEXICO FINANCE AUTHORITY

April 11, 2011

Mr. Steven Deal
NMED – Construction Programs Bureau
1170 North Solano Drive, Suite M
Las Cruces, NM 88001

**RE: Finding of No Significant Impact
Las Cruces PCE Treatment Facility - NMFA Project # 1974-DW**

Dear Mr. Deal:

The City of Las Cruces in cooperation with Daniel B. Stephens & Associates, Inc and Marron and Associates, Inc. has completed an Environmental Information Document dated March 2011 for the above referenced project.

In accordance with the U.S. Environmental Protection Agency-approved environmental review procedures set forth in the New Mexico State Environmental Review Process (SERP) for the Drinking Water State Revolving Loan Fund, the New Mexico Finance Authority (NMFA) has completed its Environmental Assessment for this project. As a result, NMFA issues the attached Finding of No Significant Impact (FNSI) for the following project:

Project: Las Cruces PCE Treatment Facility, Dona Ana County, New Mexico

Project No.: 1974-DW

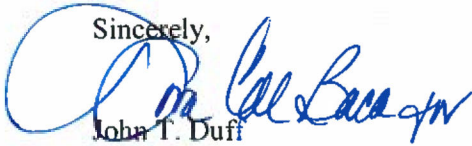
City of Las Cruces DWRLF Loan Amount: \$3,535,000

Dona Ana County DWRLF Loan Amount: \$3,535,000

This project is to be funded in part by (2) DWRLF Loans totaling \$7,070,000. The enclosed Finding of No Significant Impact has been published in the *Albuquerque Journal* on April 11th, 2011, under the Legal Classifieds. An EPA approved 15-day public comment period will be ending on April 26th, 2011, as noted in the FNSI.

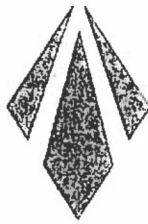
If you have any questions, please contact me or Michael Vonderheide at 1-877-275-6632.

Sincerely,



John T. Duff
Interim Chief Executive Officer

Enclosure (2)
Environmental Assessment /FNSI



NEW MEXICO FINANCE AUTHORITY

NEW MEXICO FINANCE AUTHORITY

FINDING OF NO SIGNIFICANT IMPACT LAS CRUCES PCE TREATMENT FACILITY PROJECT

In accordance with the U.S. Environmental Protection Agency procedures for complying with the National Environmental Policy Act (NEPA) of 40 CFR Part 6 implementing the Drinking Water Revolving Loan Fund (DWRLF), an environmental review has been performed by the New Mexico Finance Authority (NMFA) for the proposed project:

Project: Las Cruces PCE Treatment Facility

Project No.: 1974-DW

Location: City of Las Cruces, Doña Ana County, New Mexico

City of Las Cruces DWRLF Loan Amount: \$3,535,000

Dona Ana County DWRLF Loan Amount: \$3,535,000

1.0 PURPOSE AND NEED

The primary purpose of the proposed project is to remove tetrachloroethylene (PCE) from the City of Las Cruces (City) contaminated ground water supply. PCE was first detected in two municipal drinking water wells in 1993. At the time of listing the Griggs and Walnut Ground Water Plume Superfund Site in 2001, four municipal drinking water supply wells were affected by PCE contamination at concentrations above the maximum contaminant level. The City of Las Cruces and Doña Ana County signed a memorandum of understanding and formed the Joint Superfund Project in response to the Environmental Protection Agency (EPA) Request to Fund. The Proposed Plan and the Record of Decision (ROD), issued by U.S. EPA on June 14, 2007, set forth the selected remedy for the site, which includes actions to address the contaminated ground water. The proposed project is crucial to the overall protection of the drinking water supply in Las Cruces.

2.0 PROPOSED ACTION AND ALTERNATIVES

The City proposes to construct a new water treatment facility, install 1,400 linear feet of new 8-inch underground piping from City Well 18 and City Well 27 to an influent equalization tank, and extend a pipeline 3,400 feet from the City Well 18 to the Upper Griggs Reservoir. The proposed treatment system would consist of a centralized, low-profile tray aeration system at the existing City Well 18 site. The proposed construction method would include cutting the surface, digging a trench with an excavator, placing and pressure testing the new pipe, and backfilling the excavation. The trench, on average, would be 4 feet wide and 4.5 feet deep.

This proposed action is the only phase being implemented under this FONSI. A range of alternatives was considered and are outlined in the Environmental Information Document (EID) and in the Preliminary Engineering Report (PER).

The following are Alternatives outlined in the EID:

- **Alternative A - No Action**, The No Action Alternative would leave the municipal drinking water supply wells in their existing condition affected by PCE contamination. As noted in the ROD (U.S. EPA, 2007), if no hydraulic containment is provided, the PCE plume would eventually migrate and contaminate other municipal wells. The No Action Alternative therefore does not meet the purpose and need of the project.
- **Alternative B – Treatment Location Alternatives**, The treatment location alternatives evaluated the best location for the new treatment facility. The three options include the following:
 - Location Alternative 1: Ground water treatment at each wellhead (Wells 18 and 27)
 - Location Alternative 2: Ground water treatment of both wells at one wellhead (Well 18 or Well 27)
 - Location Alternative 3: Ground water treatment of both wells at a centralized location

These three location alternatives would include pumping the treated water into the potable distribution system at the existing Upper Griggs Reservoir where the water is blended with uncontaminated groundwater. The three location alternatives would also require the construction of new facilities since there are currently no ground water treatment facilities for PCE removal. Location Alternative 2 was moved forward as part of the Recommended Action Alternative.

- **Alternative C – Treatment Technology Alternatives**, There were a total of three treatment technology alternatives evaluated including the air stripping process, the liquid-phase granular activated carbon adsorption process, and the advanced oxidation treatment process. The complete evaluation and analysis for each of these treatment technologies is outlined in the PER.
- **Alternative D – Recommended Action Alternative**, Based on the PER analysis, the air stripping process was selected for incorporation into the Recommended Action Alternative. This alternative consists of a centralized, low-profile tray aeration system at the existing City Well 18 site. With the exception of the influent and effluent equalization tanks, the treatment system would be housed within a 3500-square-foot building to be constructed on City-owned property at the City Well 18 site. Water from supply wells City Well 18 and City Well 27 would initially be pumped to an influent equalization tank through new 8-inch PVC water lines. Treated water would be conveyed to the Upper Griggs Reservoir in existing water lines. Additionally, disinfection of the process stream would be performed prior to conveyance to the drinking water system, according to standard practices of the City Utilities Department.

3.0 POTENTIAL ENVIRONMENTAL IMPACTS AND MITIGATIVE MEASURES

The proposed project will provide short-term economic stimulation and job creation during the construction phase and will provide a safe and reliable water system for current and future water needs. The construction and operation of the proposed water system improvements will likely result in the following insignificant impacts:

- Project-related construction activities will impact one acre. Construction of the proposed project will include a minimal amount of impact to area soils, but no permanent significant adverse impacts are expected.
- Fugitive dust and other emissions causing temporary and localized reduction in air quality during construction.
- Temporary and localized construction-related increase in noise and disruption of traffic patterns.

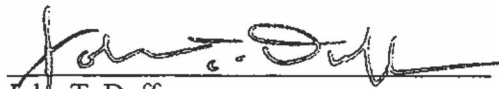
These impacts will be mitigated by implementation of the following measures:

- Since project-related construction activities will impact one acre, National Pollutant Discharge Elimination System (NPDES) coverage for storm water discharges from construction projects must be obtained, and a Stormwater Pollution Prevention Plan (SWPPP) will be prepared by the contractor prior to construction. Best Management Practices will be used to control the impacts of erosion in conformance with the SWPPP for the project.
- The New Mexico Department of Game and Fish recommends that to minimize trapping of wildlife during trenching operation, trenching and backfilling piping be conducted concurrently. If trenches are kept open overnight then escape ramps are to be provided for wildlife.
- An archaeological monitor will be present during excavation along the unnamed road in the vicinity of the pauper's cemetery in case unmarked graves are present within the project area.
- If human burials are encountered during construction activities, all ground disturbing activities in the vicinity of the human remains should cease and the local law enforcement agency, the New Mexico Office of the Medical Investigator, and the New Mexico State Historic Preservation Officer (SHPO) should be contacted.
- In consideration of the project's proximity to the Griggs and Walnut Ground Water Plume Superfund Site, the New Mexico Environment Department Groundwater Quality Bureau (NMED GWQB) recommends that the City or their contractors monitor volatile organic compound (VOC) headspace concentrations during excavation activities as a precautionary measure. The NMED GWQB requests that a concerted effort be made to protect the integrity and accessibility of any existing ground water monitoring wells associated with the monitoring network at the Superfund site.
- The City will coordinate with Hermosa Heights Elementary School regarding construction schedules and activities.
- Because the Griggs and Walnut Ground Water Plume is a Superfund Site and as such is being regulated by the Federal government, the site is not subject to regulation by the NMED Air Quality Bureau (AQB). A permit with the NMED AQB is not required, although permitted emission standards (10 pounds per hour and 10 tons per year) must be met.
- The construction contractor will ensure that no hazardous materials are released during construction activities. Any hazardous materials will be properly monitored, maintained, and stored while present at the construction site. If contaminated soil or ground water is encountered during construction, actions will be taken immediately to protect workers and residents from exposures. The NMED will be contacted for guidance and any contaminated materials will be properly handled.

4.0 CONCLUSIONS

The conclusions presented here are based on the findings of the EID, the cultural resources inventory, and communications with federal, state, and local agencies. The proposed action would not cause any significant impacts to human health or the natural environment. Therefore, a Finding of No Significant Impact (FNSI) is warranted and an Environmental Impact Statement is not required for this action.

Approved:



John T. Duff
Interim Chief Executive Officer, New Mexico Finance Authority

April 5th, 2011
Date

Copies Available: The Documents that support this Statement of Findings are available for public review at the following locations:

1. New Mexico Finance Authority, Attn: Michael Vonderheide, Sr. Program Administrator, 207 Shelby Street, Santa Fe, New Mexico 87501.
2. The City of Las Cruces, Attn: Adrienne Widmer, PE, Project Manager, 680 Motel Boulevard, Las Cruces, New Mexico 88004.

Public Comments: Comments supporting or disagreeing with this decision may be submitted for consideration. All comments should be addressed to:

1. New Mexico Finance Authority, Attn: Michael Vonderheide, Sr. Program Administrator, 207 Shelby Street, Santa Fe, New Mexico 87501.

All comments must be postmarked or delivered on or before April 26th, 2011, 5:00 PM.

NEW MEXICO FINANCE AUTHORITY
ENVIRONMENTAL ASSESSMENT
LAS CRUCES PCE TREATMENT FACILITY PROJECT
for the
City of Las Cruces and Dona Ana County
located in
DONA ANA COUNTY, NEW MEXICO
NMFA PROJECT NUMBER: 1974-DW

BACKGROUND

This Environmental Assessment (EA) reviews the need and feasibility of the proposed City of Las Cruces PCE Treatment Facility Project. Based on the Environmental Information Document (EID), prepared by Marron and Associates, Inc., and Preliminary Engineering Report (PER), prepared by Daniel B. Stephens & Associates, Inc., Parametrix, as directed by the Chief Executive Officer (CEO) of the New Mexico Finance Authority (NMFA), has prepared this EA to fulfill requirements of the State Environmental Review Process (SERP). The EID and PER are separate documents and are available upon request through NMFA.

PURPOSE AND NEED FOR PROJECT

The primary purpose of the proposed project is to remove tetrachloroethylene (PCE) from the City's contaminated ground water supply. PCE was first detected in two municipal drinking water wells in 1993. At the time of listing the Griggs and Walnut Ground Water Plume Superfund Site in 2001, four municipal drinking water supply wells were affected by PCE contamination at concentrations above the maximum contaminant level. The City of Las Cruces and Doña Ana County signed a memorandum of understanding and formed the Joint Superfund Project in response to the Environmental Protection Agency (EPA) Request to Fund. The Proposed Plan and the Record of Decision (ROD), issued by U.S. EPA on June 14, 2007, set forth the selected remedy for the site, which includes actions to address the contaminated ground water. The proposed project is crucial to the overall protection of the drinking water supply in Las Cruces.

PROJECT DESCRIPTION

The proposed project would consist of the construction of a new treatment facility at the existing City Well 18 site, new 8-inch underground piping from City Well 27 to City Well 18, and the extension of a pipeline 3,400 feet from the City Well 18 to the Upper Griggs Reservoir. Existing conveyance lines would be used for the majority of this connection. The connection of City Well 27 to City Well 18 would include a total construction footprint of 0.63 acres and the proposed connection from the City Well 18/City Treatment compound site to the City's distribution system would include a total construction footprint of 0.37 acre for a total project area of approximately 1 acre. The portion of the project area that would be directly impacted by construction activities is located along East Griggs Avenue. City Well 18 is located northwest of East Griggs Avenue and City Well 27 is located near the southeast corner of the East Griggs Avenue/North Walnut Street intersection. The Upper Griggs Reservoir is located east of East Griggs Avenue.

The proposed construction method includes cutting the surface covering, digging a trench with an excavator, placing and pressure testing the new pipe, and backfilling the excavation. The trench, on average, would be 4 feet wide and 4.5 feet deep.

ALTERNATIVES

A. Alternative A - No Action

Under the requirements of the NMFA's State Environmental Review Process, a No Action Alternative must be considered to provide a baseline for comparison of other remedial alternatives. The No Action Alternative would leave the municipal drinking water supply wells in their existing condition affected by PCE contamination. As noted in the ROD (U.S. EPA, 2007), if no hydraulic containment is provided, the PCE plume would eventually migrate and contaminate other municipal wells. The No Action Alternative therefore does not meet the purpose and need of the project.

B. Alternative B – Treatment Location Alternatives

According to the PER (DBS&A, 2010), there were a total of three potential treatment location alternatives evaluated including the following:

- Location Alternative 1: Ground water treatment at each wellhead (Wells 18 and 27)
- Location Alternative 2: Ground water treatment of both wells at one wellhead (Well 18 or Well 27)
- Location Alternative 3: Ground water treatment of both wells at a centralized location

These three location alternatives would include pumping the treated water into the potable distribution system at the existing Upper Griggs Reservoir where the water is blended with uncontaminated groundwater. The three location alternatives would also require the construction of new facilities since there are currently no ground water treatment facilities for PCE removal. Utility locations were also considered in the development of the alternatives.

Location Alternatives 1 and 3 were eliminated from further study because Location Alternative 1 had insufficient space for the proposed facilities and Location Alternative 3 would require acquisition of new property. Location Alternative 2 was moved forward as part of the Recommended Action Alternative and includes the following: new treatment facility at City Well 18, new 8-inch pipeline from City Well 27 to City Well 18, and connection to the City distribution system from the City Well 18 treatment facility.

C. Alternative C – Treatment Technology Alternatives

There were a total of three treatment technology alternatives evaluated including the air stripping process, the liquid-phase granular activated carbon adsorption process, and the advanced oxidation treatment process. Each of these three processes is described in more detail as follows.

Treatment Alternative 1 – Air Stripping Process

Air stripping is a process that has been proven successful in many applications to remove volatile organic compounds such as PCE from ground water. The process operates by partitioning the volatile organic compounds from liquid to vapor phases through mass transfer processes governed by diffusion. Process efficiency is greatly increased by increasing the surface area of the source water that is exposed by air.

Under CERCLA's provisions, an air permit would not be required, but substantive requirements regarding emissions rates must be met. Because of the low PCE concentrations expected in the influent to be treated, the air standards are unlikely to be exceeded.

There are two applications for air stripping including packed tower aeration and low-profile tray aeration. The packed tower aeration application consists of spraying source water through a spray nozzle located at the top of a tower that contains specially designed packing material. As the water descends through the packing material, air is forced up through the column, stripping off the volatile compounds. A pump at the bottom of the tower collects the treated water. The low-profile aeration application consists of forcing counter-current air through horizontally extended trays to transfer PCE from water to the air.

Treatment Alternative 2 – Liquid-Phase Granular Activated Carbon Adsorption Process

Liquid-phase granular activated carbon adsorption can effectively remove PCE from ground water by pumping ground water through one or more vessels containing granular activated carbon adsorption media. The activated carbon attracts and absorbs PCE, as well as certain metal and inorganic molecules. The dissolved PCE molecules adsorb onto the surfaces of activated carbon due to the porosity and large internal surface area of the media. Water is passed through the vessels relatively quickly. Spent carbon can be regenerated in place, removed and regenerated at an off-site facility, or removed and disposed of properly.

Treatment Alternative 3 – Advanced Oxidation Process

An advanced oxidation process that uses ozone and hydrogen peroxide can effectively remove PCE from ground water. However, the process is better suited to treat contaminated water sources with recalcitrant contaminants that are difficult to remove. The advanced oxidation process consists of mixing ozone (generated on-site using ozone generators) and hydrogen peroxide together in a reaction chamber to form hydroxyl radicals. The hydroxyl radical is a strong and short-lived oxidizing agent. The oxidizer is injected into the source water stream at numerous locations and PCE is oxidized. In this application, the most likely byproducts of PCE oxidation include chloride, carbon dioxide gas, and water.

D. Alternative D – Recommended Action Alternative

Based on the PER analysis, Treatment Alternative 1 was selected for incorporation into the Recommended Action Alternative. This alternative consists of a centralized, low-profile tray aeration system at the existing City Well 18 site. With the exception of the influent and effluent equalization tanks, the treatment system would be housed within a 3500-square-foot building to be constructed on city-owned property at the City Well 18 site. Water from supply wells City Well 18 and City Well 27 would initially be pumped to an influent equalization tank through new 8-inch PVC water lines. Approximately 1400 linear feet of new water line would be installed.

The proposed treatment facility layout includes low-profile tray aeration units, equalization tanks, transfer pumps, chemical storage, electrical component and control room, office, restroom, and additional space for optional metals treatment. Transfer pumps would process water through the low-profile tray aeration units to an effluent equalization tank. The tank has a capacity of 20,000 gallons, and would accommodate a total hydraulic flow of 500 gallons per minute (gpm), which is greater than the initial combined flow from the two extraction supply wells of 200-300 gpm.

Treated water would be conveyed to the Upper Griggs Reservoir in existing water lines. Additionally, disinfection of the process stream would be performed prior to conveyance to the drinking water system, according to standard practices of the City Utilities Department. Additionally, process stream disinfection would be performed prior to conveyance to the drinking water system, according to standard practices of the City Utilities Department. None of the equipment has special power requirements. At a minimum, optional metal treatment would require additional storage vessels, backwash water pumps and storage tanks, and chemical storage tanks.

ENVIRONMENTAL SETTING

Las Cruces is located in the Mesilla Valley in the central portion of Doña Ana County, New Mexico. The County borders Mexico and Texas to the south. The area is within the Chihuahuan Desert region. Las Cruces is the center of an agricultural region irrigated by the Rio Grande that flows west of the City.

IMPACTS OF THE PROPOSED PROJECT

The proposed project was analyzed to identify actions that individually, cumulatively over time, or in conjunction with other Federal, State, local or private actions have a significant effect on the quality of the human environment. All affected Federal, State, and local agencies were contacted, supplied a copy of the EID, and provided the opportunity to comment on potential impacts. The majority of potential impacts associated with the proposed project will be short-term and temporary due to actual construction activities, and will cease immediately upon completion of construction work in any particular area. The potential short and long-term, direct, indirect and cumulative impacts resulting from the proposed action are identified and discussed below.

1. Biological Resources including Threatened and Endangered Species: The project area was surveyed by a qualified biologist to document vegetation, wildlife, and to determine the possible impact to endangered, threatened and sensitive species (EID 2011).

The project area supports disturbed Chihuahuan Desert Scrub. The dominant species present in the project area include mesquite (*Prosopis glandulosa*), creosotebush (*Larrea tridentata*), prickly pear (*Opuntia* spp.), buffalo gourd (*Cucurbita foetidissima*), yucca (*Yucca elata*), snakeweed (*Gutierrezia* spp.), and Russian thistle (*Salsola tragus*). No rare plant communities occur within the project area.

The project area occurs in a heavily disturbed urban area and does not provide high quality wildlife habitat. No riparian habitat is present within or adjacent to the project area, and no designated critical habitat is located in the project area. The Proposed Action is expected to have little effect on wildlife.

No target species, protected under the Endangered Species Act, or their sign were observed during the biological survey. The existing habitat was highly disturbed and was not suitable for any threatened or endangered species.

After completion of the project, disturbed areas will be stabilized or seeded with certified weed-free native vegetation to reduce soil erosion and surface water quality impacts as well as improve wildlife habitat.

The NMDGF recommends that to minimize trapping of wildlife during trenching operation, trenching and backfilling piping be conducted concurrently. If trenches are kept open overnight then escape ramps are to be provided for wildlife.

2. Archeological, Cultural, and Historic Resources: A Class III pedestrian cultural resource survey was conducted in November 2009, and the Archaeological Management System (ARMS) records were examined to identify known cultural resources in the area. No previously recorded or newly discovered cultural resource sites were discerned within the project area. Most of the surveyed space is severely disturbed urban right-of-way that has been built up within the last 30 years and none of the adjacent buildings within 100 feet of the Area of Potential Effect are historic.

The Doña Ana County pauper's cemetery is located near the project area and outside the right-of-way at the northwest corner of the intersection of Griggs and the unnamed street that extends north to the maintenance facility. The proposed PVC pipeline would be located on the opposite side of the pavement from the cemetery, and no impact is anticipated. Nonetheless, the cultural resource report recommends that an archaeological monitor be present during excavation along the unnamed road in case unmarked

graves are present within the project area.

The cultural resource inventory received the concurrence of the New Mexico State Historic Preservation Officer (SHPO) with the inclusion of the following mitigation measures:

- An archaeological monitor will be present during excavation along the unnamed road in the vicinity of the pauper's cemetery in case unmarked graves are present within the project area.
- If human burials are encountered during construction activities, all ground disturbing activities in the vicinity of the human remains should cease and the local law enforcement agency, the New Mexico Office of the Medical Investigator, and the New Mexico SHPO should be contacted.

3. Floodplains/ Wetlands: Executive Order (EO) 11988 regarding floodplain management requires that any potential impacts to floodplains be assessed to reduce the risk of flood loss, minimize the impact of floods, and preserve the values served by floodplains. Based on review of the Federal Emergency Management Agency flood plain maps and field survey, no designated floodplains or special flood hazard areas are present within the project area. No mitigation is required.

4. Surface Water Resources: There are no waters of the U.S. within the project area. The USACE has been contacted about the project and has indicated that a Clean Water Act Section 404 permit would not be required for construction of the Proposed Action. Since the project will impact 1.0 acre, NPDES CGP coverage for storm water discharges from construction projects will be obtained, and a SWPPP will be prepared by the contractor prior to construction.

The construction activities associated with the Preferred Alternative will likely involve the use of heavy equipment, thereby leading to the possibility of contaminant releases (e.g. fuel, hydraulic fluid, etc.) associated with equipment malfunctions. All parties involved in the project are required to be aware of discharge notification requirements contained in 20.6.2.1203 NMAC.

5. Ground Water Resources: It is unlikely that implementation of this project would have any adverse effect on ground water quality in the area. However, the project is likely to involve the use of heavy equipment, thereby leading to the possibility of contaminant releases (e.g. fuel, hydraulic fluid, etc.) associated with heavy equipment malfunctions. The NMED-Ground Water Quality Bureau (GWQB) advises all parties involved in the project to be aware of the discharge notification requirements contained in 20.6.1203 NMAC. Compliance with the notification and response requirements will ensure the protection of ground water quality in the vicinity of the project.

In consideration of the project's proximity to the Griggs and Walnut Ground Water Plume Superfund Site, the NMED-GWQB recommends that the City or their contractors monitor volatile organic compound (VOC) headspace concentrations during excavation activities as a precautionary measure. The GWQB requests that a concerted effort be made to protect the integrity and accessibility of any existing ground water monitoring wells associated with the monitoring network at the Superfund site.

6. Socioeconomic/ Environmental Justice:

According to the U.S. Census Bureau the population of the City of Las Cruces is 74,267 and Hispanics are the largest minority group in the City representing 51.7% of the total population. The Potential Environmental Justice (EJ) for the surrounding project area was ranked at 12, which is within the low vulnerability ranking. The proposed water system project is not expected to have an adverse or disproportional impact on low income or minority groups. The proposed water treatment facility would be used to treat ground water to meet the standards of the Safe Drinking Water Act. Treated water would be introduced into the municipal water supply and served to water service customers. The proposed project is intended to have a long-term benefit for the community.

7. Land Use and Land Values: The Natural Resources Conservation Service (NRCS) was consulted in regard to the Farmland Policy Protection Act. The project area is developed and no agricultural activities occur within the project area. No prime, unique, or locally important farmland exists within the project area. No mitigation measures are required.

8. Soils: Construction of the proposed project will include a minimal amount of impact to area soils, but no permanent significant adverse impacts are expected. Best Management Practices (BMP) will be used to control the impacts of erosion in conformance with the SWPPP for the project.

9. Noise: No long-term noise impacts are anticipated from the project. The PCE treatment facility would be housed within a building. No equipment or operational noise is expected to adversely impact the area. During construction, noise levels would be higher than normal due to the operation of construction equipment. Construction activities will be primarily limited to daylight hours when loud noises are more tolerable and minimize impacts on nearby residential areas. The City will coordinate with Hermosa Heights Elementary School regarding construction schedules and activities.

10. Energy: Irreversibly and irretrievably committed resources associated with the facility are primarily the materials needed for the construction, and the fossil fuels and energy resources needed to operate and maintain the facility. In general, short-term energy demands would increase during the construction phase, including fuel use for construction equipment. These impacts are considered to be minor. The operation of the public water system requires energy, but no long-term energy impacts are expected in association with the proposed project. No mitigation is required.

11. Air Quality: Because the Griggs and Walnut Ground Water Plume is a Superfund Site and as such is being regulated by the Federal government, the site is not subject to regulation by the NMED AQB. A permit with the NMED AQB is not required, although permitted emission standards (10 pounds per hour and 10 tons per year) must be met. The project has a calculated emissions rate of 0.013 pounds per hour and 0.05 tons per year, which are orders of magnitude below these regulated thresholds. If NMED or the City were to require additional treatment, vapor-phase granular activated carbon adsorption is a treatment process that is available to remove PCE from the air after the air stripping process. The process operates by passing contaminated air through one or more vessels containing granular activated carbon media. PCE molecules adsorb onto the activated carbon surfaces (EID 2011).

12. Visual Impacts: The proposed site is located within an existing area of low visual sensitivity. The placement of the treatment facility is in character with the surrounding land use. The proposed project would have no effect on the aesthetic values or scenic quality in the area. No mitigation measures are required.

13. Public Health & Safety: The construction contractor will ensure that no hazardous materials are released during construction activities. Any hazardous materials will be properly monitored, maintained, and stored while present at the construction site. If contaminated soil or ground water is encountered during construction, actions will be taken immediately to protect workers and residents from exposures. The NMED will be contacted for guidance and any contaminated materials will be properly handled.

14. Transportation: The construction contractor will be required to utilize appropriate traffic safety measures. Access to residences, community facilities, and businesses will be maintained during construction, both for the public and for emergency response vehicles. The City of Las Cruces will coordinate with the Hermosa Heights Elementary School regarding construction schedules and activities.

15. Coastal and Barrier Resources: There are no Coastal or Barrier Island Resources in New Mexico.

16. Cumulative Impacts: The cumulative and secondary effects of the project may include stimulated growth in the area with associated loss of vegetation and wildlife habitat, increased traffic, and possible changes in the social and economic character of the area. Some growth in the area would likely occur without the improvement of the water system. Vacant parcels near the project area would likely be developed into commercial, office, or light industrial land uses as Las Cruces grows as a community. Routine maintenance projects for streets, waterlines, sewer lines, and communication lines would probably be planned and completed in future years. No mitigation measures are recommended in regards to cumulative impacts of the proposed project.

CONSULTATION, COORDINATION, AND PUBLIC INVOLVEMENT

After review of the Draft EID by the NMFA, a public hearing to present the PER and Draft EID was held on December 15, 2010, at the Lynn Middle School Cafeteria in Las Cruces, NM. Thirteen stakeholders attended the public hearing. A legal notice was published in the Las Cruces newspaper advertising the public hearing for the Proposed Action at least 45 days prior to the public hearing date as well as announcing the availability of the EID to the public. Appendix E of the Final EID includes documentation of the public hearing including an affidavit of the legal notice publication, sign-in sheet for the public hearing, hearing summary, and a transcript of public comments.

The coordination process included contacting the following agencies:

- U.S. Army Corps of Engineers, Operations Division, Regulatory Branch
- U.S. Department of Agriculture, Natural Resources Conservation Service
- U.S. Department of Interior, Fish and Wildlife Service
- U.S. Department of Interior, National Park Service
- U.S. Environmental Protection Agency
- Federal Emergency Management Agency
- New Mexico Department of Game and Fish, Conservation Services Division
- New Mexico Energy, Mineral, and Natural Resources Department
- New Mexico Environment Department
- New Mexico Office of Cultural Affairs, Historic Preservation Division
- New Mexico Office of the State Engineer
- City of Las Cruces Floodplain Administrator
- Mescalero Apache
- Isleta Pueblo
- White Mountain Apache
- Kiowa Tribe of Oklahoma
- Navajo Nation
- Ysleta del Sur
- Comanche Indian Tribe
- Fort Sill Apache

Consultation letters were mailed to all affected federal, state, and local agencies in regard to the proposed project. Copies of the agency responses are included in Appendix B in the Final EID.

Responsiveness Summary

Written comments were received from the public and are included in the responsiveness summary of the Final EID and in Appendix F. In response to comments from the NMED Ground Water Quality Bureau (Appendix B, EID 2011), environmental commitments were included in the EID including monitoring of VOC headspace concentrations during excavations as well as protection of monitoring wells within the

Superfund site. In response to comments from the NMED Surface Water Quality Bureau, a commitment was included regarding NPDES permit coverage for construction of the proposed project.

The public comment period extended from November 1 through December 30, 2010. Comments received during the hearing included concerns on how the plume was detected, investigations, and the extent of the ground water plume. Other public comments and questions were received from stakeholders on topics such as the project timeline and cost, source of the PCE contamination, importance of water, extent of the ground water plume, air emissions, construction noise impacts, chemicals used in the treatment process, health issues, and the alternatives selection. Engineering information was provided on the project components, the Preliminary Engineering Report, existing facilities, project need, alternatives considered, residuals management, alternative evaluation, and the proposed project. The environmental permitting process was also discussed including specific issues such as land use, water, air quality, biological resources, cultural resources, socioeconomics, environmental justice, and other resources. As a result of the stakeholder input, a commitment has been added to coordinate with Hermosa Heights Elementary School regarding construction schedules and activities.

Recommendation

The majority of the impacts associated with the proposed project will be short-term and temporary due to actual construction activities, and will cease immediately upon completion of construction work in any particular area. There are no significant adverse environmental impacts associated with the proposed action that cannot be reduced to acceptable levels.

Based upon completion of this Environmental Assessment, and a detailed review of the supporting information contained in the Environmental Information Document the proposed project is considered to be cost effective and environmentally sound. Therefore, it is recommended that a **Finding of No Significant Impact** be issued for this project.

REFERENCES

City of Las Cruces PCE Treatment Facility Final Environmental Report, (EID), Marron and Associates, Inc. and Daniel B. Stephens Associates, Inc., March 2011.