

# Narrative Information Sheet

## IV.D.1. Applicant Identification

City of Bloomfield  
915 N. First Street  
Bloomfield, NM 87413

## IV.D.2. Funding Requested

### IV.D.2.a. Grant Type

Grant Type: Single Site Cleanup

### IV.D.2.b. Federal Funds Requested

#### IV.D.2.b.i., b.ii., b.iii. Funds Requested and Waiver Requests

- i. \$498,416.66
- ii. I am not requesting a cost share waiver.
- iii. I am not requesting a waiver of the \$500,000 limit.

## IV.D.3. Location

The site is located in the City of Bloomfield, San Juan County, New Mexico.

## IV.D.4. Property Information

The site is known as the former Aerex Refinery, and is split into two parcels, identified as the East and West parcels. The East parcel is located on the east side of the intersection of West Blanco Blvd and North 5th Street, known as Account R0061021. The West parcel is located on the west side of the intersection of West Blanco Blvd and North 5th Street, known as Account R4005131. The zip code is 87413.

## IV.D.5. Contacts

### IV.D.5.a. Project Director

Name: Jason J. Thomas, PE, Assistant City Manager  
Ph: 505-333-7816  
E-mail: [jthomas@bloomfieldnm.gov](mailto:jthomas@bloomfieldnm.gov)  
Mailing Address:  
City of Bloomfield  
915 N. First Street  
Bloomfield, NM 87413

### IV.D.5.b. Chief Executive/Highest Ranking Elected Official

Name: Cynthia Atencio, Mayor  
Ph: 505-632-6303  
E-mail: [catencio@bloomfieldnm.gov](mailto:catencio@bloomfieldnm.gov)

Mailing Address:  
City of Bloomfield  
915 N. First Street  
Bloomfield, NM  
87413

#### **IV.D.6. Population**

The U.S. Census estimated Bloomfield's population at **7,421** on April 1, 2020.

#### **IV.D.7. Other Factors**

The City of Bloomfield's population is less than 10,000.

The San Juan Generating Station, a coal-fired power plant, is located in San Juan County. The plant, owned in part by PNM, is planning to close in 2022. Per the website [pnm.com/reducing-coal](http://pnm.com/reducing-coal) :

"PNM customers have benefited from the affordability and dependability of coal generation for many decades, primarily from the San Juan Generating Station near Farmington, New Mexico. PNM operates the plant and is a partial owner of the plant. In 2017, data compiled for our integrated resource plan (IRP) showed that removing coal from our energy mix would provide a long-term cost benefit to customers. PNM has proposed drastically reducing coal power generation by retiring the San Juan Generating Station by the end of 2022 and completely removing coal from our generation mix by exiting the Four Corners Power Plan when our purchasing contracts with that facility end in 2031."

#### **IV.D.8. Letter from the State or Tribal Environmental Authority**

Please find attached a letter dated November 4, 2021 from the New Mexico Environment Department acknowledging our intent to apply for FY22 grant funds and conduct cleanup activities.

#### **IV.D.9 Releasing Copies of Applications**

Not Applicable.

# **Narrative/Ranking Criteria for Cleanup Grants**

## **IV.E.1 Project Area Description and Plans for Revitalization**

### **IV.E.1.a Target Area and Brownfields**

#### **IV.E.1.a.i Background and Description of Target Area**

The City of Bloomfield is located in the San Juan Basin, a major producer of oil and natural gas. The City is dotted with well sites, criss-crossed with oil and gas transmission lines, and home to active refineries within the city limits. Some of these oil and gas facilities have been abandoned. Bloomfield is known as an oil and gas town with many residents being descendants of oilfield workers who were with El Paso Gas, Enterprise, or many other oilfield service businesses. When the oilfield boomed, Bloomfield did well. When it struggled, Bloomfield struggled. There were also many smaller family-owned oil and gas producers and refiners. As assets changed hands, some facilities were retired or abandoned. The Aerex Refinery was one such facility. The Aerex Refinery started operations in 1932, when the area was an agricultural cross-roads surrounded by cropland and very few residences. The refinery operated until the 1960's and was dismantled in the 1980's (Kleinfelder 2006). Aerial images starting in 1954 show the refinery in operation, and surrounded by irrigated agricultural land. There was no housing adjacent to the facility. The next image from 1964 shows a few houses on subdivided land to the east of the site. In the 1972 image, a few more houses appeared to the east. By the 1978 image, densely developed housing had appeared to the east and west. In the 1981 image, more housing was developed adjacent to the site. By 1986, densely-developed subdivisions nearly surrounded the site. A multi-family low-income development was constructed just north of the site, across West Blanco Blvd. Many of the above-ground storage tanks were still standing. Before 1997 one of the large above ground tanks were dismantled. Up to present-day, some structures are still standing, and are surrounded by densely-populated neighborhoods.

The site has been well-known as a former refinery with environmental contamination. This condition has prevented the site from being developed. The cleanup activities will be performed on this site to enable the land to be re-used by the City for beneficial open space and recreation facilities.

#### **IV.E.1.a.ii Description of the Proposed Brownfield Site(s)**

The site targeted for cleanup are two parcels where the former Aerex Refinery was located. The site has been characterized many times. The investigations have consistently shown that soils and groundwater on the East parcel are impacted with petroleum contamination from onsite refinery operations. Soils and groundwater on the West parcel are also contaminated, but the source was a third adjacent parcel currently owned by Marathon Oil, and the contamination is isolated and will not be disturbed with the proposed use as parks and recreational facilities.

Older site investigations are summarized in the Kleinfelder report (2006). In 1990, the New Mexico Environmental Improvement Department (NMEID) Superfund Bureau conducted a soil vapor survey, sampled the soils, and installed monitoring wells. Soils with hydrocarbon

staining and odor were observed. A sheen on groundwater was observed. Benzene, toluene, ethylbenzene, and xylene (BTEX) were all detected in the soils. Benzene and naphthalene was detected in the groundwater, which exhibited a sheen. In 1994, Fluor Daniel Arcs Team Inc. conducted a Site Inspection Prioritization at the property to determine if the contamination and associated wastes were excluded from the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) definition of hazardous substances under the Petroleum Exclusion Act. The investigation concluded that the wastes were not CERCLA-eligible, and no further remedial action was planned under CERCLA. The investigation estimated that 70,000 cubic feet of soils were potentially contaminated with petroleum compounds.

The Kleinfelder Phase 1 Subsurface Assessment performed in 2006 focused on the East Parcel. A total of 69 direct push soil borings were performed. A new monitoring well was also installed in one of the borings, near the location of a missing well from a previous field investigation. Groundwater from previously-installed wells was also sampled. Light Non-Aqueous Phase Liquid (LNAPL) was observed on the groundwater. Results indicated that groundwater was contaminated with Naphthalene (180 µg/L) above the New Mexico Water Quality Control Commission ((NMWQCC) standard of 30 µg/L. Soil sample results indicated Total Petroleum Hydrocarbon - Gasoline Range Organics (TPH-GRO) concentrations as high as 1,400 mg/kg, Diesel Range Organics (DRO) as high as 4,100 mg/kg, and Oil Range Organics (ORO) as high as 900 mg/kg. Total TPH was detected across the East parcel as high as 5,500 mg/kg NMWQCC Standard is 100 mg/kg). The report estimated that 7,600 cubic yards of actionable soil existed on the site.

Newer Environmental Site Assessments (ESAs) funded by the EPA and New Mexico Environment Department (NMED) at the request of the City have been performed on both the East and West Parcels. The City of Bloomfield also participated in the Phase II ESA. A Phase I ESA was performed by Weston Solutions, Inc. in November 2019. To prepare for the acquisition of the property, EA Engineering, Science, and Technology completed another Phase I ESA in October 2021. EA Engineering also completed a Phase II ESA in October 2021. Both parcels were investigated, but more field work was completed on the previously unexplored West Parcel. The investigation included soil sampling stockpiles on both parcels, Ground Penetrating Radar (GPR) Survey on the West Parcel in search of buried tanks or pipelines, Passive Soil Gas (PSG) Survey with 59 samplers on the West Parcel, soil sampling of 9 borings on the East Parcel and 10 Borings on the West Parcel using Direct Push Technology (DPT). Groundwater on the East Parcel was investigated using the existing monitoring wells and by using a Hydropunch tool in the bottom of the 9 borings. Groundwater on the East Parcel was investigated through the existing monitoring wells and by using the Hydropunch tool in the bottom of 7 of the 10 new borings. Active Soils Gas (ASG) Sampling was also performed, three from each parcel, and one QA/QC sample, to assess the vapor intrusion pathway. To investigate anomalies found from the GPR survey on the West Parcel, the City of Bloomfield contracted with an oilfield company to perform hydro-excavation (potholing) near two abandoned wells to determine if abandoned process piping or underground storage tanks were present. The City also participated in this investigation using a mini-excavator to cut approximately 600' of 6'-deep trenches across the West Parcel. The stockpiles did not contain contaminants that exceeded the NMED Soil Screening Levels (SSLs).

The GPR Survey Results indicated several unknown anomalies, which the subcontractor indicated could be underground storage tanks. Additional site investigations were performed by the City of Bloomfield with a contractor and city forces. No process piping or buried storage tanks were found by the City. The trench profiles in approximately 600' of 6' deep trenches showed no signs of contamination, and most profiles appeared to be previously undisturbed sand.

The PSG Survey results detected toluene, ethylbenzene, isopropylbenzene, trimethylbenzenes, xylenes, and TPH. These results were used to choose the boring locations. Out of the 9 soil borings on the East Parcel, one sample exceeded the Residential and Industrial SSL's for DRO and MRO with concentrations of 11,000 mg/kg and 6,170 mg/kg, respectively. Out of the 10 soil borings on the West Parcel, two samples exceeded SSLs. Sample WSB05-24 exceeded the Residential and Construction Worker SSLs for 1,1,2-trichloroethane with a concentration of 4.05 mg/kg and the Residential SSL for GRO with a concentration of 141 mg/kg. Sample WSB09-26.0 also exceeded the Residential SSL for GRO with a concentration of 122 mg/kg.

Groundwater on the East Parcel was found to contain the Volatile Organic Compound (VOC) benzene at 12 µg/L in sample ESB01 and cyclohexane was found in ESB05 with a concentration of 357 µg/L. Groundwater in Monitoring Well 1 was also noted as containing a slight LNAPL sheen. Polyaromatic Hydrocarbons (PAH) were also detected in the groundwater in the form of naphthalenes at a concentration of 161.6 µg/L, which exceeded the NMWQCC standard. Metals were also detected in groundwater that exceeded the NMWQCC standards, but they are not the target of the clean-up contaminant as they are thought to be naturally-occurring. Groundwater on the West Parcel was found to contain no VOCs above the NMWQCC standards. However, some PAH's were detected. Metals were also detected that exceeded the NMWQCC standards, but they are not the target of the clean-up. ASG sample analyses from the East and West Parcels did not exceed the New Mexico Vapor Intrusion Screening Levels (VISLs).

The stockpiles did not contain contaminants that exceeded the NMED Soil Screening Levels (SSLs).

#### Target Contaminants

The contaminants that will be targeted with the clean-up are located on the northern end of the East Parcel, and are centered around ESB01-8.0. This sample exceeded the Residential and Industrial SSL's for DRO and MRO with concentrations of 11,000 mg/kg and 6,170 mg/kg, respectively. Groundwater from this soil boring also yielded Benzene at 12 µg/L and 161.6 µg/L. It is estimated that approximately 4,333 CY of contaminated soil will need to be excavated from this location, with a target depth of 15'. The West Parcel contained contaminated soil, but it was located at 26' below ground, and will not be disturbed by future use of the property. Therefore, no cleanup activities are planned for the West Parcel.

#### **IV.E.1.b Revitalization of the Target Area**

#### **IV.E.1.b.i Reuse Strategy and Alignment with Revitalization Plans**

##### Reuse Strategy/Projected Reuse

The reuse strategy for the site in the targeted area is to develop parks/greenspace with recreational facilities. Ideas collected from the community include walking trails, multi-use sports fields, skate/bmx park, food truck court, community garden, a playground for differently-abled children, workout park, and other outdoor amenities. Redeveloping the site to provide these improvements would also enhance the visual appearance, which would improve nearby property values. Abandoned foundations, invasive weeds and trees, and stockpiles create a negative visual impact on the neighborhood. Once the clean-up project is completed, the City plans to make improvements such as eradicating invasive plants, blading out stockpiles, and demolishing old foundations with its own forces (outside of the Brownfields Grant). Intermediate uses such as perimeter walking trails can be installed economically to put the site into beneficial use while the city plans for importing topsoil and constructing irrigation to set the stage for future greenspace.

##### Alignment with the City's Land Use and Revitalization Plan

The City's Comprehensive Plan lists the goal of the Parks and Recreation Department as "Design and provide ample, diverse, safe, affordable, and accessible parks, open spaces and recreational facilities to meet the current and future needs of Bloomfield's various age and interest groups and to promote a sense of community, pride, family and multi-generational interaction." The City's plan for the site aligns with this goal by providing the parks and open space described above.

This project is also ranked Number 6 in the City's Infrastructure Capital Improvement Plan (ICIP) FY 2023-2027. The project's ranking in this plan makes it eligible for capital outlay funds at the state level, and demonstrates the City's commitment to completing the project. The ICIP is not a "wish list" but a planning tool the City uses to focus its resources on critical infrastructure projects.

##### Public Involvement in the Reuse Plan

Due to growing interest in the redevelopment of this site, the City created a webpage on its website dedicated to information on the re-use of this property: [bloomfieldnm.gov/publicworks/brownfields.html](http://bloomfieldnm.gov/publicworks/brownfields.html).

Mayor Cynthia Atencio issued a challenge to Bloomfield Municipal School students to re-envision the use of the site, develop reuse ideas, and present them to City Council. A small group of students, with support from their teachers, met virtually several times in 2020 during the COVID-19 pandemic to compile and refine their ideas. On January 25, 2021, the students offered a detailed presentation to City Council, which can be viewed on the City's Brownfields webpage. Students recommended the following improvements, complete with proposed layouts: pond with seating areas, skate/bmx park, community garden, drive-in movie theater, beautification opportunities including trees and landscaping.

Scott Nightingale, KSU-TAB expert, and NMED Brownfields Program Staff joined the City to hold a Community Workshop on July 20, 2021. The attendees were divided into groups and challenged to select their top five reuse ideas for the site. Ideas included walking trails, multi-use sports fields, skate/bmx park, food truck court, community garden, a playground for differently-abled children, workout park, and other outdoor amenities. A landscape architect

contracted by KSU-TAB developed a rendering of these ideas, which also included perspective views. These renderings can be viewed on the city's Brownfields webpage.

By challenging students and holding the Community Workshop, Bloomfield City Council has encouraged the citizens and students to become involved in the redevelopment of this site, and to drive what improvements are made on the property.

#### **IV.E.1.b.ii Outcomes and Benefits of Reuse Strategy**

The cleanup of the site with this grant will directly facilitate the development of parks, recreational facilities, and greenspace by allowing proposed improvements to move forward. The removal of contaminated soil will allow the city to safely construct trails, irrigation, sports fields, playgrounds, picnic shelters, and other amenities. All of these improvements are included in the City's reuse plans.

The site has been out of use since the 60's, was partially dismantled in the 80's, with subdivisions being developed around the site in the mid-80's. The site is now in the center of the City, with the known environmental conditions from the refinery operations preventing its redevelopment.

#### **IV.E.1.c Strategy for Leveraging Resources**

##### **IV.E.1.c.i Resources Needed for Site Reuse**

The City is eligible to apply for many different types of grants from the state and federal agencies. At the state level, the City can apply for Capital Outlay funds from the State Legislature. This project is ranked Number 6 in the City's Infrastructure Capital Improvement Plan FY 2023-2027. The project's ranking in this plan makes it eligible for capital outlay funds. The City has already committed funding to the project by having a boundary survey (\$5,085) and deed descriptions prepared and having subsurface investigations performed as part of the Phase II ESA (\$6,361).

Additionally, the City intends to perform other site improvements with its own forces to prepare the site for reuse as parks, recreation, and greenspace. City forces will be used to eradicate invasive plants (i.e., siberian elm), demolish exposed foundations, and blade out uneven ground. Further, the Parks and Facilities Budget Line Item "Outside Services" will be used to purchase materials for improvements outside of the grant, such as crusher fines for trail building, fencing, and extension of irrigation lines. A report showing the remaining balance of this budget line item is attached.

##### **IV.E.1.c.ii Use of Existing Infrastructure**

Once the cleanup work is completed on the East Parcel, the existing concrete aprons off West Blanco Blvd can be used to create a parking lot with two entrances. Further, an existing irrigation water line that runs along the property's eastern boundary can be tapped to provide irrigation for future landscaping and grass. Sidewalks on the north end of the East and West parcels will be incorporated into the proposed walking trail loops to create connectivity to the streets and the site. Future development of the site will require drop inlets to promote good drainage. The drop inlets will be tied into the existing storm sewer under 5th Street.

## **IV.E.2 Community Need and Community Engagement**

### **IV.E.2.a Community Need**

#### **IV.E.2.a.i The Community's Need for Funding**

The U.S. Census estimated Bloomfield's population at **7,421** on April 1, 2020. The City does not have the financial resources to tackle the cleanup on its own due to its limited budget. The grant will help the City meet the needs of its citizens by removing this unproductive, blighted property, and putting it to beneficial use for the community. The reuse also aligns with the City's Comprehensive Plan.

#### **IV.E.2.a.ii Threats to Sensitive Populations**

##### **IV.E.2.a.ii.1 Health or Welfare of Sensitive Populations**

Located directly across W. Blanco Blvd from the site is Pinos Blancos II Apartments, a low-income housing tax credit property listed on [resources.hud.gov](https://resources.hud.gov). The redevelopment of the site will provide free parks and recreation opportunities for the residents within short walking distance. The reuse plan will promote outdoor exercise for these residents who currently cannot use the property.

Bloomfield Nursing and Rehabilitation is located about 300 ft to the northeast of the East Parcel. The facility is a skilled nursing facility offering post-hospital, short- and long-term rehabilitation, and respite care. The planned improvements will provide much-needed outdoor recreation and open space for this group.

##### **IV.E.2.a.ii.2 Greater Than Normal Incidence of Disease and Adverse Health Conditions**

The grant will facilitate the reduction of threats to the surrounding neighborhoods and the City from petroleum contamination. The residents of Bloomfield Nursing and Rehabilitation will benefit from the improvement in outdoor recreation opportunities. Children at Los Pinos Apartments will have more opportunity for outdoor activities.

##### **IV.E.2.a.ii.3 Promoting Environmental Justice**

The persistence of the abandoned Aerex Refinery site, its petroleum contamination, and partially demolished foundations maintain a negative environmental consequence on the neighboring low-income housing development, surrounding neighborhoods, and the City as a whole. The site is inaccessible for any use in its current state, and blocks any redevelopment due to the expense of the cleanup.

### **IV.E.2.b Community Engagement**

#### **IV.E.2.b.i Project Involvement**

Bloomfield City Council and Bloomfield Residents will have input on reuse plans for the site. Additionally, the Four Corners Fastpitch Association has shown a keen interest in the development of multi-use sports fields, where youth football, soccer, softball, and baseball, could be accommodated in combined facilities. The Bloomfield Youth Athletic Football League



has also expressed an interested in developing a field at the site. The Four Corners Soccer League will also be consulted by city staff.

**IV.E.2.b.ii Project Roles**

List of Organizations/Entities/Groups & Roles<sup>1</sup>

Name of organization/entity/group	Point of contact (name, email & phone)	Specific involvement in the project or assistance provided
NMED Voluntary Remediation and Brownfields Program	Savannah Richards, savannah.richards@state.nm.us, 505-670-2221	Consult and guide the City's Project Manager in the implementation of the cleanup grant, assist in the enrollment of the site into the state's voluntary remediation program, consult the City on what improvements can be made to the site.
City of Bloomfield	Jason Thomas, jthomas@bloomfieldnm.gov, 505-333-7816	Project Manager, procure consultant and contractor, manage grant, manage cleanup construction contract.
<i>Bloomfield City Council</i>	Cynthia Atencio, Mayor, catencio@bloomfieldnm.gov, 505-632-6303	Mayor of Council, which will be responsible for approving the cleanup grant agreement and contracts
Bloomfield Citizens		During open Council meetings, citizens will have the opportunity to make suggestions and comment on future site uses, both interim and permanent.

**IV.E.2.b.iii Incorporating Community Input**

Once the grant is awarded, Bloomfield City Council will approve the selection of a consultant to prepare the plans and specifications. Council will also approve the award of the

cleanup contract. At each of these milestones, the public will have the opportunity to review and make comments on the Council Agenda items. Further cleanup progress will be reported to Council at regularly-scheduled Council meetings, which are always advertised and open to the public.

In the event of COVID-19 restrictions, meetings will be held via ZOOM, and the public will have the opportunity to review the Council Agenda items and make comments during the virtual meetings.

### **IV.E.3 Task Descriptions, Cost Estimates, and Measuring Progress**

#### **IV.E.3.a Proposed Cleanup Plan**

Only soil samples collected from a single boring (ESB01) on the East Parcel exceeded the NMED Residential and Industrial SSLs for DRO and MRO with concentrations of 11,000 mg/kg and 6,170 mg/kg, respectively. Only groundwater from this boring exceeded the NMWQCC standards with respect to VOCs (benzene at a 12 µg/L). Also, groundwater exceeding PAH NMWQCC standards was found only in this boring. Therefore, the cleanup plan involves the excavation of approximately 4,500 CY of petroleum-contaminated soil surrounding this boring, and extending 15' below grade. This depth extends below the groundwater table about 5' to remove the "smear zone". This approach represents Alternative #3 in the ABCA.

Cleanup methods will be to excavate the contaminated soil, and haul to a nearby permitted disposal facility (i.e. permitted landfarm). Clean fill will be imported to the site and backfilled into the excavation in controlled lifts.

#### **IV.E.3.b Description of Tasks/Activities and Outputs**

##### **IV.E.3.b.i Project Implementation**

Task 1: Engineering Services to develop plans, specifications, and bid documents for the Cleanup Plan
i. Project Implementation <ul style="list-style-type: none"> <li>• Procure Engineering Services through RFP</li> <li>• Develop plans and specifications of Cleanup Plan</li> <li>• Gain input from NMED Voluntary Remediation Program</li> <li>• Prepare Bid Documents</li> </ul>
ii. Anticipated Project Schedule: Start RFP process upon grant agreement execution: October 2022. Final Draft of Bid Documents: December 2022.
iii. Task/Activity Lead: Jason Thomas, PE, Project Manager
iv. Outputs: Bid Documents for Cleanup Project

Task 2: Professional Services During Construction - Construction Observation, Materials Testing, Soil Screening and Sampling, Final Cleanup Reporting
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<p>i. Project Implementation</p> <ul style="list-style-type: none"> <li>• Procure Professional Services through RFP.</li> <li>• Document Daily Cleanup Activities, Monitor Excavation through visual and PID screening, collect soil characterization sampling, collect final TPH sampling, prepare Final Cleanup Report.</li> </ul>
<p>ii. Anticipated Project Schedule: Start RFP Process: December 2022. Award Contract February 2023. Perform Services During Construction: March through May 2023. Final Report in July 2023.</p>
<p>iii. Task/Activity Lead: Jason Thomas, PE, Project Manager</p>
<p>iv. Outputs: Daily Field Reports, Characterization and Final Sampling Results, Final Cleanup Report.</p>

<p><b>Task 3: Cleanup Activities: Remedial Excavation, Disposal, and Restoration</b></p>
<p>i. Project Implementation</p> <ul style="list-style-type: none"> <li>• Procure Cleanup Contractor by Request for Bid</li> <li>• Perform Cleanup Activities per the Plans and Specifications</li> <li>• Restore the Site.</li> </ul>
<p>ii. Anticipated Project Schedule: Start in March 2023. Complete by May 2023.</p>
<p>iii. Task/Activity Lead: Jason Thomas, PE, Project Manager</p>
<p>iv. Outputs: Remediated Site.</p>

**IV.E.3.b.ii Anticipated Project Schedule**

- Task 1: October 2022 - December 2022. 3 months
- Task 2: December 2022 - July 2023: 8 months
- Task 3: March 2023 - May 2023: 3 months

**IV.E.3.b.iii Task/Activity Lead**

- Task 1: The Lead overseeing this work is the City's Project Manager, Jason Thomas, PE (applicant)
- Task 2: The Lead overseeing this work is the City's Project Manager, Jason Thomas, PE
- Task 3: The Lead overseeing this work is the City's Project Manager, Jason Thomas, PE.

**IV.E.3.b.iv Outputs**

- Task 1: Bid Documents for Cleanup Project
- Task 2: Daily Field Reports, Characterization and Final Sampling Results, Final Cleanup Report.
- Task 3: Remediated Site.

**IV.E.3.c Cost Estimates**

Budget Categories		Project Tasks (\$)				
		Task 1	Task 2	Task 3	Task 4	Total
Direct Costs	Personnel					0
	Fringe Benefits					0
	Travel <sup>1</sup>					0
	Equipment <sup>2</sup>					0
	Supplies					0
	Contractual	40000	40000	518100		598100.00
	Other (include subwards, specify type) _____					0.00
<b>Total Direct Costs<sup>3</sup></b>		40000	40000	518100	0	598100.00
Indirect Costs <sup>3</sup>		0	0	0		0.00
<b>Total Federal Funding</b> (Not to exceed \$500,000 or \$650,000 if requesting a waiver)		33333.33	33333.33	431750.00	0	498416.66
<b>Cost Share</b> (20% of requested federal funds) <sup>4</sup>		6666.67	6666.67	86350.00		99683.34
<b>Total Budget (Total Direct Costs + Indirect Costs + Cost Share)</b>		40000	40000	518100	0	598100.00

<sup>1</sup>Travel to brownfields-related training conferences is an acceptable use of these grant funds.

<sup>2</sup>EPA defines equipment as items that cost \$5,000 or more with a useful life of more than one year. Items costing less than \$5,000 are considered supplies. Generally, equipment is not required for Brownfield grants.

<sup>3</sup>Administrative costs (direct and/or indirect) for the Cleanup Grant applicant itself cannot exceed 5% of the total EPA-requested funds.

<sup>4</sup>Applicants must include the cost share in the budget even if applying for a cost share waiver (see Section III.B.13 for a list of applicants that may request a cost share waiver). If the applicant is successful and the cost share waiver is approved, it will be removed in pre-award negotiation.

#### IV.E.3.d Measuring Environmental Results

**Task 1:** Ensure that Engineer's plans and specifications clearly show the intended cleanup limits on the plans, that disposal requirements are clearly identified, and that specifications address

proper compaction of clean imported fill. Monitor progress with weekly check-in meetings to ensure work is on schedule to finish within 3 months.

**Task 2:** Ensure that Professional Consultant is knowledgeable of cleanup plan, performing detailed daily reports, performing PID screening and characterization sampling properly, and draft the Final Cleanup Report in July 2023.

**Task3:** Ensure Contractor is following the plans and specifications, contaminated soil is being excavated safely and efficiently, soil is being properly manifested to the disposal facility, work is being adequately staffed, work is staying on schedule to be completed within 3 months.

Outcomes: Site will be cleaned up to facilitate the development of parks, recreational facilities, and open space.

#### **IV.E.4 Programmatic Capability and Past Performance**

##### **IV.E.4.a Programmatic Capability**

###### **IV.E.4.a.i Organizational Structure**

The City's Project Manager (Jason Thomas, PE, Assistant City Manager) will implement the grant agreement and ensure all Tasks are carried out in a timely fashion. The Public Works Administrative Assistant, Catherine Galvan will provide filing and clerical support. Catherine will also update ACRES. Expenditure of funds will be overseen by Kimberly Simpson, Finance Director.

###### **IV.E.4.a.ii Description of Key Staff**

**Project Manager:** Jason Thomas, PE, Assistant City Manager (City Engineer and Public Works Director).

**Roles:** The Project Manager will be responsible for implementing the grant and executing the Tasks.

**Experience:** As a consultant Jason Thomas completed the closure of many LUST sites for AT&T all across the Mid-East for three years. These projects involved excavation, closure sampling, long-term monitoring, and construction of institutional controls. He has had extensive experience in private and public site development, often dealing with contamination encountered during construction. He is also implementing a \$13M wastewater plant upgrade using EPA CWSRF funding and New Mexico Capital Outlay and Water Trust Board Funding. As the City Engineer and Public Works Director, he often has to implement clean-up plans when contaminated soil is found. He has extensive experience in managing consultants and contractors. He has been involved in Public Works for 17 years.

**Administrative Support:** Catherine Galvan, Administrative Assistant. Catherine has had a wide variety of experience in city government operations and record keeping, including Utility Billings and supporting Public Works in filing other clerical duties.

**Financial Oversight:** Kimberly Simpson, Finance Director. Kimberly is a New Mexico certified Chief Procurement Officer. She is knowledgeable in the oversight, reporting, and accounting of federal grants.

#### **IV.E.4.a.iii Acquiring Additional Resources**

The City's Project Manager has extensive experience in preparing RFPs and managing engineers and consultants for providing a vast array of design and construction-phase services. Jason has procured design services using EPA CWSRF funding, and has worked with the NMED Brownfields Program Staff in developing and refining the scope of services for environmental professionals who have performed Phase I and II ESA's on this site. The NMED Brownfields Staff will be consulted extensively to ensure the proper execution of this project.

#### **IV.E.4.b Past Performance and Accomplishments**

##### **IV.E.4.b.i Currently Has or Previously Received an EPA Brownfields Grant**

###### **IV.E.4.b.i.1 Accomplishments**

NA

###### **IV.E.4.b.i.2 Compliance with Grant Requirements**

NA

##### **IV.E.4.b.ii Has Not Received an EPA Brownfields Grant but has Received Other Federal or Non-Federal Assistance Agreements**

###### **IV.E.4.b.ii.1 Purpose and Accomplishments**

EPA Clean Water State Revolving Fund (CWSRF) Award 091: Engineering Services for completion of the final design of the Bloomfield Water Reclamation Facility Upgrade. \$10,000 Loan and \$90,000 Grant. The funding was used to successfully complete the final design documents for this project.

EPA CWSRF Award 103: Construction and Engineering Services for the completion of the Bloomfield Water Reclamation Facility Upgrade Project. \$9.1M Loan and \$4.3M Grant. The funding is being used to complete the major upgrades on this facility to construct a Sequencing Batch Reactor Plant.

The outcome of the above EPA grant/loans will be the successful completion of an upgrade water reclamation facility that produces a cleaner effluent discharge to the San Juan River, and includes reclaimed water recycling.

New Mexico Capital Outlay Grant 18-C2272-STB: Engineering and Construction of a 500,000 gallon tank rehabilitation. Total grant amount was \$500,000. The funding was used to successfully design and rehabilitate a highly corroded steel tank.

The outcome of the tank rehabilitation was a more resilient potable water storage system that also improves the quality of the stored water.

**IV.E.4.b.ii.2 Compliance with Grant Requirements**

Compliance of the EPA CWSRF Grant/Loans has been successfully achieved by ensuring that both engineering and construction services are performed within the guidelines of the agreement, staying in close communication with the grantor agency (NMED-Construction Programs Bureau), ensuring that the consultant provide detailed and timely monthly reports to the agency, and prepare accurate and timely reimbursement requests.

**IV.E.4.b.iii Never Received Any Type of Federal or Non-Federal Assistance Agreements (8 pts.)**

NA

# Threshold Criteria for Cleanup Grants

## III.B.1 Applicant Eligibility

The City of Bloomfield is eligible for EPA Brownfields funding.

## III.B.2 Previously Awarded Cleanup Grants

I affirm that the proposed site has not received funding from a previously awarded EPA Brownfields Cleanup Grant.

## III.B.3 Expenditure of Existing Multipurpose Grant Funds

I affirm that my organization does not have an active EPA Brownfields Multipurpose Grant.

## III.B.4 Site Ownership

The City of Bloomfield is the sole owner of the site (both East and West Parcels).

## III.B.5 Basic Site Information

The site is known as the former Aerex Refinery, and is split into two parcels, identified as the East and West parcels. The East parcel is located on the east side of the intersection of West Blanco Blvd and North 5th Street, known as Account R0061021. The West parcel is located on the west side of the intersection of West Blanco Blvd and North 5th Street, known as Account R4005131. The zip code is 87413. There are no street addresses assigned to these two parcels.

## III.B.6 Status and History of Contamination at the Site

The site has been well-known as a former refinery with petroleum contamination. This condition has prevented the site from being developed. The Aerex Refinery started operations in 1932, when the area was an agricultural cross-roads surrounded by cropland and very few residences. The refinery operated until the 1960's and was dismantled in the 1980's (Kleinfelder 2006). Up to present-day, some structures are still standing, and are surrounded by densely-populated neighborhoods.

Newer Environmental Site Assessments (ESAs) funded by the EPA and New Mexico Environment Department (NMED) at the request of the City have been performed on both the East and West Parcels. The City of Bloomfield also participated in the Phase II ESA. A Phase I ESA was performed by Weston Solutions, Inc. in November 2019. To prepare for the acquisition of the property, EA Engineering, Science, and Technology completed another Phase I ESA in October 2021. EA Engineering also completed a Phase II ESA in October 2021. Both parcels were investigated, but more field work was completed on the previously unexplored West Parcel. The investigation included soil sampling stockpiles on both parcels, Ground Penetrating Radar (GPR) Survey on the West Parcel in search of buried tanks or pipelines, Passive Soil Gas (PSG) Survey with 59 samplers on the West Parcel, soil sampling of 9 borings on the East Parcel and 10 Borings on the West Parcel using Direct Push Technology (DPT). Groundwater on the East Parcel was investigated using the existing monitoring wells and by using a Hydropunch tool in the bottom of the 9 borings. Groundwater on the East Parcel was investigated through the



existing monitoring wells and by using the Hydropunch tool in the bottom of 7 of the 10 new borings. Active Soils Gas (ASG) Sampling was also performed, three from each parcel, and one QA/QC sample, to assess the vapor intrusion pathway. To investigate anomalies found from the GPR survey on the West Parcel, the City of Bloomfield contracted with an oilfield company to perform hydro-excavation (potholing) near two abandoned wells to determine if abandoned process piping or underground storage tanks were present. The City also participated in this investigation using a mini-excavator to cut 6' trenches across the West Parcel. The stockpiles did not contain contaminants that exceeded the NMED Soil Screening Levels (SSLs).

The GPR Survey Results indicated several unknown anomalies, which the subcontractor indicated could be underground storage tanks. Additional site investigations were performed by the City of Bloomfield with a contractor and city forces. No process piping or buried storage tanks were found by the City. The trench profiles in approximately 600' of 6' deep trenches showed no signs of contamination, and most profiles appeared to be previously undisturbed sand.

The PSG Survey results detected toluene, ethylbenzene, isopropylbenzene, trimethylbenzenes, xylenes, and TPH. These results were used to choose the boring locations. Out of the 9 soil borings on the East Parcel, one sample exceeded the Residential and Industrial SSL's for DRO and MRO with concentrations of 11,000 mg/kg and 6,170 mg/kg, respectively. Out of the 10 soil borings on the West Parcel, two samples exceeded SSLs. Sample WSB05-24 exceeded the Residential and Construction Worker SSLs for 1,1,2-trichloroethane with a concentration of 4.05 mg/kg and the Residential SSL for GRO with a concentration of 141 mg/kg. Sample WSB09-26.0 also exceeded the Residential SSL for GRO with a concentration of 122 mg/kg.

Groundwater on the East Parcel was found to contain the Volatile Organic Compound (VOC) benzene at 12 µg/L in sample ESB01 and cyclohexane was found in ESB05 with a concentration of 357 µg/L. Groundwater in Monitoring Well 1 was also noted as containing a slight LNAPL sheen. Polyaromatic Hydrocarbons (PAH) were also detected in the groundwater in the form of naphthalenes at a concentration of 161.6 µg/L, which exceeded the NMWQCC standard. Metals were also detected in groundwater that exceeded the NMWQCC standards, but they are not the target of the clean-up. Groundwater on the West Parcel was found to contain no VOCs above the NMWQCC standards. However, some PAH's were detected. Metals were also detected that exceeded the NMWQCC standards, but they are not the target of the clean-up.

ASG sample analyses from the East and West Parcels did not exceed the New Mexico Vapor Intrusion Screening Levels (VISLs).

### Target Contaminants

The contaminants that will be targeted with the clean-up are located on the northern end of the East Parcel, and are centered around ESB01-8.0. This sample exceeded the Residential and Industrial SSL's for DRO and MRO with concentrations of 11,000 mg/kg and 6,170 mg/kg, respectively. Groundwater from this soil boring also yielded Benzene at 12 µg/L and 161.6 µg/L. It is estimated that approximately 4,333 CY of contaminated soil will need to be excavated from this location, with a target depth of 15'. The West Parcel contained

contaminated soil, but it was located at 26' below ground, and will not be disturbed by future use of the property. Therefore, no cleanup activities are planned for the West Parcel.

### **III.B.7 Brownfields Site Definition**

I affirm the site subject to this application is a) not listed or proposed for listing on the National Priorities List; b) not subject to unilateral administrative orders, court orders, administrative orders on consent, or judicial consent decrees issued to or entered into by parties under CERCLA; and c) not subject to the jurisdiction, custody, or control of the U.S. government.

### **III.B.8 Environmental Assessment Required for Cleanup Applications**

A Phase II Environmental Site Assessment of the site was completed by EA Engineering, Science, and Technology, Inc. on October 8, 2021.

### **III.B.9 Enforcement or Other Actions**

Does Not Apply.

### **III.B.10 Sites Requiring a Property-Specific Determination**

This site does not require a property-specific determination.

### **III.B.11 Threshold Criteria Related to CERCLA/Petroleum Liability**

#### **III.B.11.a Property Ownership Eligibility - Hazardous Substance Sites**

##### **III.B.11.a.i Exemptions to CERCLA Liability**

###### **III.B.11.a.i.1 Indian Tribes**

Does Not Apply.

###### **III.B.11.a.i.2 Alaska Native Village Corporations and Alaska Native Regional Corporations**

Does Not Apply.

###### **III.B.11.a.i.3 Property Acquired Under Certain Circumstances by Units of State and Local Government**

The City of Bloomfield acquired this property through a Property Transfer Agreement with the previous owners: Clayton Investment Company, LTD and Lampliter Enterprises, LLC. Neither the City nor the previous owners contributed to the release of petroleum contamination on the site.

###### **III.B.11.a.ii Exceptions to Meeting the Requirement for Asserting an Affirmative Defense to CERCLA Liability**

Does Not Apply.

**III.B.11.a.iii. Landowner Protections from CERCLA Liability**

**III.B.11.a.iii.1 Bona Fide Prospective Purchaser Liability Protection**

**III.B.11.a.iii.1.a Information on the Property Acquisition**

Does Not Apply.

**III.B.11.a.iii.1.b Pre-Purchase Inquiry**

Does Not Apply.

**III.B.11.a.iii.1.c Timing and/or Contribution Toward Hazardous Substances Disposal**

Does Not Apply.

**III.B.11.a.iii.1.d Post-Acquisition Uses**

Does Not Apply.

**III.B.11.a.iii.1.e Continuing Obligations**

Does Not Apply.

**III.B.11.a.iii.2 Non-Publicly Owned Sites Acquired Prior to January 11, 2002**

NA

**III.B.11.b Property Ownership Eligibility - Petroleum Sites**

**III.B.11.b.i Information Required for a Petroleum Site Eligibility Determination**

Please find attached a copy of our NMED determination letter.

**III.B.11.b.i.1 Current and Immediate Past Owners**

The City of Bloomfield acquired this property through a Property Transfer Agreement with the previous owners: Clayton Investment Company, LTD and Lampliter Enterprises, LLC. Neither the City nor the previous owners contributed to the release of petroleum contamination on the site.

**III.B.11.b.i.2 Acquisition of Site**

The City of Bloomfield acquired this property through a Property Transfer Agreement with the previous owners: Clayton Investment Company, LTD and Lampliter Enterprises, LLC.

**III.B.11.b.i.3 No Responsible Party for the Site**

The City of Bloomfield acquired this property through a Property Transfer Agreement with the previous owners: Clayton Investment Company, LTD and Lampliter Enterprises, LLC. Neither the City nor the previous owners contributed to the release of petroleum contamination on the site.

#### **III.B.11.b.i.4 Cleaned Up by a Person Not Potentially Liable**

The City of Bloomfield did not dispense or dispose of petroleum or petroleum product, or exacerbate the existing petroleum contamination at the site. Reasonable steps to limit the public's exposure to the site have been taken, included prohibiting excavation into the contamination area.

#### **III.B.11.b.i.5 Judgments, Orders, or Third Party Suits**

The City of Bloomfield has been working closely with the NMED for several years on preparing this project for a Brownfields Grant Application, included financing Phase I and II ESA's. No judgements or enforcement actions, or other third party claims have been discovered, or reported.

#### **III.B.11.b.i.6 Subject to RCRA**

The site is not subject to any order under the Solid Waste Disposal Act.

#### **III.B.11.b.i.7 Financial Viability of Responsible Parties**

There is no financial viability of a responsible party.

#### **III.B.12 Cleanup Authority and Oversight Structure**

##### **III.B.12.a Cleanup Oversight**

The City will enroll in the New Mexico Voluntary Remediation Program.

##### **III.B.12.b Access to Adjacent Properties**

Access to neighboring properties is not required.

#### **III.B.13 Community Notification**

##### **III.B.13.a Draft Analysis of Brownfields Cleanup Alternatives**

The ABCA and draft grant application were posted to the City's website. The public was notified of the opportunity to comment on these documents by Facebook, on the City's website, and by posting at the City's 6 public notification locations. Comments were directed to Jason Thomas by email, and the public was also invited to attend a special City Council Meeting to hear comments on 11/29/21.

An advertisement was also run in the Farmington Daily Times on November 14, 2021.

##### **III.B.13.b Community Notification Ad**

An advertisement was run in the Farmington Daily Times regarding the public meeting.

##### **III.B.13.c Public Meeting**

A special Bloomfield City Council Meeting was held on November 29, 2021 to allow the public to discuss the draft application and ABCA.

### **III.B.13.d Submission of Community Notification Documents**

#### **III.B.14 Statutory Cost Share**

The required cost share will be provided from the City's operating account and its cash balance.

#### **III.B.15 Waiver of the \$500,000 Limit**

The City is not requesting a waiver of the \$500,000 limit.

#### **III.B.16 Name Contractors and Subrecipients**

NA

### **Hardship Waiver Request**

A hardship waiver is not being requested.