

# CITIZENS GAS & ELECTRIC COMPANY SUPERFUND SITE COMMUNITY INVOLVEMENT PLAN



The goal of this Community Involvement Plan (CIP) is to encourage and facilitate community engagement throughout the Citizens Gas & Electric Company Superfund Site cleanup. The CIP describes how EPA will involve the community and address local needs during the Superfund process. Active public involvement is crucial to the success of any project. EPA's community involvement activities at the site are designed to inform the public of all cleanup activities.

EPA defines the "community" as those people and entities who have an interest in or are affected by the site. EPA also recognizes that other stakeholders, including local, state and federal agencies, may have an interest in the site. This CIP is based on a series of community interviews conducted in October 2022 with the affected community and stakeholders in accordance with EPA's Superfund community involvement and cleanup guidance. The CIP is a "living document," meaning that it can be updated or revised over the course of site cleanup to reflect long-term changes in the community.

## Community Involvement at the Citizens Gas & Electric Company Superfund Site

Active and participatory community involvement is an important part of the cleanup process. It is also regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), also known as "Superfund." This CIP follows community involvement requirements in the Superfund Amendment and Reauthorization Act of 1986 (SARA) section 117 and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) section 300.415. EPA's Community Involvement Program is designed to facilitate participation of community members throughout the cleanup process, including the investigation phase and the remedy selection phase. EPA works closely with state and local agencies to provide community involvement throughout the Superfund process.

## THE COMMUNITY

### Site Overview

The former Citizens Gas & Electric Company is located between 10th and 11th Avenues and 6th and 8th Streets in the city of Council Bluffs, Pottawattamie County, Iowa. The site is zoned for commercial use and the surrounding area is mainly commercial and industrial, with some residential areas a quarter mile from the site.

The site operated as a gas manufacturing plant from 1870 to at least 1932. Coal carbonization was the method of gasification utilized at the site from 1870 to 1882. Oil replaced coal in the gasification process in 1882; however, coal gas equipment was maintained at the plant until at least 1949. By 1930, the city had converted to natural gas, relegating the plant to operational status for emergency use only. In 1952, a propane air plant began operating at the site.

While the gas plant was operating, by-product tars and carbon were produced along with the gas. A variety of oil-based feedstocks were used to produce gas, including kerosene, diesel oil, and bunker C fuel oil. Contaminants and wastes typically associated with gas production include benzene, toluene, ethylbenzene, and xylene (BTEX); polyaromatic hydrocarbons (PAHs), oxide waste, tar residues, sludge, wastewater, ash, and phenolic and ammonia compounds. By-product tars produced during gasification at the site were refined into products (i.e., creosote, road tars, and fuels) or disposed of on-site.

Most structures associated with the former plant have since been demolished. However, a review of the Iowa Department of Natural Resources (IDNR) Storage Tanks database identified multiple leaking underground storage tank (LUST) sites in the general site vicinity. IDNR also identified the need for further assessment to be performed in locating tar separators and underground piping associated with this type of operation in order to characterize its contents.

Past investigations conducted have identified BTEX and PAHs in the soil and groundwater at the site. BTEX and PAHs are designated as hazardous substances, pursuant to 40 CFR section 302.4.

As of Sept. 30, 2020, Respondents Black Hills Energy, Iowa Department of Transportation (IDOT), and T&A Real Estate signed an Administrative Settlement Agreement and Order on Consent, in which they have agreed to perform an Engineering Evaluation/Cost Analysis (EE/CA) to determine if contamination on-site poses a threat to human health. EPA provides oversight to all work occurring by the potentially responsible parties. The completed EE/CA will provide EPA with more information to determine if the site requires additional cleanup.

## **Contaminants of Concern**

BTEX and PAHs are considered contaminants of concern (COCs) at the Citizens Gas & Electric Company Site. COCs are chemicals that need to be addressed by a cleanup action because they pose a potential threat to human health and the environment.

The Centers for Disease Control and Prevention's Agency for Toxic Substances and Disease Registry (ATSDR) has a series of summaries about contaminants called ToxFAQs. You can find ToxFAQs on the contaminants of concern at:

[www.atsdr.cdc.gov/toxfaqs](http://www.atsdr.cdc.gov/toxfaqs). For more information on contaminants at Superfund sites, please visit: [www.epa.gov/superfund/contaminants-superfund-sites](http://www.epa.gov/superfund/contaminants-superfund-sites).

### **Benzene, Toluene, Ethylbenzene and Xylene (BTEX)**

BTEX is an abbreviation used for four compounds (benzene, toluene, ethylbenzene and xylene) and is considered a COC at the site. The four compounds found in BTEX are generally associated with petroleum products, such as diesel fuel, home heating oil, and gasoline.

### **Polycyclic Aromatic Hydrocarbons (PAHs)**

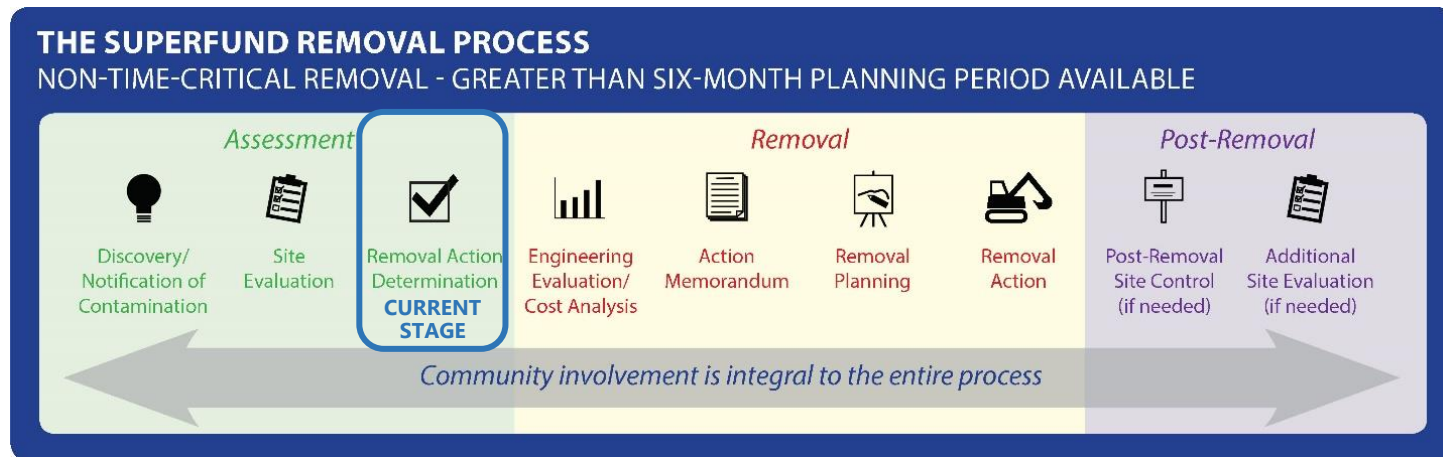
Polycyclic aromatic hydrocarbons (PAHs) are considered a contaminant of concern (COC) at the site. PAHs are a class of chemical that occur naturally in coal, crude oil, and gasoline. They are also produced when coal, oil, gas, wood, garbage, and tobacco are burned.

## **Superfund Removal Process**

Removal responses are common at Superfund sites when the contamination poses an immediate threat to human health and the environment. Removal actions tend to be swift responses to immediate threats from hazardous substances, pollutants or contaminants to eliminate dangers to the public. Removals are classified as either emergency, time-critical or non-time-critical, depending on the extent and type of contamination.

## Superfund Removal Process – Non-Time-Critical Removal

**Non-time-critical removals** happen when EPA determines that a removal action is appropriate, and the situation allows for a planning period of at least six months before on-site activities must begin. Because non-time-critical removal sites do not present an immediate threat to public health or safety, more time is available to thoroughly assess potential threats and evaluate cleanup alternatives. The following section describes the general steps in a non-time-critical removal.



### Assessment

After discovery of the contamination, EPA evaluates if the site poses a threat to people and the environment and whether hazards need to be addressed immediately or additional site information will be collected.

### Removal

An EE/CA is prepared to analyze removal alternatives. The report is available to the public for review and comment. The Action Memorandum describes the cleanup method chosen for the site and the reasons for the selection. During the removal planning phase, design plans for the removal are developed. Then, the removal action begins.

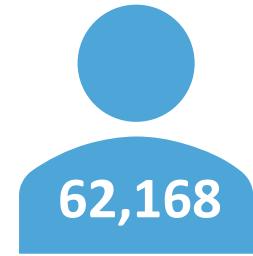
### Post-Removal

After the removal action, site controls are put in place to protect human health and the environment if needed. Additional site evaluation may take place to determine whether further action is needed.

## About the Community

Council Bluffs, Iowa, is located on the western border of Iowa on the Missouri River. Omaha, Nebraska, is across the Missouri River to the west. Lake Manawa State Park is in the southern part of Council Bluffs.

Council Bluffs' city government includes a mayor and city council. The elected mayor is responsible for city ceremonial duties and direct city administrative oversight. The city council is made up of five members who appoint a city clerk and city attorney. According to U.S. Census data, the city's racial makeup is 91% White, 2% Black or African American, 3% two or more races, and less than 2% Asian, American Indian and Alaskan Native.



Council Bluffs population, based on 2015-2019 American Community Survey data

## Environmental Justice

Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin or income, with respect to the development, implementation and enforcement of environmental laws, regulations and policies.

EPA Region 7 programs collaborate closely to make sure that underserved, low-income, and tribal communities facing disproportionate environmental risks have opportunities for meaningful participation in environmental decision-making. Region 7 also coordinates closely with EPA Headquarters and states to support initiatives that provide all people living near Superfund sites with technical assistance, training opportunities, and other services. EPA has a variety of environmental justice resources available at [www.epa.gov/environmentaljustice](http://www.epa.gov/environmentaljustice), including:

- [Environmental Justice Collaborative Problem-Solving \(CPS\) Cooperative Agreement Program](#) provides funding for eligible applicants for projects that address local environmental and public health issues in an affected community. The program assists recipients in building collaborative partnerships to help them understand and address environmental and public health concerns in their communities.
- [Environmental Justice Small Grants Program](#) supports and empowers communities working on solutions to local environmental and public health issues. The program helps communities understand and address exposure to multiple environmental harms and risks.

## EJSCREEN

EJSCREEN is an environmental justice mapping and screening tool. It uses environmental indicators for a community to show potential exposures and demographic factors to then show potential susceptibility. An EJSCREEN analysis for an area with a one-mile radius around the site in May 2022 found environmental justice concerns in the surrounding community; 10 of the 12 environmental justice index indicators were at the 80th percentile or above compared to the rest of Iowa. Additionally, the area's demographic indicators showed the population in the selected area is in the 80th percentile or above for attaining less than a high school education, being linguistically isolated, and being made up of people of color.

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
<b>Environmental Justice Indexes</b>			
EJ Index for Particulate Matter 2.5	85	78	59

EJ Index for Ozone	85	78	59
EJ Index for 2017 Diesel Particulate Matter*	84	78	57
EJ Index for 2017 Air Toxics Cancer Risk*	84	78	57
EJ Index for 2017 Air Toxics Respiratory HI*	85	78	58
EJ Index for Traffic Proximity	91	88	71
EJ Index for Lead Paint	87	82	68
EJ Index for Superfund Proximity	86	80	60
EJ Index for RMP Facility Proximity	86	82	65
EJ Index for Hazardous Waste Proximity	79	71	55
EJ Index for Underground Storage Tanks	88	84	68
EJ Index for Wastewater Discharge	78	75	57



Source: EJSCREEN, 1-mile ring centered at 41.252129,-95.854855

### Socioeconomic Indicators in Selected Population compared to State

	Value	State Avg.	%ile in State
People of Color	24%	14%	82
Low Income	40%	28%	78
Unemployment Rate	4%	4%	65
Linguistically Isolated	4%	2%	84
Less Than High School Education	20%	8%	91
Under Age 5	4%	6%	29
Over Age 64	14%	17%	35

### **EJSCREEN Quick Facts**

To summarize how environmental indicators and demographics come together in the same location, EJSCREEN uses EJ Indexes. EJSCREEN has 11 EJ Indexes that reflect the 11 environmental indicators below. In the EJ Indexes, environmental indicators are combined with information about the low-income and minority population in a Census block group. EJSCREEN presents results in terms of percentiles, allowing the community to be compared to the rest of the state, EPA Region, or nation.

- National Scale Air Toxics Assessment Air Toxics Cancer Risk
- National Scale Air Toxics Assessment Respiratory Hazard Index
- National Scale Air Toxics Assessment Diesel Particulate Matter (DPM)
- Particulate Matter (PM2.5)
- Ozone
- Lead Paint Indicator
- Traffic Proximity and Volume
- Proximity to Risk Management Plan Sites
- Proximity to Treatment Storage and Disposal Facilities
- Proximity to National Priorities List (NPL) Sites
- Wastewater Discharge Indicator

### **Community Issues and Concerns**

EPA conducted interviews with three city officials and one county official.

#### **HUMAN HEALTH**



Interviewees expressed concern about the potential for contamination leaching outside of the site area. While there are currently minimal concerns about pathways for human exposure to contamination, if the site area expands, it could border the city's public work campus.

#### **METHODS OF COMMUNICATION**



Communicating by email with updates, as needed, is the preferred method of communication by the interview participants. Interviewees advised EPA to wait to push more information out to the public until there is more concrete information and next steps for the site.

### **Community Involvement Plan Community/Stakeholder Interview Questionnaire**

EPA used the following questions when conducting community interviews about the site.

1. Were you aware of the site prior to this meeting?
2. What did you know about it?

3. Do you have any questions about the site?
4. Do you have any concerns about site and its cleanup?
5. What are the best ways to provide information to you? (Examples: web postings, email, mailing post cards, mailing fact sheets, in-person meetings.)
6. Do you have any suggestions on how we can improve communication?
7. Is there anyone else you think might be useful for us to talk to about the site?
8. Is there anything else you would like to share with us?

## Key Contacts

### *EPA Contacts*

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