### IOWA DEPARTMENT OF NATURAL RESOURCES ADMINISTRATIVE CONSENT ORDER

IN THE MATTER OF:

ADMINISTRATIVE CONSENT ORDER

BLACK HILLS/IOWA GAS UTILITY COMPANY, LLC

No. 2024-HC-01

To: Black Hills/Iowa Gas Utility Company, LLC

7001 Mt. Rushmore Road Attn: Amy K. Koenig Rapid City, SD 57702

#### I. SUMMARY

This administrative consent order is issued by the Iowa Department of Natural Resources (DNR) to Black Hills/Iowa Gas Utility Company, LLC (Black Hills) to address a hazardous condition and discharge of pollutants into waters of the state.

As detailed below, Black Hills shall implement the recommended removal action alternative presented in the Engineering Evaluation Cost Analysis (EE/CA) (dated December 22, 2023) which was prepared pursuant to an Administrative Settlement Agreement and Order on Consent (AOC) with the United States Environmental Protection Agency (EPA) (CERLA Docket No. 07-2020-0089) and which was signed by EPA on September 30, 2020, and shall implement preventative measures to ensure no additional contamination. Nothing in this document shall be construed as an admission of sole liability by Black Hills.

Any questions regarding this consent order should be directed to:

### **Relating to technical requirements:**

Matthew Graesch, Env. Specialist Senior Iowa Department of Natural Resources 6200 Park Avenue, Suite 200 Des Moines, IA 50321 Phone: (515) 250-1923

### **Relating to legal requirements:**

Kelli Book, Attorney Iowa Department of Natural Resources 6200 Park Avenue, Suite 200 Des Moines, IA 50321 Phone: (515) 210-3408

#### II. JURISDICTION

This administrative consent order is issued pursuant to Iowa Code section 455B.175, which authorizes the Director to issue any order necessary to secure compliance with or prevent a violation of Iowa Code Chapter 455B, Division III (water quality) and the rules adopted pursuant to that part and Iowa Code section 455B.382, which authorizes the DNR to prevent, abate, and control exposure of citizens to hazardous conditions.

#### III. STATEMENT OF FACTS

The following statements of facts are relevant to this matter:

- 1. The Site is located between 10th and 11th Avenues and 6th and 8th Streets in the City of Council Bluffs (City), Pottawattamie County, Iowa. Reference to 11th Avenue is considered a railroad right-of-way. The Site encompasses approximately 4.75 acres.
- 2. The Site, and site area, is comprised of four main parcels where manufactured gas plant (MGP) related infrastructure was historically located or currently remains. These parcels include the following Parcel Identification Numbers (PINs) and/or property descriptions:
  - a. PIN 754436333002, located to the west of the 1000 block of 7th Street in Council Bluffs, Iowa, and owned by Black Hills;
  - b. PIN 754436334005, located to the east of the 1000 block of 7th Street in Council Bluffs, Iowa, and owned by Black Hills;
  - c. PIN 754436334007 located to the east of the 1000 block of 7th Street in Council Bluffs, Iowa, and south of PIN 754436334005, and owned by T-A Real Estate, LLC; and
  - d. City right of way (ROW) for Highway 192, located further to the east of the 1000 block of 7th Street in Council Bluffs, Iowa, and owned by the City (formerly owned by Iowa Department of Transportation). A PIN is not available for this city-owned, ROW property.
- 3. Investigations conducted since 1969 have identified soil and groundwater contamination at the Site. Benzene, toluene, ethylbenzene, and xylenes (BTEX) and polynuclear aromatic hydrocarbons (PAHs) have been found in the soil and groundwater at the Site. BTEX and PAHs are designated as hazardous substances pursuant to 40 C.F.R. § 302.4 and Iowa Code § 455B.381.

- 4. The Site is located approximately two miles east of the Missouri River on the floodplain. River bluffs, which form the eastern boundary of the flood plain, are located approximately ¼ mile east of the Site. The bluffs rise approximately 200 feet above the floodplain and consist primarily of loess deposits (wind-blown silt). Other unconsolidated soils in the Council Bluffs area typically consist of glacial till overlain by approximately 30 feet of loess. In many areas the glacial till may be underlain by sand and gravel. Typically, the depth of unconsolidated deposits ranges from approximately 35 to 200 feet. Pennsylvanian-aged bedrock underlies the unconsolidated deposits and consists of alternating beds of limestone and shale. The limestone units are water bearing, but due to the relatively impermeable nature of the shale, the individual limestone units are confined, and therefore, the average aquifer yield is low.
- 5. The Site operated as a gas manufacturer from approximately 1870 to at least 1932. Initially, gas was manufactured from coal using the coal carbonization gasification method. Coal was cooked in ovens or retorts to produce gas and various gas by-products. These gases required treatment to remove tar, ammonia, "light oils" (i.e., BTEX), naphthalene, and sulfur compounds before use. By 1930, the City had converted to natural gas, relegating the plant to operational status for emergency use only. Until 1952, the Site stored natural gas and propane to accommodate peak needs of the City, and coal gas equipment was maintained at the facility. In 1952 the Site's manufacturing equipment was retired. Most of the structures associated with the former manufactured gas plant have since been demolished.
- 6. 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. By-product tars were either refined into marketable products, such as creosote, road tars, fuels, and various pitches, or stored or abandoned on-site. Contaminants and wastes typically associated with gas production include BTEX, PAHs, oxide waste, tar residues, sludge, wastewater, ash, and phenolic and ammonia compounds.
- 7. The initial manufactured gas plant was owned by Council Bluffs Gas Light Company from the early 1870s to the early 1890s. Sometime in the 1890s, Council Bluffs Gas Light Company reincorporated into Council Bluffs Gas and Electric Company. Citizens Gas and Electric Company of Council Bluffs (CGE) leased the gas plant from Council Bluffs Gas and Electric Company from 1900 to 1904. In 1904, CGE bought the plant and continued to operate it until 1928. Council Bluffs Gas Company (CBGC) purchased the plant from CGE in 1928 and continued operating it until at least 1932.
- 8. In 1929, CGE changed its name to Citizens Power & Light Company. In 1937, Citizens Power & Light Company merged into Nebraska Power Company. In 1946, Omaha Public Power District (OPPD) acquired all issued and outstanding common stock of Nebraska Power Company, and Nebraska Power Company was later liquidated into OPPD.

- 9. In 1986, Utilicorp sold portions of the Site property to Linda Whisler, but maintained ownership of the majority of the Site. In 2002, Utilicorp changed its name to Aquila Inc., and in 2008, Aquila, Inc. sold the remainder of the Site property it owned to Black Hills. Black Hills is a current owner of two parcels of property located within the Site. In 2018, Linda Whisler sold a parcel of property located within the Site to T & A Real Estate, L.L.C. T & A Real Estate, L.L.C. is the current owner of a parcel of property located within the Site.
- 10. The ownership history of the Site is complex and laid out in the AOC (CERCLA Docket No. 07-2020-0089). However, during the original evaluation of Potentially Responsible Parties (PRPs) Northern Natural Gas, MidAmerican Energy Company, Omaha Public Power District, and the City were each identified by EPA and Black Hills as having some association and involvement with the Site. General Notice Letters were sent by EPA to those entities and their respective inclusion as PRP's were evaluated. However, each of the aforementioned entities denied liability and declined to participate in the EE/CA Settlement. Black Hills and EPA made the decision to proceed with the EE/CA Settlement and reserved all rights as to these entities.
- 11. For the purposes of this administrative consent order only, Black Hills agrees it is the landowner, and warrants that it shall be held liable for applicable remediation efforts as though it were a responsible party.
- 12. In 1972, the Iowa State Highway Commission, n/k/a Iowa Department of Transportation (IDOT), acquired a portion of the Site to construct a highway. In 1978, IDOT acquired another portion of the Site for the same purpose. IDOT constructed a highway on these portions of the Site in the mid-1970's. IDOT later transferred jurisdiction of the highway, including these portions of the Site, to the City in 2019, pursuant to Iowa Code section 306.42. The City is a current owner of two parcels of property located within the Site.
- 13. In 1969, IDOT conducted soil borings in the area directly east of the Site in order to evaluate foundation conditions for a proposed highway construction project. The soil borings identified the presence of gas odors and visible oils in the soil in the area of what was believed, at the time, to be the bottom of an underground, old gasoline tank. IDOT also documented additional gas odors and visible oils in nearby soil borings. During the mid-1970s, IDOT constructed Highway 192 through that area.
- 14. In 1989, a Phase I preliminary investigation was conducted at the Site, which included soil borings and ground water sampling. This investigation included the installation of four groundwater monitoring wells and on-site soil borings. Elevated levels of BTEX and cyanide were found in one of the monitoring wells. BTEX compounds were found in three of the eleven soil samples collected on-site. The investigation also indicates that volatile organic compounds had migrated off-site.

- 15. In 1993, EPA and the Site's owner at the time entered into an Administrative Order on Consent, Docket No. VII-93-F-0033, requiring a Phase II investigation be conducted to delineate the extent of a release if one was found to have occurred; or if not, to assess the threat of release and any danger to public health and the environment. The Phase II investigation was conducted in October 1995 and confirmed the presence of groundwater contamination within the western Site parcel and concluded that elevated concentrations of BTEX and PAHs at the Site were related to coal tar contamination. The Phase II also confirmed the presence of non-aqueous phase liquid (NAPL) at the bottom of one of the Site's monitoring wells, with PAHs constituting of approximately 18% of the material.
- 16. In 2003, a Phase II environmental site assessment (ESA) was conducted one block east of the Site. The Phase II ESA concluded that soils had been adversely impacted by coal tar constituents from approximately 64 to 75.5 feet below ground surface (bgs), and that coal tar contamination in the form of free-phase non-aqueous product existed at 68 to 73 feet bgs.
- 17. In 2015, EPA's contractor, Tetra Tech, conducted a removal assessment at the Site and confirmed the presence of soil contamination at and around the Site, including concentrations of BTEX and PAHs above their maximum contaminant levels (MCLs), regional screening levels (RSLs), and removal management levels (RMLs). Since that time, site-specific Remedial Action Goals (RAGs) have been developed through the EE/CA process, which are further described below.
- 18. The 2015 removal assessment concluded that the elevated concentrations of BTEX and PAHs were likely related to the former manufactured gas plant operations. Soil contamination occurs in the southern portion of the Site, extending from two feet bgs to the soil- groundwater interface (approximately 5 to 14 feet bgs). Laboratory analysis indicated that coal tar constituents have impacted groundwater within the immediate vicinity of the Site. Groundwater contamination occurs in the southern portion of the Site, extends west across 6th Street and south of 11th Avenue, and may be more widespread at depth.
- 19. An AOC was entered into voluntarily by EPA and Black Hills, IDOT, and T&A Real Estate, L.L.C. (collectively, Respondents). The AOC provided for the performance of an engineering evaluation/cost analysis (EE/CA) by Respondents and the payment of certain response costs incurred by the EPA. The AOC was signed by EPA on September 30, 2020.
- 20. The EE/CA included the development of site-specific RAGs to support the implementation of the EE/CA. The RAGs are summarized as follows:
  - a. Soil RAGs- Protection of Construction/Utility Workers –

- i. Benzene 149 mg/kg;
- ii. Benzo(a)pyrene 9.8 mg/kg;
- iii. Naphthalene 92.5 mg/kg; and
- iv. Manganese 921.2 mg/kg
- b. Groundwater RAGs-Protection of Commercial Indoor Air
  - v. Benzene 107 ug/l;
- vi. Ethylbenzene 266 ug/l;
- vii. Naphthalene 410 ug/l; and
- viii. Xylene 2830 ug/l
- c. Groundwater RAGs- Protection of Construction/Utility Workers –
- ix. Benzene 144 ug/l;
- x. Cyanide 1.4 ug/l; and
- xi. Naphthalene 7.7 ug/l
- 21. In a letter dated February 20, 2024, EPA stated that the 30-day public comment period to submit written comments about the EE/CA for the Citizens Gas & Electric site in Council Bluffs, IA ended February 14, 2024. EPA did not receive comments. Therefore, the EE/CA dated December 22, 2023 is final.
- 22. As presented in the EE/CA, the City obtains most of its drinking water from the Missouri River. Based on contact with the City of Council Bluffs Public Works Department, there are no public wells within a one-mile radius of the Site. The nearest City wells are located near the Missouri River, approximately 2.5 miles northwest of the Site. A water well survey conducted through a review of DNR permitting recordings identified a total of 75 potential domestic wells, monitoring wells, agricultural wells, industrial wells, and municipal wells within a one-mile radius of the Site. Of the 75 wells identified, all but two were confirmed as abandoned/plugged, or having non-drinking water applications. No information was available on the two wells with no usage listed and no contact details. In addition, the City maintains a City Ordinance prohibiting installation of potable water wells within the City limits.
- 23. On January 24, 2024EPA and DNR agreed to a programmatic deferral of the Black Hills site to state lead oversight. With the programmatic deferral, Black Hills became included in DNR's Contaminated Sites Program.

### IV. CONCLUSIONS OF LAW

1. Iowa Code Chapter 455B, Subchapter IV, Part 4 addresses hazardous conditions. Iowa Code section 455B.381(4) defines a hazardous condition as "any situation involving the actual, imminent, or probable spillage, leakage, or release of a hazardous substance onto the land, into a water of the state, or into the atmosphere, which creates an immediate or potential danger to the public health

or safety or to the environment." Furthermore, the provision states "a site which is a hazardous waste or hazardous substance disposal site...is a hazardous condition."

- 2. The wastes previously described, and the constituents thereof located at the Site are "hazardous substances" as defined in Iowa Code section 455B.381(5).
- 3. Iowa Code section 455B.411(4) defines "hazardous waste or hazardous substance disposal site" as "real property which has been used for the disposal of hazardous waste or hazardous substances either illegally or prior to regulation as a hazardous waste or a hazardous substance under this part and any adjoining real property and groundwater affected by the disposal activities."
- 4. The past, present, or potential migration of the hazardous substances from the aforementioned site may constitute an actual and/or threatened "release" and a "hazardous condition" as defined in Iowa Code sections 455B.381(9) and 455B.381(4) respectively.
- 5. Black Hills is a "person having control over hazardous substances" as defined in Iowa Code section 455B.381(7).
- 6. The wastes previously described, and the constituents thereof located at the Site are "pollutants" as defined in Iowa Code section 455B.171(22).
- 7. Iowa Code section 455B.186 prohibits discharges of pollutants into waters of the state, such as those at issue in this matter.
- 8. The past, present, or the potential migration of pollutants from the aforementioned site into the surface water and groundwater constitutes a "prohibited discharge" to the waters of the state as defined in Iowa Code section 455B.186.
- 9. When a hazardous condition exists, Iowa Code section 455B.387 authorizes the director to remove or provide for the removal and disposal of the hazardous substance.
- 10. Iowa Code section 455B.383 and Iowa Code section 455B.105(3) gives the DNR and the Environmental Protection Commission (Commission) rulemaking authority to "protect the public from unnecessary exposure to hazardous conditions." The EPC and DNR have done so at 567 Iowa Administrative Code (IAC) Chapter 133.
- 11. 567 IAC 133.2 gives the DNR authority to require responsible persons to take appropriate preventative, investigatory and remedial actions.
- 12. 567 IAC 133.4(3)(b)(2) states that where "significant amounts of contaminants [are] present in the soils or other environment, such that groundwater

contamination is occurring or is likely, active cleanup of the contaminated soils or other environment shall be implemented to the extent reasonable and necessary to prevent or minimize release to the groundwater."

Based on the Statement of Facts and Conclusions of Law set forth above, the DNR has determined that the actual or probable release of pollutants and hazardous substances into the surface water and groundwater of the aforementioned site constitutes a hazardous condition. The actions required by this Consent Order are in accordance with Iowa Code sections 455B.175 and 455B.387 and are necessary to protect the public health and the environment.

#### V. ORDER

THEREFORE, the DNR orders and Black Hills agrees to the following implementation of the EPA approved EE/CA:

- 1. Black Hills shall perform the remedial action per the EE/CA, acting as the owner of the parcel(s) that contain holder #2 and holder #3, with parcel information as follows:
  - a. Holder 2 PIN 754436333002; and
  - b. Holder 3 PIN 754436334005
- 2. Complete remedial excavation with off-site disposal of the contents of the former manufactured gas plant holders #2 and #3, as indicated in the attached conceptual excavation design plans.
  - Complete remedial excavation per the EE/CA associated with holder #2 and holder #3, with off-site disposal of soils above the water table (approximately 15 feet below grade surface) that investigation data has indicated exhibits soil concentrations greater than the remedial action goals (RAGs) established for this project, and defined in Item 20, Part III Statement of Facts of this administrative consent order.
- 3. Place an asphalt paving cover over accessible areas above gas holder #4 (measuring approximately 105 feet by 120 feet). DNR recognizes that the City is the majority owner of real property associated with holder #4, and that Black Hills agrees to implement asphalt paving to satisfy the EE/CA.
- 4. Following completion of the remedial action, establish Institutional Controls in the form of an Environmental Covenant including the following land-use restrictions on the Black Hills properties until the RAGs are met:
  - a. Prohibition of use of the property for residential purposes.

- b. Prohibition of the use of the groundwater beneath the Site (all uses, including drinking water and geothermal).
- c. Restriction on excavation activities at the Site into contaminated groundwater unless an Occupational Safety and Health Administration-compliant health and safety plan is developed and implemented.
- d. DNR is to be notified if excavation activities are planned within the remedial excavation area boundaries at depths below the clean fill materials.
- e. In the event an enclosed building (not including structures such as open sided pole building or similar) is to be constructed on site before the groundwater RAGs are met, a vapor barrier or vapor extraction system will be provided to mitigate potential soil vapor associated with site groundwater contamination.
- 5. Following completion of the remedial excavation work, groundwater monitoring will be performed from the existing groundwater monitoring well network to support documentation of the conditions needed to support natural attenuation of the site groundwater contaminants within the Site boundary. Any wells destroyed during remediation, and deemed necessary for post-remediation monitoring shall be replaced. Groundwater sampling will be conducted for the groundwater-related RAGs defined in Item 20, Part III Statement of Facts of this Order, as well as the following monitored natural attenuation indicator field parameters:
  - a. Dissolved oxygen;
  - b. Oxidation-reduction potential (ORP);
  - c. pH; and
  - d. Specific conductance.

Quarterly groundwater sampling shall be performed consistent with DNR and/or EPA guidance for three years, followed by up to two years of biannual sampling if required by DNR, or until trends are confirmed. Statistical trend analysis will be performed using Mann Kendall (with level of confidence agreed upon with DNR) or similar statistical methods.

6. Based on groundwater data collected following the removal action, additional groundwater monitoring wells shall be installed if required by DNR. Groundwater data will be compared to the groundwater RAGs established for the

Site for consideration of potential additional sampling if needed related to vapor intrusion within any existing or future on-site building(s).

- 7. Black Hills shall adhere to the following work schedule at the Site:
  - a. Remedial excavation, backfill, site restoration activities, and asphalt paving described in the scope of work, commencing in October of 2024 and be completed by May 2025.
  - b. Monthly letter summaries will be provided to DNR during the remedial excavation. The reports will provide details on tons of material transported and disposed off-site, import material delivered, schedule update, and summary of any changes to planned work activities.
  - c. Within 120 days of completion of the remedial excavation, an Excavation Summary Report indicating the surveyed excavation boundaries, tons of material transported and disposed off-site, import material delivered, and the results of confirmation sidewall and/or floor samples at the excavation boundaries will be provided to DNR.
  - d. An Annual Groundwater Sampling Summary Report with trend analysis will be provide to DNR by March 15 of each calendar year of monitoring.

#### VI. APPEAL RIGHTS

This administrative consent order is entered into knowingly and with the consent of Black Hills. For that reason, Black Hills waives the right to appeal this administrative consent order or any part thereof.

#### VII. NONCOMPLIANCE WITH THIS ORDER

Failure to comply with any requirement of this administrative consent order may result in the imposition of administrative penalties or referral to the Iowa Attorney General to obtain injunctive relief and civil penalties.

Kayla Lyon, Director		
Iowa Department of Natural Resources		
Jmy K. Koenia	Dated this 9th	day of
Black Hills/Iowa Gas Utility Company, LLC	October	. 2024