3.a. Utilities & Infrastructure Factors – General

General: Provide information and describe the availability, adequacy, cost and specifics of electricity, water, sanitary sewer, natural gas, telephone, cellular, data, internet, connectivity and cable utility services to the site.

i. Water Analysis: Provide information regarding the source of water and chemical analysis for compliance with U.S. Environmental Protection Agency (EPA) and Nebraska DHHS/Department of Environmental Quality standards.

The City of Kearney complies with every State and Federal Drinking Water Regulation, and in many measurements exceeds those standards. Enclosed is a copy of the City of Kearney Water Quality Report for 2012. This report is in compliance with the Nebraska Department of Health and Human Services, Division of Environmental Health requirements and U.S. Environmental Protection Agency (EPA) requirements. The water supply for the community is sourced from two well fields: the Northwest Well Field is capable of producing 7.5 million gallons per day, the Platte River Well Field is capable of producing 24 million gallons per day. Additional water quality constituents have been enclosed demonstrating the commitment of the City of Kearney to ensuring abundant safe, reliable drinking water to the community. See attached Water Report.

Further details in the General Category identified in the following subcategories.

Quality On Tap!

Our Commitment Our Profession

City Of Kearney

Annual Water Quality Report
For January 1 to December 31, 2012

This report is intended to provide you with important information about your drinking water and the efforts made by the City Of Kearney water system to provide safe drinking water.

Para Clientes Que Hablan Español:
Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

For more information regarding this report, contact:

MARK BOWMAN
308-233-3241

If you would like to observe the decision-making processes that affect drinking water quality, please attend the regularly scheduled meeting of the City Council. If you would like to participate in the process, please contact the City Clerk to arrange to be placed on the agenda of the meeting of the City Council.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

Source Water Assessment Availability:
The Nebraska Department of Environmental Quality (NDEQ) has completed the Source Water Assessment. Included in the assessment is a Wellhead Protection Area map, potential contaminant source inventory, vulnerability rating, and source water protection information. To view the Source Water Assessment or for more information please contact the person named above on this report or the NDEQ at (402) 471-6988 or go to www.deq.state.ne.us .

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Sources of Drinking Water:
The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

The source of water used by City Of Kearney is ground water under the direct influence of surface water.

Contaminants that may be present in source water include:
* Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
* Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.
* Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
* Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
* Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

Drinking Water Health Notes:
Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested. Flushing your tap for 30 seconds to 2 minutes before using your tap water will clear the line of any lead that may have leached into the water while the line was idle. Additional information is available from the Safe Drinking Water Hotline (800-426-4791) or the Department of Health and Human Services/Division of Public Health/Office of Drinking Water (402-471-2541).

The City Of Kearney is required to test for the following contaminants: Coliform Bacteria, Antimony, Arsenic, Asbestos, Barium, Beryllium, Cadmium, Chromium, Copper, Cyanide, Fluoride, Lead, Mercury, Nickel, Nitrate, Nitrite, Selenium, Sodium, Thallium, Alachlor, Atrazine, Benzo(a)pyrene, Carbofuran, Chlordane, Dalapon, Di(2-ethylhexyl)adipate, Dibromochloropropane, Dinoseb, Di(2-ethylhexyl)phthalate, Diquat, 2,4-D, Endothall, Endrin, Ethylene dibromide, Glyphosate, Heptachlor, Heptachlor epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, Lindane, Methoxychlor, Oxamyl (Vydate), Pentachlorophenol, Picloram, Polychlorinated biphenyls, Simazine, Toxaphene, Dioxin, Silvex, Benzene, Carbon Tetrachloride, o-Dichlorobenzene, Para-Dichlorobenzene, 1,2-Dichlorethane, 1,1-Dichloroethylene, Cis-1,2,-Dichloroethylene, Trans-1,2-Dichloroethylene, Dichloromethane, 1,2-Dichloropropane, Ethylbenzene, Monochlorobenzene, 1,2,4-Trichlorobenzene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Trichloroethylene, Vinyl Chloride, Styrene, Tetrachloroethylene, Toluene, Xylenes (total), Gross Alpha (minus Uranium & Radium 226), Radium 226 plus Radium 228, Sulfate, Chloroform, Bromodichloromethane, Chlorodibromomethane, Bromoform, Chlorobenzene, m-Dichlorobenzene, 1,1-Dichloropropene, 1,1-Dichloroethane, 1,1,2,2-Tetrachlorethane, 1,2-Dichloropropane, Chloromethane, Bromomethane, 1,2,3-Trichloropropane, 1,1,1,2-Tetrachloroethane, Chloroethane, 2,2-Dichloropropane, o-Chlorotoluene, p-Chlorotoluene, Bromobenzene, 1,3-Dichloropropene, Aldrin, Butachlor, Carbaryl, Dicamba, Dieldrin, 3-Hydroxycarbofuran, Methomyl, Metolachlor, Metribuzin, Propachlor.

Note: The state requires monitoring of certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of this data may be more than one year old.
MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety. AL (Action Level): The concentration of a contaminant which, if exceeded triggers treatment or other requirements which a water system must follow.

ppm: parts per million	ppb: parts per billion
ppt: parts per trillion	pCi/l: picoCuries per liter
ug/l: micrograms per liter	(Measurement of Radioactivity)

CITY OF KEARNEY
HEART OF NEBRASKA

TEST RESULTS (collected in 2012 unless otherwise noted)

Microbiological	Highest No. of Positive Samples	MCL	MCLG	Likely Source Of Contamination	Violations Present
COLIFORM (TCR)	In the month of October, 2 sample(s) were positive	MCL: Systems that Collect Less Than 40 Samples per Month - No more than 1 positive monthly sample	0	Naturally present in the environment	Yes

Lead and Copper	Monitoring Period	90th Percentile	Range	Unit	AL	Sites Over AL	Likely Source Of Contamination
No Detected Results were Found in the Calendar Year of 2012							

Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Likely Source Of Contamination
2,4,5-TP	04/12/2010	0.982	0.982	ppb	50	50	Residue of banned herbicide
ARSENIC	05/14/2012	7.97	2.64 - 7.97	ppb	10	0	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
BARIUM	07/09/2012	0.0615	0.0615	ppm	2	2	Discharge from drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
CHROMIUM	07/09/2012	5.49	5.49	ppb	100	100	Discharge from steel and pulp mills; Erosion of natural deposits.
DINOSEB	04/12/2010	1.63	1.63	ppb	7	7	Runoff from herbicide used on soybeans and vegetables
FLUORIDE	07/09/2012	0.774	0.774	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; Fertilizer discharge.
NITRATE-NITRITE	07/30/2012	9.44	0.477 - 9.44	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
PENTACHLOROPHENOL	04/12/2010	0.729	0.729	ppb	1	0	Discharge from wood preserving factories

Disinfection Byproducts	Monitoring Period	Highest RAA	Range	Unit	MCL	MCLG	Likely Source Of Contamination
TOTAL HALOACETIC ACIDS (HAA5)	1/1/2012 - 12/31/2012	9.04375	0.84 - 16.7	ppb	60	0	By-product of drinking water disinfection.
* TTHM	1/1/2012 - 12/31/2012	42.81313	2.31 - 88.9	ppb	80	0	By-product of drinking water disinfection.

Radiological Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Likely Source Of Contamination
COMBINED RADIUM (-226 & -228)	08/06/2012	1.5	1.4 - 1.5	pCi/l	5	0	Erosion of natural deposits
* * COMBINED URANIUM	11/05/2012	16	16	pCi/l	N/A	0	Erosion of natural deposits
* * GROSS ALPHA, INCL. RADON & U	11/05/2012	26.7	13.6 - 26.7	pCi/l	15	0	Erosion of natural deposits
RADIUM-226	04/09/2012	0.2	0.1 - 0.2	pCi/l	5	0	Erosion of natural deposits
RADIUM-228	08/06/2012	1.4	1.2 - 1.4	pCi/l	5	0	Erosion of natural deposits

*** Compliance based on rolling annual average, RAA.**

*** * Combined Uranium is subtracted from Gross Alpha including Radon and Uranium to calculate compliance with Gross Alpha including radon and Uranium MCL on a sample by sample basis. Negative numbers are reported as zero.**

Unregulated Water Quality Data	Collection Date	Highest Value	Range	Unit	Secondary MCL
METOLACHLOR	01/17/2012	7.43	2.96 - 7.43	ppb	
NICKEL	07/09/2012	0.0028	0.0028	mg/l	0.1
SULFATE	07/09/2012	250	250	mg/l	250

During the 2012 calendar year, we had the below noted violation(s) of drinking water regulations.

Type	Category	Analyte	Compliance Period
MCL (TCR), MONTHLY	Maximum Contaminant Level Violation	COLIFORM (TCR)	10/01/2012 - 10/31/2012

The City Of Kearney has taken the following actions to return to compliance with the Nebraska Safe Drinking Water Act: The City of Kearney continued chlorinating the system and has improved the sampling techniques. All samples taken since have been negative for total coliform.

Additional Required Health Effects Language:

- Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

- While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

- Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

- Some people who drink water containing trihalomethanes (TTHM) in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.