CON 12-15
Doc # 28250

Site Name: Kum and Go #4098, Windsor Heights

Initial Site Screening (ISS)

Project Manager: Tami S. Quam

Date: April 9, 2013

☒ **3931 - Phase II Assessment Review – Brownfield Funded**
Phase II submitted as part of standard real estate development, pre-purchase agreement, or other due diligence, not a part of a community grant project, or

☐ **3837 - Phase II Assessment – Brownfield Grant Funded**
Phase II submitted as part of an EPA grant funded community-wide or targeted assessment project – see Mel Pins if questions on this determination, or

☐ **3321 - Phase II Assessment Review – CERCLA Pre-Remedial Funded**
Phase II submitted that is not part of a real estate transaction

Location:

Latitude: 41.6007 *Longitude: -93.7176* ***County**: Polk*
(Decimal Degree format)

USGS Quadrant: _____

Site Size: 0.53

Site Dimension: ☒ Acres ☐ Square Feet ☐ Feet ☐ Square Miles ☐ Miles

Site Alias Name(s): _____

Congressional District: 3

Grant Recipient Name, Address & Contact: NA

Current Owner & Address: Kum & Go, 6750 Westown Parkway, Suite 200, West Des Moines, Iowa 50266

Responsible Party Name(s) & Address, if different from current owner: Unknown at this time

Site Street Address or Tier, Range, Section & Subsections (if street address is unknown)
7229 University Avenue, Windsor Heights, Iowa 50324

Directions to site: From I-235 in Des Moines, take exit 4 to turn right (north) onto 63rd Street. The site is located on the northeast corner of University Avenue and 63rd Street.

Summarize the site history (past usages, past ownerships, wastes, known or suspected contamination pathways such as tanks, septic tank/tile field, lagoon, land applications, S.W. burial, etc)

The site is currently a Kum & Go gas station which was built in 1991. There are several registered underground storage tanks (USTs) located onsite and there have been two reported leaks from the USTs (LUST No. 8LTQ33 and 9LTH22). In addition to the leaking underground storage tanks located onsite, it was reported that the site was previously operated as a chemical manufacturing facility. Any petroleum contamination observed onsite would be regulated by the Leaking Underground Storage Tank (LUST) Section due to the fact that there are and were historically petroleum USTs located onsite. Therefore, this document will not address or summarize any petroleum contamination found onsite as part of the Phase II Environmental Site Assessment dated March 20, 2013.

Briefly describe the site assessment that was conducted (number of borings, monitoring wells, number of samples, depth of soil samples and monitoring wells, analysis, etc.)

The site assessment consisted of three soil borings (SB1 through SB3) drilled to a depth of 20 feet. Soil was field-screened using a photo-ionization detector (PID) for the presence of volatile organic compounds (VOCs). Soil samples were collected from each boring at the depth of the highest PID reading. Each boring was converted into a temporary groundwater monitoring well and a groundwater sample was collected from each monitoring well. The soil and groundwater samples were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and RCRA metals. Groundwater was observed onsite at depths of 8 to 10 feet.

Summarize the findings and conclusions regarding the contaminants found and their extent and concentrations. Relate those values to known criteria such as statewide standards, MCLs, water quality standards, background levels or other benchmarks used to determine site priority.

VOCs and RCRA metals were detected in the soil samples but none of the concentrations exceeded a standard. Arsenic, barium, cadmium, and lead were detected in groundwater onsite at concentrations that exceed the protected groundwater standard. Concentrations of arsenic in SB1 and SB2 also exceeded the non-protected groundwater standard. It was not specified if the groundwater samples collected for RCRA metals analysis were field filtered. See Table 1 below for additional information.

Table 1 – RCRA Metal Concentrations in Groundwater (mg/L)

	SB1	SB2	SB3	Protected Groundwater Standard	Non-protected Groundwater Standard
Arsenic	**0.0507**	**0.111**	**0.038**	0.01	0.05
Barium	**3.07**	**3.67**	1.9	2	10
Cadmium	**0.00628**	0.00353	**0.013**	0.005	0.025
Chromium	0.0297	0.0362	<0.025	0.1	0.5
Lead	**0.0415**	**0.0643**	**0.0232**	0.015	0.075
Selenium	<0.025	<0.025	<0.025	0.05	0.25
Silver	<0.0025	<0.0025	<0.0025	0.1	0.5
Mercury	<0.0002	<0.0002	<0.0002	0.002	0.01

* Concentrations in bold exceed the protected groundwater standard

** Concentrations underlined also exceed the non-protected groundwater standard

Identify on-site or off-site potential and actual targets (e.g., municipal wells, private wells, drinking water intakes). What is known of the neighboring area, i.e., are there residences, businesses, public use areas, etc.? Are there utility lines that could be impacted by site contaminants? Identify any other use/location issues that deserve consideration.

There are several abandoned wells but no active wells located within a quarter-mile radius of the site. Between a quarter-mile radius and a half-mile radius of the site there are two heat pump wells, a 439 foot deep oil exploration well, a 300 foot deep commercial well, and several abandoned wells. Bedrock was observed in one of the wells at a depth of 39 feet. The site is about 2.5 miles north of the Raccoon River. The site is located within the primary protection area capture zone for the surface water used as a drinking water source by the Des Moines public water supply.

Rate the site on a scale of 1 to 4, in decreasing order of severity or priority.

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Summarize the reasoning, knowledge or any other information used in determining your recommendation regarding the priority assigned to this site.

As noted above, VOCs and RCRA metals were detected in the soil samples but none of the concentrations exceeded a standard. Several metals were detected in groundwater onsite at concentrations that exceed the protected groundwater standard. In addition, arsenic in SB1 and SB2 also exceeded the non-protected groundwater standard. It was not specified if the groundwater samples collected for RCRA metals analysis were field filtered. Based on the lack of nearby receptors of concern; further investigation is not required at this time. No further action is required under CERCLA or Iowa Chapter 133 at this time and the site is not a candidate for an ESS.

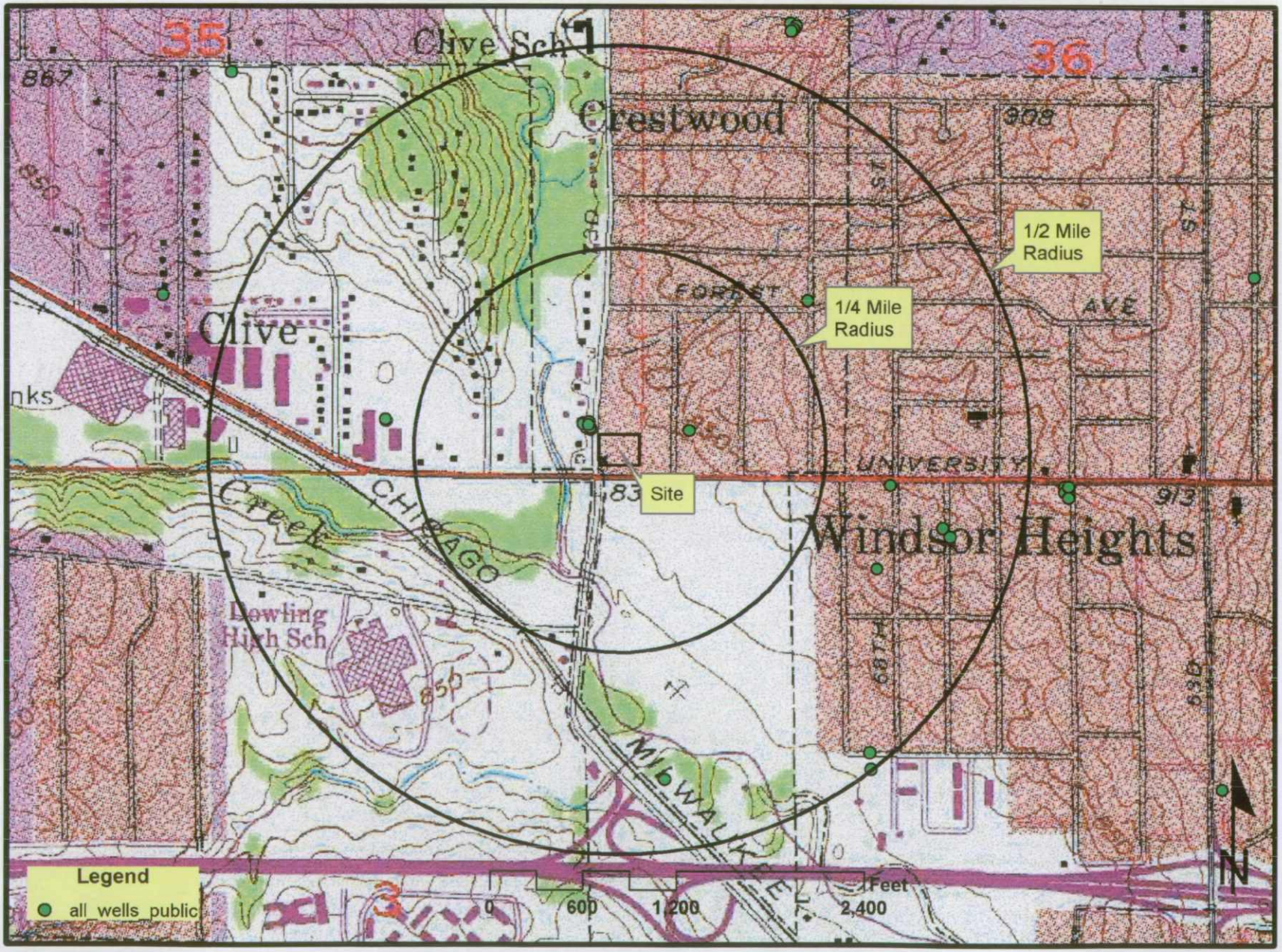
Site recommended for:

- ☒ No further action
- ☐ Additional investigation under state program (activity code 2824)
- ☐ Additional investigation under CERCLA (Extended Site Screening)
- ☐ Transfer to LUST/UST

Form Reviewed: _____ **Date Reviewed:** 4/11/13

Revised 11/2012

Kum and Go #4098, Windsor Heights



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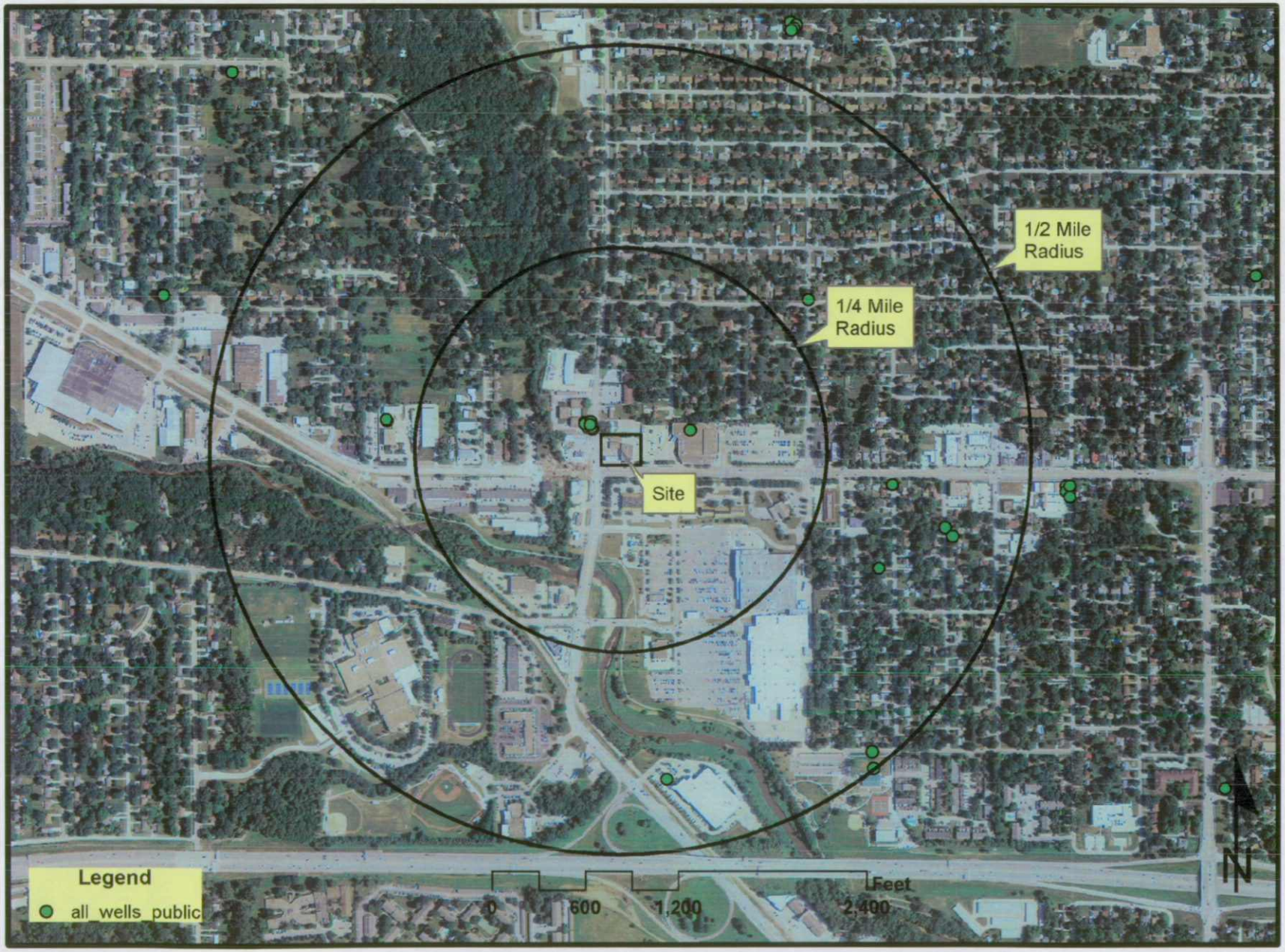

Seneca Environmental Services	Courtesy of BING MAPS

Kum & Go #4098 **7229 & 7215 University Avenue** **Windsor Heights, IA**	**Seneca Job No. 6509806**	**Site Vicinity Map**	