



City of Grand Island

Tuesday, March 13, 2012

Council Session

Item F2

#9370 - Consideration of Amendment to Chapter 35 of the Grand Island City Code Relative to Groundwater Control Area #4 - Nebraska Solvents Company Site on the Eastern Side of the City of Grand Island, and a Portion of Western Merrick County

Staff Contact: Tim Luchsinger

Council Agenda Memo

From: Timothy Luchsinger, Utilities Director

Meeting: March 13, 2012

Subject: Consideration of Groundwater Control Area #4 on the Eastern Side of the City of Grand Island and a Portion of Western Merrick County (NE Solvents Site)

Item #'s: F-2

Presenter(s): Timothy Luchsinger, Utilities Director

Background

The former Nebraska Solvents Company operated a facility located at Stuhr Road and Highway 30 on property owned by the Union Pacific Railroad. The operation of that facility resulted in the release of tetrachloroethylene, commonly used in dry cleaning or as a degreaser, to the area groundwater. The tetrachloroethylene has now migrated several miles to the east into Merrick County, and contaminated private wells in several subdivisions around the Gunbarrel and Fort Kearney Road area. Union Pacific has enrolled in a voluntary remediation program administered by the Nebraska Department of Environmental Quality to develop a corrective plan. The remediation action is to replace the private wells in that area by extending the City's water system. The Union Pacific will reimburse the City for the engineering, material, and construction costs associated with that extension. An agreement was negotiated with the UP by staff from the City's Utilities and Legal Departments and approved by Council on September 13, 2011. The structure of the agreement is that the Utilities Department will proceed with the design and construction of the water main in accordance with their normal procedures and standards with reimbursement by the UP as costs are incurred. The UP is provided the following approval points in the process.

- Selection of design firm
- Completion of design and cost estimate
- Selection of installation contractor

Approval at these points by the UP is required for the project to continue. Upon completion of the project, the water mains become the property of the City and the operation and maintenance are the responsibility of the City. Property owners in this area have six months after the installation of the mains to be connected at the expense of the

UP, after which it will be done at the property owners' expense. Water usage will be paid by the property owners in accordance with the City's water rates.

Discussion

Union Pacific would like to create a groundwater control area restricting development and use of new water sources by property owners in the contaminated area. Similar areas were created in other contamination zones in the City in the Northwest and Parkview areas.

Alternatives

It appears that the Council has the following alternatives concerning the issue at hand. The Council may:

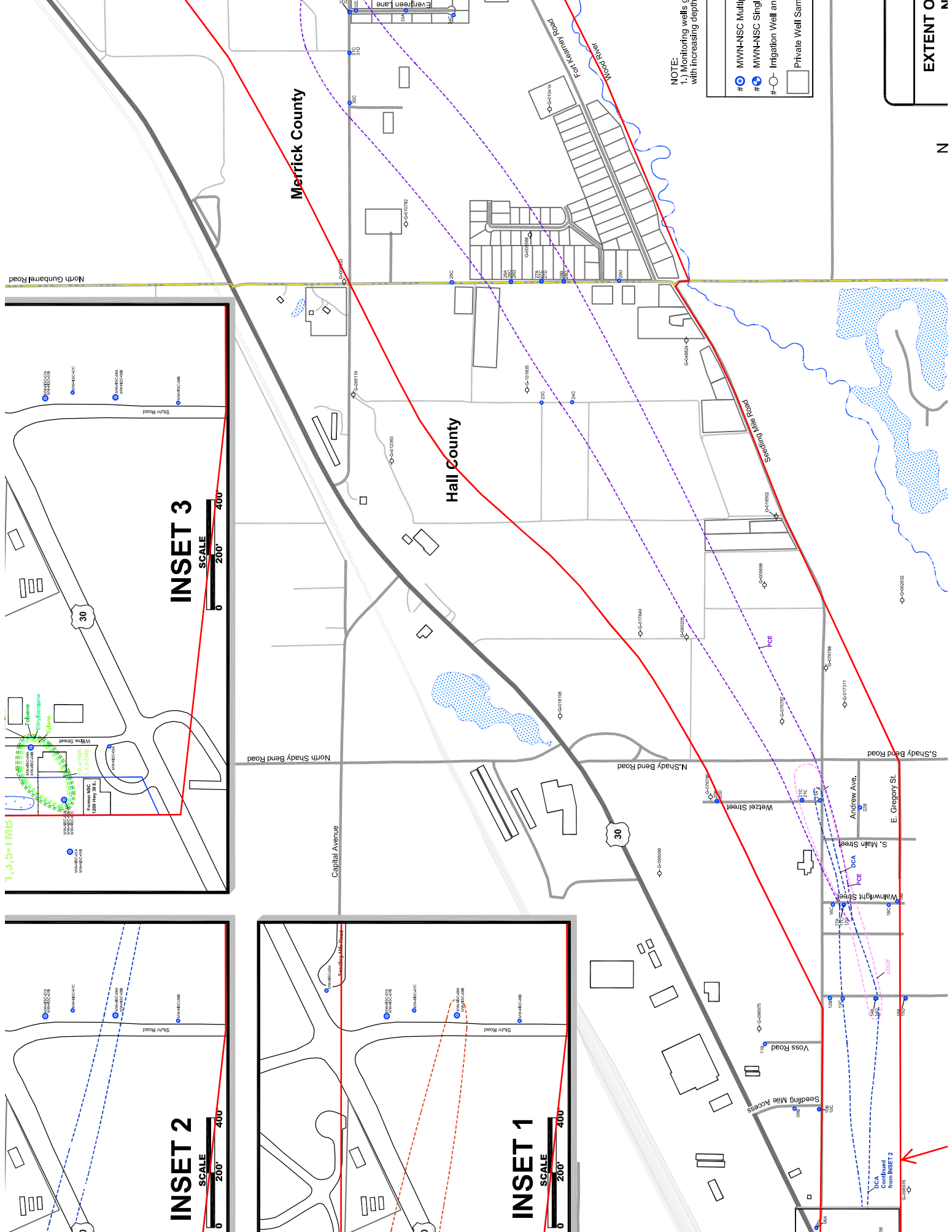
1. Move to approve
2. Refer the issue to a Committee
3. Postpone the issue to future date
4. Take no action on the issue

Recommendation

City Administration recommends that the Council approve Ordinance #9370 amending Chapter 35 of the Grand Island City Code relative to Groundwater Control Area No. 4 on the eastern side of the City of Grand Island, and a portion of western Merrick County. In addition this Ordinance has a housekeeping function of clearly delineating the provisions of the Code relative to Groundwater Control Area No. 3 which was previously approved by the Council.

Sample Motion

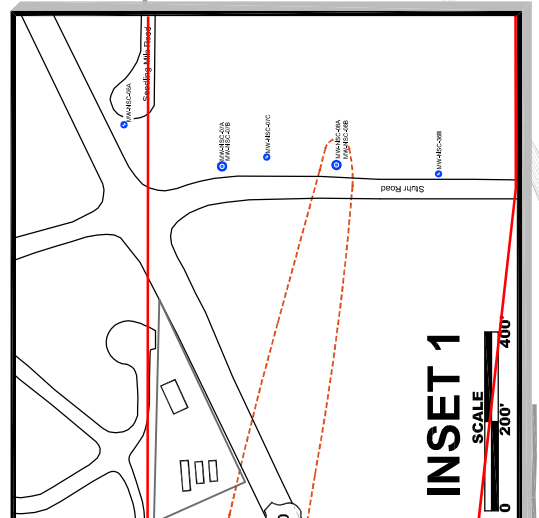
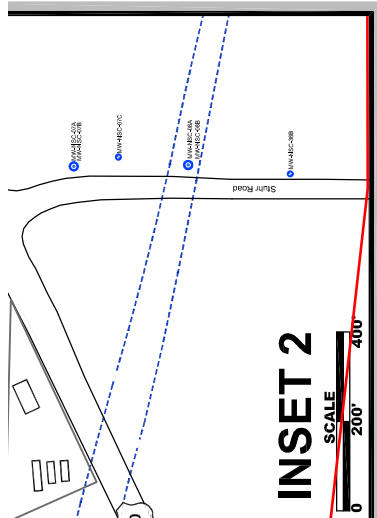
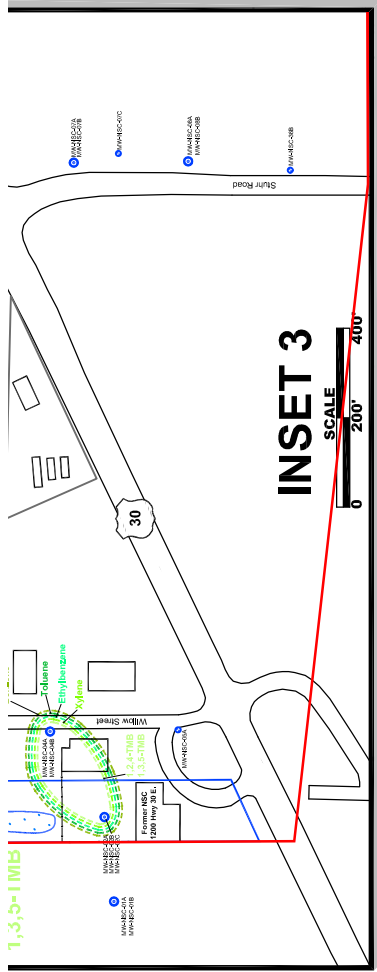
Move to approve Ordinance #9370 amending Chapter 35 of the Grand Island City Code relative to Groundwater Control Area #4 and delineating Sections 35-84 to 35-92 as Article VIII. Groundwater Control Area #3.



NOTE:
1.) Monitoring wells g
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#	●	MWN-NSC Single
#	○	Irrigation Well anc
	□	Private Well Sami

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ORDINANCE NO. 9370

An ordinance to amend Chapter 35 of the Grand Island City Code to designate §§35-84 to 35-92 as Article VIII. Groundwater Control Area No. 3 and to designate §§35-93 to 35-102 as Article IX. Groundwater Control Area No. 4 and to repeal any ordinance or parts of ordinances in conflict herewith; and to provide for publication and the effective date of this ordinance.

BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA:

SECTION 1. Section 35-84 through 35-92 of the Grand Island City Code is hereby designated as Article VIII. Groundwater Area No. 3.

SECTION 2. Section 35-93 through 35-102 of the Grand Island City Code is hereby added to read as follows:

Article IX. Groundwater Control Area No. 4

§ 35-93 Purpose

- (A) The Nebraska Solvents Company Site (“Site”) is located in the eastern portion of the City of Grand Island in Hall County, Nebraska, and in a portion of western Merrick County. The Site consists of one area of groundwater contamination and an associated source area which resulted from the historical mismanagement of industrial solvents.
- (B) The Nebraska Department of Environmental Quality (NDEQ) approved on March 21, 2011 a Remedial Action Plan (RAP) dated February 1, 2010. The RAP identified one contaminant source area located at a facility at 1200 Highway 30 East that has resulted in contamination in the groundwater which trend to the east and then northeast.
- (C) The RAP presented the selected remedies for the source area and the plume. A component of the selected remedies in the approved RAP is the enactment by the City of Grand Island of an institutional control ordinance designating a Groundwater Control Area through which groundwater use would be restricted to prevent human exposure and consumption of contaminated groundwater and prohibit the installation of new wells supplying water for human consumption in the plume area. This institutional control ordinance is to remain in full force and effect until the groundwater contamination identified in the RAP is reduced to a level making the groundwater safe to be used as a

ORDINANCE NO. 9370 (Cont.)

source of drinking water pursuant to the Safe Drinking Water Act, 42 U.S.C. §§ 300f – 300j-26, or its successor legislation.

Added by Ordinance No. 9370, effective April 3, 2012.

§35-94. Definitions

As used in this Article, the following terms mean:

City means the City of Grand Island, Nebraska.

Domestic use means human consumption and any use of groundwater for human health and sanitation including, but not limited to, drinking, cooking, washing, bathing, showering, and other similar household uses.

EPA means the United States Environmental Protection Agency.

Groundwater contamination means the chemicals of interest described in the RAP for the Site.

Groundwater Control Area No. 4 means a defined area within the jurisdictional limits of the City of Grand Island subject to the institutional controls provided for in this Article which are intended to prohibit human exposures to contaminated groundwater from wells.

NDEQ means the Nebraska Department of Environmental Quality, and any successor departments of agencies of the State of Nebraska.

NDNR means the Nebraska Department of Natural Resources, and any successor departments of agencies of the State of Nebraska.

RAP means the Remedial action Plan submitted to NDEQ and approved March 22, 2011.

Well means a hole or shaft sunk into the earth in order to obtain water from a natural subterranean supply or aquifer.

The definitions found in Neb. Rev. Stat., Chapter 46 – Irrigation and Regulation of Water – are adopted herein by reference, except where such definitions are in conflict with those provided herein.

Added by Ordinance No. 9370, effective April 3, 2012.

§35-95. Groundwater Control Area Boundaries

The boundaries of Groundwater Control Area No. 4 are described as follows and are shown on the attached map. Commencing 135 feet to the west of the intersection of Museum Drive and East Seedling Mile Road; thence running westerly to the western lease boundary of the 1200 Highway 30 East Site; thence running southerly to the intersection of the lease boundary and Highway 30 East; thence running east-southeasterly to the intersection of Stuhr Road and an extension of East Gregory Street; thence running easterly along Gregory Street to Shady Bend Road, thence running east-northeasterly to East Seedling Mile Road; thence following East Seedling Mile Road to the intersection with Gunbarrel Road; thence southerly to the Wood River; thence east-northeasterly along a path 350 feet south of and parallel to Fort Kearney Road to the intersection with a southerly extension of Beck Road; thence running northerly along Beck Road to the farm access road 2,270 feet south of Highway 30 East, thence running westerly for 1,000 feet; thence running southwesterly along a path 1,130 feet south of and parallel to Highway 30 East to the point of beginning. A map of the boundaries of Groundwater Control Area No. 4 shall be maintained in the City's Geographical Information System Mapsifter (or any successor application, if any).

Added by Ordinance No. 9370, effective April 3, 2012.

§35-96. Duration of Institutional Control Ordinance

- (A) This Article shall remain in full force and effect as long as there remains groundwater contaminated at levels that exceed the residential use cleanup levels provided for in the RAP making the groundwater unsafe to be used as a source of drinking water pursuant to the Safe Drinking Water Act of its successor legislation.
- (B) Following NDEQ notifying the City that the groundwater contamination within the Groundwater Control Area No. 4 has been reduced to a level making the groundwater safe to be used as a source of drinking water pursuant to the Safe Drinking Water Act, or its successor legislation, the City's Mayor and City Council may proceed to repeal this Article forthwith.

Added by Ordinance No. 9370, effective April 3, 2012.

§35-97. Duration of Institutional Control Ordinance

- (A) This Article shall remain in full force and effect as long as there remains groundwater contaminated at levels that exceed the residential use cleanup levels provided for in the RAP making the groundwater unsafe to be used as a source of drinking water pursuant to the Safe Drinking Water Act or its successor legislation.
- (B) Following NDEQ notifying the City that the groundwater contamination within the Groundwater Control Area No. 4 has been reduced to a level making the groundwater safe to be used as a source of drinking water pursuant to the Safe Drinking Water Act,

or its successor legislation, the City's Mayor and City Council may proceed to repeal this Article forthwith.

Added by Ordinance No. 9370, effective April 3, 2012.

§35-98. Prohibited Groundwater Uses

- (A) Groundwater pumped from wells within Groundwater Control Area No. 4 shall not be used for any domestic use which may result in human exposures. Such uses include drinking, food preparation, washing, bathing, showering, and other household uses which result in human exposures to contaminated groundwater. Because groundwater from wells within Groundwater Control Area No. 4 may be contaminated and presents a hazard to the health, safety, and welfare of persons exposed to such water, any human consumption or prohibited use of groundwater from wells within Groundwater Control Area No. 4 is a violation of this Article and is declared to be a public nuisance subject to abatement as provided in §§35-101 to 35-102 of this Article.
- (B) No new well with a design capacity of more than 50 gallons per minute (gpm) may be drilled or installed in Groundwater Control Area No. 4 unless and until the party proposing the well installation has demonstrated, by a hydrogeological study performed by a competent environmental consulting firm, that the operation of the well will not cause the movement of the groundwater contamination or adversely affect the remedial action provided for in the RAP for the Site. Any such hydrogeological study shall be submitted to NDEQ for review and approval prior to well installation.
- (C) This Section on Prohibited Groundwater Uses shall not prohibit uses of groundwater pumped from wells within Groundwater Control Area No. 4 which do not result in human exposure to contaminated groundwater, including, but not limited to, groundwater monitoring wells, EPA, NDNR, or NDEQ remediation wells, wells that produce 50 gpm or less for dewatering purposes, for non-contact cooling water for industrial, commercial, or residential uses, or wells used for irrigation. Discharges from dewatering wells must be appropriately handled and disposed of in accordance with applicable City, State and Federal laws including National Pollution Discharge Elimination System permits under the Clean Water Act.

Added by Ordinance No. 9370, effective April 3, 2012.

§35-99. Well Installation

- (A) No person shall drill or install a well with a design capacity of more than 50 gallons per minute within Groundwater Control Area No. 4 prior to applying for and obtaining a well permit from the Central Platte Natural Resources District.

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- (B) No person may install a well within Groundwater Control Area No. 4 which penetrates two or more water-bearing zones unless water-tight casings are installed which conform to the regulations governing water well construction, pump installation, and water well decommissioning standards of the Nebraska Department of Health and Human Services, Regulation and Licensure Division (178 NAC 12, Section 003.11D – Contaminated Water-Bearing Zones).

Added by Ordinance No. 9370, effective April 3, 2012.

§35-100. New Well Registration, Application for Well Permit

The following information shall be submitted to the City's Building Department prior to drilling a new well in groundwater Control Area No. 4:

- (1) A copy of the well permit obtained from the Central Platte Natural Resources District.
- (2) The address and legal description of the property on which the proposed well is to be located.
- (3) The address of all properties to be served by groundwater pumped from the proposed well.
- (4) A description of the uses to be made of water pumped from the proposed well, if any; including a certification that such groundwater will not be used for domestic use which may result in human exposures.
- (5) Whether City water is available to the property to be served by the proposed well.
- (6) The depth of the proposed well and pump intake.
- (7) A diagram showing the location of the proposed well.
- (8) An application for any dewatering well will include a plan for the appropriate handling and disposal of the discharge water in accordance with applicable City, State and Federal laws including NPDES permits.
- (9) A statement as to whether the design capacity of the proposed well exceeds 50 gpm. If the design capacity of the well exceeds 50 gpm, the owner of the well shall demonstrate, by a hydrogeological study performed by a competent environmental consulting firm in accordance with §35-98(B) of this Article, that the operation of the well will not cause the movement of the groundwater contamination or adversely affect the remedial action provided for in the RAP for the Site.

Added by Ordinance No. 9370, effective April 3, 2012.

§35-101. Violations of Institutional Control Ordinance; Abatement of Public Nuisance.

Whenever the City's Building Department Director, or his/her designee, has inspected any well within Groundwater Control Area No. 4 and determined that such well is being operated, or that the groundwater pumped from the well is being used, in violation of this Article, he/she will send a written notice to the owner of record of the real property where the well is located, or the owner's agent, or the occupant of the property, by certified mail, return

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receipt requested, notifying such party of the violation. The written notice will contain the following:

- (1) The street address and/or a legal description sufficient for identification of the property where the well is located.
- (2) A description of the acts or circumstances constituting a violation of this Article.
- (3) A description of the corrective action required to be taken to render the well and groundwater uses in compliance with this Article.
- (4) A statement advising the addressee that if the well and groundwater uses are not brought into compliance with this Article within the time specified, the City's Building Department Director, or his/her designee, may order electrical power to the well disconnected and may request the City Attorney, with the consent of the City's Mayor, to file an action to charge the costs thereof against the real estate, the owner of record and the addressee. The charge shall constitute a lien against said property.

Added by Ordinance No. 9370, effective April 3, 2012.

§35-102. Procedure for Abatement of Public Nuisance

- (A) If the addressee of the notice described in §35-101 of this Article fails to abate said nuisance within the time specified, the City of Grand Island, at the written request of the City's Building Department Director, or his/her designee, directed to the City Attorney, and with the consent of the Mayor, may abate said public nuisance pursuant to §20-15 of the Grand Island City Code, and charge the costs thereof against the real estate on which the well is located and the addressee of the notice.
- (B) If the City, in its sole discretion, determines that the use of the groundwater in violation of this Article might cause irreparable harm or poses a threat to public health, safety or welfare, or the health, safety or welfare of the persons using the groundwater, the written notice to abate pursuant to §20-15 of the Grand Island City Code shall not be required as a condition precedent to commencing a legal action to obtain abatement of the nuisance. The City, with the consent of the Mayor, may immediately file an action requesting such temporary and permanent orders as are appropriate to expeditiously and permanently abate such public nuisances and protect the public health, safety or welfare of the health, safety or welfare of persons using the groundwater in violation of this Article.

Added by Ordinance No. 9370, effective April 3, 2012.

SECTION 2. The validity of any section, subsection, sentence, clause, or phrase of this ordinance shall not affect the validity or enforceability of any other section, subsection, sentence, clause, or phrase thereof.

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SECTION 3. That this ordinance shall be in force and take effect from and after its passage and publication in pamphlet form within fifteen (15) days according to law.

Enacted March 13, 2012.

Jay Vavricek, Mayor

Attest:

RaNae Edwards, City Clerk