

ORDINANCE NO. 21-22

AN ORDINANCE AMENDING SECTIONS 13.30.030, 13.30.070 AND 13.30.150 OF THE MURRAY CITY MUNICIPAL CODE RELATING TO RESTRICTING GEOTHERMAL WELLS IN RECHARGE AREAS AND PROTECTION ZONES.

BE IT ORDAINED BY THE MURRAY CITY MUNICIPAL COUNCIL:

*Section 1. Purpose.* The purpose of this Ordinance is to amend sections 13.30.030, 13.30.070 and 13.30.150 relating to restricting geothermal wells in recharge areas and protection zones.

*Section 2. Amend sections 13.30.030, 13.30.070 and 13.30.150.* Sections 13.30.030, 13.30.070 and 13.30.150 of the Murray City Municipal Code shall be amended as follows:

**13.30.030: DEFINITIONS:**

Unless the context specifically indicates otherwise, the meanings of terms used in this chapter shall be defined as follows:

**ABANDONED WELL:** Means a well, the use of which has been permanently discontinued or is in such a state of disrepair that it cannot be used for its intended purpose or for observation purposes.

**BEST MANAGEMENT PRACTICES (BMPs):** Means a practice or combination of practices determined to be the most effective practicable (including technological, economic, and institutional considerations) means of preventing or reducing the amount of pollution to a level compatible with water, soil, and air quality goals.

**CITY:** Means Murray City Corporation.

**CITY COUNCIL:** Means the Murray City Municipal Council.

**CLOSURE:** Means the cessation of operation of a facility, or any portion thereof, and the act of securing such facility or portion thereof to ensure protection of ground water in accordance with the appropriate State, Federal and local regulations applicable to the specific facility and with the provisions of this chapter.

**CONTINUOUS TRANSIT:** Means the nonstop movement of a mobile vehicle except for stops required by traffic laws.

**DEPARTMENT:** Means the City Public Works Department.

**DIRECTOR:** Means the Director of the Public Works Department or designee.

**DISCHARGE:** Means and includes, without limitation, spilling, leaking, seeping, pouring, injecting, emitting, emptying, disposing, releasing, or dumping regulated substances, hazardous waste or petroleum products to the soils, air, ground waters, or surface waters of the City. Discharge does not include the use of a regulated substance in accordance with the appropriate use intended or specified by the manufacturer of the substance, provided that such use is not prohibited by Federal, State, or local regulations. Discharge does not include discharges specifically authorized by Federal or State permits.

**DRINKING WATER SOURCE:** Means a drinking water spring or well supplying water which has been permitted or intended for consumptive use.

**DRINKING WATER SOURCE PROTECTION ZONE (DWSP), OR PROTECTION ZONE:** Means an area within which Best Management Practices are mandated for restricted uses, or certain uses are prohibited, in order to protect ground water flowing to public drinking water sources, and designated as a Protection Zone, level 1, 2, 3, or 4, pursuant to section [13.30.050](#) of this chapter.

**GROUND SOURCE HEAT PUMP (GSHP) SYSTEM:** Means a central heating and/or cooling system that pumps heat to or from the ground. It uses the earth as a heat source in the winter or a heat sink in the summer. These systems reduce operational costs of heating and cooling by taking advantage of moderate ground temperatures. GSHP as used in this chapter includes, but is not limited to, any such systems commonly referred to as Geothermal Wells, Geothermal Heat Pump Wells, Geothermal Heat Pumps, Closed-loop Heating/Cooling Exchange Wells, and Heat Exchange Units.

**GROUND WATER:** Means any water which may be drawn from the ground.

**GROUND WATER DISCHARGE AREA:** Means an area where the direction of ground water movement is upward from the principal aquifer to the shallow unconfined aquifer. Discharge areas, determined by the United States Geological Survey (USGS), are shown in section [13.30.150](#), appendix C of this chapter.

**GROUND WATER DIVIDE:** Means a line on a water table on each side of which the water table slopes downward in a direction away from the line.

**GROUND WATER TOT:** Means the time of travel for ground water to reach a drinking water source.

**HANDLE:** Means to use, generate, process, produce, package, treat, store or transport a regulated substance, hazardous waste or petroleum product in any fashion.

**HAZARDOUS WASTE:** Means all waste regulated under the following Federal Acts: the Reserve Conservation and Recovery Act, the Toxic Substance Control Act, the Clean

Water Act, the Clean Air Act, the Solid Waste Disposal Act and the Atomic Energy Act of 1954.

HEALTH DEPARTMENT: Means the Salt Lake Valley Health Department.

OPERATING PERMIT: Means a permit to operate a facility handling regulated substances, hazardous waste or petroleum products under this chapter. The permit will be issued by the Public Works Department.

PCS: Means potential contaminant source.

PETROLEUM PRODUCT: Includes, without limitation, fuels (gasoline, diesel fuel, kerosene, and mixtures of these products), lubricating oils, motor oils (new and used), hydraulic fluids, and other similar petroleum based products.

POTENTIAL CONTAMINATION SOURCE: means any facility or site which employs an activity or procedure which may potentially contaminate ground or surface water. A pollution source is also a potential contamination source.

PROHIBITED USE: Means a use, activity or practice which creates a substantial risk of pollution or contamination in the specified protection zone. A prohibited use is not permitted.

RECHARGE AREA: Means either a primary or secondary recharge area.

RECHARGE AREA AND PROTECTION ZONE MAP: Means the map by that name designated in section [13.30.040](#) of this chapter.

REGULATED PERSON: Means a person, corporation, partnership, association or other legal entity subject to this chapter.

REGULATED SUBSTANCES: Means substances (including degradation and interaction products) which because of quantity, concentration, or physical, chemical (including ignitability, corrosivity, reactivity and toxicity), infectious characteristics, radiomutagenicity, carcinogenicity, teratogenicity, bioaccumulative effect, persistence (nondegradability) in nature, or any other characteristics relevant to a particular material that may cause significant harm to human health and/or the environment (including surface and ground water, plants, and animals), including, without limitation, those substances set forth in the generic regulated substances list which is included as section [13.30.150](#), appendix A of this chapter; and the substances set forth in the following lists, as the same may be amended from time to time: identification and listing of hazardous materials (40 CFR part 261, subpart D) and list of extremely hazardous substances (40 CFR part 355, appendices A and B) and which are in a form capable of entering ground water.



**RESIDENTIAL USE:** Means any building or structure or portion thereof that is designated for or used for residential purposes and any activity involving the use or occupancy of a lot for residential purposes. Residential use shall include those customary and accessory residential activities associated with the principal permitted use of a lot for residential purposes as provided in the City's zoning ordinance.

**SECONDARY CONTAINMENT:** Means any system that is used to provide release detection and release prevention, such as trays under containers, floor curbing or other systems designed to hold materials or liquids that may discharge from containers holding regulated substances, petroleum products or hazardous substances. Examples include a double walled tank, a double walled integral piping system, or single walled tank or integral piping system that is protected by an enclosed concrete vault, liner or an impervious containment area.

**SEPTIC HOLDING TANK:** Means a watertight receptacle, used to contain septic waste, the contents of which are removed and disposed of at a waste disposal facility.

**SEPTIC TANK SYSTEM:** Means a generally watertight receptacle connected to a drain field that allows liquid from the tank to enter the soil. The system is constructed to promote separation of solid and liquid components of domestic wastewater, to provide decomposition of organic matter, to store solids and to allow clarified liquid to discharge for further treatment and disposal in a soil absorption system.

**SLUDGE OR BIOSOLIDS:** Means the solids separated from wastewater during the wastewater treatment process.

**TRAVEL TIME CONTOUR:** Means the locus of points that form a line of any configuration in space from which ground water particles on that line theoretically take an equal amount of time to reach a given destination, such as a well or a well field, as predicted by the refined Salt Lake Valley MOD FLOW/MOD PATH model.

**USGS:** Means the United States Geological Survey.

**WELL:** Any excavation that is drilled, cored, bored, washed, driven, dug, jetted or otherwise constructed when the intended use of such excavation is for the location, acquisition, development or artificial recharge of ground water.

**WELL FIELD:** Means an area of land which contains one or more drinking water supply wells. (Ord. 18-06: Ord. 17-40)

### **13.30.070: USES AND RESTRICTIONS WITHIN RECHARGE AREAS AND PROTECTION ZONES:**

A. Prohibitions And Restrictions: A list of uses which may constitute potential contamination sources is found in section [13.30.150](#), appendix B of this chapter. The list

categorizes each use as either permitted, conditional or prohibited within protection zones referenced in section [13.30.150](#), appendix C of this chapter, and includes BMPs, if available, for each use. Permit requests for restricted uses shall be processed as provided in section [13.30.080](#) of this chapter. The department shall update and/or revise section [13.30.150](#), appendix B of this chapter from time to time as uses, technology, and BMPs evolve over time. Section [13.30.150](#), appendix C of this chapter shall not be construed to allow a permitted or a conditional use except as that use may be provided in the zoning ordinance of the City. It is the purpose of this chapter to regulate and/or prohibit certain land uses which may be otherwise classified as permitted or conditional uses under the zoning ordinance, and if the provisions of this chapter conflict with the zoning ordinance in this regard, the more strict provisions of this chapter shall apply.

B. Discharge: A person may not discharge, or permit the discharge, of any regulated substance, hazardous waste or petroleum product, whether treated or untreated, to soils, air, ground water, or surface water in any recharge area or protection zone, that may have a deleterious effect upon the ground water in the City, unless the discharge is in compliance with Federal, State, and local regulations. (Ord. 17-40)

C. Ground Source Heat Pump wells: The City restricts GSHP wells drilled in Source Protection Zones 1 through 4 as follows:

1. GSHP wells of any depth are prohibited in Zones 1 and 2.
2. GSHP wells less than 30' are restricted in zones 3 and 4.

### **13.30.150: APPENDICES:**

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### **APPENDIX B**

#### **List Of Potential Contamination Sources And Best Management Practices**

The following table identifies uses which have varying potentials to contaminate ground water sources. These uses have been classified according to the risk of contamination in each protection zone as follows:

**Permitted Uses (P)** - The risk of contamination is considered relatively low in the specified zone if regulatory requirements and Best Management Practices are implemented and, therefore, the use is permitted if it otherwise conforms to the zoning ordinance, chapter 17, of this Code.

**Conditional Uses (C)** - The risk of contamination is moderate in the specified zone. The use may be permitted only after conditional use review and approval by the Planning Commission if the use otherwise conforms to the zoning ordinance, chapter 17, of this Code and to State law. Approval is subject to implementation of Best

Management Practices and compliance with other reasonable conditions as may be established by the Planning Commission.

**Prohibited Uses (X)** - The risk of contamination is very high in the specified zone. The use is not permitted regardless of any other provision of the zoning ordinance, chapter 17, of this Code.

**Stormwater: R-317-8 Pretreatment: Contact local Municipal wastewater plant.**

TABLE 1 Use Matrix for Potential Contamination Sources							
Potential Contamination Source	Protection Zone					Related Regulations	Best Management Practice(s)
	Primary Recharge	Secondary Recharge	Zone 1	Zone 2	Zones 3 and 4		
...							
GSHP, less than 30 feet deep	X	X	X	X	C		
GSHP, more than 30 feet deep	X	X	X	X	X		
...							

...

*Section 3. Effective date.* This Ordinance shall take effect upon first publication.

PASSED, APPROVED AND ADOPTED by the Murray City Municipal Council on this 24<sup>th</sup> day of August, 2021

MURRAY CITY MUNICIPAL COUNCIL

  
Diane Turner, Chair

ATTEST:

  
Brooke Smith, City Recorder

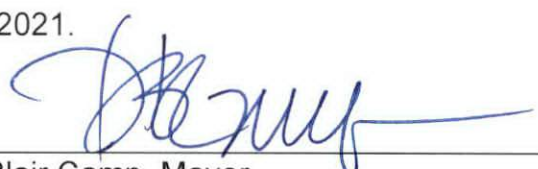


Transmitted to the Office of the Mayor of Murray City on this 27<sup>th</sup> day of

Aug, 2021.

MAYOR'S ACTION: Approved

DATED this 27<sup>th</sup> day of Aug., 2021.


  
D. Blair Camp, Mayor

ATTEST:

  
Brooke Smith, City Recorder

#### CERTIFICATE OF PUBLICATION

I hereby certify that this Ordinance or a summary hereof was published according to law on the 27<sup>th</sup> day of Aug., 2021.

  
Brooke Smith, City Recorder