

AN ORDINANCE TO CREATE AN AQUIFER PROTECTION
OVERLAY ZONE

Section 1. Legislative Findings. Approximately 60% of the City's municipal water supply comes from wells and springs in the Casper Formation aquifer. The Casper Formation is exposed along the west side of the Laramie Range and is vulnerable to contamination for these reasons:

A. Points of withdrawal (municipal and domestic wells) are in close proximity to the recharge area;

B. The aquifer is fractured and has extensive exposures of porous sandstones; and

C. Interstate Highway 80 cuts through the entire thickness of the Casper Formation. Numerous hazardous substances are transported each day over I-80.

D. The Casper Formation is exposed at the ground surface on the west flank of the Laramie Range.

The City of Laramie/Albany County Environmental Advisory Committee (EAC) has members with expertise in groundwater science. The Environmental Advisory Committee has developed the Casper Aquifer Protection Plan. One of the EAC's priority recommendations is the establishment of an overlay zone which defines setbacks from recharge features and prohibition of inappropriate land uses.

The Casper Formation is overlain by the Satanka Formation. The bottom fifty feet of the Satanka Formation are fractured and are probably in hydraulic communication with the Casper Formation. Generally the Satanka Formation serves as a confining layer above the Casper aquifer, retarding the flow of water upward out of the Casper Formation and the flow of water downward to the Casper Formation. The EAC recommends a safety factor of seventy-five feet of Satanka Formation above the Casper Formation as adequate to reduce the risk of contamination to acceptable levels.

To safeguard the Casper aquifer wells and springs which provide 60% of the City's municipal water, the City Council adopts this ordinance.

Section 2. Aquifer Protection Overlay Zone Established.

A. There is established within the City of Laramie an aquifer protection overlay zone (APO zone). The APO zone is effective within the city corporate limits at all

locations where the upper boundary of the Casper Formation is not covered by at least 75 feet of the overlying Satanka Formation naturally in place, whether the reduction in thickness of the Satanka Formation is due to natural causes or is man-made.

B. Copies of the illustrations which accompany the EAC Casper Aquifer Protection Plan shall be kept in appropriate City offices and shall be used to determine the boundaries of the APO zone. All property east of the western boundary of Zone 2 and west of the easternmost outcrop of the Casper Formation along the crest of the Laramie Range as shown upon the Plan's illustrations is zoned APO by default. Upon annexation of any property within the defined area, the annexed property is zoned APO whether another zoning classification is immediately established or not. Property west of the western boundary of Zone 2 shall be included in the APO zone if in the opinion of the city engineer based upon geologic evidence there is less than 75 feet of Satanka Formation overlying the Casper Formation at that location.

C. Any aggrieved person who believes that all or part of a parcel of property included in the APO should not be included may request that the appropriate City employees redetermine whether the property is correctly included. Redetermination shall not be made except upon clear and convincing evidence that at least 75 feet of undisturbed Satanka Formation overlies the Casper Formation at the location in dispute. Evidence based upon opinion alone without sound geologic field control is unacceptable. Before making a decision, the City may submit the evidence to qualified professionals for analysis, and may obtain independent evidence bearing upon the question.

D. Any person aggrieved in fact by an administrative decision under this section may appeal the decision to the Zoning Board of Adjustment.

Section 3. Allowed and Prohibited Uses.

A. Within APO zone, the underlying zoning classification shall control all aspects of the property's zoning except that no property may be used for any use prohibited in subsection 3.C. below.

B. For the purposes of this ordinance, "hazardous material" means (i) any hazardous substance as defined in 40 CFR 302.4 and listed therein at Table 302.4; (ii) any hazardous waste as defined in Wyoming law; (iii) any pesticide as defined in Wyoming law; or (iv) any oil or petroleum.

C. Each prohibited activity listed in Column 1 of the table below in this section is prohibited in the APO zone.

Table of Prohibited Activities

Column 1 Prohibited Activity	Column 2 Examples
The following activities are prohibited in the APO zone:	The following are examples of business or activity which conduct the prohibited activity.

1. Activities involving any equipment for the underground storage or transmission of oil or petroleum to the extent that it is not pre-empted by federal law; or hazardous material.	Any business or facility. Some examples include automotive service station, gasoline station, fleet garage
2. The discharge to ground water of any waste product.	Any business or facility.
3. Car or truck washing, unless all waste waters from the activity are lawfully disposed of through a connection to a Publicly Owned Treatment Works.	Car or truck washes.
4. Production or refining of chemicals, including without limitation hazardous materials or asphalt.	Chemical, petroleum, asphalt, or pesticide manufacturer.
5. Clothes or cloth cleaning service which involves the use, storage, or disposal of hazardous materials including without limitation dry-cleaning solvents.	Dry cleaner.
6. Generation of electrical power by means of fossil fuels except generation by means of natural gas or propane	Fossil-fueled electric power producer.
7. Production of electronic boards, electrical components, or other electrical equipment involving the use, storage, or disposal of any hazardous material or involving metal plating, degreasing of parts or equipment, or etching operations.	Electronic circuit board, electrical components or other electrical equipment manufacturer.
8. On-site storage of oil or petroleum for the purpose of wholesale or retail sale.	Bulk plant.
9. Embalming or crematory services which involve the use, storage or disposal of hazardous material, unless all waste waters from the activity are lawfully disposed of through a connection to a Publicly Owned Treatment Works.	Funeral home or crematory.
10. Furniture stripping operations which involve the use, storage, or disposal of hazardous materials.	Furniture stripper.
11. Furniture finishing operations which involve the use, storage, or disposal of hazardous materials, unless all waste waters from the activity are lawfully disposed of through a connection to a Publicly Owned Treatment Works.	Furniture repair.
12. Storage, treatment, or disposal of hazardous waste permitted under Wyoming law.	Hazardous waste treatment, storage, or disposal facility..
13. Clothes or cloth cleaning service for any industrial activity that involves the cleaning of clothes or cloth contaminated by hazardous material, unless all waste waters from the activity are lawfully disposed of through a connection to a Publicly Owned Treatment Works.	Industrial laundry.
14. Any biological or chemical testing, analysis or research which involves the use, storage, or disposal of hazardous material.	Laboratory: biological, chemical, clinical, educational, product testing, or research.
15. Pest control services which involve storage, mixing, or loading of pesticides or other hazardous materials.	Lawn care or pest control service
16. Salvage operations of metal or vehicle parts.	Metal salvage yards, vehicle parts, salvage yards, or junk yards.
17. Photographic finishing which involves the use, storage, or disposal of hazardous materials.	Photographic finishing laboratory.
18. Production, fabrication of metal products which involves the use, storage, or disposal of hazardous materials including (A) metal cleaning or degreasing with industrial solvents; (B) metal plating; (C) metal etching.	Metal foundry, metal finisher, metal machinist, metal fabricator, or metal plating.
19. Printing, plate making, lithography, photoengraving, or gravure, which involves the use, storage, or disposal of hazardous materials.	Printer or publisher.
20. Pulp production, which involves the use, storage or disposal of any hazardous materials.	Pulp, paper, or cardboard manufacturer.
21. Accumulation or storage of waste oil, anti-freeze or spent lead-acid batteries.	Recycling facility which accepts waste oil, spent anti-freeze, or spent lead-acid batteries.

22. Production or processing of rubber, resin cements, elastomers, or plastic, which involves the use, storage or disposal of hazardous materials.	Rubber, plastic, fabric coating, elastomer, or resin cement manufacturer.
23. Any activity listed in this column that is conducted at a residence for compensation.	Residential occupations.
24. Storage of pavement de-icing chemicals unless storage takes place within a weather-tight waterproof structure for the purpose of retail sale, or for the purpose of de-icing parking areas or access roads to parking areas.	Salt storage facilities.
25. The accumulation, storage, handling, recycling, disposal, reduction, processing, burning, transfer, or composting of solid waste except for a potable water treatment sludge disposal area.	Solid waste facility or intermediate processing center.
26. Finishing or etching of stone, clay, concrete or glass products, or painting of clay products which involves the use, storage, or disposal of hazardous materials.	Stone, clay or glass products manufacturer.
27. Dying, coating or printing of textiles, or tanning or finishing of leather, which involves the use, storage, or disposal of hazardous materials.	Textile mill, tannery.
28. Repair or maintenance of automotive or marine vehicles or internal combustion engines of vehicles, involving the use, storage, or disposal of hazardous materials, including solvents, lubricants, paints, brake or transmission fluids, or the generation of hazardous wastes.	Vehicle service facilities which may include: new or used car dealership, automobile body repair or paint shop, aircraft repair shop, automobile radiator, or transmission repair; boat dealer; recreational vehicle dealer; motorcycle dealer; truck dealer; truck stop; diesel service station; automotive service station, municipal garage, employee fleet maintenance garage, or construction equipment repair or rental.
29. On-site storage of hazardous materials for the purpose of wholesale or retail sale.	Wholesale trade, storage or warehousing of hazardous substances, hazardous wastes, pesticides or oil or petroleum.
30. Production or treatment of wood, veneer, plywood, or reconstituted wood, which involves the use, storage or disposal of any hazardous material.	Manufacturer of wood veneer, plywood, or reconstituted wood products.
31. Injection wells	
32. Water wells which are not cased at least to the top of the production zone with the annular space sealed from the top of the production zone to the surface, or in accordance with the state engineer's requirements or recommendations, whichever is stricter.	Residential uses.
33. Septic tanks and below-ground waste storage tanks. See below on pre-existing septic tanks.	Residential and business uses.
34. Application of pesticides and herbicides which do not become non-hazardous within 48 hours of application or which are not applied according to the manufacturer's instructions..	
35. Application of fertilizer at greater than the agronomic uptake rate of the vegetation fertilized.	
36. Quarrying and sand and gravel mining.	

Section 4. Setbacks from vulnerable features.

A. Vulnerable features in the Casper Formation are:

1. Faults and fracture zones which intercept the ground surface and have apertures of greater than one centimeter. Fractures may extend as far as 150 feet from the fault trace.

2. Folds which extend to the ground surface.
3. Exposed bedrock.
4. Bedrock not overlain by a sufficient thickness of low-permeability materials to prevent the effective downward migration of contaminants into the aquifer.
5. Defined drainages.
6. Shallow depth to ground water, defined as any location where no effective confining layer is present over the water-bearing strata within the Casper Formation and the depth to water is less than 70 feet.

B. No person shall install, maintain, or use any on-site wastewater treatment system or wastewater storage system or any private sewer system not connected to a public wastewater system within 100 feet of a vulnerable feature in the Casper Formation.

C. Within the APO, no building permit shall be issued for any wastewater system until the applicant demonstrates to the Building Official that there are no vulnerable features in the Casper Formation within 100 feet of any point of the proposed system. Proof shall be at least the signed and stamped written opinion of a Wyoming licensed professional engineer or Wyoming licensed professional geologist. The Building Official may review independently obtained evidence and records in arriving at a decision under this subsection. If material not supplied by the applicant is used in the decision, the applicant shall be given notice of the material used and an opportunity to comment on it before a final decision is reached. Aggrieved parties may appeal the Building Official's decision to the Zoning Board of Adjustment.

Section 5. Design standards for on-site wastewater treatment systems.

A. Installation, design, repair, and removal of septic systems located within the APO zone must be in accordance with plans and specifications certified by a professional engineer registered to practice in the State of Wyoming. This ordinance does not grant the right to install a septic system or small wastewater treatment system otherwise forbidden by the Laramie Municipal code. A septic system on property annexed to the City after the effective date of this ordinance must be replaced by a connection to the Publicly Owned Treatment Works or, if no connection is available at the time of annexation, brought into compliance with subsection B below within one year of annexation and must comply with Section 6 of this ordinance.

B. Each septic system and leach field within the APO shall be inspected by a person qualified by education or training to inspect small wastewater systems

1. During installation before and during backfilling;
2. Any time the ownership of the property is transferred; and

3. Upon annexation and at least once each three years thereafter. If upon inspection a septic system is found not to be adequately designed or constructed to serve the use to which it is connected without undue risk to the aquifer, it shall not be used for the disposal of wastewater until it is cleaned, repaired, or otherwise made to operate adequately so as not to present an undue risk to the aquifer.

C. Upon initial installation of a new system, or upon allowed replacement of any failed septic system, a two-tank or two-piece compartment system is required.

Section 6. Sunset date for small wastewater treatment systems.

A. For properties annexed to the City after the effective date of this ordinance and within the APO zone, no private on-site wastewater treatment system may be used after the earlier of

1. One year after installation of a municipal sewer collection line within 100 feet of the property on which the system is located; or

2. One year after the inclusion of the property containing the on-site system in a sewer district connected to the City's sewage treatment system; or

2. Seven years from the effective date of this ordinance.

B. The city council may grant a single extension of up to one additional year beyond the seven year requirement where municipal or district sewer lines to serve the property will be constructed within one year.

Section 7. Pre-existing nonconforming uses.

Pre-existing nonconforming uses within the APO zone are subject to the terms of this ordinance and not to the general ordinances on pre-existing nonconforming uses. Septic systems and other privately-owned wastewater treatment systems are controlled exclusively under Sections 5 and 6 above and are not subject to these provisions on pre-existing nonconforming uses.

A. A pre-existing nonconforming use is a use prohibited by this ordinance but which is in place upon property included in the APO zone as of the date the property was included in the APO zone. That date may be the effective date of this ordinance, the date of annexation of the property into the City, or the date a use becomes nonconforming because of an amendment to this ordinance.

B. Pre-existing nonconforming uses may continue in the same location they were in when they became nonconforming uses, but shall not be expanded in size or scope. Pre-existing nonconforming uses which are damaged may be repaired and resumed at the same location, size, and scope, provided that after repairs are complete, best available

control technology shall be in place to prevent contact between hazardous materials and the surface of the ground.

C. A pre-existing nonconforming use may be expanded under these conditions:

1. The expansion does not increase the hazard to the aquifer; or
2. Control technology built in to the expansion will prevent any increased risk to the aquifer because
 - a) Substitution is made of one hazardous material for another provided the substituted material is used for the same function and in equal or lesser amounts as the original material;
 - b) Substitution of equipment or process for equipment or process provided that the substituted equipment or process performs the same function as the original equipment or process, without increasing the storage volume of hazardous materials stored at the subject business or facility;
 - c) Expansion of wholesale or retail sales volume which increases the use of hazardous materials but which does not increase the storage capacity for hazardous material;
 - d) Initiation at the subject facility or business of an activity that is not a prohibited activity; or
3. As a result of the expansion the risk to the aquifer will be reduced.

D. Every pre-existing nonconforming use shall:

1. Store hazardous material in an enclosed structure or under a roof which minimizes storm water entry to the containment area.
2. Provide floors within a structure where hazardous material is stored, coated to protect the surface of the floor from deterioration due to spillage of any such material. A structure which may be used for storage or transfer of hazardous material shall be protected from storm water run-on and ground water intrusion.
3. Store hazardous material within an impermeable containment area which is capable of containing at least the volume of the largest container of such hazardous material present in the area, or 10% of the total volume of all such containers in the area, whichever is larger, without overflow of released hazardous material from the containment area.
4. Store hazardous material in a manner that will prevent the contact of chemicals with any materials so as to create a hazard of fire, explosion, or generation of toxic substances.

5. Store hazardous materials only in a container that has been certified by a state or federal agency or the American Society of Testing and Materials as suitable for the transport or storage of the material.

6. Except items offered for retail sale in their original unopened containers, store all hazardous material in an area secured against entry by the public.

7. Not use, maintain, or install floor drains, dry wells, or other infiltration devices or appurtenances which allow the release of wastewater to the ground water.

8. Discharge any substance or material to the ground in the APO zone unless the discharge is permitted by law.

These requirements are intended to supplement, and not to supersede, any other applicable requirements of federal, state, or local law.

The Building Official is authorized to promulgate rules and regulations under the Wyoming Administrative Procedure Act concerning the kind and amount of information which the owner of a pre-existing nonconforming use must provide to enable the Building Official to make an informed decision under this section. Appeals from the decision of the Building Official under this section shall be taken to the Zoning Board of Adjustment.

Section 8. Existing law on aquifer contamination unaffected.

The establishment of the APO zone, and the use of APO-zoned properties in accord with this ordinance, does not relieve any person from liability provided by law for contamination of the aquifer. This ordinance does not supersede or modify the requirements of any federal or state law or local ordinance which makes stricter requirements.

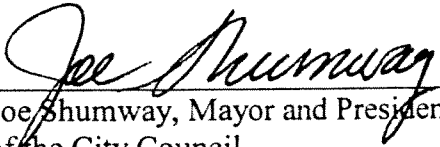
Section 9. Severability.

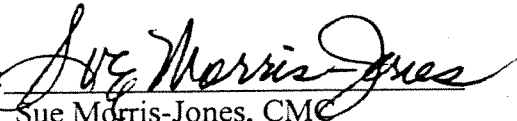
The provisions of this ordinance are severable. If any provision is declared to be invalid or unenforceable by any court of competent jurisdiction, those provisions not so declared shall remain in effect.

Section 10. Effective date.

This ordinance is effective upon publication.

Passed and approved this 15th day of October, 2002.


Joe Shumway, Mayor and President
of the City Council

Attest: 
Sue Morris-Jones, CMC
City Clerk

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