

The Town of

Star Valley Ranch, Wyoming

ORDINANCE 2008-15

BE IT ORDAINED BY THE GOVERNING BODY OF THE TOWN OF STAR VALLEY RANCH

Town of Star Valley Ranch Code

Chapter 11, Article 6

Adoption of the International Plumbing Code

AN ORDINANCE PROVIDING FOR THE ADOPTION OF THE INTERNATIONAL PLUMBING CODE FOR THE TOWN OF STAR VALLEY RANCH, AND PROVIDING FOR AN EFFECTIVE DATE.

SECTION I.

There is hereby adopted a new Article 6 to Chapter 11, titled Adoption of the International Plumbing Code of the Municipal Code of the Town of Star Valley Ranch to read as follows:

International Plumbing Code--Adoption by reference.

All buildings and temporary structures built or located within the town from and after January 1, 2009 shall be constructed in accordance with the requirements of the International Plumbing Code, 2006 Edition, as published by the International Code Council, specifically **excluding** all appendices. The said Code is incorporated herein by reference as if the same were more fully herein set out except as follows:

11. **Section 106.6.2 Fee Schedule** shall read, "For all buildings or structures requiring any permit, the fee for such permit shall be paid as set forth in the Town of Star Valley Ranch Code, Article 1, Chapter 11, Section 11-3, Fee Schedule".

22. **Section 106.6.2 Schedule of permit fees.** A sentence is added that reads, "Third party inspection costs are the responsibility of the owner as described in the Town of Star Valley Ranch Code, Chapter 11, Article 1, Sections 11-3 and 11-6.

33. **Section 106.6.3 Fee refunds** number .2 shall read, "Not more than 80 percent of the permit fee paid when no work has been done under a permit issued in accordance with this code.

44. **Section 106.6.3 Fee refunds** number 3 shall be deleted.

55. **Re-inspection Fee.** A re-inspection fee may be assessed as set forth in the Town of Star Valley Ranch Code, Chapter 11, Article 1, Sections 11-3 and 11-6, Miscellaneous Fees.

66. **Section 108.4 Violation Penalties** shall read “Penalties for infractions are described in the Town of Star Valley Ranch Code, Chapter 11, Article 1, Section 11-9 and Chapter 11, Article 1, Appendix 11-2.
77. **Section 108.5 Stop Work Orders.** The last sentence shall read “Stop work orders and the penalties for non compliance are described tin the Star Valley Ranch Code, Chapter 11, Article 1, Section 11-10 and Chapter 11, Article 1, Appendix 11-2.
88. **Section 305.6 Freezing.** The last sentence shall read, “Exterior water supply system piping shall be installed not less than 6 feet below grade.”
99. **Section 413 Commercial Food Waste Grinder Units** shall have an additional **Section 413.1.1 Prohibited Installations** added which shall read, “Food waste grinder units shall not be installed in commercial kitchens unless connected to an approved grease interceptor with a minimum liquid capacity of 750 gallons.”
1010. Add **Section 608.16.5.1** that reads as follows:
 Yard hydrants shall be sanitary hydrants and provided with an approved backflow prevention device with purging valves.
111. **Section 904.1 Roof extension** shall read, “All open vent pipes that extend through a roof shall be terminated at least 16 inches above the roof or 6inches above the anticipated snow accumulation whichever is greater, except that where a roof is to be used for any purpose other than weather protection, the vent extensions shall be run at least 7 feet above the roof.”
12. **Section 904.2 Frost enclosure.** Amend the first sentence to read: Every vent extension through a roof or wall shall be a minimum of 3 inches in diameter.
213. **Section 1003.3 Grease interceptors** shall read, “Grease interceptors shall be approved by the Building Official and shall comply with the requirements of Sections 1003.3.1 through 1003.3.5. Interior grease interceptors shall be provided with a solids interceptor that shall separate the discharge before connecting to the interior grease interceptor.”
314. **Section 1003.3.2 Food Waste Grinders** shall be amended to read, “*Food waste grinders shall not be connected to a grease interceptor with a liquid capacity of less than 750 gallons.* Emulsifiers, chemicals, enzymes and bacteria shall not discharge into the food waste grinder.”
415. An additional **Section 1003.3.6 Grease Interceptor Sizing** shall be added which shall read, “Grease interceptors for commercial kitchens shall be designed and sized in accordance with the following:”
- DESIGN, CONSTRUCTION AND INSTALLATION OF COMMERCIAL KITCHEN GREASE INTERCEPTORS
 H 101.0 GENERAL
 The provisions of this appendix shall apply to the design, construction, installation, and testing of commercial kitchen grease interceptors.
 H 102.0 WASTE DISCHARGE REQUIREMENTS

H 102.1 Waste discharge from fixtures and equipment in establishments which may contain grease, including but not limited to, scullery sinks, Pot and pan sinks, dishwashing machines, soup kettles and floor drains located in areas where grease-containing materials may exist, may be drained into the sanitary waste through the interceptor when approved by the Administrative Authority.

H 102.2 Toilets, urinals, and other similar fixtures shall not drain through the interceptor.

H 102.3 All waste shall enter the interceptor through the inlet pipe only.

H 103.0 DESIGN

H 103.1 Interceptors shall be constructed in accordance with the design approved by the Administrative Authority and shall have a minimum of two compartments with fittings designed for grease retention.

H 103.2 There shall be an adequate number of manholes to provide access for cleaning all areas of an interceptor; a minimum of one (1) per ten (10) feet (3048 mm) of interceptor length. Manhole covers shall be gastight in construction having a minimum opening dimension of twenty (20) inches (508mm).

H 103.3 In areas where traffic may exist the interceptor shall be designed to have adequate reinforcement and cover.

H 104.0 LOCATION

H 104.1 Each grease interceptor shall be so installed and connected that it shall be at all times easily accessible for inspection, cleaning, and removal of the intercepted grease. A grease interceptor may not be installed in any part of a building where food is handled. Location of the grease interceptor shall meet the approval of the Administrative Authority.

H 104.2 Interceptors shall be placed as close as practical to the fixtures it serves.

H 104.3 Each business establishment for which a grease interceptor is required shall have an interceptor, which shall serve only that establishment.

H 105.0 CONSTRUCTION REQUIREMENTS

H 105.1.0 PURPOSE Grease interceptors shall be designed to remove grease from effluent, and shall be sized in accordance with this appendix. Grease interceptors shall also be designed to retain grease until accumulations can be removed by pumping the interceptor. It is recommended that a sample box be located at the outlet end of all grease interceptors so that the Administrative Authority can periodically sample effluent quality.

H 105.2.0 DIMENSION AND TOLERANCE REQUIREMENTS Drawings shall be complete and shall show all dimensions, capacities, reinforcing, and structural design calculations.

H 105.2.2 Grease interceptors shall have two (2) compartments. The inlet compartment shall be two-thirds (2/3) of the total capacity of the interceptor, shall have a minimum liquid volume of three hundred thirty three (333) gallons (1260 L) and in all cases shall be longer than the maximum inside width of the interceptor. The outlet compartment shall have minimum capacity of one-third (1/3) of the total interceptor capacity. The liquid depth shall not be less than two feet six inches (2'6") (362 mm) nor more than six feet (6') (1829 mm).

H 105.2.3 All grease interceptors shall have at least one (1) square foot (0.09 m²) of surface area for every forty-five (45) gallons (170 L) of liquid capacity.

H 105.2.4 Access to each grease interceptor shall be provided by a manhole over the inlet and a manhole over the outlet. There shall also be an access manhole for each ten (10) feet (3048 mm) of length for interceptors over twenty (20) feet (6096 mm) long. Each such access opening shall have a leak-resistant closure (i.e., lid) that cannot slide, rotate or flip, exposing the opening when properly installed and which does not require the use of mechanical fasteners. Note: The intention is that a child-resistant lid be provided. Mechanical fasteners are recommended to augment the safety of and ensure positive closure of the lid. Manholes shall extend to grade, have a minimum size of 20"x20" square (508mm x 508 mm), and shall have a gasket cover at grade.

H 105.2.5 The inlet and outlet shall have a baffle tee or similar flow device with a minimum cross sectional area equal to the required cross sectional area of the inlet. Each baffle shall extend from at least four (4) inches (102 mm) above the liquid level to within at least twelve (12) inches (305 mm) of the inside floor of the interceptor.

H 105.2.6 Adequate partitions or baffles of sound durable material shall be constructed between compartments of the grease interceptor and shall extend at least six (6) inches (152 mm) above the liquid level. Flow from inlet compartment to outlet compartment shall be through a quarter bend, or similar device equivalent in cross sectional area to the inlet into the interceptor, and shall extend down to within twelve (12) inches (305 mm) of the inside floor. Wooden baffles are prohibited.

H 105.2.7 Inlet, outlet and main baffle shall have a free vent area equal to the required cross sectional area of the inlet pipe.

H 105.2.8 The inside cover of the grease interceptor shall be minimum of nine (9) inches (229 mm) above the liquid level over the entire surface area of the interceptor. The airspace shall have a minimum capacity equal to 12-1/2% of the grease interceptor's liquid volume.

H 105.3.0 STRUCTURAL REQUIREMENTS

H 105.3.1 Grease interceptors shall be designed to withstand all anticipated loads.

H 105.3.2 Grease interceptors and covers shall be designed for an earth load of not less than five hundred (500) pounds per square foot (24 kPa) when the maximum coverage does not exceed three (3) feet (914 mm). Each interceptor and cover shall be structurally designed to withstand all anticipated earth or other loads and to be installed level and on a solid bed. Wood covers are prohibited. Grease interceptors for installation in traffic areas shall be designed to withstand an AASHTO H20-44 wheel load, an additional three (3) foot (914 mm) earth load with an assumed soil weight of one hundred (100) pound per square foot (4.8 kPa), and thirty (30) pounds per square foot (1.4 kPa) fluid equivalent sidewall pressure.

H 105.3.3 Independent laboratory tests and engineering calculations certifying the grease interceptor capacity and structural stability shall be provided.

H 105.4.0 Material requirements

H 105.4.1 Concrete shall have a minimum compressive strength of four thousand (4000) pounds per square inch (27579 kPa).

Specification for Fly Ash and Raw or Calcined Natural Pozzolan for use as a Mineral Admixture in Portland Cement Concrete.

H 105.4.2 Walls shall have a thickness of at least three (3) inches (76mm), except where engineering analysis and production methods can justify a lesser thickness.

H 105.4.3 The minimum area of steel reinforcement (in both directions) of the structural elements shall be 0.0015 times the gross cross-sectional area of the reinforced section, if of bars; and not less than three fourths (3/4) as much if of welded wire fabric. All reinforcement shall be protected with a minimum of one (1) inch (25.4 mm) of concrete and shall comply with ASTM A 185-85, Specification for Steel Welded Wire Fabric, Plain for Concrete Reinforcement and ASTM A 165, Specification for Deformed and Plain Billet-Steel Bars for Concrete Reinforcement. Tanks shall be of sufficient strength to resist stresses caused during handling and installation without structural cracking.

H 105.4.4. If repairs are necessary, they shall be carried out in accordance with the established practices of the manufacturer in a manner that insures that the repaired interceptor meets the requirements of this appendix.

H 105.5.1 Steel. Steel grease interceptors shall comply with the requirements for steel septic tanks in Section 4 of PS 1.

H 105.6.1 Fiberglass reinforced polyester

Fiberglass reinforced polyester grease interceptors shall comply with the requirements for fiberglass reinforced polyester septic tanks in Section 4 of PS 1.

H 105.6.2 Polyethylene. Polyethylene grease interceptors shall comply with the requirements for polyethylene septic tanks in Section 4 of PS 1.

H 105.7.0 Water tight testing

H 105.7.1 Water testing. A sampling from each manufacturer's production run shall be water tested. One sample shall be tested for each size interceptor manufactured. Sample interceptors shall be assembled per manufacture's instructions, set level, and water raised to the flow-line of the outlet fitting. Interceptors shall show no leakage from section seams, pinholes, or other imperfections. Any leakage is cause for rejection. When leakage occurs additional water testing shall be made from new samples after correcting measures in production or installation have been completed. Test reports shall show total number of interceptors tested, number passing, number failing, location and cause of leakage. When leakage occurs corrective measures taken shall be reported.

H 105.8.0 Marking and Identification

H 105.8.1 Grease interceptors shall be permanently and legibly marked with the following:

- (1) Manufacturer's name or trademark.
- (2) Model number.
- (3) Any other marking required by law.

H 106.0 SIZING CRITERIA

H 106.1 Parameters. The parameters for sizing a grease interceptor are hydraulic loading and grease storage capacity, for one or more fixtures.

H 106.2 Sizing formula. The size of the interceptor shall be determined by using the method outlined in Table H-1.

H 107.0 EFFLUENT SAMPLING. The Administrative Authority may require an effluent sampling box on grease interceptors.

Sizing of Grease Interceptors

Number of meals Size	Waste Flow	Retention	storage	Interceptor
Per peak hour 1	X Rate ²	X time ³	X factor ⁴	= (liquid capacity)

1

21. Meals Served at Peak Hour

2. Waste Flow Rate

- a. With dishwashing machine6 gallon (22.7L)
flow
- b. Without dishwashing machine5 gallon (18.9 L)
flow
- c. Single service kitchen*.....2 gallon (7.6 L)
flow
- d. Food waste disposer.....1 gallon (3.8 L)
flow

3. Retention Times	
Commercial kitchen waste Dishwasher	2.5
hours	
Single-Service Kitchen*	
Single-serving.....	1.5 hours
4. Storage Factors	
Fully equipped commercial kitchen	8-hour operation:
1	
16-hour operation: 2
24-hour operation: 3
Single-Service Kitchen*.....	
1.5	

*Single service kitchen - paper service only; no food preparation

SECTION II.

All ordinances and parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

SECTION III.

If any section, subsection, sentence, clause, phrase or portion of this ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision and such holding shall not affect the validity of the remaining portions of the ordinances.

This ordinance shall take effect from and after the date of its publication following approval and adoption.

PASSED ON FIRST READING THIS 9TH DAY OF SEPTEMBER, 2008.

Boyd Siddoway, Mayor

Brenda Bauer, Town Clerk

PASSED ON SECOND READING THIS 14TH DAY OF OCTOBER, 2008

Boyd Siddoway, Mayor

Brenda Bauer, Town Clerk

PASSED ON THIRD READING THIS 18TH DAY OF NOVEMBER, 2008

Boyd Siddoway, Mayor

Brenda Bauer, Town Clerk