

# MOWER COUNTY BOARD OF ADJUSTMENT

## Minutes of the Mower County Board of Adjustment

Members Present: Gary Braaten, Bill Milbrath, Don Olson, Joan Roe.

Members Absent: None.

Others Present: Robert Jacobsen, Daryl Franklin, Bill Buckley.

The special meeting of the Mower County Board of Adjustment was called to order by Chair Don Olson on Wednesday, November 8, 1995, at 1:30 p.m. in the County Office's, Mower County Office Building, 1105-1/2 NE 8th Avenue, Austin, Minnesota.

Minutes of the October 11, 1995, meeting were approved as mailed on a motion by Joan Roe, seconded by Gary Braaten. The motion passed unanimously. Chair Olson made a deviation from the agenda to hear Variance #292 first since Mr. Jacobsen was present.

**Variance #292 - Robert Jacobsen** - Variance from Section 11-5, Subd. 6, of the Mower County Individual Sewage Treatment Ordinance to install a holding tank as an alternative to the standard treatment system (mound) which is required. Staff report was presented. After some discussion, a motion was made by Gary Braaten, seconded by Bill Milbrath, to approve the variance because (1) the variance is in harmony with the spirit and intent of the ordinance because land application is an acceptable means of disposal, (2) the variance is consistent with the Comprehensive Plan because alternative systems are acceptable under MPCA and County Standards, (3) there are practical difficulties and particular hardships shown because of the high water table in the area and the additional cost of a mound as a standard on-site sewer system with the following conditions:

1. The holding tank shall be constructed the same as a water tight septic tank.
2. A clean-out pipe of at least 6-inches diameter shall extend to the ground surface and be provided with seals to prevent odor and to exclude insects and vermin. A manhole of at least 20 inches in diameter shall extend through the cover to a point within 12 inches but no closer than 6 inches below finished grade. The manhole cover shall be covered with at least 6 inches of earth.
3. The tank shall be protected against floatation.
4. The holding tank will be a minimum of 1,200 gallons or 400 gallons times the number of bedrooms.
5. The holding tank shall be located in an area readily accessible to a pumping truck. The tank shall be pumped as needed by a licensed sewage tank pumper or the homeowner with appropriate equipment.
6. The holding tank shall be monitored to prevent accidental sewage overflow and a device such as a warning light or bell or other visual technique shall be used to prevent overflow.

7. Septage (sewage) shall be incorporated in the soil following appropriate state and federal guidelines and standards or shall be disposed of at a municipal treatment plant with the appropriate authorization.
8. A garbage disposal or water softener will not be discharged into the holding tank.

The motion passed unanimously.

**Variance #290 - Robert Underdahl/Morrison Well Company.** Variance from Section 6-82 of the Mower County Well Code to allow the petitioner to drill a cased and grouted Galena limestone well. Staff report was presented. A letter of approval from the Minnesota Department of Health was discussed. After some discussion, a motion was made by Bill Milbrath, seconded by Gary Braaten, to approve the variance because (1) the variance is in harmony with the spirit and intent of the ordinance because by following the standards of the State Health Department it will insure an adequate and safe supply of water, (2) the variance is consistent with the Comprehensive Plan for the reasons stated above; (3) there are practical difficulties and particular hardships shown because going to the St. Peter Sandstone would not insure any better quality or quantity of water. The variance was approved with the following 11 conditions of the Minnesota Department of Health and a 12th condition added that the well must be conformance with the Mower County nitrate standard:

1. The variance is valid only with the written approval of Mower County (County). Approval must be given prior to construction and in accordance with the Mower County Water Well Ordinance (Article VII). All conditions from the granted state approval shall be included within the final variance decree of Mower County.
2. The Galena formation at the well location must be overlain by the Spillville, Maquoketa, and Dubuque formations.
3. The static water level in the completed well must be no lower than the elevation of the top of the Maquoketa formation.
4. The well must be cased and grouted to a minimum depth of 450 feet and at least 20 feet below the static water level in the well. If the gamma-log and geological cutting samples, analyzed by the Minnesota Geological Survey (MGS), indicate that the top of the Galena formation is at a shallower depth than the required minimum depth given in this condition, the well can be cased and grouted to a depth not less than 10 feet into the Galena formation.
5. The well must be constructed in a bore hole which is at least 3.25 inches larger than the outer diameter of the casing. If couplings are used, the bore hole must be at least 3.25 inches larger than the outer diameter of the couplings. The annular space around the casing must be filled with neat cement grout in the rock portion of the well.
6. The well shall be test pumped and the well water sampled prior to grouting. The water sample taken from the well must meet water quality standards for coliform bacteria (less than 1.0 organism/100 milliliter [ml] MF method or less than 2.2 organisms/100 ml MPN method) and nitrate nitrogen (less than 10.0 milligrams/liter [mg/l]). If the water quality in the Galena formation is unsatisfactory, the well must be cased and grouted into an underlying safe aquifer or be sealed in accordance with Minnesota Rules, Chapter 4725.
7. Water from this well must be tested annually for nitrate nitrogen for a period of

three years. The results of these tests must be forwarded to: Minnesota Department of Health (MDH), Southeastern District Office, Campus Center Building, 2116 Campus Drive SE, Rochester, Minnesota, 55904-4744; and the Mower County Environmental Health Department.

8. Representative samples of drill cuttings shall be collected for each 5-foot drilled interval. These samples shall be collected in bags which will be sent to the well contractor under separate cover. The MGS will pick up the bagged drill cuttings.
9. The MGS must be contacted at 612/627-4788 after the bore hole is drilled so that a gamma-log of the well may be obtained. The gamma log and cuttings will be used to determine the depth to the Galena limestone.
10. Mr. Chris De Mattos or Mr. Peter Zimmerman at the MDH (507/285-7289) and the County (507/437-9527) shall be notified at least 24 hours prior to the construction of the well.
11. The well must be constructed in accordance with all other provisions of Minnesota Rules, Chapter 4725.

An additional condition was stated by the Board of Adjustment:

12. The nitrate-nitrogen concentration of the finished well shall be less than 5 mg/l as required by Mower County Ordinance.

The motion passed unanimously.

**Variance #291 - LeRoy and Wendy Johnson/Thein Well Co., Inc.** Variance from Section 6-82 of the Mower County Well Code to allow the petitioner to drill a cased and grouted Galena limestone well. Staff report was presented. A letter of approval from the Minnesota Department of Health was discussed. After some discussion, a motion was made by Joan Roe, seconded by Gary Braaten, to approve the variance because (1) the variance is in harmony with the spirit and intent of the ordinance because by following the standards of the State Health Department it will insure an adequate and safe supply of water, (2) the variance is consistent with the Comprehensive Plan for the reasons stated above; (3) there are practical difficulties and particular hardships shown because going to the St. Peter Sandstone would not insure any better quality or quantity of water. The variance was approved with the following 11 conditions of the Minnesota Department of Health and a 12th condition added that the well must be conformance with the Mower County nitrate standard:

1. The variance is valid only with the written approval of Mower County (County). Approval must be given prior to construction and in accordance with the Mower County Water Well Ordinance (Article VII). All conditions from the granted state approval shall be included within the final variance decree of Mower County.
2. The Galena formation at the well location must be overlain by the Spillville, Maquoketa, and Dubuque formations.
3. The static water level in the completed well must be no lower than the elevation of the top of the Maquoketa formation.
4. The well must be cased and grouted to a minimum depth of 435 feet and at least 20 feet below the static water level in the well. If the gamma-log and geological cutting samples, analyzed by the Minnesota Geological Survey (MGS), indicate that the top of the Galena formation is at a shallower depth than the required minimum depth given in this condition, the well can be cased

- and grouted to a depth not less than 10 feet into the Galena formation.
5. The well must be constructed in a bore hole which is at least 3.25 inches larger than the outer diameter of the casing. If couplings are used, the bore hole must be at least 3.25 inches larger than the outer diameter of the couplings. The annular space around the casing must be filled with neat cement grout in the rock portion of the well.
  6. The well shall be test pumped and the well water sampled prior to grouting. The water sample taken from the well must meet water quality standards for coliform bacteria (less than 1.0 organism/100 milliliter [ml] MF method or less than 2.2 organisms/100 ml MPN method) and nitrate nitrogen (less than 10.0 milligrams/liter [mg/l]). If the water quality in the Galena formation is unsatisfactory, the well must be cased and grouted into an underlying safe aquifer or be sealed in accordance with Minnesota Rules, Chapter 4725.
  7. Water from this well must be tested annually for nitrate nitrogen for a period of three years. The results of these tests must be forwarded to: Minnesota Department of Health (MDH), Southeastern District Office, Campus Center Building, 2116 Campus Drive SE, Rochester, Minnesota, 55904-4744; and the Mower County Environmental Health Department.
  8. Representative samples of drill cuttings shall be collected for each 5-foot drilled interval. These samples shall be collected in bags which will be sent to the well contractor under separate cover. The MGS will pick up the bagged drill cuttings.
  9. The MGS must be contacted at 612/627-4788 after the bore hole is drilled so that a gamma-log of the well may be obtained. The gamma log and cuttings will be used to determine the depth to the Galena limestone.
  10. Mr. Chris De Mattos or Mr. Peter Zimmerman at the MDH (507/285-7289) and the County (507/437-9527) shall be notified at least 24 hours prior to the construction of the well.
  11. The well must be constructed in accordance with all other provisions of Minnesota Rules, Chapter 4725.

An additional condition was stated by the Board of Adjustment:

12. The nitrate-nitrogen concentration of the finished well shall be less than 5 mg/l as required by Mower County Ordinance.

The motion passed unanimously.

**Variance #286 - Mower County** - Variance #286 for Mower County to allow a well that can not be found to remain unsealed was continued until next month because no new information has been received

There being no further business, the meeting adjourned at 2:10 p.m. on a motion by Gary Braaten, seconded by Bill Milbrath. The motion passed unanimously.

Respectfully submitted:



Daryl W. Franklin