

RULES AND REGULATIONS FOR THE ENFORCEMENT OF
THE
LITTLE BLUE NRD GROUNDWATER MANAGEMENT
AREA

Effective Date: May 8, 2007

PREAMBLE: These Rules and Regulations are adopted pursuant to the authority granted in State Statute Section 46-707. The purpose of these Rules and Regulations is for the orderly implementation of the NE Groundwater Management and Protection Act, Section 46-701, in order to stabilize, reduce, and prevent the increase or spread of groundwater contamination and/or the prevention of groundwater storage depletion in portions of the District where available data, evidence, and other information indicates that present or potential groundwater conditions dictate such actions.

These Rules and Regulations apply to all the lands of the Little Blue Natural Resources District which have been designated by action of the District Board of Directors as a Groundwater Management Area.

CHAPTER 1

DEFINITIONS

The following definitions shall be used in the administration of the Groundwater Management Area.

ACRE-INCH shall mean the amount of water that will cover one surface acre to the depth of one (1) inch, or twenty-seven thousand, one hundred fifty-four (27,154) gallons

ALLEGED VIOLATOR shall mean the operator or landowner, as determined to be appropriate by the Board of Directors, of a Farm Unit which has been operated in violation of any of the applicable requirements of these Rules and Regulations.

ALLOCATION shall mean the allotment of a specified total number of acre-inches of water.

APPLICATOR means any person engaged in the application of chemicals by means of chemigation. Applicator shall include any person operating equipment used for chemigation including starting and stopping the equipment whether for themselves or on behalf of the permit holder for the land on which the chemigation will take place.

APPROVED LABS are laboratories approved by the District for making fertilizer recommendations to regulated crop acres. A list of approved labs will be kept at the Little Blue NRD offices and may be modified upon submission of reference and approval of the District.

BEST MANGEMENT PRACTICES (BMP'S) shall mean schedules of activities, maintenance procedures and other management practices utilized to prevent or reduce present and future contamination of groundwater and/or reduce groundwater depletion. These shall consist of any authorized controls under each level of the implementation of this plan respectively, or as otherwise determined by the District, which may include: soils testing, water testing, irrigation scheduling, water usage, proper timing and rate of fertilizer and pesticide application and other fertilizer and pesticide management programs, or groundwater management programs as adopted by the Board of Directors.

BOARD OR BOARD OF DIRECTORS shall mean the elected Board of Directors of the Little Blue Natural Resources District and/or its employees and agents acting at the direction of the Board of Directors.

CERTIFICATION shall mean the act of certifying that a person has completed a required course of study in best management practices approved by the District.

CERTIFIED ACRES shall mean those acres verified with the District which were irrigated by a registered well at least one out of three years prior to the effective date of either Level II controls or special controls for a hydrologic unit.

CHEMICAL means any fertilizer, herbicide, or pesticide mixed with the water supply.

CHEMIGATION means any process whereby chemicals are applied to land or crops in or with water through an on-farm irrigation distribution system.

COMPLIANCE OFFICER shall mean an employee or agent of the District authorized by the General Manager to perform the functions assigned by these Rules and Regulations.

CONTROLS shall mean any requirements or restrictions placed upon an operator or landowner pursuant to the Groundwater Management Plan.

COUNCIL mean the Environmental Control Council.

DEMONSTRATION FIELD (water quality) shall mean an operator's largest irrigated field as delineated in the FSA cropping plan records, or other field with specific management challenges as agreed to by the District, in which the operator intends to plant corn, milo, or forage sorghum in the ensuing crop year. If the operator does not have any irrigated row crop fields, the Demonstration Field shall mean the largest dryland field as delineated in the FSA

cropping plan records, or other field with specific management challenges as agreed to by the District, in which the operator intends to plant corn, milo, or forage sorghum in the ensuing crop year. An irrigated Demonstration Field for water quality shall be 5 acres in size or larger, a non-irrigated Demonstration Field for water quality shall be 10 acres in size or larger.

DEMONSTRATION FIELD (water quantity) shall mean an operator's largest irrigated as delineated in the FSA cropping plan records, or other field with specific management challenges as agreed to by the District, on which the operator intends to apply groundwater for plant production. An irrigated Demonstration Field for water quantity shall be 5 acres in size or larger.

DEPARTMENT means the Department of Environmental Quality.

DISTRICT or NRD shall mean the Little Blue Natural Resources District.

DIRECTOR means the Director of Environmental Quality.

EDUCATIONAL PROGRAMS shall mean information and educational training sessions designed to acquaint landowners and operators with best management practices in the operation of their irrigation and cropping systems.

FARM UNIT shall mean a tract of land with a determined size on which field agricultural crops are grown.

FERTILIZER means any formulation or product used as a plant nutrient which is intended to promote plant growth and contains one or more plant nutrients recognized by the Association of American Plant Food Control Officials in its official publication.

FIELD shall mean non-irrigated fields ten (10) acres or larger and irrigated fields that are five (5) acres and larger on which agricultural crops will be grown.

GROUNDWATER shall mean that water which occurs or moves, seeps, filters or percolates through ground under the surface of the land and shall include groundwater which becomes commingled with waters from surface sources.

GROUNDWATER MANAGEMENT AREA shall mean an area so designated by the Board of Directors pursuant to State Statute Section 46-709.

GROUNDWATER MANAGEMENT PLAN shall mean a plan developed pursuant to State Statute Section 46-709, and adopted by the Board, which includes a schedule for implementation of prescribed Best Management Practices, designed to address water quantity and quality problems identified within the District.

GROUNDWATER USER shall mean any person who at any time extracts, withdraws or confines groundwater for any use by himself or other persons at a rate in excess of 50 gallons per minute.

HERBICIDE means an agent used to destroy or inhibit plant growth.

ILLEGAL WELL shall mean:

1. Any well not registered pursuant to the provisions of State Statute Sections 46-602 to 46-606.
2. Any well in violation of spacing requirements specified by State Statute Sections 46-609 or 46-651 or these Rules and Regulations.
3. Any well utilized for application of fertilizer/chemical material in violation of State Statute Section 46-1127 (Laws 1986, LB 284).
4. Any water well from which the groundwater withdrawn is transported to an adjoining state in violation of State Statute Section 46-613.01.
5. Any water well, after July 1 2000, located within 50 feet of the bank of any natural stream and utilized for irrigation purposes without a permit issued pursuant to State Statute Section 46-637.
6. Any well the water from which flows under natural pressure in excess of the provisions of State Statute Section 46-281.
7. Any well constructed or operated in violation of these Rules and Regulations, State Statute Section 46-1207.01, or of other applicable laws of the State of Nebraska.

IMPROPER IRRIGATION RUNOFF shall mean the occurrence of irrigation runoff water after July 1, 1976:

1. Which causes or contributes to an excessive accumulation of water upon or beneath the surface of the lands of any other person(s) or
2. Which causes or contributes to the deterioration of water quality by depositing sediment and/or associated chemicals in surface waters within the area.

INJECTION LOCATION means each site where chemicals will be applied through an irrigation distribution system.

INSPECTOR shall mean an employee or agent of the District authorized by the Compliance Office to inspect suspected rule or statute violations.

IRRIGATION DISTRIBUTION SYSTEM means any device or combination of devices having a hose, pipe, or other conduit, which connects directly to any source of ground or surface water, through which water or a mixture of water and chemicals is drawn and applied for agricultural or horticultural purposes. Irrigation distribution system shall not include any hand-held hose sprayer or other similar device which is constructed so that an interruption in water flow automatically prevents any backflow to the water source.

IRRIGATED ACRE shall mean any acre of ground upon which groundwater is being applied for agricultural purposes and has been certified as such

IRRIGATION SEASON shall mean the 12 months of the calendar year.

IRRIGATION RUNOFF WATER shall mean groundwater used for irrigation purposes, which escapes from land, owned, leased or otherwise under the direct supervision and control of a groundwater user.

LANDOWNER shall mean a person, or persons owning land.

LATE PERMIT shall mean a document required to be obtained from the Little Blue Natural Resources District after a well has been constructed without a permit in the Management Area in accordance with State Statute Section 46-735.

MCL shall mean maximum contaminant level for specified contaminant measured in mg/l as established by the U.S. Environmental Protection Agency.

NITROGEN ACCOUNTING METHOD shall mean the accounting for nitrogen from all sources (soil, irrigation water, legumes, manure, etc.) prior to fertilization.

NONPOINT SOURCE CONTAMINATION any source of pollution resulting from the dissolution and disbursement of widespread, relatively uniform contaminants of a non-specific origin.

OPEN DISCHARGE SYSTEM means a system in which the water is pumped or diverted directly into a ditch or canal in such a manner that the force of gravity at the point of discharge into the ditch or canal cannot cause water to flow back to the point from which the water was pumped or diverted.

OPERATOR shall mean a person who controls the day to day operations on a field.

PERMIT shall mean a document required to be obtained from the Little Blue Natural Resources District before a well is constructed in the Management Area in accordance with State Statute Sections 46-735 and 46-736.

PERMITHOLDER means the owner or operator of land who applies or authorizes the application of chemicals to such land by means of chemigation. The permit holder shall be the party primarily responsible for any liability arising from chemigation on the property.

PESTICIDE means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, insect, rodent, nematode, fungus, weed, or other form of plant or animal life or virus, except viruses on or in living humans or animals, and any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant.

PERSON shall mean a natural person, personal representative, trustee, guardian, conservator, irrigation district, corporation, limited liability company, partnership, association, municipality, or any agency or political subdivision of the State of Nebraska or any agency of the Federal Government.

POOLING shall mean an arrangement in which groundwater allocations for irrigated acres may be combined based on operator or landowner.

RAD is a reasonable acceptable decline in the groundwater aquifer based on hydro-geological characteristics across the District.

REPORT shall be documents required by the District to effectively verify the operator's, or landowner's compliance in carrying out BMP's or any other documents which are required pursuant to the Groundwater Management Plan.

RESTRICTED USE PESTICIDE means a pesticide that is classified for restricted use under the provisions of the Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. Sec. 135, et seq., including section 3(d)(1)(C) thereof.

SCHEDULE OF COMPLIANCE shall mean a plan or measure to bring a person into compliance with District rules or State statutes.

STAY shall mean to halt, stop, or delay a permit, action of development, or expansion of irrigated acres.

STRAIGHT LINE AVERAGE shall be the sum of all data in a specific geographic area divided by the number of sets collected.

TRANSFER (Allocation) shall mean allowing any or all of a groundwater acre-inch allocation being transferred to other certified acres.

TRANSFER (Groundwater) shall mean groundwater withdrawn for any purpose from a well, or series of wells, producing 50 gallons per minute or more and being transferred to another tract of land from where the well is located.

UNL NITROGEN FERTILIZER RECOMMENDATIONS shall mean the University of Nebraska recommendations for application of a specific amount of additional nitrogen calculated in pounds per acre to meet the crop yield goal for the field.

VARIANCE shall mean the approval to act in a manner contrary to existing and applicable rules and regulations.

WATER WELL shall mean any excavation that is drilled, cored, bored, washed, driven, dug, jetted, or otherwise constructed for the purpose of exploring for groundwater, monitoring groundwater, utilizing the geothermal properties of the ground, obtaining hydro geologic information, or extracting water from or injecting water into the underground water reservoir. Water well shall not include any excavation made for obtaining or prospecting for oil or natural gas, or for inserting media, to repressure oil or natural gas bearing formations regulated by the Nebraska Oil and Gas Conservation Commission.

YIELD GOAL shall mean the farm's 5-year average crop yield multiplied by 1.05.

CHAPTER 2

LEVEL I CONTROL MEASURES

Currently the entire Little Blue NRD is in a Level I Management area. After the effective date of these Rules and Regulations, groundwater users located within the Little Blue NRD are required to do the following:

A. WELL CONSTRUCTION

1. Any person who intends to construct a water well in a groundwater management area on land which he or she owns or controls shall, before commencing construction, apply with the District in which the water well will be located, for a permit on forms provided by the District. Permits are required for any new water

well, or series of water wells, intended to pump 50 gallons per minute or more. Permits are required for replacement wells. Exemptions to this policy are (a) no permit shall be required for test holes or dewatering wells with an intended use of ninety day or less and (b) no permit shall be required for a single water well designed and constructed to pump fifty gallons per minute or less. The following rules are established to properly permit a new water well construction and to assure that 1) proper well spacing regulations are met, 2) the District has adequate time to evaluate each permit before construction of the water well, 3) other undesirable site conditions or environmental hazards are avoided, and 4) all other applicable rules and regulations of the District are followed.

- a. All applications for a new water well shall be submitted on forms provided by the District not less than seven (7) calendar days prior to the intended date of construction. The District shall issue or deny the permit within thirty (30) days after the application is filed.
- b. The application form shall be accompanied by an aerial photo of the site with a distinctive mark and if available, GPS coordinates, locating the proposed new well.
- c. The application shall include the fee specified in State Statute Section 46-735. The fee for a new well permit is \$50 per application; a late fee permit is \$250.
- d. The District will review the application form, examine aerial photos, topographic maps, and other relevant information and is authorized to do a physical on-site inspection if deemed necessary.
- e. The well driller will often serve as the primary contact for new well installations, and as such, will usually provide the necessary form information and fees for the application. The landowner may also provide this information or work with the driller to assure that all requirements are met. All well applications must be signed by the landowner, or person with power of attorney, a copy of which shall be provided to the District at the time the application is submitted.
- f. The permit will be issued only after District staff has determined the proposed well meets all state and local requirements and only after the seven (7) day waiting period.
- g. An emergency well application may be considered by the District staff, in which the seven (7) day waiting period may be waived, only if circumstances of an emergency nature arise (i.e. collapsed well casing or other similar situations). The waiting period shall not be waived for failure by the landowner or well driller to anticipate the needed time scheduling for well construction.
- h. Each water well constructed shall be registered with the Nebraska Department of Natural Resources within 60 days of completion or the well will be considered an illegal well.
- i. As a condition of permit approval, all new well installations are required to have a minimum of 10 times the pipe diameter of clear space in the discharge pipe to allow for potential installation of a flow meter at a future date. As an alternative, the distance requirement may be waived if the water well owner installs a new water flow meter at the time of well completion, which, in accordance with the manufacturer's specifications, may be installed in a discharge length of less than 10 times the pipe diameters, and provided the meter has been approved by the District. The District will certify the installation.

2. High Capacity Water Wells

- a. In addition to the water well permitting requirements set forth above, any water user who intends to construct a new well, replace an existing well or use an existing well or series of interconnected wells with the purpose of consuming more than five hundred (500) acre-feet of groundwater per year, or increasing ground water withdrawal from an existing well or series of wells by an additional two hundred and fifty (250) acre feet on a cumulative basis must also apply to the NRD for a high volume groundwater consumption permit. The high volume groundwater consumption permit application shall include a hydrologic evaluation, conducted at the permittee's expense, showing the impact, if any, of the intended withdrawal on current groundwater users and a minimum 20-year impact on the groundwater table for potential future uses. In determining appropriateness of allowing the development of such a well or series of wells, the board shall also consider the preference of use as follows: 1) domestic, 2) agriculture and 3) industry and manufacturing in accordance with Sec. 46-613.
- b. A high volume groundwater consumption permit shall be reviewed by the Water Resources Committee and recommendations acted on by the NRD board of directors, who may approve, deny or approve with conditions and limitations thereon as determined necessary to protect groundwater supplies, prevent groundwater waste or take other such other actions as may be appropriate to limit adverse impacts on adjacent or nearby groundwater users. Such conditions may include, but are not limited to:
 - limitations on the rate or volume of groundwater pumping,
 - requirements to offsets for depletions to groundwater table declines,

- reporting pumping to the NRD on an annual basis,
 - allowing NRD personnel access to the well site for inspection of the well and flowmeter,
 - construction and maintenance of groundwater observation wells at locations to be determined.
 - limitations on the location, rate and manner of discharge of groundwater after use in an industrial facility.
- c. It is further the policy of the Little Blue NRD that every reasonable effort shall be made by the permittee to reclaim as much of the water withdrawn from the aquifer as possible and that pumpage to waste shall be avoided if possible.
- d. The applicant shall pay a non-refundable fee of \$250 and shall also pay an amount estimated by the District to be re-imbursed for its actual costs expended in hiring a consultant for peer review and assessment of the hydrologic evaluation.

B. WELL SPACING

After March 10, 2006 spacing between all new irrigation wells shall be set at one thousand (1,000) feet, except as described in paragraph 3 below. Implementation of this control is allowed in State Statute Section 46-739(1)(c).

1. This spacing shall apply to all irrigation wells, even if registered to the same owner.
2. When irrigation wells are commingled or combined for use in the same irrigation system and have a total capacity exceeding 50 gallons per minute, each well shall comply with all provisions of this paragraph.
3. When an irrigation well located less than 1000 feet from an existing irrigation well is replaced, the replacement irrigation well may be constructed no more than fifty (50) feet closer to the existing irrigation well of different ownership. However; when replacing an irrigation well the state requirement of 600 feet between irrigation wells of differing ownership must still be maintained.
4. Nothing in this control shall exempt a person from the provisions of state statute 46-739(1)(c) regarding irrigation well spacing.

C. WATER TRANSFERS

Any existing transfer of ground water from a water well to another tract of land prior to March 10, 2006 is grandfathered and may continue.

1. TRANSFERS FOR IRRIGATION

- a. Any person who intends to develop facilities to transfer water from the overlying tract for the purpose of irrigation, either with a new or existing irrigation well or series of wells, shall, before commencing construction, apply with the District in which the water well(s) is/will be located, for such transfer on forms provided by the District.
- b. A groundwater user shall only be allowed to initiate new groundwater transfers for irrigated crop production to a government survey quarter (¼) section directly adjacent or catercorner (diagonal) to the tract of land on which the water well is located. Implementation of this control is allowed in State Statute Section 46-739(1)(k).
- c. The tract of land on which the well is located must be a single tract no larger than 160 acres. An irrigation well used for transfer may not irrigate more additional acres than the total acreage of the tract of land on which the well is located.
- d. New transfers of irrigation water from within the LBNRD to any area where a well moratorium, permit suspension, or groundwater allocation has been established is prohibited.
- e. A non-refundable application fee of \$100 payable to the Little Blue NRD shall accompany all requests for an irrigation transfer to cover any costs associated with investigation or review.

2. TRANSFERS FOR USES OTHER THAN IRRIGATION

- a. Any person who intends to develop facilities to transfer water from the overlying land tract to any other tract of land for uses other than irrigation, either with a new, existing, or series of wells which produce 50 gallons per minute or more shall, before commencing construction, apply with the District in which the water well is/will be located, for such transfer on forms provided by the District. Implementation of this control is allowed in State Statute Section 46-739(1)(k).
- b. For new transfers which will consume more than five hundred (500) acre-feet of groundwater per year from an existing well or series of well, or an increase in ground water withdrawal from an existing well or series of wells by an additional two hundred and fifty (250) acre feet on a cumulative basis, a hydrologic evaluation will be required, conducted at the permittee's expense, showing the impact, if

- any, of the intended withdrawal on current groundwater users and a minimum 20-year impact on the groundwater table for potential future uses.
 - c. Groundwater transfers authorized by the Municipal Rural Domestic Ground Water Transfers Permit Act and groundwater transfers by a municipality within its corporate limits, are exempt from this rule.
 - d. The applicant shall pay a non-refundable fee of \$250 and shall also pay an amount estimated by the District to be re-imbursed for its actual costs expended in hiring a consultant for peer review and assessment of the hydrologic evaluation.
3. All applications for transfers will be reviewed by the District's Water Resources Committee and recommendations acted upon by the Board of Directors at a monthly scheduled meeting. The District will either approve, approve with conditions, deny, or request additional information before action on the transfer. The District shall approve or deny an application for water transfer based on:
 - a. Preference of use as follows: 1) domestic, 2) agriculture and 3) industry and manufacturing in accordance with Sec. 46-613.
 - b. The Groundwater Reservoir Life Goal of the Little Blue NRD.
 - c. Potential adverse effects on other ground or surface water users.
 - d. Any adverse impacts on the State's ability to comply with an interstate compact or decree or to fulfill the provisions of any other formal state contract or agreement.
 - e. Protection of the public's interest and welfare.
 4. Nothing in this control shall exempt a person from the provisions of applicable state laws regarding ground water transfers.

D. NITROGEN FERTILIZER RESTRICTIONS

Pre-plant applications of nitrogen fertilizers are prohibited prior to November 1; however, the following activities are exempt from the pre-plant nitrogen fertilizer restriction.

1. The spreading of manure, sewage, and other by-products conducted in compliance with state laws and regulations.
2. Applications of pre-plant starter nitrogen formulation to fall seeded crops.

E. WELL CONSTRUCTION REQUIREMENTS

1. After March 10, 2006 new or replacement water wells to be used for domestic, stock, or other such purposes shall be constructed to such a depth that they are less likely to be affected by seasonal water level declines caused by other water wells in the same area. Implementation of this control is allowed in State Statute Section 46-739(1)(1).

After March 10, 2006, municipalities located within the Little Blue NRD may request the following:

F. WELLHEAD PROTECTION AREAS

1. A Sub-Area may be designated when requested by a municipality, such a request will be considered only if:
 - a. The municipality has adopted a Wellhead Protection Area Plan and such plan has been approved by the State of Nebraska as per the Nebraska Wellhead Protection Act, or;
 - b. The average nitrate level in the municipality's wells exceeds 7 mg/l, or;
 - c. Water quantity triggers have been met which would move the wellhead sub-area to the next higher level of control.
2. Within 90 days after receipt of such a request, the District shall appoint an advisory committee consisting of an equal number of representatives from the municipality and farmers in the proposed Sub-Area and at least one representative from the District.
3. Within one year following its' creation, the advisory committee shall submit a report to the District recommending whether a Sub-Area should be designated. If the report recommends such designation it must also include recommendations on the management activities that should be implemented from the District's GWMP's controls. The committee may also make recommendations to the municipality concerning modifications to their Wellhead Protection Plan.
4. The District shall hold a public hearing concerning the designation of a Sub-Area to conform to the boundaries of the municipalities' approved Wellhead Protection Boundary. Following the hearing the District may accept or reject a resolution designating the Sub-Area.
5. The various levels of control in a Municipality requested Sub-Area will be based on the District's Groundwater Management Plan.

6. The discontinuance or modification of a Municipality requested Sub-Area will be subject to review every three years.

The use of BMP's are encouraged, such as:

G. WATER QUALITY AND QUANTITY BEST MANAGEMENT PRACTICES

1. Irrigation scheduling methods.
2. Water measurement devices.
3. Irrigation recycle systems.
4. Land leveling.
5. Fertilizer management, including: soil sampling, realistic yield goals, irrigation water nitrate analysis, and following recommended application rates.
6. Chemical and pesticide management, including: application calibrations, timing, storage and disposal.
7. Integrated pest management, including field scouting.
8. Conservation tillage practices.
9. Conservation structural practices.
10. Crop rotation.
11. Computerized fertilizer monitors.
12. Computerized spray monitors.
13. Proper calibration and maintenance of equipment.
14. Other practices which the industry may identify as beneficial as approved by the District's Board of Directors.

CHAPTER 3

ADVANCED LEVELS OF CONTROL

A. TRIGGER LEVELS

The data obtained through sampling and measurement programs to monitor MCLs and static water levels will be calculated using a straight line average. For comparison purposes, the data collected from these programs are applied to the entire District or to potential management sub-areas. To establish a management sub-area and move to the next higher level of controls the following triggers must be met:

1. Water Quality
 - a. Level II – Is enacted when 70% of the MCL for any contaminant is sampled in 60% of the monitored wells.
 - b. Level III – Is enacted when 85% of the MCL for any contaminant is sampled in 60% of the monitored wells.
 - c. Level IV – Is enacted when 100% of the MCL for any contaminant is sampled in 60% of the monitored wells.
 - d. See appendix for listing of sampled contaminants and their MCL's.
2. Water Quantity
 - a. Level II – Is enacted when the established percentage of monitored wells fall below 50% RAD (Reasonable Acceptable Decline) for the specific Hydro-Geologic Unit in which the well is located for two consecutive spring measurements.
 - b. Level III – is enacted when the established percentage of monitored wells fall below 100% RAD (Reasonable Acceptable Decline) for the specific Hydro-Geologic Unit in which the well is located for two consecutive spring measurements.
 - c. See appendix for listings of the established percentage, RAD, and location of the Hydro-Geologic Units.

B. PROCEDURES FOR SUB-AREA DESIGNATION AND ESTABLISHMENT OF CONTROLS

1. A sub-area for Quality and Quantity Controls will be established, or a higher level of controls implemented, when the triggers above are met, or when upon action of the Board, a special Hydrologic Unit is declared. The following procedure will be followed:
 - a. A sub-area is defined as an area containing at least five sampled wells within the LBNRD's well sampling program around which a logical boundary can be drawn. The minimum size of a sub-area shall be sixteen (16) square miles.

- Exception can be made for Wellhead Protection Areas that have been delineated for any Little Blue NRD community. A community can request the NRD for assistance in protecting its municipal water supply, without regard to the size of the management area. This area can be managed by the LBNRD for water quality and/or water quantity purposes under existing rules and regulations.
- b. The District will advertise a public hearing in the newspaper(s) of general circulation in the area of the proposed sub-area.
- c. The public hearing will be held to provide information about the problems being experienced, the proposed boundaries of the area, the proposed controls to be implemented, and will receive testimony from the affected public on the same.
- d. Following review of available data and public testimony, the Board of Directors shall take action to implement the proposed sub-area and controls, or delay implementation for further study. If action is taken to implement the sub-area and controls, notification shall be made to the public in a newspaper(s) of general circulation in the affected area once each week for 3 consecutive weeks.
- e. The controls proposed by the Board for the sub-area or hydrologic unit area will take effect not less than seven days after the final publication date. The full text of all controls adopted shall be available upon request at least 30 days prior to the effective date.

C. SUB-AREA BOUNDARY OR CONTROL MODIFICATION -If, after three years of monitoring in areas adjacent to or within an established sub area, the condition for which the original sub area was established has changed or and/or the next higher or lower trigger has been reached according to these rules, the district shall provide 1) monitoring information to the public, 2) a proposal for expanding or reducing the boundaries of the sub area in question for which a logical boundary can be drawn, 3) the proposed control(s) to be implemented, and 4) hold one or more public hearings to receive testimony on the proposed change. Upon approval by the Board of Directors, the proposed geographical modification of the sub-area or change in the level of control measures will be implemented. In accordance with these rules, the advancement to each new level of control cannot occur more rapidly than one level per year except as they relate to land in a newly expanded sub-area in the first year of said expansion.

D. SUB-AREA OPERATOR TRAINING-The purpose of certification is to share results of ongoing monitoring of water resources conditions and train farm operators in the use of Best Management Practices (BMP's) and other measures necessary to increase nitrogen use efficiency, irrigation water use efficiency, and general environmental protection. All operators of lands within a Water Quality/Quantity Sub-Area are required to attend nitrogen and/or irrigation management workshops every 4 years, commencing from the institution of Level II controls.

E. SUB-AREA OPERATOR CERTIFICATION-any person who makes the day-to-day decisions about the operations of the farm must be certified in proficient management of Nitrogen and Irrigation application practices. If a farm unit has two or more individuals who, independent of each other, may make decisions about the farm operations, each person shall be certified. If one person essentially makes all management decisions and directs the work, which other parties carry out, only the person making the operational decisions will be required to be certified. If an operator has farm operations in two or more different sub-areas he or she must only attend training sessions and be certified in the sub-area with the highest level of control. The following statements will help in determining who is required to be certified.

Yes – Owner/Operator

Yes – Operator/Tenant – if decision maker

Yes – Family Farm Operator – all who make management decisions

Yes – Hired Hand – if he or she is responsible for making decisions about fertilizer rates and irrigation operations

Yes – Crop consultants – if serving operators and making recommendations,

No – Hired hands working under direction of decision maker

No – Custom Operator – if working at the direction of the decision maker

For a water quality sub-area if a farm unit is, and will continue to be, planted to all non-qualifying crops (such as small grain and alfalfa) or is devoted entirely to grassland or pasture, the operator will not be required to become certified. However, if the farm plans change which will include the planting of qualifying crops (corn, soybeans, milo or forage sorghum), the operator must first attend the training provided and become certified.

1. If an operator is unable to attend the training, the producer can review a taped version of the workshop with NRD personnel or other designated parties.
2. During the interim between scheduled training workshops, new operators can review a taped version of the workshop with NRD personnel or other designated parties. This certification will only be good until the next rotation of scheduled workshops is held.
3. Re-certification is required every fourth (4th) year in order to remain in program compliance.
 - a. Credit can be given, with prior approval from the District manager or his designee, to operators attending similar training on Nitrogen or Irrigation Management.
 - b. Exemptions will not be allowed until the operator has attended two mandatory sub-area certification training sessions through the District.
 - c. For re-certification operators may also choose to complete a self study course approved by the District manager or his designee.
 - d. Exemptions will not be allowed for Pesticide or Chemigation Certifications.

F. SUB-AREA IRRIGATION SCHEDULING-will be required in Water Quality/Quantity Sub-Areas using the following methods in accordance with NRD or UNL Extension guidelines:

1. Hand-Feel Method
2. Irrigation Management Practices
3. Irrigation Scheduling Using Crop Water Use
4. Estimating Effective Rainfall
5. Predicting the Last Irrigation
6. Spot checks can be conducted by NRD staff for verification
7. Other practices which the industry may identify as beneficial as approved by the District's Board of Directors.

CHAPTER 4 **AREAS WITH UNIQUE HYDROLOGIC AND** **GEOLOGIC CONDITIONS**

Because of unique hydrologic and geologic conditions which exist in Hydro-Geologic Unit 8 and as described in the District's Groundwater Management Plan on page 10-2, the District Board may initiate higher level management controls in lieu of meeting the established triggers if deemed necessary by the Board of Directors. The board recognizes that if similar conditions exist in other areas of the district as outlined in 46-739(4) the application of similar actions may be necessary. The process for development of such special areas is outlined in Chapter 3, Section B.

CHAPTER 5 **SUB-AREA CONTROLS**

CHAPTER 5(A) **WATER QUALITY SUB-AREA CONTROLS**

Upon establishment of a Water Quality Sub-Area following trigger levels as stated in Chapter 4; the following controls will be enacted.

A. WATER QUALITY SUB-AREA ANNUAL FARM OPERATIONS REPORTING

1. Level II
 - a. Initial Reports will be required at the establishment of any Level II Water Quality sub-area. They will be completed by the operator on forms provided by the District and consist of the following:
 - Current irrigation management practices.
 - Current fertilizer management practices.
 - Current chemical/pesticide management practices.
 - Current tillage practices.

- b. Year-end annual reports tailored to crop and farming practices of the landowner/operator will be required. The year end report is required on the demonstration field in Level II, and all fields in Levels III and IV. The reports will be submitted on forms provided by the District by April 1st and consist of the following:
 - Available soil sample results for the upcoming growing season, location where samples are taken, and yield goal.
 - Irrigation water sample results from each well if available.
 - Year-end report on amount of fertilizer/chemical applied and yields in the previous year to each field for all designated crops.
 - Flow meter readings or best available pumpage data for the previous year's irrigation season, the crops grown, and acres irrigated from each well.
 - Other BMPs being implemented by the producer.
 - Other measures deemed appropriate by the LBNRD Board.
- c. Require operator adherence to the "NRD Approved" laboratory fertilizer recommendations.

B. WATER QUALITY SUB-AREA DEMONSTRATION FIELD

It is the intent of these Rules and Regulations to require designation of a Demonstration Field in a Level II Water Quality Sub-Area for the purpose of implementing and demonstrating BMPs to the operator. The Demonstration Field shall meet the following criteria:

1. The Demonstration Field (water quality) shall be any field which meets the criteria spelled out in the definition. At the District's discretion, flexibility will be allowed in selecting a demonstration field. Management challenges in fertilization, irrigation, tillage or other practices may prompt an operator to request designation of an alternate field.
2. It is the intent of the Groundwater Management Plan to develop a continuous record of information of the Demonstration Field to assist the operator in making wise management decisions to base future farm operations upon. Therefore, consistent data from the same field is desired. If the operator acquires additional land during Level II of the Action Plan so that the operator controls a Field larger than his or her Demonstration Field, the operator will be required to continue Level II activities on his already established Demonstration Field. In that event, there is no requirement under Level II to establish Level II controls on the newly acquired tract.
3. In Level II, if an operator has farming operations in two or more sub-areas, he or she will only be required to maintain a Demonstration Field in the sub-area with the highest level of control.
4. If the operator's Demonstration Field is, in its entirety, idled, placed in a farm program set aside, or rotated out of corn, milo, or forage sorghum, the operator will be required to establish another field which he or she farms in the Water Quality Sub-Area as a Demonstration Field for the ensuing crop year. If only a portion of the operator's Demonstration Field is idled, placed in a farm program set aside, or rotated out of corn, milo, or forage sorghum, the operator shall retain the existing Demonstration Field and all required activities will apply as specified in the Groundwater Management Plan.
5. If an operator sells or otherwise loses control of the field which was defined as his Demonstration Field under Level II, he or she will be required to implement Level II controls on the largest field which he or she continues to operate which meets the definition of the Demonstration Field.

C. WATER QUALITY SUB-AREA SOIL SAMPLING-in obtaining soil samples to comply with requirements of the Management Plan, samples shall be taken from each field which meets the following requirements:

1. Soil sampling is required on Demonstration field in Level II, and all fields in Level III and IV.
 - a. One shallow composite sampling on the field according to number 2 below to a minimum depth of 8 inches will be required annually per 40 acres and,
 - b. One deep soil composite sampling is required on the field according to number 2 below with a minimum depth of 36 inches per 40 acres.
2. Each sampled area shall be no larger than 40 acres, preferably no larger than 20 acres. A soil sample shall consist of a composite surface sample from 15 – 20 cores collected to a depth of 8 inches, mixed to create a single sample and analyzed for general fertility and nitrate – N; and a subsurface sample from 6 – 8 cores to a depth of 36 inches shall be mixed and analyzed for nitrate – N.
3. Deep soil sampling exemptions will be given for corn-soybeans rotations in accordance with NRD or UNL Extension guidelines.

D. HIGHER LEVELS OF WATER QUALITY CONTROLS REQUIREMENTS

1. Level III - actions in the sub-area will include the following requirements in addition to previous requirements:
 - a. Encourage a water analysis for nitrogen (NO₃-N) content on each field growing corn, grain sorghum, or forage sorghums. The water sample can be tested at the LBNRD office.
 - b. Annual soil samples are required on all fields.
 - c. Require operator adherence to the "NRD Approved" laboratory fertilizer recommendations.
 - d. Irrigation Scheduling is required on all irrigated fields.
 - e. Require year-end annual reports on all fields tailored to crop and farming practices of the landowner/operator.
2. Level IV - actions in the sub-area will include the following requirements in addition to previous requirements:
 - a. Fall application of commercial Nitrogen Fertilizer is prohibited prior to January 1st.
 - b. No greater than the "NRD Approved" Laboratory Nitrogen Fertilizer Recommendation followed, on all fields, with all credits figured.

CHAPTER 5 (A-1) **SUPERIOR HARDY SUB-AREA**

The Superior Hardy Sub-Area was originally established as a Special Protection Area for water quality concerns. It lies in both the Little Blue and Lower Republican Natural Resources Districts and a joint plan was developed to manage the rising groundwater nitrate problems of the area. The trigger levels, management controls, and reporting requirements differ from other water quality sub-areas established by the Little Blue NRD. These management criteria are outlined in the Superior-Hardy Water Quality Sub-Area Handbook (Revised Fall 1999) and this publication should be consulted for any questions concerning that area.

CHAPTER 5(B) **WATER QUANTITY SUB-AREA CONTROLS**

Upon establishment of a Water Quantity Sub-Area following trigger levels as stated in Chapter 4; the following controls will be enacted.

A. WATER QUANTITY SUB-AREA ANNUAL REPORTING

1. Level II
 - a. Year-end annual reports of water use on all acres of the landowner/operator will be required. The reports will be submitted by January 15th and consist of the following:
 - Flow meter readings or best available pumpage data.
 - Acres and crops irrigated from each well.
 - Type of irrigation system used.
 - b. In Level II, operators will be required to identify a demonstration field for the purposes of Level II controls. A flow meter will be required on the Demonstration Field and a detailed report on irrigation practices for the field is required. The report will be submitted by January 15th and consist of the following:
 - Flow meter readings.
 - Acres and crops irrigated from each well.
 - Type of irrigation system used.
 - Report on irrigation scheduling.
 - Other BMPs being implemented by the producer.
 - Other measures deemed appropriate by the LBNRD Board.
2. Level III
 - a. In Level III allocations of groundwater for crop production will be initiated in accordance with Section F of this Chapter. Year-end annual reports of water use on all acres will be required. The reports will be submitted by January 15th and consist of the following:
 - Acres and crops irrigated from each well.
 - Type of irrigation system used. (if different from previous year)

- Ending meter reading.
- b. Flow meter readings will be checked by District personnel on a three-year rotating basis. The District will record the annual water use, and based on guidelines as established in F.2. of this section, report to the operator his or her remaining allocation.

B. WATER QUANTITY SUB-AREA DEMONSTRATION FIELD

It is the intent of these Rules and Regulations that each operator is required to designate one Demonstration Field in a Level II Water Quantity Sub-Area for the purpose of implementing and demonstrating BMPs to the operator. The Demonstration Field shall meet the following criteria:

1. The Demonstration Field (water quantity) shall be any field which meets the criteria spelled out in the definition. At the District's discretion, flexibility will be allowed in selecting a demonstration field. Management challenges in irrigation, tillage or other practices may prompt an operator to request designation of an alternate field.
2. It is the intent of the Groundwater Management Plan to develop a continuous record of information of the Demonstration Field to assist the operator in making wise management decisions to base future farm operations upon. Therefore, consistent data from the same field is desired. If the operator acquires additional land during Level II of the Action Plan so that the operator controls a Field larger than his or her Demonstration Field, the operator will be required to continue Level II activities on his already established Demonstration Field. In that event, there is no requirement under Level II to establish Level II controls on the newly acquired tract.
3. If the operator's Demonstration Field is, in its entirety, idled, placed in a farm program set aside, or rotated out of irrigation, the operator will be required to establish another field which he or she farms in the Water Quantity Sub-Area as a Demonstration Field for the ensuing crop year. If only a portion of the operator's Demonstration Field is idled, the operator shall retain the existing Demonstration Field and all required activities will apply as specified in the Groundwater Management Plan.
4. If an operator sells or otherwise loses control of the field which was defined as his Demonstration Field under Level II, he or she will be required to implement Level II controls on the largest field which he or she continues to operate which meets the definition of the Demonstration Field.

C. MUNICIPAL, INDUSTRIAL, FISH & WILDLIFE, LIVESTOCK, AND RECREATIONAL WELLS

After the effective date of these Rules and Regulations; and with authority from the Groundwater Management and Protection Act, owners of water wells with intended municipal, industrial, recreational, fish & wildlife, or livestock uses shall report to the District no later than January 15th of each year, the amount of groundwater withdrawn from each such well during the preceding calendar year. This rule shall apply to such wells, or combination of wells, that are intended to pump 50 gallons per minute or more and are located in a designated Level II or Level III Water Quantity Sub-Area. Reports will be generated by using the best available procedures, as approved by the LBNRD Board.

D. WATER QUANTITY SUB-AREA FLOW METERS

1. In a Level III Water Quantity sub-area flow meter installations will be required on regulated wells to receive an allocation. Flow meter standards and installations are outlined in Chapter 7.
2. For administration of the District's Groundwater Management Plan and these Rules and Regulations the District hereby notifies all operators of its' intent and right to enter onto property to verify meter installation and/or to read and verify totalizer readings.
3. The District will verify the location and proper installation of flow meters. The District will establish a method by which the installed meter is tagged, sealed, marked or otherwise protected from tampering.
4. It shall be a violation for any person to willfully alter, remove, reset, manipulate, or in any manner tamper with any flow meter within any Groundwater Management Sub-Area of the Little Blue NRD.
5. Landowners shall notify the District of an inoperative meter within one (1) working day from the time the defect is first discovered.

E. WATER QUANTITY SUB-AREA CERTIFIED ACRES

1. Each owner or duly authorized agent will have 12 months from the date a Level II sub-area for water quantity is designated to certify their irrigated acres with the District. Each owner or duly authorized agent shall certify (1) the well registration number for that well and, (2) the maximum number and location of all acres irrigated with a registered well at least one out of three years prior to the effective date of either Level II controls or special controls for a hydrologic unit. Such certification shall be on forms provided by the

- District and may be determined by applicable records from the Farm Service Agency, County Assessor, suitable aerial photographs, or such other information as requested by the District to verify the information.
2. Acres located on lands that are contractually bound through a government set-aside program (CRP, CREP, etc.) shall retain their irrigated history as long as they remain in the program. The right to certify acres will be forfeited if the acres that are released from an obligatory government contract are not irrigated within three (3) years of the expiration date of the contract.
 3. Any acres currently enrolled in a government set-aside program (CRP, CREP, etc.) or not irrigated within 3 years after the contract expires; or for which a variance has been granted according to these rules, shall not be eligible for an allocation, transfer, or pooling activities unless and until the acres are placed under irrigation within the time frame specified herein.
 4. If an operator acquires control of new irrigated acres in a Level II or III sub-area, he or she must report the said change to the District within sixty (60) days. If an operator develops new acres in a Level II sub-area he or she must report the said change to the District within sixty (60) days.
 5. When acres have been certified as irrigated, the District staff may grant the transfer of any or all of such irrigated acres to another adjoining tract of land or Hydrologic Unit at the request of the landowner, provided that the total number of acres to be irrigated is not increased. If the request to transfer irrigated acres extends beyond the adjoining tract or Hydrologic Unit, the decision to grant such a transfer shall be vested in the Board of Directors.
 6. In a Level III Water Quantity Sub-Area irrigated acres must be certified prior to receiving an allocation. Failure to confirm irrigated acres will preclude a groundwater user from receiving an allocation. In a Level III sub-area irrigated acres may not be increased.

F. WATER QUANTITY SUB-AREA GROUNDWATER ALLOCATIONS

1. Water wells as defined in Chapter 6, Letter C., will be subject to allocation under these Rules and Regulations. Within 12 months of designating a Level III Water Quantity Sub-Area all owners of such wells located in the sub-area shall be allocated water in a manner established by the Board.
2. In a Level III water quantity sub-area the use of ground water from all water wells for crop irrigation shall be allocated based on an acre-inch determination multiplied by the number of irrigated acres certified for each well.
 - a. Acre-inch allocations will be set after considering: (a) the relationship between groundwater wells within the sub-area; (b) whether ground water levels are declining; (c) historical irrigation use as established in Level II; and (d) such other factors as the Board determines may be relevant to the appropriate amount of water to be withdrawn.
 - b. Allocations will be established for a three year period, the board will determine a new acre inch allocation per irrigated acre at the expiration of any allocation period.
 - c. If an operator exceeds his 3 year, acre inch allocation; their subsequent allocation period allotment will be reduced by the amount of over use. This reduction shall be on a one to one basis.
 - d. When the control of any irrigated acres in a Level III sub-area transfers to a new operator he or she will also acquire the remaining allocation for those acres.
3. In a Level III water quantity sub-area the use of ground water from regulated wells for crop irrigation may be pooled based on operator or landowner.
 - a. Any operator or landowner may not have a dual pooling arrangement on the same irrigated acres. Example: Landowner 1 may pool acres he leases to Operator 1 and Operator 2, but Operator 1 may not pool the same acres in an arrangement with Landowner 2.
 - b. Pooled allocations may not exceed the total allowed use for the regulated wells in any three year period.
 - c. Pooling arrangements for the same operator but different landowners, or landowners but different operators, will only be allowed through a written agreement signed by all parties involved.
 - d. Pooling arrangements must be approved by the District prior to their implementation.
 - e. A non-refundable application fee of \$100 payable to the Little Blue NRD shall accompany the request for pooling arrangement to cover any costs associated with investigation or review.
4. In a Level III water quantity sub-area water allocation transfers are permitted between acres of differing owner and/or operators with the owner's permission. The allocation transfer exists for the purpose of letting a groundwater source use the allocation of another groundwater source that will not be totally utilized. These transfers can be arranged for at any time before or during the growing season. Transfers must be documented in the same manner as a pooling transfer.

G. GROUNDWATER QUANTITY SUB-AREA PENALTIES

1. The District may impose penalties of up to 1/6 (one sixth) of an operator's 3-year allocation for a 2 year period for violations of the following:
 - a. Failure to report an inoperative meter.
 - b. Failure to report or inaccurately reporting meter readings.
 - c. Tampering with the meter to obtain un-metered water.
2. These penalties shall be in addition to any enforcement of cease and desist orders applicable in Chapter 10.

H. GROUNDWATER QUANTITY SUB-AREA STAYS

1. In a Level III Water Quantity Sub-Area the board shall issue a stay on well permits, well construction, and expansion of irrigated acres with the following exceptions.
 - a. Well construction stays shall be selective as to groundwater use but will comply with State Statute 46-613 concerning groundwater preference of use.
 - b. All stays will only be in effect for the year they are issued and if not renewed by action of the District's Board of Directors will expire on December 31st of each year.
 - c. Upon decision of the Board of Directors that a stay on new well construction or expansion of irrigated acres shall be implemented, notice of such stay shall be provided by publication once each week for three consecutive weeks in at least one newspaper of local circulation.
 - d. No new well permits shall be issued for the selected groundwater use(s) immediately upon Board decision that a stay on well construction will be implemented.
 - e. Construction of any new well shall be prohibited on the effective date of Level III designation unless construction had commenced prior to that publication date. This restriction shall apply even if a well permit had been issued by the District prior to the implementation of a stay.
 - f. Expansion of irrigated acres shall be prohibited on the effective date of Level III designation. Certification of irrigated acres shall be accomplished following procedure outlined in subsection E. of this chapter.
2. Before stays are enacted the District shall conduct two public meetings to offer statements on the need and to accept testimony from the public.

CHAPTER 5 (B-1) **SPECIAL RULES FOR HYDROLOGIC UNIT # 8**

Due to differing hydrologic and geologic conditions in Hydro-Geologic Unit # 8, and because the triggers established for implementation of a higher level of management would not permit immediate response to groundwater quantity problems that exist in that area, the District hereby establishes special controls which apply exclusively to Unit # 8.

A. EFFECTIVE MARCH 17, 2006, STAYS ARE HEREBY IMPOSED ON WELL PERMITS, WELL CONSTRUCTION, AND THE EXPANSION OF IRRIGATED ACRES WITHIN ALL OR A PORTION OF HYDRO-GEOLOGIC UNIT # 8.

1. No new well permits shall be issued for groundwater uses.
2. Only water wells for which construction has begun prior to the effective date of this rule will be allowed to be completed.
3. The expansion of irrigated acres, including the groundwater transfers to adjoining lands, shall be prohibited. Certification of irrigated acres shall be accomplished following procedure outlined in subsection E of Chapter 5(B).
4. All stays will remain in effect for the year they are issued and will expire on December 31st of each year unless renewed by action of the District's Board of Directors.
5. This area will move to Level II or III of water quantity controls if trigger levels are met or by decision of the board and following appropriate actions identified in Chapter 3 (B).

CHAPTER 7

FLOW METERS

A. WATER USER'S RESPONSIBILITIES

1. The water user shall select the proper size, pressure rating, and operating range (minimum and maximum GPM) for his or her water flow meter installation and properly install the meter in accordance with the Little Blue NRD's requirements and the manufacturer's instructions.

B. BASIC REQUIREMENTS

1. **Registration Accuracy** - The meter manufacturer shall provide to Little Blue NRD individual test data for each meter showing the individual meter registry has been tested and shall be warranted to register not less than 98% nor more than 102% of the actual volume of water passing the meter for all rates of flow within the meter size's range of flow. This requirement shall be met throughout the meter's normal operating range.
2. **Register and Indicator** - The meter shall be equipped with a direct reading rate-of-flow indicator showing instantaneous flow in gallons per minute, or a sweep hand indicator for which rate-of flow can be determined by timing. The meter registry shall have a visual, volume-recording totalizer which shall record in gallons, acre inches, or acre feet. The totalizer shall have sufficient capacity to record the quantity of water diverted from each well or combination of sources for multiple well installations during a period of one calendar year.
3. **Installation** - The meter shall be located near the well in such a manner as to measure the entire flow from the well, except when a single meter is installed in such a manner as to measure the combined flow from two or more wells, the meter shall then be installed to measure the combined flow prior to entering the distribution system. The meter must also be installed in such a manner that there shall be a full pipe flow of water at all times while water is being pumped. Pipe flow is influenced by valves, elbows, check valves or other obstructions or conditions which create turbulent or jetting flow. Such conditions must be accounted for and the meter shall be installed in accordance with NRCS Construction Specification NE-209 or manufacturer's recommendations. See Specification NE-209 in the appendix. Irrigation flow meters installed prior to the effective date of these Rules and Regulations are certifiable and will not be required to meet the above installation guidelines. However; District cost share meters or meters installed after the establishment of a water quantity sub-area will be held to the plus or minus 2% installation standards.
4. **Approved flow meters** - The Little Blue NRD shall maintain an approved list of water flow meters that meet District specifications which is compiled based on manufacturer's information. This is not an endorsement for any of the products. Any meter which is not on the approved list will be reviewed, at manufacturer's request, and upon approval by the Board may be added to the list.

CHAPTER 8

METER MAINTENANCE PROGRAM

The Little Blue Natural Resources District on a year-to-year basis funds the Irrigation Pumpage and Crop Reporting Program. By decision of the District's Board of Directors this program may be continued or terminated depending on its' educational or informational value. Policy outlining the reporting and maintenance program follows.

- A. Meter maintenance is performed to meters that operators report are not working.
- B. District staff will schedule a route after the pumpage forms are returned to pick up meters needing repair. The District will return the meters to the well after maintenance is accomplished.
- C. District staff or other qualified personnel will do meter repairs on a least cost basis. Repairs will be new or rebuilt but meet factory replacement specifications.
- D. The District must have certified that a meter is properly installed and serviceable before said meter would be considered eligible for the District's meter maintenance program.
- E. Certification of the meter will involve the following activities:

1. Record serial number of the meter.
 2. Size and type of discharge pipe.
 3. Number of inches downstream from the face of the pump discharge.
 4. Affix lead seal to canopy.
 5. Photograph of the installation.
- F. The District will offer free meter maintenance to owners/operators who report the following information:
1. the name and address of the water user
 2. the legal description of each metered land tract
 3. the seasonal beginning and ending water meter readings
 4. the total number of irrigated acres served by each metered well by type of crop (or other uses)
 5. and such other information deemed necessary.
- G. If the information in letters E and F above is supplied annually, that owner/operator is entitled to free meter maintenance including parts and labor. The maintenance shall not apply to damage caused by rodents, livestock, or negligence by the owner/operator. Meters will be repaired to an extent not to exceed (30%) replacement cost of a new meter. Generally this will only be maintenance towards internal repairs, if the saddle or drop pipe are corroded or repairs are estimated to exceed the above level the District requires replacing the meter to be kept in the program. McCrometer, Rockwell, and Water Specialties are the typical meters in use; however, Water Specialties and Rockwells are no longer being manufactured. If a Water Specialty or Rockwell meter fails, an estimate for repairs will be compiled and provided to the owner to determine if repair or replacement should be done to remain in the reporting program.
- H. The District will provide meter maintenance on a "cost-of-parts-and-labor" basis for any owner/operator who has a meter installed on a water well within the District but fails to report the data listed on the pumpage report by the December 31st deadline.
- I. Owners/operators who acquire a new flow meter may be included in the maintenance program by notifying the District before July 1st in the year the meter is purchased. The meter and installation must meet the specification of the District and must be certified and approved by the District. The owner/operator will be required to report year-end pumpage totals continually thereafter.
- J. If a land tract containing a flow meter, not covered by the District's maintenance program, is sold, the new owner may be reinstated in the maintenance program by notifying the District of the land purchase, having the meter inspected and certified and providing annual meter readings thereafter.
- K. An owner/operator who is not included in the meter maintenance program or has special circumstances, which should be considered for reinstatement in the program, may petition the Board for reinstatement. A request for reinstatement shall be made in writing to the LBNRD Board describing the circumstances on why they should be reinstated. The LBNRD Board shall review the request and either grant or deny the application.

CHAPTER 11

RELAXATION OF CONTROLS

A. If the results of the LBNRD's monitoring well sampling program for a sub-area indicate that a triggering level for a level of controls lower (less restrictive) than that level which is currently being enforced in that sub-area is met for three consecutive years, then controls in that sub-area will decrease to that less restrictive level, unless specific action by the LBNRD Board maintains the current level. This relaxation of controls applies to both quality and quantity controls.

Quality Example: An established sub-area is currently under Level II Quality controls due to nitrate readings in monitoring wells equal to or greater than 70% of MCL. If nitrate level readings in monitoring wells in that sub-area are below 70% of MCL for three consecutive years (and no other Level II triggering levels are met for other contaminants), then that sub-area will revert to Level I Quality controls after the third year, unless the LBNRD Board determines a problem still exists and acts to maintain Level II Quality controls in that sub-area.

Quantity Example: An established sub-area is currently under Level II Quantity controls. If the established percentage or greater, as set in table 10.6.2.2.1, of the measured wells in that sub-area show a spring water level above the 50% of the "Reasonable Acceptable Decline" level, and that water level has been maintained for three consecutive years, then that sub-area will revert to Level I Quantity controls after the third year, unless the LBNRD Board determines a problem still exists and acts to maintain Level II Quantity controls in that sub-area.

B. This relaxation of controls would be an acknowledgement that the problem which had existed in that sub-area has been remediated and that the lessons and practices learned during the remediation process, employed by the residents of that sub-area, will continue to maintain an improved water quality or quantity without the burdens and restrictions imposed by a higher level of controls.

C. If, however, in any subsequent year, in a sub-area in which controls have previously been relaxed, a higher triggering level for the same problem (ie: water quantity or the same contaminant if controls were for water quality) is reached, the controls in that sub-area will be re-instated at that higher level and will remain there until the following conditions are met:

1. The monitored problem level (ie: water quantity or contaminant level) in the sub-area has dropped to a lower triggering level and remained there for at least seven subsequent years; or
2. The LBNRD Board acts to remove the higher level controls and reinstate a lower level of controls as appropriate for the existing triggering level.

Example: Four years after the controls in the sub-area in the example above were relaxed to Level I Quality, well sampling in that sub-area indicates nitrate readings equal to or greater than 70% of MCL. The controls in that sub-area will immediately revert to Level II Quality controls and will remain there until either condition mentioned above are met, This would require specific action of the LBNRD Board but not an amendment to the GWMP. (If a different contaminant besides nitrate, should reach Level II triggering levels, the sub-area would also go to Level II Quality controls, but would still be eligible for later relaxation of controls for that contaminant.)

This "anti yo-yo" clause acknowledges that it was the presence of the higher level controls themselves that was improving the water quality or quantity in the sub-area and that these controls must remain in place to continue or maintain improvements. Thus, the higher level controls must be reinstated and maintained in that sub-area.

CHAPTER 12

VARIANCES

A. The Little Blue Natural Resources District Board of Directors may grant variances from the strict application of these regulations upon good cause shown. A variance may be requested before the Water Resources Committee, with recommendations made to the Board of Directors for formal action. An applicant is responsible for providing proof that a variance is warranted. A request for a variance shall include:

1. The name and addresses of all landowners adjacent to the location of the requested variance.
2. A map or sketch showing the location of lands and/or water wells that would be affected by the variance. If the request for a variance is for well spacing, the sketch must include measured distances from the proposed water well to any affected wells.
3. An explanation as to why the variance is needed including how the person making the application would be affected if the variance is not granted and any alternatives that could be considered.
4. A list of adjacent landowner(s) and water well owner(s). Such owners may be contacted by the District to assess potential impacts or conflicts between users.
5. Any other information that shall be deemed relevant.
6. A non-refundable application fee of \$100 payable to the Little Blue NRD shall accompany the request for a variance to cover any costs associated with investigation or review.

B. Requests for variances shall be considered by the Water Resources Committee on a case by case basis, with recommendations made to the Board of Directors for formal action. If a variance is granted, the grantee shall sign an affidavit agreeing to all terms and conditions of the variance. The affidavit will be recorded by the District with the register of deeds and/or appropriate State Agency and be attached to all properties affected by the variance.

C. Any person who feels aggrieved by any action or decision of the Little Blue NRD Board in connection with the granting or denial, in whole or in part, of an application for a permit, transfer, certification or irrigated acres or other matter involving these rules and regulations may request reconsideration before the Little Blue NRD Board of

Directors. The reconsideration shall be requested by the plaintiff in writing within seven (7) days of the decision of the Board. Such reconsideration can only be made in the event that the plaintiff has new information which was not available for the Board prior to the previous action. The request for reconsideration will be placed on the next Board of Directors meeting agenda. The plaintiff will be granted an opportunity to present his/her case regarding the matter before the Board of Directors. Any decision and action on the matter of reconsideration by the Board, will be final.

EFFECTIVE DATE. These Rules and Regulations as amended shall be effective commencing on May 8 2007, and shall remain in full force and effect until repealed, amended, or superseded.

SEVERABILITY. If any Rule or any part of any Rule herein shall be declared invalid or unconstitutional by a Court of competent jurisdiction, such declaration shall not affect the validity or constitutionality of the remaining Rules or portion thereof.

These Rules and Regulations are hereby adopted this 8th day of May, 2007.

Chairman

Attest:

Secretary

DISTRICT RULES AND REGULATIONS APPENDIX

46-281

Artesian water; waste prohibited.

It shall be unlawful for any owner or owners, lessee or lessees, occupier or occupiers, foreman or superintendent of any farm, town lot or other real estate in the State of Nebraska, where artesian water has been found or may be found hereafter, to allow the water from wells or other borings or drillings on any farm, town lot, or other real estate in Nebraska to flow out and run to waste in any manner to exceed what will flow or run through a pipe one-half of one inch in diameter, except where the water is first used for irrigation, or to create power for milling or other mechanical purposes.

46-601

Ground water; declaration of policy.

The Legislature finds, recognizes, and declares that the conservation of ground water and the beneficial use thereof are essential to the future well-being of this state. Complete information as to the occurrence and the use of ground water in the state is essential to the development of a sound ground water policy. The registration of all water wells in this state should be required.

46-602

Registration of water wells; forms; replacement; change in ownership; illegal water well; decommissioning required; abandonment.

(1) Each water well completed in this state on or after July 1, 2001, excluding test holes and dewatering wells to be used for less than ninety days, shall be registered with the Department of Natural Resources as provided in this section within sixty days after completion of construction of the water well. The water well contractor as defined in section 46-1213 constructing the water well, or the owner of the water well if the owner constructed the water well, shall file the registration on a form made available by the department and shall also file with the department the information from the well log required pursuant to section 46-1241. The department shall, by January 1, 2002, provide water well contractors with the option of filing such registration forms electronically. No signature shall be required on forms filed electronically. The fee required by subsection (3) of section 46-1224 shall be the source of funds for any required fee to a contractor which provides the on-line services for such registration. Any discount in the amount paid the state by a credit card, charge card, or debit card company or a third-party merchant bank for such registration fees shall be deducted from the portion of the registration fee collected pursuant to section 46-1224.

(2)(a) If the newly constructed water well is a replacement water well, the registration number of the water well it replaces, if applicable, and the date the original water well was or will be decommissioned shall be included on the registration form. For purposes of this section, replacement water well means a water well which (i) replaces an abandoned water well within three years after the last operation of the abandoned water well or replaces a water well that will not be used after construction of the new water well and the original water well will be abandoned within one year after such construction and (ii) is constructed to provide water to the same tract of land served by the water well being replaced.

(b) No water well shall be registered as a replacement water well until the Department of Natural Resources has received a properly completed notice of abandonment for the water well being replaced. Such notice shall be completed by (i) the water well contractor as defined in section 46-1213 who decommissions the water well, (ii) the pump installation contractor as defined in section 46-1209 who decommissions the water well, or (iii) the owner if the owner decommissions a driven sand point well which is on land owned by him or her for farming, ranching, or agricultural purposes or as his or her place of abode. The Department of Health and Human Services Regulation and Licensure shall, by rule and regulation, determine which contractor or owner shall be responsible for such notice in situations in which more than one contractor or owner may be required to provide notice under this subsection.

(3) For a series of two or more water wells completed and pumped into a common carrier as part of a single site plan for irrigation purposes, a registration form and a detailed site plan shall be filed for each water well. The registration form shall include the registration numbers of other water wells included in the series if such water wells are already registered.

(4) A series of water wells completed for purposes of installation of a ground heat exchanger for a structure for utilizing the geothermal properties of the ground shall be considered as one water well. One registration form and a detailed site plan shall be filed for each such series.

(5) One registration form shall be required along with a detailed site plan which shows the location of each such water well in the site and a log from each such water well for water wells constructed as part of a single site plan for (a) monitoring ground water, obtaining hydrogeologic information, or extracting contaminants from the ground, (b) water wells constructed as part of remedial action approved by the Department of Environmental Quality pursuant to section 66-1525, 66-1529.02, or 81-15,124, and (c) water well owners who have a permit issued pursuant to the Industrial Ground Water Regulatory Act and also have an underground injection control permit issued by the Department of Environmental Quality.

(6) The department shall be notified by the owner of any change in the ownership of a water well required to be registered under this section. Notification shall be in such form and include such evidence of ownership as the Director of Natural Resources by rule and regulation directs. The department shall use such notice to update the registration on file. The department shall not collect a fee for the filing of the notice.

(7) The water well contractor or pump installation contractor responsible therefore shall notify the department on a form provided by the department of any pump installation or any modifications to the construction of the water well or pump, after the initial registration of the well. A water well owner shall notify the department on a form provided by the department of any other changes or any inaccuracies in recorded water well information, including, but not limited to, changes in use. The department shall not collect a fee for the filing of the notice.

(8) Whenever a water well becomes an illegal water well as defined in section 46-706, the owner of the water well shall either correct the deficiency that causes the well to be an illegal water well or shall cause the proper decommissioning of the water well in accordance with rules and regulations adopted pursuant to the Water Well Standards and Contractors' Licensing Act. The water well contractor who decommissions the water well, the pump installation contractor who decommissions the water well, or the owner if the owner decommissions a driven sand point well which is on land owned by him or her for farming, ranching, or agricultural purposes or as his or her place of abode, shall provide a properly completed notice of abandonment to the Department of Natural Resources within sixty days. The Department of Health and Human Services Regulation and Licensure shall, by rule and regulation, determine which contractor or owner shall be responsible for such notice in situations in which more than one contractor or owner may be required to provide notice under this subsection. The Department of Natural Resources shall not collect a fee for the filing of the notice.

(9) Except for water wells which are used solely for domestic purposes and were constructed before September 9, 1993, and for test holes and dewatering wells used for less than ninety days, each water well which was completed in this state before July 1, 2001, and which is not registered on that date shall be an illegal water well until it is registered with the Department of Natural Resources. Such registration shall be completed by a water well contractor or by the current owner of the water well, shall be on forms provided by the department, and shall provide as much of the information required by subsections (1) through (5) of this section for registration of a new water well as is possible at the time of registration.

(10) Water wells which are or were used solely for injecting any fluid other than water into the underground water reservoir, which were constructed before July 16, 2004, and which have not been properly decommissioned on or before July 16, 2004, shall be registered on or before July 1, 2005.

46-602.01

Water well in management area; duties; prohibited acts; penalty.

Prior to commencing construction of or installation of a pump in a water well in a management area, a water well contractor as defined in section 46-1213 or a pump installation contractor as defined in section 46-1209 shall take those steps necessary to satisfy himself or herself that the person for whom the well is to be constructed or the pump installed has obtained a permit as required by the Nebraska Ground Water Management and Protection Act. Any person who commences or causes construction of or installation of a pump in a water well for which the required permit has not been obtained or who knowingly furnishes false information regarding such permit shall be guilty of an offense punishable as provided in section 46-613.02.

46-604

Registration form; copies; disposition.

The Director of Natural Resources shall retain the registration form required by section 46-602 and shall make a copy available to the natural resources district within which the water well is located, to the owner of the water well, and to the water well contractor as defined in section 46-1213.

46-606

Water wells; registration fees; disposition.

(1) The Director of Natural Resources shall collect in advance a registration fee of forty dollars and the fee required by subsection (3) of section 46-1224 for each water well registered under section 46-602 except as provided in subsections (2) through (5) of this section.

(2) For water wells permitted pursuant to the Industrial Ground Water Regulatory Act, the director shall collect in advance a registration fee of forty dollars and the fee required by subsection (3) of section 46-1224 for each of the first ten such water wells registered under section 46-602, and for each group of ten or fewer such water wells registered thereafter, the director shall collect in advance a registration fee of forty dollars and the fee required by subsection (3) of section 46-1224.

(3) For a series of water wells completed for purposes of installation of a ground heat exchanger for a structure for utilizing the geothermal properties of the ground, the director shall collect in advance a fee of forty dollars for each such series and the fee required by subsection (3) of section 46-1224.

(4) For water wells constructed as part of a single site plan for monitoring ground water, obtaining hydrogeologic information, or extracting contaminants from the ground, the director shall collect in advance a registration fee of forty dollars and the fee required by subsection (3) of section 46-1224 for each of the first five such water wells registered under section 46-602, and for each group of five or fewer such water wells registered thereafter, the director shall collect in advance a registration fee of forty dollars and the fee required by subsection (3) of section 46-1224. However, if such water wells are a part of remedial action approved by the Department of Environmental Quality pursuant to section 66-1525, 66-1529.02, or 81-15,124, the fee set pursuant to this subsection shall be collected as if only one water well was being registered and the fee required by subsection (3) of section 46-1224 shall be collected.

(5)(a) For a series of two or more water wells completed and pumped into a common carrier as part of a single site plan for irrigation purposes, the director shall collect in advance a registration fee of forty dollars and the fee required by subsection (3) of section 46-1224 for each of the first two such wells registered under section 46-602. (b) Any additional water wells which are part of a series registered under this subsection shall not be subject to a new well registration fee.

(6) The director shall remit the fees collected to the State Treasurer for credit to the appropriate fund. From the registration fees required by subsections (1) through (5) of this section, the State Treasurer shall credit to the Department of Natural Resources Cash Fund the amount determined by the Department of Natural Resources to be necessary to pay for the costs of processing notices filed pursuant to section 46-230, the costs of water resources update notices required by section 76-2,124, and the costs for making corrections to water well registration data authorized by subsections (6) and (7) of section 46-602 and shall credit the remainder of the registration fees required by subsections (1) through (5) of this section to the Water Well Decommissioning Fund. The State Treasurer shall credit the fees required by subsection (3) of section 46-1224 to the Water Well Standards and Contractors' Licensing Fund.

46-609

Irrigation water wells; spacing; requirements; exceptions.

(1) Except as otherwise provided by this section or section 46-610, no irrigation water well shall be drilled upon any land in this state within six hundred feet of any registered irrigation water well and no existing nonirrigation water well within six hundred feet of any registered irrigation water well shall be used for irrigation purposes. Such spacing requirement shall not apply to (a) any well used to irrigate two acres or less or (b) any replacement irrigation water well if it is drilled within fifty feet of the irrigation water well being replaced and if the water well being replaced was drilled prior to September 20, 1957, and is less than six hundred feet from a registered irrigation water well.

(2) The spacing protection of subsection (1) of this section shall apply to an unregistered water well for a period of sixty days after completion of such water well.

Section 46-613

Ground water; declaration of policy; preference in use.

Preference in the use of ground water shall be given to those using the water for domestic purposes. They shall have preference over those claiming it for any other purpose. Those using the water for agricultural purposes shall have the preference over those using the same for manufacturing or industrial purposes.

As used in this section, (1) domestic use of ground water shall mean all uses of ground water required for human needs as it relates to health, fire control, and sanitation and shall include the use of ground water for domestic

livestock as related to normal farm and ranch operations and (2) agricultural purposes shall include, but not be limited to, aquaculture as defined in section 2-3804.01.

46-613.01

Ground water; transfer to another state; permit; Department of Natural Resources; conditions.

The Legislature recognizes and declares that the maintenance of an adequate source of ground water within this state is essential to the social stability of the state and the health, safety, and welfare of its citizens and that reasonable restrictions on the transportation of ground water from this state are a proper exercise of the police powers of the state. The need for such restrictions, which protect the health, safety, and general welfare of the citizens of this state, is hereby declared a matter of legislative determination. Any person, firm, city, village, municipal corporation, or other entity intending to withdraw ground water from any water well located in the State of Nebraska and transport it for use in another state shall apply to the Department of Natural Resources for a permit to do so. In determining whether to grant or deny such permit, the Director of Natural Resources shall consider:

- (1) The nature of the proposed use and whether it is a beneficial use of ground water;
- (2) The availability to the applicant of alternative sources of surface or ground water;
- (3) Any negative effect of the proposed withdrawal on ground water supplies needed to meet present or reasonable future demands for water in the area of the proposed withdrawal, to comply with any interstate compact or decree, or to fulfill the provisions of any other formal state contract or agreement;
- (4) Any negative effect of the proposed withdrawal on surface water supplies needed to meet present or reasonable future demands within the state, to comply with any interstate compact or decree, or to fulfill the provisions of any other formal state contract or agreement;
- (5) Any adverse environmental effect of the proposed withdrawal or transportation of ground water;
- (6) The cumulative effect of the proposed withdrawal and transfer relative to the matters listed in subdivisions (3) through (6) of this section when considered in conjunction with all other transfers subject to this section; and
- (7) Any other factors consistent with the purposes of this section that the director deems relevant to protect the health, safety, and welfare of the state and its citizens.

Issuance of a permit shall be conditioned on the applicant's compliance with the rules and regulations of the natural resources district from which the water is to be withdrawn. The applicant shall be required to provide access to his or her property at reasonable times for purposes of inspection by officials of the district or the department. The director may include such reasonable conditions on the proposed use as he or she deems necessary to carry out the purposes of this section.

46-637

Pumping for irrigation purposes; permit; application; approval by Director of Natural Resources.

The use of water described in section 46-636 may only be made after securing a permit from the Department of Natural Resources for such use. If the applicant is an individual, the application for a permit shall include the applicant's social security number. In approving or disapproving applications for such permits, the Director of Natural Resources shall take into account the effect that such pumping may have on the amount of water in the stream and its ability to meet the requirements of appropriators from the stream. This section does not apply to (1) water wells located within fifty feet of the bank of a channel of any natural stream which were in existence on July 1, 2000, and (2) replacement water wells as defined in section 46-602 that are located within fifty feet of the banks of a channel of a stream if the water wells being replaced were originally constructed prior to July 1, 2000, and were located within fifty feet of the bank of a channel of any natural stream.

46-651

Spacing of water wells; distance.

(1) Except as provided in section 46-653 or 46-654, (a) no irrigation or industrial water well or water well of any other public water supplier shall be drilled within one thousand feet of any registered water well of any public water supplier, (b) no water well of any such public water supplier shall be drilled within one thousand feet of any registered irrigation or industrial water well, (c) no irrigation water well shall be drilled within one thousand feet of a registered industrial water well, and (d) no industrial water well shall be drilled within one thousand feet of a registered irrigation or industrial water well. Such prohibitions shall not apply to water wells owned by the same person.

(2) An existing water well for which a change in the intended use is proposed shall be subject to any spacing requirement in subsection (1) of this section that would apply to the drilling of a new water well at the same location for the new use intended.

(3) The well-spacing protection of subsections (1) and (2) of this section shall apply to an unregistered water well for a period of only sixty days following completion of such water well.

(4) The spacing requirements in subsection (1) of this section shall not apply to any replacement water well if that water well is drilled within fifty feet of the water well being replaced and if the water well being replaced was drilled prior to July 16, 2004, was in compliance with any applicable spacing statute when drilled, and is less than one thousand feet from the registered water well for which spacing protection is provided.

46-701

Act, how cited.

Sections 46-701 to 46-753 shall be known and may be cited as the Nebraska Ground Water Management and Protection Act.

46-707

Natural resources district; powers; enumerated.

Regardless of whether or not any portion of a district has been designated as a management area, in order to administer and enforce the Nebraska Ground Water Management and Protection Act and to effectuate the policy of the state to conserve ground water resources, a district may:

(1) Adopt and promulgate rules and regulations necessary to discharge the administrative duties assigned in the act;

(2) Require such reports from ground water users as may be necessary;

(3) Require meters to be placed on any water wells for the purpose of acquiring water use data;

(4) Require decommissioning of water wells that are not properly classified as active status water wells as defined in section 46-1204.02 or inactive status water wells as defined in section 46-1207.02;

(5) Conduct investigations and cooperate or contract with agencies of the United States, agencies or political subdivisions of this state, public or private corporations, or any association or individual on any matter relevant to the administration of the act;

(6) Report to and consult with the Department of Environmental Quality on all matters concerning the entry of contamination or contaminating materials into ground water supplies; and

(7) Issue cease and desist orders, following ten days' notice to the person affected stating the contemplated action and in general the grounds for the action and following reasonable opportunity to be heard, to enforce any of the provisions of the act or of orders or permits issued pursuant to the act, to initiate suits to enforce the provisions of orders issued pursuant to the act, and to restrain the construction of illegal water wells or the withdrawal or use of water from illegal water wells.

Before any rule or regulation is adopted pursuant to this section, a public hearing shall be held within the district. Notice of the hearing shall be given as provided in section 46-743.

46-708

Action to control or prevent runoff of water; natural resources district; rules and regulations; power to issue cease and desist orders; notice; hearing.

(1) In order to conserve ground water supplies and to prevent the inefficient or improper runoff of such ground water, each person who uses ground water irrigation in the state shall take action to control or prevent the runoff of water used in such irrigation.

(2) Each district shall adopt, following public hearing, notice of which shall be given in the manner provided in section 46-743, rules and regulations necessary to control or prohibit surface runoff of water derived from ground water irrigation. Such rules and regulations shall prescribe (a) standards and criteria delineating what constitutes the inefficient or improper runoff of ground water used in irrigation, (b) procedures to prevent, control, and abate such runoff, (c) measures for the construction, modification, extension, or operation of remedial measures to prevent, control, or abate runoff of ground water used in irrigation, and (d) procedures for the enforcement of this section.

(3) Each district may, upon ten days' notice to the person affected, stating the contemplated action and in general the grounds therefore, and upon reasonable opportunity to be heard, issue cease and desist orders to enforce any of the provisions of this section or rules and regulations issued pursuant to this section.

46-709**Ground water management plan; required; contents.**

Each district shall maintain a ground water management plan based upon the best available information and shall submit amendments to such plan to the Director of Natural Resources for review and approval. The plan shall include, but not be limited to, the identification to the extent possible of:

- (1) Ground water supplies within the district including transmissivity, saturated thickness maps, and other ground water reservoir information, if available;
 - (2) Local recharge characteristics and rates from any sources, if available;
 - (3) Average annual precipitation and the variations within the district;
 - (4) Crop water needs within the district;
 - (5) Current ground water data-collection programs;
 - (6) Past, present, and potential ground water use within the district;
 - (7) Ground water quality concerns within the district;
 - (8) Proposed water conservation and supply augmentation programs for the district;
 - (9) The availability of supplemental water supplies, including the opportunity for ground water recharge;
 - (10) The opportunity to integrate and coordinate the use of water from different sources of supply;
 - (11) Groundwater management objectives, including a proposed ground water reservoir life goal for the district. For management plans adopted or revised after July 19, 1996, the ground water management objectives may include any proposed integrated management objectives for hydrologically connected ground water and surface water supplies but a management plan does not have to be revised prior to the adoption or implementation of an integrated management plan pursuant to section 46-718 or 46-719;
 - (12) Existing subirrigation uses within the district;
 - (13) The relative economic value of different uses of ground water proposed or existing within the district;
- and
- (14) The geographic and stratigraphic boundaries of any proposed management area.

If the expenses incurred by a district preparing or amending a ground water management plan exceed twenty-five percent of the district's current budget, the district may make application to the Nebraska Resources Development Fund for assistance. Each district's ground water management plan shall also identify, to the extent possible, the levels and sources of ground water contamination within the district, ground water quality goals, long-term solutions necessary to prevent the levels of ground water contaminants from becoming too high and to reduce high levels sufficiently to eliminate health hazards, and practices recommended to stabilize, reduce, and prevent the occurrence, increase, or spread of ground water contamination.

46-735**Construct water well in a management area; permit required; application; form; fee; contents; late permit application; fee.**

(1) Any person who intends to construct a water well in a management area in this state on land which he or she owns or controls shall, before commencing construction, apply with the district in which the water well will be located for a permit on forms provided by the district, except that (a) no permit shall be required for test holes or dewatering wells with an intended use of ninety days or less, (b) no permit shall be required for a single water well designed and constructed to pump fifty gallons per minute or less, and (c) a district may provide by rule and regulation that a permit need not be obtained for water wells defined by the district to be replacement water wells. A district may require a permit for a water well designed and constructed to pump fifty gallons per minute or less if such water well is commingled, combined, clustered, or joined with any other water well or wells or other water source, other than a water source used to water range livestock. Such wells shall be considered one water well and the combined capacity shall be used as the rated capacity. A district may by rule and regulation require that a permit be obtained for each water well or for one or more categories of water wells designed and constructed to pump fifty gallons per minute or less, other than a water source required for human needs as it relates to health, fire control, and sanitation or used to water range livestock, in ground water management areas in which regulations have been imposed to control declining ground water levels. Forms shall be made available at each district in which a management area is located, in whole or in part, and at such other places as may be deemed appropriate. The district shall review such application and issue or deny the permit within thirty days after the application is filed.

(2) A person shall apply for a permit under this section before he or she modifies a water well for which a permit was not required under subsection (1) of this section into one for which a permit would otherwise be required under such subsection.

(3) The application shall be accompanied by a fifty-dollar filing fee payable to the district and shall contain (a) the name and post office address of the applicant or applicants, (b) the nature of the proposed use, (c) the intended location of the proposed water well or other means of obtaining ground water, (d) the intended size, type, and description of the proposed water well and the estimated depth, if known, (e) the estimated capacity in gallons per minute, (f) the acreage and location by legal description of the land involved if the water is to be used for irrigation, (g) a description of the proposed use if other than for irrigation purposes, (h) the registration number of the water well being replaced if applicable, and (i) such other information as the district requires.

(4) Any person who has failed or in the future fails to obtain a permit required by subsection (1) or (2) of this section shall make application for a late permit on forms provided by the district.

(5) The application for a late permit shall be accompanied by a two-hundred-fifty-dollar fee payable to the district and shall contain the same information required in subsection (3) of this section.

46-736

Permit; when denied; corrections allowed; fees nonrefundable.

An application for a permit or late permit for a water well in a management area shall be denied only if the district in which the water well is to be located finds (1) that the location or operation of the proposed water well or other work would conflict with any regulations or controls adopted by the district, (2) that the proposed use would not be a beneficial use of water, or (3) in the case of a late permit only, that the applicant did not act in good faith in failing to obtain a timely permit. If the district finds that the application is incomplete or defective, it shall return the application for correction. If the correction is not made within sixty days, the application shall be canceled. All permits shall be issued with or without conditions attached or denied not later than thirty days after receipt by the district of a complete and properly prepared application. A permit issued shall specify all regulations and controls adopted by a district relevant to the construction or utilization of the proposed water well. No refund of any application fees shall be made regardless of whether the permit is issued, canceled, or denied. The district shall transmit one copy of each permit issued to the Director of Natural Resources.

46-739(1)(c)

It may adopt well-spacing requirements more restrictive than those found in sections 46-609 and 46-651;

46-739(1)(k)

It may require district approval of (i) transfers of ground water off the land where the water is withdrawn or (ii) transfers of rights to use ground water that result from district allocations imposed pursuant to subdivision (1)(a) of this section or from other restrictions on use that are imposed by the district in accordance with this section. Such approval may be required whether the transfer is within the management area, from inside to outside the management area, or from outside to inside the management area, except that transfers for which permits have been obtained from the Department of Natural Resources prior to July 16, 2004, or pursuant to the Municipal and Rural Domestic Ground Water Transfers Permit Act shall not be subject to district approval pursuant to this subdivision. If the district adopts rules and regulations pursuant to this subdivision, such regulations shall require that the district deny or condition the approval of any such transfer when and to the extent such action is necessary to (A) ensure the consistency of the transfer with the purpose or purposes for which the management area was designated, (B) prevent adverse effects on other ground water users or on surface water appropriators, (C) prevent adverse effects on the state's ability to comply with an interstate compact or decree or to fulfill the provisions of any other formal state contract or agreement, and (D) otherwise protect the public interest and prevent detriment to the public welfare;

46-739(1)(l)

It may require, when conditions so permit, that new or replacement water wells to be used for domestic or other purposes shall be constructed to such a depth that they are less likely to be affected by seasonal water level declines caused by other water wells in the same area.

46-739(4)

If because of varying ground water uses, varying surface water uses, different irrigation distribution systems, or varying climatic, hydrologic, geologic, or soil conditions existing within a management area the uniform application throughout such area of one or more controls would fail to carry out the intent of the Nebraska Ground Water Management and Protection Act in a reasonably effective and equitable manner, the controls adopted by the district pursuant to this section may contain different provisions for different categories of ground

water use or portions of the management area which differ from each other because of varying climatic, hydrologic, geologic, or soil conditions. Any differences in such provisions shall recognize and be directed toward such varying ground water uses or varying conditions. Except as otherwise provided in this section, if the district adopts different controls for different categories of ground water use, those controls shall be consistent with section 46-613 and shall, for each such category, be uniform for all portions of the area which have substantially similar climatic, hydrologic, geologic, and soil conditions.

46-745

Natural resources district; cease and desist order; violation; penalty; Attorney General; duties; Department of Justice Natural Resources Enforcement Fund; created; use; investment.

(1) Any person who violates a cease and desist order issued by a district pursuant to section 46-707 shall be subject to a civil penalty of not less than one thousand dollars and not more than five thousand dollars for each day an intentional violation occurs. In assessing the amount of the civil penalty, the court shall consider the degree and extent of the violation, the size of the operation, whether the violator has been previously convicted or subjected to a civil penalty under this section, and any economic benefit derived from noncompliance. Any civil penalty assessed and unpaid shall constitute a debt to the state which may be collected in the manner of a lien foreclosure or sued for and recovered in a proper form of action in the name of the state in the district court of the county in which the violator resides or owns property. The court shall, within thirty days after receipt, remit the civil penalty to the State Treasurer for credit to the permanent school fund.

(2)(a) Prior to issuing a cease and desist order against a public water supplier as defined in section 46-638, the district shall consult with the Attorney General. If the Attorney General determines that the district does not have sufficient grounds to issue a cease and desist order, the district shall abide by such determination and shall not issue a cease and desist order. The Attorney General shall have exclusive authority to enforce actions under this subsection.

(b) Any determination as to whether a water well is properly registered under sections 46-602 to 46-604 or whether a water well is properly permitted under the Municipal and Rural Domestic Ground Water Transfers Permit Act shall be made by the Department of Natural Resources.

(3) When the Attorney General, a county attorney, or a private attorney brings an action on behalf of a district to recover a civil penalty under this section, the district shall recover the costs of the action if a civil penalty is awarded. Any recovered costs of the action shall be: (a) Remitted to the State Treasurer for credit to the Department of Justice Natural Resources Enforcement Fund if the action is brought by the Attorney General; (b) credited to the applicable county fund if the action is brought by the county attorney; and (c) remitted to the district if the action is brought by the district's private attorney.

(4) The Department of Justice Natural Resources Enforcement Fund is created. The fund shall consist of money credited pursuant to subsection (3) of this section. Money in the fund shall be used to reimburse the office of the Attorney General for the costs incurred in enforcing this section. Any money in the fund available for investment shall be invested by the state investment officer pursuant to the Nebraska Capital Expansion Act and the Nebraska State Funds Investment Act.

Section 46-1124

District; conduct inspections; inspection warrant.

(1) Each district shall conduct areawide, selective, and periodic inspections to insure compliance with the Nebraska Chemigation Act and rules and regulations adopted and promulgated under the act. A permitholder or any person believed by the district to be chemigating without a required permit shall be notified by the district of the district's right and intent to inspect the premises concerned. Authorized representatives of the district and the department shall have access at all reasonable times to inspect a chemigation system and to otherwise carry out their duties under the act. Prior to inspection such authorized representatives shall make reasonable efforts to obtain consent to inspect from the permitholder, his or her authorized employee, the applicator, or the owner or operator of the system. If consent for inspection is denied, such authorized representatives may apply to the district or county court of the county in which the chemigation system is located for an inspection warrant to require the permitholder or person believed to be chemigating without a required permit to allow the authorized representatives to enter onto his or her land to carry out their duties under the act or the rules and regulations.

(2) No person shall refuse entry or access to any authorized representative of the district or department who requests entry for purposes of inspection and who presents appropriate credentials and an inspection warrant, and no person shall obstruct, hamper, or interfere with any such inspection. Nothing in this section shall be construed to prevent prompt inspection without consent or appropriate warrant in emergency situations when there is neither sufficient time nor opportunity to obtain an inspection warrant. If requested, the permitholder, applicator, or person

chemigating without a required permit shall receive a report specifying all facts found which relate to compliance status.

(3) Entry upon any property pursuant to the act shall not be considered to be trespass, and no damage shall be recoverable on that account alone. Damage to crops caused by the issuance of any order authorized by the act shall not be recoverable on that account alone.

46-1127

Irrigation distribution system; improper operation; penalty; equipment; rules and regulations.

(1) Any person who places any chemical in an irrigation distribution system or permits any chemical to be in an irrigation distribution system without having a properly operating (a) check and vacuum relief valve in the irrigation pipe, (b) inspection port or other device to check the performance of the check valve on the irrigation pipeline, (c) automatic low-pressure drain placed between the main check valve and the irrigation pump so that a solution will drain away from the source of water supply, (d) check valve in the chemical injection line, and (e) simultaneous interlock device between the power system of the chemical injection unit and the irrigation pumping plant to protect the water supply from contamination in the event such pumping plant ceases to operate or such other properly operating additional or replacement equipment as may be specified by the council pursuant to subsection (3) of this section shall be guilty of a Class IV misdemeanor.

(2) On or before October 1, 1986, the council shall adopt and promulgate rules and regulations specifying the standards for the equipment required pursuant to this section as are necessary to prevent the contamination of the water supply. The standards specified in such rules and regulations shall not be such as to impose an unduly severe or costly burden on any person without substantially contributing to the prevention of water contamination.

(3) The council may adopt and promulgate rules and regulations specifying equipment other than that required in subsection (1) of this section if changes in design, technology, or irrigation practices or other similar reasons warrant the use of equipment in addition to or in lieu of that enumerated in this section. Any equipment specified pursuant to this subsection shall provide protection to the water supply at least equal to that provided by the equipment required in subsection (1) of this section. The districts shall be given forty-five days to review and comment on rules and regulations proposed by the council prior to the hearing by the council.

46-1135

District; adopt rules and regulations.

Each district may adopt and promulgate such rules and regulations as shall be necessary to carry out its responsibilities under the Nebraska Chemigation Act. The rules and regulations of a district shall be subject to approval by the director.

46-1207.01

Illegal water well, defined; landowner; petition for reclassification; when.

(1) Illegal water well shall mean any water well which has not been properly decommissioned and which meets any of the following conditions:

(a) The water well is in such a condition that it cannot be placed in active or inactive status;

(b) Any necessary operating equipment has been removed and the well has not been placed in inactive status;

(c) The water well is in such a state of disrepair that continued use for the purpose for which it was constructed is impractical;

(d) The water well was constructed after October 1, 1986, but not constructed by a licensed water well contractor or by an individual on land owned by him or her and used by him or her for farming, ranching, or agricultural purposes or as his or her place of abode;

(e) The water well poses a health or safety hazard;

(f) The water well is an illegal water well in accordance with section 46-706; or

(g) The water well has been constructed after October 1, 1986, and such well is not in compliance with the standards developed under the Water Well Standards and Contractors' Licensing Act.

(2) Whenever the department classifies a water well as an illegal water well, the landowner may petition the department to reclassify the water well as an active status water well, an inactive status water well, or an abandoned water well.

**TABLE 10.4-1
GROUNDWATER CONTAMINANTS
MONITORED BY THE LBNRD**

<u>Contaminant</u>	<u>MCL</u>	
Inorganic Chemicals:		
Nitrate	10.	mg/l
Nitrite	1.	mg/l
Total nitrate and nitrite	10.	mg/l
Organic Chemicals:		
Pesticides & PCB:		
Alachlor (Lasso Herbicide)	0.002	mg/l
Aldicarb (Temik Insecticide)	0.003	mg/l
Aldicarb sulfoxide (Temik Insecticide)	0.004	mg/l
Aldicarb sulfone (Temik 1/4 Strength)	0.003	mg/l
Atrazine	0.003	mg/l
Carbofuran (Furadan)	0.04	mg/l
Chlordane	0.002	mg/l
Dibromochloropropane	0.0002	mg/l
2, 4-D	0.07	mg/l
Endrin (No longer produced)	0.0002	mg/l
Ethylene dibromide (EDB, Pestmaster)	0.00005	mg/l
Heptachlor	0.0004	mg/l
Heptachlor epoxide	0.0002	mg/l
Lindane	0.0002	mg/l
Methoxychlor (Dual)	0.04	mg/l
Pentachlorophenol (PCP)	0.001	mg/l
Polychlorinated biphenyls	0.0005	mg/l
Toxaphene	0.003	mg/l
2,4,5-TP (Silvex)	0.05	mg/l

TABLE 10.6.2.2-1
LITTLE BLUE NRD
EXPLANATION OF DETERMINATION
FOR REASONABLE ACCEPTABLE DECLINES BASED
ON HYDROGEOLOGICAL CHARACTERISTICS
PRE- 1994

Unit	Average Pre-Development Saturated Aquifer	Average 1992 Saturated Aquifer	Average Approximate Pump Drawdown	NRD Allowable Usage	Reasonable Acceptable Decline¹	Percentage of Wells Allowed to Decline
<u>1</u>	<u>155 ft.</u>	<u>148 ft.</u>	<u>-14 ft.</u>	<u>10%</u>	<u>15 ft.</u>	<u>80%</u>
<u>2</u>	<u>135</u>	<u>121</u>	<u>-21 ft.</u>	<u>10%</u>	<u>12 ft.</u>	<u>80%</u>
<u>3</u>	<u>90</u>	<u>86</u>	<u>-30 ft.</u>	<u>10%</u>	<u>9 ft.</u>	<u>80%</u>
<u>4</u>	<u>70</u>	<u>65</u>	<u>-20 ft.</u>	<u>10%</u>	<u>7 ft.</u>	<u>80%</u>
<u>5</u>	<u>92</u>	<u>80</u>	<u>-27 ft.</u>	<u>10%</u>	<u>8 ft.</u>	<u>80%</u>
<u>6</u>	<u>125</u>	<u>110</u>	<u>-21 ft.</u>	<u>10%</u>	<u>11 ft.</u>	<u>80%</u>
<u>7</u>	<u>135</u>	<u>130</u>	<u>-17 ft.</u>	<u>10%</u>	<u>13 ft.</u>	<u>80%</u>
<u>8</u>	<u>70</u>	<u>65</u>	<u>-15 ft.</u>	<u>5%</u>	<u>3 ft.</u>	<u>40%</u>
<u>9</u>	<u>N.A.²</u>					

¹ Values rounded to nearest foot.

² N.A. indicates data Not Applicable due to absence of aquifer.

The columns in Table 10.6.2.2-1 were developed by the following procedures. The Hydro-Unit, Average Pre-Development Saturated Aquifer, and Average 1992 Saturated Aquifer were developed by District Staff working with Olson & Associates and Conservation and Survey Division personnel. The Average Approximate Pump Drawdown column was established by researching well registration records in the respective Hydro-Unit. The NRD Allowable Usage and Percentage of Wells allowed to decline was established as Board policy and the Reasonable Acceptable Decline is the 1992 Saturated Aquifer multiplied by the NRD allowable usage rounded to the nearest foot

Figure 13-26
Guideline Map for
Reasonable Acceptable Declines
Based on Hydrogeological Characteristics
(Pre-1994)

