

ORDINANCE NO.2008 - 05

**AN ORDINANCE AMENDING CHAPTER 51 OF THE WHITLEY COUNTY
CODE OF ORDINANCES (REGARDING WATER WELLS)**

Whereas, the Whitley County, Indiana Board of Commissioner (“Board”) previously adopted an ordinance that has been codified as Chapter 51 of the Whitley County Code of Ordinances regarding water well; and

Whereas, the Board finds it to be in the best interest of the citizens of the County to amend said chapter as provided below;

NOW, THEREFORE, BE IT ORDAINED:

51.01 TITLE.

This chapter may be referred to as “Whitley County Ordinance of Wells.”

51.02 ADOPTION OF REGULATIONS BY REFERENCE.

The regulations of the Indiana State Department of Natural Resources at 310 I.A.C. 16-1-1-16-12-5 et seq. “Final Rules Concerning the Regulation of Water Well Drilling” and I.C. 25-39-3 et seq. entitled “Water Well Drilling Contractors,” as amended from time to time and as promulgated by the Indiana Department of Natural Resources are incorporated and adopted by reference. One copy of these regulations shall be on file with the Whitley County Health Department.

51.03 DEFINITIONS.

For the purpose of this chapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

ABANDON. To terminate operations of a well for water supply, monitoring, dewatering or geothermal purposes and to restore the site of the well in a manner that will protect ground water resources from contamination.

ABANDONED WELL. A well whose original purpose and use has been discontinued for more than five years or that is in such a state of disrepair that using it to obtain to obtain ground water is impractical or a health hazard.

ANNULAR SPACE. The space between the exterior of the well casing and the natural formation in a drilled well.

AQUIFER. Any underground geologic formation (consolidated or unconsolidated) that has the ability to receive, store and transmit water in amounts sufficient of the satisfaction of any beneficial use.

BENTONITE. Clay material composed predominantly of sodium montmorillonite which meets American Petroleum Institute specifications standard 13-A (1985).

BENTONITE SLURRY. A mixture, made according to manufacturer specifications, of water and commercial grouting or plugging bentonite which contains high concentrations of solids. The term does not include solid concentration or which are designed for drilling fluid purposes.

BRIDGE. A barrier created by any unwanted object or material which prevents the introduction of grouting materials in the borehole or well.

CASING. A pipe installed to prevent unwanted solids, liquids, or gases from entering the interior of a well.

COARSE GRADE CRUSHED BENTONITE. Natural bentonite crushed to an average size range of three-eighths to three-fourths inches.

COMMISSION. The Natural Resources Commission established under I.C. 14-10-1-1.

CONTAMINATION. The degradation of natural water quality as a result of human activities.

COUNTY. Those unincorporated areas which are under the jurisdiction of the Whitley County Health Officer and not incorporated cities or towns, except as provided for under authority of I.C. 16-8.

DEWATERING WELL. A temporary well that:

- (1) Is used as part of construction project to remove water from a surface or subsurface area; and
- (2) Ceases to be used upon completion of the construction project or shortly after completion of the project.

DISINFECTION. The process of destroying pathogenic microorganisms such as coliform bacteria.

DIVISION. The division of water of the Department of Natural Resources.

GEO-THERMAL WELL. A hole drilled in the earth for the purposes of utilizing the inherent cooling and heating qualities of the earth, including open loop and closed loop systems.

GROUNDWATER. Water beneath the earth's surface between saturated soil and rock that supplies well and springs.

GROUT PIPE. A length of hose or pipe positioned in the annular space of a well, between the well casing and borehole used for the introduction of grouting materials.

HEALTH OFFICER. The Whitley County Health Officer or a duly authorized representative.

MEDIUM GRADE CRUSHED BENTONITE. Natural bentonite crushed to an average size range of one-fourth to three-eighths inch.

MONITORING WELL. A well installed to obtain hydro-geological information or to monitor the quality or quantity of ground water.

NEAT CEMENT. A mixture of 94 pounds of cement and no more than six gallons of clean water. Additives designed to increase fluidity may not exceed 5% of the total mixture.

PERSON. An individual, firm, corporation, partnership or association.

WATER WELL. A hole drilled or driven to: (1) obtain geological information on aquifers; (2) monitor the quality of ground water; (3) utilize the geothermal properties of each formations; (4) obtain ground water for any purpose, including residential, commercial, public, agricultural and/or irrigational purposes; and/or (5) find and/or locate a water source (i.e.. "test wells"). The terms "water well" includes a monitoring well, a dewatering well, and a geo-thermal well, as those terms are defined herein. The term "water well" includes a water well (as defined above) constructed, installed, maintained, operated, and owned by a municipality or taxing district.

WELL LOG. A record of earth formation encountered by the Well Driller upon a descent of the bore hole, and the depths of those encounters.

51.04 WATER WELLS.

- (A) No person shall place, install or permit the installation of a water well in an unsanitary or unsafe manner with the county.
- (B) No water well shall be installed which does not conform to the requirements of this chapter and/or any ruling of the Health Officer issued under this chapter.
- (C) In any defect exists or occurs in any water well which could cause that water well to contaminate an existing aquifer or the groundwater, the owner or occupant shall correct the violation immediately.
- (D) If the owner or occupant of any property, or his or her agent, receives a written order from the Whitley County Board of Health or Health Officer, he or she shall comply with the provisions of the order and perform all

acts required by the order within the time limit set forth in that order. The order shall be served on the owner or occupant of the property or his or her agent, or by United States certified mail, but may be served on any person who, by contract with the owner, has assumed the duty of complying with the provisions of this chapter and any order issued under this chapter.

51.05 CONSTRUCTION, PLACEMENT, PERMITS AND INSPECTIONS.

- (A) Water wells shall be located in accordance with the distances shown in the table below;

Minimal Horizontal Separation Distances From Water Wells

Lake, pond, river, stream or public ditches	25 feet
Dwelling or other inhabiting structure	10 feet
Side, rear or front lot lines	5 feet
Private sewage disposal system	50 feet
Commercial sewage disposal system	100 feet
Private sewage disposal system (in soils where aquifers are in danger of contamination)	100 feet
Underground storage tanks for fuel or Chemicals	50 feet
Permanently fixed above ground storage Tanks for fuel or chemicals (300 gallons or more)	50 feet
Permanently fixed above ground storage Tanks for fuel or chemicals (0-299 gallons)	25 feet
Earthen agricultural waste pits	200 feet
Concrete agricultural waste pits	50 feet
Sanitary sewerage lines (water main grade pipe and fittings)	10 feet (horizontal) 18 inches (vertical)
Sanitary sewage lagoons	300 feet

Landfills (presently or previously licensed or Permitted by the State of Indiana) 600 feet

Geo-thermal well 25 feet

- (B) Water well casings shall be a minimum of two inches in diameter.
- (C) Water wells shall not be placed in below grade well pits unless: (i) the water well is protected by a secured manhole pit with pressure valve and manhole cover construction of cast iron; and (ii) approval of the Indiana Department of Natural Resources is obtained.
- (D) The cap of the water well shall be visible and securely attached at a height above the surface of the ground, no greater than two feet and no less than one foot. Minimum well depth shall be fifty (50) feet or more if necessary to enter a satisfactory aquifer. Single suction lines must be fifty (50) feet from the septic tanks and sewage absorption systems, unless the suction lines are made of water main grade pipe with water main grade fittings.
- (E) No annular space may exist. Materials and design for sealing must conform to the standards of the Indiana Department of Natural Resources.
- (F) Pitless adapter shall be required on each new water well as in accordance with requirements of the Indiana Department of Natural Resources.
- (G) All new water wells shall be properly disinfected at the time of installation.
- (H) The owner(s) or authorities, or agents thereof, of any parcel of ground unto which a water well is to be installed or replacement of an existing water well is planned shall obtain a written permit signed by the Whitley County Health Officer before any construction begins. The owner shall apply for a permit on a form provided by the county. The applicant shall supplement the application with plans, specifications and other information deemed necessary by the Whitley County Health Officer. The Health Officer shall then make a site review of the area proposed, in person, within two working days of the filed application. The Health Officer will provide drawings of area(s) in which the water well may be placed to the owner and well driller. The applicant shall pay a permit and inspection fee of ten dollars (\$10.00), as established under I.C. 16-20-1-27, to the County Health Department at the time the application is filed. The fee shall be accounted for and paid into the County Health Department. The installation or repair of well lines, screens, pump, pressure tanks and the like are exempted unless a new well is also installed.

- (I) No permit for a water well shall become effective until the installation is completed to the satisfaction of the Whitley County Health Officer. The Health Officer shall be allowed to inspect the work at any stage of construction. The applicant for the permit shall notify the Whitley County Health Department when the well construction is completed during the day it was finished or the following weekday. The Whitley County Health Officer shall make the inspection within two (2) working days of the receipt of notice from the applicant.
- (J) The Whitley County Health Officer shall upon the request of the applicant sample and test the new water well for total coliform, nitrate/nitrite and any other substances as deemed necessary by the Whitley County Health Officer. The applicant may employ private laboratory personnel from an Indiana State Certified Lab to conduct the required test under the direction of the Whitley County Health Officer. The Whitley County Health Officer may, in any event, conduct tests deemed necessary by the Whitley County Health Officer. All final sample results must be within acceptable primary standards as established by the United State Environmental Protection Agency for public drinking water sources. All fees and charges for water testing shall be the responsibility of the individual property owner.
- (K) All water tests shall be conducted according to the most recent Standard Methods for the Examination of Water and Wastewater. These test results will be provided in writing to the Whitley County Health Department within forty-five (45) days from the date of well completion. The failure of a water well to meet any of these primary water quality standards will constitute grounds for rejection of the water well by the Whitley County Health Officer.
- (L) The applicant will post the permit in a conspicuous place at or near a building where the water well is under construction. The notice shall be plainly visible from the public thoroughfare nearest the building.
- (M) Subdivisions designed to utilize water wells, the plans for which were duly recorded in the office of the Whitley County Recorder prior to January 1, 1997, are exempt from the provisions of this chapter regarding location and may be located in accordance with the best judgment of the Whitley County Health Officer.
- (N) The water well permit is valid for a term of one year from the date of issue, unless otherwise voided by the Whitley County Health Officer.
- (O) In cases of extreme emergency and when the Whitley County Health Department is not open for public business, a water well may be installed without first obtaining a local permit, provided that the property owner or

his or her agent obtains a local well permit within the next working day. The water well must meet all other requirements of this chapter.

- (P) No person shall install a water well in Whitley County, without being licensed by the State of Indiana Department of Natural Resources, under authority of I.C. 25-39-3.
- (Q) No water well may be placed with the delineated well head protection area of a public water supply well, except by the municipality utilizing the well.
- (R) Well logs for vertical closed loop geo-thermal well systems must be submitted to the Health Department within thirty (30) days of well completion. Well logs may be submitted on official DNR publications.
- (S) A closed loop geo-thermal well system must be located so as to be easily accessed and must not be built over or placed under impervious materials.
- (T) Piping for a closed loop geo-thermal well system must be bedded so as to prevent freezing or undue compaction pressure.
- (U) Piping used for a closed loop geo-thermal well system must be constructed of polyethylene pipe having a pressure resistance of 160 psi and a SDR of 11.5 @ a 73 degree minimum hold.
- (V) Any coolant or other chemical additive used in any closed loop geo-thermal well system must be non-toxic (i.e.. consumable by humans and easily degradable) such that it would not be injurious to the public health or health of the environment in the event of a spill, leak or other release.
- (W) A vertical closed loop geo-thermal well may be installed and/or operated only if there is a monitoring well (whether or not located on the same site) that: (i) is located within the subdivision as accepted by the Whitley County Planning Commission and recorded by the Whitley County Recorder, of the vertical closed loop geo-thermal well; (ii) has a minimum depth to the next aquifer below the depth of the vertical closed loop geo-thermal well system; and (iii) has a lockable cap on the casing with a working key in the possession of the Whitley County Health Officer.

51.06 POWERS FOR INSPECTION.

The Whitley County Health Officer will be permitted to enter upon all properties at any reasonable and proper time to inspect, observe, measure, sample and test to carry out the provisions of this chapter. The Whitley County Health Officer shall, upon request, produce and display proper credentials and identification. The Whitley County Health Officer may at anytime observe the drilling of a water well to determine if proper drilling

practices and grouting practices are being observed. The Whitley County Health Officer inspect a portion of the well drilling process for at least ten (10) separate well drilling events for each calendar year. The Whitley County Health Officer must document upon the well permit observations conducted at the time of the inspection.

51.07 NOTICES.

The Whitley County Health Officer will serve any person found to be violating any provision of this chapter with a written order stating the nature of the violation and providing a time limit for its satisfactory correction.

51.08 HEARINGS.

- (A) Any person affected by an order or notice in connection with the enforcement of any provision or ordinance may request and shall be granted a hearing on the matter before the Whitley County Board of Health, provided that the person files a written request for hearing with the Health Officer within ten days. Written requests for hearing shall clearly state the following:
- (1) The name and address of the person affected;
 - (2) The provisions of the ordinance in question;
 - (3) The reasons for requesting a hearing;
 - (4) The request relief; and
 - (5) The basis for the requested relief.
- (B) A hearing requested pursuant to this section shall be conducted within thirty (30) days of the Health Officer's receipt of the request. The hearing shall be conducted by the Whitley County Board of Health at a time and place designated by the Health Officer. Written notice of the time and place of the hearing shall be delivered by Certified United States Mail to the person requesting the hearing at least ten (10) days prior to the hearing. If the person requesting the hearing so requests, the Health Officer may grant a continuance of the hearing date for a period of not more than thirty (30) days.
- (C) A tape recording shall be made of the hearing and the cost borne by the Health Department; however, a transcript of the hearing will be made only if a person requests it shall be transcribed at the cost of such person. The Whitley County Board of Health shall make a ruling based upon the complete hearing record and shall sustain, modify, or rescind any order, suspension, revocation or ruling challenged in the hearing. A written

report of the hearing decision, including the reason(s) for such decision, shall be furnished to the affected person by the Health Officer within ten (10) days after the hearing.

- (D) The Whitley County Board of Health may in its discretion establish a Hearing Board to conduct water well hearings in the county. Any such Hearing Board would have three members. The members of the Hearing Board would include the Health Officer, on representative of the general public, appointed by the Whitley County Board of Health to serve at its pleasure and on well driller, registered with the state, appointed by the Whitley County Board of Health to serve at its pleasure. In the event that a Hearing Board is established, the procedures indicated above in divisions (A) through (C) of this section. In such an event, the Whitley County Board of Health may affirm, reverse or modify the decision of the Hearing Board.
- (E) In the event the Health Officer elects to instigate prosecution and enforcement action for violation of the provisions of this chapter with the assistance of the Whitley County Prosecutor and/or Whitley County Attorney in accordance with 10.99, the hearing provisions contained with divisions (A) through (D) of this section shall not apply and shall not be available to the affected person.

51.09 WELL ABANDONMENT.

- (A) A well abandoned before January 1, 1988, must be sealed at or above the ground surface by a welded, threaded or mechanically attached watertight cap. The well shall be maintained so the well does not become a source or channel of ground water contamination. A well which poses a hazard to human health must also be plugged under division (C). A cased or uncased bucket well or hand dug well (other than buried slab construction) that was abandoned before January 1, 1988, shall be closed in conformance with one of the following procedures:
 - (1) Covered with a reinforced concrete slab at least four inches thick and having a diameter larger than the nominal diameter of the borehole or the well casing;
 - (2) Equipped with a properly reinforced cover constructed of pressure treated lumber, using chromium copper arsenic (CCA) salt that has dimensions larger than the nominal diameter of the borehole or well casing. The cover shall be protected against the water with roofing or other water repelling materials that are properly maintained to ensure the integrity of the cover. Closure shall not be performed under this subdivision, however, if the cover is in direct contact with ground water or surface water;

- (3) Closed as otherwise approved by the division.
- (B) A well drilled before January 1, 1988, and properly abandoned before January 1, 1994, shall be sealed at or above ground surface by a welded, threaded or mechanically attached watertight cap. This sealing of the well shall be the responsibility of the property owner. The well shall be maintained so the well does not become a source of channel of ground water contamination. A well which poses a hazard to human health must also be plugged under division (C).
- (C) A well abandoned after December 31, 1987, shall be plugged with an impervious grouting material to prevent the migration of materials or fluids in the well and the loss of pressure in a confined aquifer by a registered and licensed well driller.
- (D) A well drilled after December 31, 1987, and not equipped with casing must be plugged within seventy-two (72) hours after completion.
- (E) This subsection applies as follows to a cased or uncased well abandoned after December 31, 1987:
- (1) The plugging material must consist of one or a combination of the following:
- (a) Neat cement with not more than 5% by weight of bentonite additive;
 - (b) Bentonite slurry (which can include polymers designed to retard swelling);
 - (c) Pelletized, medium-grade or coarse-grade crushed bentonite;
 - (d) Other materials approved by the Commission.
- (2) The following methods apply:
- (a) Cement and bentonite slurries shall be pumped into place in a continuous operation with a grout pipe introducing the plugging material at the bottom of the well and moving the pipe progressively upward as the well is filled;
 - (b) Plugging materials other than neat cement or bentonite slurry shall be installed in a manner to prevent bridging

of the well or borehole. The well or borehole shall be measured periodically throughout the plugging process to ensure that bridging does not occur.

(c) The following procedures apply:

1. An abandoned well shall be disconnected from the water system. Any substance which may interfere with plugging shall be removed, if practicable;
2. A well (other than a monitoring well, a dewatering well or an uncased borehole) shall be chlorinated before abandonment as provided in 310 I.A.C. 16-9-1.

(d) A cased well shall be plugged as follows:

1. With neat cement, bentonite slurry or medium-grade or coarse-grade crushed or palletized bentonite from the bottom of the well to within two feet below the ground surface, unless otherwise provided by the Department;
2. The well casing shall be severed at least two (2) feet below the ground surface and a cement plug larger in diameter than the borehole shall be constructed over the borehole and covered with natural clay material to the ground surface.

(e) An uncased well (other than a borehole drilled by a bucket rig or a dewatering well governed by subdivision (h) and (i)), shall be filled with natural clay materials, neat cement, bentonite slurry or medium-grade or coarse-grade or palletized bentonite from the bottom of the borehole to a depth of no less than twenty-five (25) feet below the ground surface. The borehole shall be filled with neat cement or medium-grade or coarse-grade crushed or palletized bentonite from a depth no less than twenty-five (25) feet below ground surface to within two feet below ground surface. The remaining borehole shall be filled with natural clay material to ground surface.

(f) A cased or uncased monitoring well shall be plugged from the bottom of the well or borehole to the ground

surface with a bentonite slurry or palletized or coarse-grade crushed bentonite.

(g) A bucket well shall be plugged as follows:

1. A bucket well installed as buried slab construction shall be filled with gravel from the bottom of the well to within ten (10) feet below the ground surface. Neat cement, bentonite slurry or palletized, medium-grade or coarse-grade crushed bentonite shall be installed in the casing or well pipe from no less than ten (10) feet below the ground surface to within two (2) feet below the ground surface. The well pipe shall be severed at least two (2) feet below the ground surface and covered with a cement plug larger in diameter than the well pipe. The remaining hole shall be filled with natural clay material to the ground surface.
2. Bucket well construction using casing with an inside diameter of less than twelve (12) inches extending the entire length of the borehole and equipped with a well screen shall be abandoned under subdivision (D) (1).
3. An uncased borehole drilled by a bucket rig shall be filled with natural clay material from the bottom of the hole to the ground surface. The clay material shall be thoroughly tamped to minimize settling.
4. For other than buried slab construction, a bucket well shall be filled with gravel from the bottom of the well to at least five (5) feet below ground surface. The top section of the concrete or tile well casing shall be removed to cause the top of the well to terminate below ground surface the top section of the concrete or tile well casing shall be removed to cause the top of the well to terminate below ground surface. The well shall be filled with at least one foot of neat cement, bentonite slurry, or palletized, medium-grade or coarse-grade crushed bentonite from at least five (5) feet below ground surface to the top of the well casing. The well casing shall be covered with cement plug larger in diameter than the borehole. The remaining borehole shall be filled with natural clay material to ground surface.

- (h) If a dewatering well casing is removed following use, the remaining borehole shall initially be filled with granular, palletized, medium-grade or coarse-grade crushed bentonite a minimum of one (1) foot thick. The remainder of the borehole shall be filled with natural earth materials obtained during the drilling process to the ground surface and be thoroughly tamped to minimize settling.
- (i) If a dewatering well casing is removed following use and the well site will be excavated as part of the construction project, the remaining borehole shall be filled with natural earth materials obtained during the drilling process to the ground surface and be thoroughly tamped to minimize settling.
- (j) The division shall be notified in writing of a well abandonment with thirty (30) days after plugging is completed.

51.10 CONSTRUCTION

- (A) In the event that any provision of this chapter is ultimately determined by a court of competent jurisdiction to conflict with any provision of Indiana Department of Natural Resources Code, Title 310, and I.C. 25-39-1-5; then and in any such event the more strict provision shall govern.
- (B) In the event that any provision of this chapter is ultimately determined by a court of competent jurisdiction to be pre-empted by any state or federal law or regulation, this chapter shall automatically be deemed amended by eliminating the pre-empted provision and incorporating in its place the applicable provision of the pre-empting state or federal law or regulation.
- (C) Each provision of this chapter shall be construed as separate, to end that if any part of it shall be held invalid for any reason, the remainder shall continue in full force and effect.
- (D) Compliance with the requirements of this chapter does not obviate or eliminate the necessity of complying with any other applicable federal, state or local laws and regulations affecting water wells.

51.11 AUTHORITY OF HEALTH OFFICER

It is acknowledged, understood and declared by the Board of Commissioners of the County of Whitley, Indiana, that under this chapter the Health Officer is required to

exercise and is vested with the authority to exercise his or her discretion and judgment in order to protect and preserve the public health, safety and general welfare of the citizens of the County of Whitley, Indiana, in regulation of water wells. The authority of the Health Officer to issue, deny, suspend or revoke or fail or refuse to issue, deny, suspend or revoke any license, approval, order or similar authorization under this chapter is declared to be discretionary.

51.12 DISCLAIMER

- (A) Because of many interrelating factors contributing in the failure of a water well, acceptance of a water well does not imply approval, and it cannot be considered as a guarantee by the Board of Health of successful potability or operation. The Whitley County Health Officer's signature merely signifies that as of the date of signing the water well permit meets the Whitley County Board of Health's minimum standards. The Whitley County Health Officer's signature makes no other representation.
- (B) If any provision(s) of this ordinance shall be held to be invalid, illegal, or unenforceable by a court or other tribunal of competent jurisdiction, the validity, legality, and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.
- (C) The Auditor of Whitley County is directed to publish this Ordinance as provided by law.
- (D) This Ordinance shall be in full force and effect from and after its passage and approval by the Board of Commissioners on the date shown below.

ADOPTED this 7 day of APRIL, 2008.

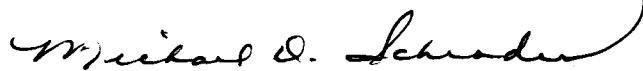
**THE BOARD OF COMMISSIONERS
OF WHITLEY COUNTY, INDIANA**



Thomas Rethlake, President



James Pettigrew, Vice President



Michael D. Schrader, Commissioner

ATTEST:

A handwritten signature in cursive script that reads "Linda Gerig". The signature is written in black ink and is positioned above a horizontal line.

Linda Gerig, Auditor
Whitley County, Indiana