

Q u e s t i o n s a n d A n s w e r s

on the

Agricultural Drainage Well Program

Iowa Department of Natural Resources

January 1999

The answers to the questions below are intended to provide general information on the Iowa Department of Natural Resources' (IDNR) program to regulate agricultural drainage wells (ADWs). The Environmental Protection Commission (EPC) has adopted rules to implement this program and these rules are contained in Chapters 50, 51, and 52 of the Commission's rules (Agency number 567).

Q : ADWs have been around for a long time. Why is the IDNR now going to regulate ADWs?

A : There are a number of reasons. First, Senate File 473, which was passed by the 1997 Iowa General Assembly, requires the IDNR to adopt rules to implement the provisions of that bill. The bill requires the closure of some ADWs and, for others, the removal of surface water intakes and sealing the cisterns. Second, the 1987 Groundwater Protection Act charged the IDNR and the Iowa Department of Agriculture and Land Stewardship with developing a program to eliminate the chemical contamination of groundwater caused by the use of ADWs. Third, Iowa's water rights law requires a permit for the "diversion" of surface water into an aquifer, which includes ADWs. The program will bring existing ADWs into compliance with these laws and, at the same time, implement a comprehensive program to minimize the contamination potential of ADWs.

Q : How many ADWs are there in Iowa?

A : There are an estimated 290 active ADWs in Iowa. About 80 ADWs have been closed within the last decade and there are another dozen that no longer function. The active ADWs are primarily concentrated in Floyd, Wright, Humboldt, and Pocahontas Counties, with the others being located in Blackhawk, Butler, Mitchell, Worth, Winnebago, Hancock, Kossuth and Webster Counties. There may be some ADWs that are not accounted for in the existing ADW inventory, but it is not believed the number of unknown ADWs are significant.

Q : What do the adopted rules require?

A : In general, the rules:

- Require the closure of all ADWs that have an anaerobic lagoon or earthen wastewater storage basin within their drainage area. Closure is to be in accordance with the IDNR's well plugging requirements for abandoned drinking water wells and must be accomplished by December 31, 1999. It appears that only about nine ADWs in Wright County will be affected by this mandatory closure requirement, although a final determination has not been made. *(Note: A number of ADWs in Pocahontas and Wright Counties are involved in alternative drainage projects and will be closed if the drainage projects go through. With the exception of some ADWs in Wright County, these ADWs do not have to be closed, but are being closed voluntarily with financial assistance provided under the alternative drainage assistance program administered by the Iowa Department of Agriculture and Land Stewardship.)*
- Require the closure of ADWs for which there are economically and technically feasible alternatives to the use of the ADW. The decision as to whether there is an economically and technically feasible alternative will be made by IDNR on a case-by-case basis. Factors that will be used to make the determination include:
 - * The impact that closure of the ADW would have on lands drained by the agricultural drainage well if an alternative drainage system is not provided.
 - * The cost and feasibility of providing an alternative outlet. Alternative drainage systems constructed under the provisions of the alternative drainage system assistance program authorized by SF 473 will be considered as a viable alternative to the use of the ADW.
 - * The availability of public assistance for the construction of an alternate outlet or for compensation for loss of productivity on lands drained by the agricultural drainage well.
- Require permits for all other ADWs. The continued use of all other ADWs would be allowed if a permit is obtained from the IDNR. All owners of lands draining to an ADW must submit the permit application. The permit, if granted, will contain permit conditions requiring the permit holder(s) to implement best management practices (BMPs), such as the removal of surface water intakes, to reduce the contamination potential of an ADW. New ADWs will not be allowed.

Q : How can I apply for a permit for the continued use of an ADW? Is there a deadline for an application?

A : The IDNR has developed an application form (Application for Use of an Agricultural Drainage Well, DNR Form 542-1539) which must be used to apply for a permit. In addition to the information on the form, a map must be submitted with the application showing the location of the ADW, tile lines, surface intakes, the ADW drainage area boundary, and other features as listed on the application form and in the rules. Applications must be submitted by July 1, 1999. Forms can be obtained from the IDNR or the local NRCS office. Iowa State University Extension staff may be able to assist you in preparing and submitting the application and you should contact your county extension office for possible assistance.

Q : I plan to voluntarily close my ADW but probably will not do this until sometime after the July 1, 1999 deadline for submitting an ADW permit application. Do I have to go through the process of applying for a permit if I intend to close my ADW?

A : An application will not have to be filed for ADWs that will be closed by December 31, 1999 or soon thereafter. ADW owners intending to close their ADW in the near future should write to the IDNR notifying them of their intention to close the ADW and providing any supporting information they have documenting their intention. The IDNR will not routinely waive the requirement to file an application without information showing there is a good chance the ADW will, in fact be closed by the year 2000 or soon thereafter.

Q : Once a permit application is received by the IDNR, what is the review process?

A : Applications received will initially be screened to determine if all the required information has been included. If not, the applicant(s) will be informed the application is not complete and cannot be processed until all the needed information is submitted. For instance, applications submitted without the required map will not be considered complete. Complete applications will be reviewed in the order received. The primary emphasis of the review will be to determine if all the submitted information is correct and whether there is a physically and economically viable alternative to the use of the ADW. An initial decision to issue or deny a permit will be made with notice of the initial decision being published in a newspaper. After a 20-day public comment period, a final decision to issue or deny the permit will be made. The applicant(s) will then either be sent the permit or informed of the decision to deny the permit. In general, Iowa law requires that a decision be made on a completed application within 90 days of receipt.

Q : I didn't register my ADW with the IDNR back in 1988. Will this make a difference in whether a permit is granted?

A : No. The 1987 Groundwater Protection Act, as amended, required that all ADWs be registered with the IDNR by September 30, 1988. Many ADWs were registered, some were not. However, the decision to issue or deny a permit for the continuing use of an ADW will not be based on whether or not the ADW was registered with the IDNR.

Q : The rules allow the continued use of an ADW if a permit is obtained. What type of permit would this be?

A : The permit would be issued under the IDNR's water rights authority, which more commonly is used to regulate the withdrawal, use, and storage of water. The law specifically requires a permit for the "diversion" of surface water to an aquifer. The permits would be issued for a period of 10 years and contain various conditions requiring that the permit holder(s) implement best management practices (BMPs) for the ADW, the associated tile drainage system, and the land drained by the ADW. Permits would be issued to the ADW owner as well as all landowners having land that is drained by the ADW.

Q : What are some of the permit conditions that typically would be included in an ADW permit?

A : In addition to the requirements to remove surface intakes and seal the cistern by December 31, 2001 (which are required by law), permits would typically contain various conditions that both require as well as allow the permit holder(s) do certain things. Some of the more important conditions that would be normally be included in an ADW permit:

- *Repair, maintenance, and modifications of the ADW and the associated drainage system* - Permit holders would be required to keep the ADW and drainage system in good repair. ADWs could be cleaned out to maintain efficiency. The drainage system could be modified (e.g., adding tile to compensate for a removed surface water inlet) as long as additional land is not drained.
- *Waste systems* - Any connections to a septic system or other waste treatment system would have to be removed. In addition, permit conditions may require the installation of runoff control measures for feedlots within the drainage area of the ADW.
- *Nitrogen/herbicide management* - The application of nitrogen from all sources, including manure, legumes, and commercial fertilizers, on lands within an agricultural drainage well drainage area could not exceed the nitrogen use levels necessary to obtain optimum crop yields for the crop being grown. Applications of herbicides would have to be in accordance with label directions and the pesticide rules of the Iowa Department of Agriculture and Land Stewardship.
- *Alternatives study* - An engineering study would have to be completed within nine years of the time the permit is issued (one year before the permit must be renewed) to determine if there is an economically and physically feasible alternative to the use of the ADW. This study would be used by the IDNR to determine if the permit should be renewed when the original 10-year permit expires. The IDNR will provide more specific guidance in the future as to the nature of the engineering study.

Q : Will I have to monitor the drainage water going down my ADW as a condition of a permit?

A : No, ADW permit holders would not be required to monitor water quality. The IDNR may monitor the quality of drainage water entering some ADWs to see if the required BMPs are reducing groundwater contamination, but this would not be the responsibility of the ADW owner.

Q : Why will the IDNR issue a “joint” permit to all persons having land drained by the ADW as well as the ADW owner? Why not just issue the permit to the ADW owner?

A : There are a number of reasons for this. The primary purpose is to insure that the IDNR can fairly and quickly enforce the required BMPs. By issuing a joint permit, it clearly establishes that all the landowners that drain to the well are responsible for implementing the required BMPs. This has some distinct legal advantages to the IDNR as well as the actual ADW owner. Issuance of a joint permit also is a reminder that all the landowners having land drained by an ADW have responsibilities, not just the ADW owner.

Q : What if I don't agree with the conditions in an ADW permit or with an IDNR denial of a permit based on a "viable alternative?" What recourse do I have?

A : IDNR rules as well as Iowa law provides the right to appeal such decisions. An Administrative Law Judge typically hears appeals although the Environmental Protection Commission (EPC) has the final say. And, if a person were unhappy with the EPC's decision on the appeal, the District Court could be petitioned for judicial review of the EPC's decision. Ultimately, the matter could end up in the Iowa Supreme Court or Court of Appeals. Likewise, a person unhappy with a decision to issue a permit for an ADW could appeal that decision, using the same appeal process. Normally, appeals must be made within 30 days of the issuance or denial of a permit.

Q : If I get an ADW permit and later sell my land, does the new owner have to re-apply for an ADW permit?

A : No. By law, the permit "attaches" to the land. The permit will automatically transfer to the new owner and the new owner will be bound by all the conditions and terms of the ADW permit. The IDNR may file a copy of an ADW permit with the county recorder to give prospective purchasers constructive notice of the permit conditions.

Q : I have plugged my ADW well. Does IDNR still consider this an ADW and do I need to do anything else?

A : If the ADW well was plugged using IDNR-approved well plugging techniques, it will no longer be considered an ADW. If the well was plugged but the ADW owner does not have proof the ADW was plugged using acceptable techniques, the IDNR will address these on a case-by-case basis. In this case, the ADW owner should write to the IDNR and provide information regarding how the ADW was plugged. This documentation should be submitted prior to July 1, 1999. ADW owners that completed an "Abandoned Water Well Plugging Record" (DNR Form 542-1226) and submitted it to the county or directly to IDNR do not need to do anything else.

Q : If I want to close my ADW, is there any type of public assistance available?

A : Senate File 473 established an alternative drainage assistance program. The Division of Soil Conservation (DSC) of the Iowa Department of Agriculture and Land Stewardship is implementing this program. In general, the law provides up to 75% cost share funds for the construction of alternative drainage systems. This must be done through a legally organized drainage district. Questions on the alternative drainage assistance program should be directed to the DSC. There may also be other options, such as the wetland reserve program. If alternative drainage is not provided, wetlands resulting from closure of an ADW could potentially be enrolled in the wetland reserve program, in which case the landowner would receive monetary compensation for a permanent easement. The local NRCS office should be contacted to determine if this is a realistic option. Funds for the actual well plugging may also be available from the county through the IDNR's Grants-to-Counties program for well testing and closure. The county sanitarian should be contacted to determine if funds are available for plugging an ADW.

Q : What if I want to close my ADW after I get a permit?

A : ADWs can be closed at any time and approval from IDNR is not needed prior to closure. If you obtain a permit and later decide to close the ADW, simply inform the IDNR that the ADW has been closed. Closure should be done in accordance with the IDNR's well closure requirements and an "Abandoned Water Well Plugging Record" (DNR Form 542-1226) should be filled out and submitted. Once the notice of closure has been received, the permit would be rescinded.

Q : The law requires that all surface water intakes be removed and cisterns be sealed by December 31, 2001. I plan to eventually close my ADW but this will not be done until some time in the future, after December 31, 2001. Do I have to remove the intakes and seal the cistern even though I plan to eventually close the ADW?

A : Yes. The law is specific that for all ADWs that have not been closed, the surface inlets must be removed and the cisterns sealed by December 31, 2001. The IDNR feels this is sufficient time for ADW owners to bring their ADWs into compliance with state law. If an ADW is not going to be closed by December 31, 1999, an application for a permit should be filed.

Q : What if I don't apply for a permit or close my ADW?

A : The IDNR intends to have all ADWs brought into compliance with applicable laws and regulations by the year 2000 or soon thereafter. That is, all ADWs would either have to have a permit or be closed. The IDNR has various enforcement options it can use to bring ADWs into compliance. These include issuance of Administrative Orders and assessment of administrative penalties as well referral to the Iowa Attorney General. Persons who violate applicable ADW laws and regulations could be subject to civil penalties of up to \$500 for each day that a violation continues.

Q : My land is drained by an ADW that is on land I don't own. The ADW owner has said he won't apply for an ADW permit and plans to close the ADW. Can I require the ADW owner to keep the ADW open or to provide alternative drainage for me?

A : There is no clear answer to this question if there isn't a formal, written agreement regarding the use and maintenance of the ADW. To the IDNR's knowledge, there are no court cases that have addressed this particular issue. There have been many court cases involving tile drains that discharge to waterways, but none involving tile drains and ADWs. This would be considered a local drainage matter and, ultimately, this question would have to be answered by an Iowa court. The court's position may depend on its willingness to "borrow" principles applicable to individual drainage improvements that discharge to surface waterways.

Q : I have an existing ADW that is silted in and doesn't work. What should I do? Do I need to apply for a permit?

A : There are three options for such an ADW. From an environmental standpoint, the preferable approach would be to clean out the ADW, plug it using accepted well plugging techniques, and submit proof of closure to the IDNR. A second option would be to apply for a continuing use permit. A permit, if granted, would allow the ADW to be cleaned out and used. However, it may be difficult to get a permit because of the "viable alternative" standard. If the ADW has not worked for a number of years, it could be difficult to make the case that the ADW is needed and there are no viable alternatives. The third option would be to write the IDNR to see if it the ADW could be left "as is" without either plugging it or applying for a continuing use permit. The IDNR would evaluate such requests on a case-by-case basis.

Q : If I get a permit for my ADW, what happens if someone else builds an anaerobic lagoon or earthen waste storage basin in the drainage area of the ADW on land not owned by me? Will I have to close the ADW?

A : Iowa law as well as IDNR rules prohibit the construction of any more of these structures within ADW drainage areas. Therefore, this should not happen. If it does, IDNR would take appropriate steps to have the structure removed rather than to have the ADW closed.

Q : The Natural Resources Conservation Service (NRCS) has developed standards for sealing ADW cisterns and replacing surface water inlets with additional tile. How are these standards related to the IDNR ADW program?

A : The NRCS standards were developed primarily for the purpose of the NRCS' EQIP program. Work complying with the NRCS standards will also meet IDNR requirements for intake removal and cistern sealing and the rules reference these standards. Although the IDNR and NRCS are working together to address ADWs, the ADW regulations will be carried out and enforced by the IDNR. The IDNR can allow alternatives to the NRCS standards on a case-by-case basis.

Q : If my ADW has a "buried" cistern, do I have to construct and maintain sidewalls around the cistern?

A : The law states that if there is a cistern connected to the ADW, the owner shall "...construct and maintain sidewalls surrounding the cistern in order to prevent surface water runoff directly from emptying in to the agricultural drainage well." The IDNR ADW rules reference the NRCS standard for accomplishing this but also allow alternatives. If an existing cistern is completely buried with no possibility of surface water directly entering the cistern or well, the IDNR will not require sidewalls to be constructed, as the intent of the legislation (i.e., elimination of direct surface water inflow) will be met. Existing cisterns that are not buried cannot be buried to avoid the construction of sidewalls as required by SF 473.

Q : Several years ago someone from the Environmental Protection Agency (EPA) contacted me about my ADW. What's the EPA got to do with this?

A : The EPA has jurisdiction over ADWs under the provisions of the federal Safe Drinking Water Act. ADWs are considered injection wells and are just one of many types of injection wells that fall under the jurisdiction of the EPA's Underground Injection Control Program. To date, the EPA has inventoried ADWs but has not adopted specific ADW regulations. They are in the process of reevaluating their program for injection wells but at this time it is uncertain what EPA will do in regard to ADWs. The IDNR regulations were adopted to comply with state law, not federal law. There is no assurance at this time that an IDNR permit will satisfy any ADW regulations the EPA may adopt at some future date. However, the IDNR is keeping the EPA informed of the actions Iowa is taking in the hope that any action EPA might take will not be inconsistent with Iowa's ADW program.

Q : If I get a permit allowing the continued use of an ADW, does this provide assurance that I can continue to use the ADW for at least another 10 years?

A : Not necessarily. There are several things that could happen. Under Iowa law, the IDNR could cancel an ADW permit if it is necessary to protect public health and safety or if a condition of the permit has been violated. To do this, the IDNR would have to notify the permit holder at least 30 days in advance and a formal hearing would be held before the permit could be cancelled. The IDNR could also, in emergency situations, require temporary closure of an ADW to avoid an imminent danger to the public health, welfare or safety or to public or private interests in lands and water. In addition, the U.S. EPA has authority under the federal Safe Drinking Water Act to require the closure of an ADW if the ADW endangers an underground source of drinking water. An ADW permit issued under state law would not supercede or negate federal authority under the federal Safe Drinking Water Act. From a long term perspective, ADW owners should not automatically assume the initial permit will be reissued after a period of 10 years or that closure will not be required under federal law.

Q : Whom should I contact if I have additional questions or need more information?

A : Contact Mike Anderson with the IDNR in Des Moines at 515-281-6599