CHAPTER 20

Abandoned Well Regulatory Initiatives:
An Examination of Recently Enacted Legislation
in the Eastern United States

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§ 20.01. Introduction.

State legislatures and regulatory agencies have had a significant level of interest in abandoned well issues for many years. Not only has this interest extended to determining when a well should be deemed to be abandoned, but also to determining how a well is to be abandoned.

At least three regulatory interests arise in the development of abandoned well regulatory programs. These sometimes competing interests include:

(1) Conservation of the resource -- For years states have sought to protect oil and gas resources from premature depletion. By addressing the circumstances under which wells are required to be plugged, states have sought to take this objective a step further by assuring the continued access, where appropriate, to reserves that would otherwise be lost to plugging.

(2) Revenue implications -- The premature plugging of abandoned wells will, in many states, have a direct impact on revenues received by a state.

(3) Environmental concerns -- While abandoned wells can be a conduit through which contamination can reach water supplies, abandoned well plugging programs have developed in a way that recognizes when this
potential exists.

There can be little doubt but that environmental concerns have been among the most significant contributors to recent statutory and regulatory abandoned well initiatives. These environmental concerns are typified by the following newspaper excerpt:

From the Louisiana bayous to the arid plains of Texas and Oklahoma, thousands of oil and gas wells, abandoned at the end of their productive life, have become conduits for noxious liquids that bubble up from deep below the earth's surface to kill crops and taint drinking water.

For state governments in America's oil patch, these abandoned wells have become an expensive legacy left by a fading industry.\(^{(1)}\)

This Chapter examines recent developments in the law applicable to abandoned oil and gas wells by focusing initially on the activities of the United States Environmental Protection Agency (EPA) and of the Interstate Oil and Gas Compact Commission (IOGCC) (formerly the Interstate Oil Compact Commission) in assessing the issues involved and in recommending solutions. Thereafter, attention turns to an analysis of three recent legislative enactments. These will be compared to the IOGCC recommendations for a model state program.\(^{(2)}\)

§ 20.02. Background.

[1]--EPA Report to Congress.

Section 8002(m) of the Resource Conservation and Recovery Act\(^{(3)}\) (RCRA) directed the EPA to perform a study of waste generated by the oil and gas industry as a part of a determination as to whether hazardous waste regulatory controls should be imposed on the management of those wastes.\(^{(4)}\) The EPA completed this study in a Report to Congress that was filed on December 31, 1987.\(^{(5)}\)

While the EPA's Report to Congress generally found that state regulatory programs were adequate to regulate the management of oil and gas waste, some deficiencies were noted.\(^{(6)}\) One area of deficiency related to abandoned wells, where the EPA concluded that "groundwater damages associated with unplugged and improperly plugged abandoned wells are a significant concern."\(^{(7)}\)

Rather than impose on the oil and gas industry the rigid and expensive federal hazardous waste regulatory program as the means of addressing concerns over abandoned wells and other oil and gas waste issues, the EPA recommended that cooperative efforts be undertaken with individual states and interstate commissions.\(^{(8)}\)

[2]--IOGCC Waste Management Guidelines.

The most significant cooperative effort undertaken by the EPA to implement the recommendations in its Report involves the IOGCC. Act-ing under a grant from the EPA, the IOGCC undertook a two-year project leading to the publication of a report in December 1990 that provided guidance to the EPA and the oil and gas producing states on the elements necessary for an effective state regulatory program.\(^{(9)}\) That report made several recommendations regarding well plugging and abandonment obligations, including recommendations as to financial responsibility.\(^{(10)}\)

These recommendations have been used by the IOGCC since their issuance as a yardstick against which individual state oil and gas regulatory programs have been compared.
20.03. IOGCC Idle Well Study.

In December 1992, the IOGCC completed a study that focused exclusively on abandoned wells. This study was performed under a grant with the United States Department of Energy and sought to ascertain the resource available from idle oil and gas wells and to encourage states to exchange ideas on approaches being used to address these wells.\(^{(11)}\)

In addressing these issues, the IOGCC identified three types of idle wells. An understanding of these well categories is critical to the development of state regulatory programs. The three categories of idle wells are:

A well that has been drilled since a state's regulatory program was established, is not producing or injecting, and has received state approval to remain idle (sometimes known as temporary abandonment);

A well that has been drilled since regulation, is not producing or injecting, has not received state approval to remain idle, and for which the operator is known and solvent;

A well that has been drilled since regulation, is not producing or injecting, has not received state approval to remain idle, and for which the operator is unknown or is not solvent (also known as orphaned wells).\(^{(12)}\)

Beginning from this premise, the IOGCC first surveyed the major oil and gas producing states and then made recommendations for the development of state regulatory programs.

[1]--Survey of State Programs.

At the outset of its survey of state programs, the IOGCC recognized that many states have their Underground Injection Control (UIC) programs administered by the EPA. In those cases, idle wells used for disposal or enhanced oil recovery would be subject to EPA jurisdiction and not that of the states.\(^{(13)}\)

Based upon its survey of all significant oil and gas producing states, the IOGCC found the following to be the current status of the 3,263,000 wells drilled since the inception of current state regulatory programs or subsequently brought under regulation. A Summary of its findings are set forth in Table 1.

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
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<tbody>
<tr>
<td>Producing or injecting wells</td>
<td>1,033,000</td>
</tr>
<tr>
<td>Plugged and abandoned wells</td>
<td>1,895,000</td>
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<tr>
<td>Wells converted to Class II UIC</td>
<td>120,000</td>
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<td>Wells idle with state approval</td>
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<tr>
<td>Operator known</td>
<td>18,000</td>
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<tr>
<td>Operator unknown/insolvent</td>
<td>50,000</td>
</tr>
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</table>

Table 1\(^{(14)}\)

More detailed statistics for the three states that are the focus of this Chapter, Illinois, Pennsylvania and West Virginia, are set forth in the Appendix.\(^{(15)}\)
With respect to energy concerns, the IOGCC reached the conclusion that substantial volumes of oil continue to be abandoned in the United States and the premature abandonment of currently idle wells could exacerbate this trend. The IOGCC estimated that across the nation, idle wells could provide as much as 2.6 billion barrels of oil using conventional techniques and 500 million barrels using enhanced recovery techniques. (16)

The IOGCC report also found that, in most cases, an idle well is not an environmental threat. According to the study, "Many wells are allowed to remain idle with approval of the state regulatory authority because they are not threatening the environment or public safety." (17)

[2]--Recommendations.

Even though the IOGCC found that states generally have adequate statutory authority and programs to address idle wells, several recommendations were made for improvements in state idle well programs:

(1) Assurance of Financial Responsibility. "States should continually evaluate the financial responsibility mechanisms most appropriate for the state, and implement changes when necessary to provide assurance for plugging. States should also consider the expansion of programs to bring nonsecured wells, which may be exempt under some state statutes, under some type of financial responsibility."

(2) Future Use and Testing Requirements. "States should consider establishing procedures whereby an operator demonstrates a bona fide future use of an oil or gas well when seeking approval to allow a well to remain idle, and to require testing to ensure stability of the well during the period of idle status."

(3) Plugging Funds. "States should periodically review their funding mechanisms to plug and abandon orphan and preregulatory wells to ensure that funds remain adequate."

(4) Priority List For Plugging. "States should establish a priority list for plugging and abandoning orphan and preregulatory wells under a state plugging fund."

(5) Streamlined Procurement. "States should have a streamlined procurement procedure in the bid process for plugging and abandoning wells using either security forfeiture or plugging funds."

(6) Enforcement Authority. "States should have adequate enforcement mechanisms to ensure compliance with state financial responsibility and temporary abandonment regulations, including sufficient funding and staffing."

(7) Liens and Equipment Salvage. "States should consider seeking authority to permit the state or contractor to salvage equipment on a well site once the plugging and abandonment procedures have been completed to offset costs of plugging incurred by the state."

(8) Data Management. "States should develop or continue to develop an adequate data management system for well tracking and identification."

(9) Innovative Approaches to Conserve Oil and Gas Resources. "Where practical to conserve oil and gas resources, states should examine and undertake innovative approaches to ensure the proper maintenance of the wellbore of an orphan well so that it could remain available for a bona fide future use without posing an environmental problem."

(10) Evolving Programs and New Authorities. "States should continue to keep up with new technologies, innovative approaches, and evolving trends in both government and industry, and make program
modifications or seek new authorities when necessary."

(11) Future Study. "The IOGCC recommends that states continue involvement in future efforts to study idle oil and gas wells."(18)

The three state programs that are the focus of this Chapter will now be examined with these recommended program elements in mind.


States have independently been working to address regulatory and operational aspects of the abandonment of wells drilled for the exploration, development, and production of crude oil and natural gas. The IOGCC Idle Well Study briefly compares the various efforts of the producing states to track well plugging and abandonment. The following is a more thorough review of those eastern states that have recently enhanced their regulatory programs through legislative and administrative modifications.

[1]--West Virginia.

The State of West Virginia passed legislation in 1992 revising its oil and gas program with respect to abandoned wells.(19) Subsequent to that legislation, administrative regulations have and continue to be developed.(20) The following is a discussion of the principal elements of the West Virginia abandoned well program.

[a]--Assurance of Financial Responsibility.

West Virginia statutes require well operators to provide the Division of Environmental Protection (DEP) with assurance of financial responsibility.(21) A provision now imposes financial assurance requirements for wells that were not previously subject to these requirements: "Operators of all wells, not otherwise required to demonstrate financial responsibility through bonding or otherwise in accordance with the provisions of article one of this chapter, shall . . . demonstrate financial responsibility in accordance with the methods and in amounts prescribed by this article."(22) The result of this requirement is the collective inclusion of wells constructed prior to the state drilling-related bonding requirements. Before this legislation, older wells were not bonded. The prior law required only that owners of all newly drilled and constructed wells submit a bond with their permit application. The new law imposes financial responsibility on all existing wells within the state.

The West Virginia Abandoned Well Act revised the former individual bond amounts of $10,000.00, as follows:

The financial responsibility requirements applicable to all wells shall be as set forth in section twenty-six, article one of this chapter, except that the amount of financial responsibility through bonding or otherwise, as provided for in said section, for an individual well shall be in the amount of five thousand dollars.(23)

A blanket bond may be furnished covering several wells for $50,000.00, as previously provided.(24)

Some minor relief from the bonding requirements may be obtained under DEP's administrative regulations.(25) These regulations provide for a demonstration of unjust hardship as a result of the statute's financial responsibility provision. The Chief of the Office of Oil and Gas may, on a hardship demonstration by the operator, suspend the financial responsibility requirements. Suspension may extend to no later than July 1, 1995. Alternatively, the Chief may allow the operator to demonstrate financial responsibility by
supplying 20% of any required amount no later than July 1, 1994; 40% no later that July 1, 1995; 60% no later than July 1, 1996; 80% no later July 1, 1997; and 100% by July 1, 1998.\(^{(26)}\)

[b]--Future Use and Testing Requirements.

The West Virginia program has established procedures whereby an operator must demonstrate a bona fide future use of an oil or gas well before allowing the well to remain idle or in "inactive status."\(^{(27)}\) The West Virginia administrative regulations concerning bona fide future use provide that any operator seeking this designation for a well must submit, for each well, the following information on the Office of Oil and Gas' form: (1) name and address of the operator; (2) location of the well; (3) API number of the well, if any; (4) a viable plan for using the well, including an estimated time for commencement of the future use; and (5) any other information requested by the DEP.\(^{(28)}\)

To demonstrate a bona fide future use and avoid having the well deemed abandoned, the operator must submit information and data sufficient to satisfy the Office of Oil and Gas that there is a bona fide future use for that well.\(^{(29)}\) The operator is guided by the regulations, which provide an extensive list for the types of information the agency would want to consider prior to granting the well inactive status.\(^{(30)}\) Upon submission of a completed bona fide future use application, any well that satisfies the following three requirements will be deemed to be in inactive status: (1) the condition of the well is sufficient to prevent waste of oil and gas, (2) the condition of the well is sufficient to prevent pollution of waters of the state, and (3) the operator has satisfied the bonding requirements.\(^{(31)}\)

The Chief of the Office of Oil and Gas may require the operator of any well in inactive status to monitor the mechanical integrity of that well and to submit reports of its integrity.\(^{(32)}\) The inactive status of any well with a bona fide future use designation is valid for no more than five years, unless inactive status is revoked or the operator elects to extend the inactive status period.\(^{(33)}\) To extend the inactive status period, the operator must file a new designation of bona fide future use form two weeks before the end of the existing inactive status period.\(^{(34)}\) If there is to be a change in an inactive well's status, either to active or abandoned status, the operator must notify the Office of Oil and Gas of the change within 30 days after it has occurred.\(^{(35)}\) For the purposes of this regulatory program, an "abandoned well" is defined as any well completed as a dry hole or that has not produced in commercial quantities for a period of twelve consecutive months.\(^{(36)}\) An "active status well" is defined as any well producing oil or gas in commercial quantities, or being operated pursuant to Underground Injection Control permits, or being operated in conjunction with the underground storage of hydrocarbons.\(^{(37)}\)

[c]--Plugging Funds.

The West Virginia program includes a special plugging fund to address the costs of plugging abandoned wells.\(^{(38)}\) The Oil and Gas Reclamation Fund is funded through monies from reclamation fees assessed on every well, as well as from forfeited bonds and penalty fees. Under the statute, the DEP requires prepared plans for the reclaiming and plugging of abandoned wells that have not been reclaimed or plugged or that have been improperly plugged. Expenditures from the fund are made by the Office of Oil and Gas to plug and reclaim wells in accordance with those submitted plans.\(^{(39)}\) Funds may also be used to purchase abandoned wells where purchase is necessary to the well's reclamation.\(^{(40)}\)

[d]--Priority Listing for Plugging.

The West Virginia plugging program has established a priority system through the administrative
regulations of the Office of Oil and Gas. These regulations have been proposed pursuant to a statute requiring that the DEP promulgate rules to establish a priority system by which available funds from the Oil and Gas Reclamation Fund will be expended to plug abandoned wells. The proposed rules establish three primary classifications, which take into consideration, among other things, the following factors: the age of the well; the length of time the well has been abandoned; the casing remaining in the well; the presence of leaks, either at the surface or underground; the possibility or existence of groundwater contamination; whether the well is located in an area to be developed for enhanced recovery; whether the well hinders or impedes mineral development; and whether the well is located close to population. The three classifications to be established by the rules are: (1) wells that are an immediate threat to the environment or that may hinder the development of mineral resources so as to require immediate plugging; (2) wells that need to be plugged consistent with available resources; and (3) wells for which plugging may be deferred for an indefinite period.

[e]--Enforcement.

To ensure compliance with the Abandoned Well Act, the statute provides penalties. Any person who fails to plug an abandoned well within 30 days or, on a showing of good cause, within a longer period (as determined by the DEP) not to exceed 180 days, from the date plugging is ordered by the Chief, is liable for a civil penalty of $25,000.00. This penalty is recoverable in a civil action in the circuit court. The net proceeds of all civil penalties are deposited in the Oil and Gas Reclamation Fund.

[f]--Liens and Equipment Salvage.

The Abandoned Well Act establishes the right of any interested person, the operator, or the Chief to enter the premises where an abandoned well is located, properly plug or replug the well, and reclaim the area. The person may elect to take any casings, equipment or other salvage that result from the plugging provided the appropriate level of notice has been given. The surface owner may elect to take these items by giving notice to the interested person who is plugging the well.

[g]--Data Management.

According to the IOGCC Idle Well Study, West Virginia maintains various data bases. Oil and gas production information is reported on a monthly basis by well and by operator. (The operator may file information on diskette.) Production reports must be filed by all wells, even non-producing wells. The Office of Oil and Gas is currently in the process of reviewing its data management systems in order to determine its deficiencies and possible solutions to those deficiencies.

[2]--Pennsylvania.

Pennsylvania has passed legislation as recently as July 2, 1992 revising its oil and gas program with respect to abandoned wells.

[a]--Assurance of Financial Responsibility.

The Pennsylvania program requires well operators to provide the Commonwealth with assurance of financial responsibility. The statute requires an indemnity bond, an alternative fee in lieu of bonding, or other evidence of financial security be submitted by every person who was the owner or operator of a well in existence prior to April 18, 1985, which well had not been registered with the Department of Environmental Resources (Department) and for which no drilling permit had been issued by the Department. No financial security for identification of the well is required or wells abandoned prior to
the effective date of the Act from which the present owner, operator, or lessee has received no economic benefit. For wells drilled before November 30, 1955, which have not been previously bonded, the well operator is given three additional years to comply with the financial responsibility requirements.

The Pennsylvania program offers several options for assuring financial responsibility. Generally, on filing an application for a well permit or before continuing to operate any oil or gas well, a bond must be filed with the Department. The amount of the bond is $2,500.00 per well for at least two years following the effective date of the Act, July 2, 1992. After two years, the Environmental Quality Board may adjust the bond amount to reflect the projected costs to the Commonwealth of well plugging.

The statute, however, provides that operators of not more than 200 wells who cannot obtain the bond for a well drilled prior to 1985 may, in lieu of the bond, submit to the Department a fee of $50.00 per well, or a blanket fee of $500.00 for 10 to 20 wells or $1,000.00 for more than 20 wells. The fee is a non-refundable annual fee. Operators also have the option of making phased deposits of collateral. An operator of up to 10 existing wells who does not intend to operate additional wells may deposit $250.00 per well and annually thereafter deposit $50.00 per well until the bonding obligations of $2,500.00 per well or the blanket bonding obligation of $25,000.00 is met. An operator of 11 to 25 wells or an operator of up to 10 wells who applies for one or more permits for additional wells is required to deposit $2,000.00 and, annually thereafter, $1,150.00 plus $150.00 for each additional well to be permitted that year. Incremental payment schedules are set forth for up to 200 wells.

An individual who cannot obtain a bond to drill new wells due to an inability to demonstrate adequate financial resources may meet the collateral bond requirements by making phased deposits of collateral to collateralize the bond in full. These individuals are limited to drilling 10 new wells per calendar year. Bond liability continues until the well has been properly plugged in accordance with the Act and for an additional period of one year after the certificate of plugging has been filed with the Department.

In addition to requiring an indemnity bond for wells that have been registered and identified under Section 203 of the Act, a registration fee of $15.00 per well, or a blanket registration fee of $250.00 for multiple well registrations is required. There is no fee for the identification of an orphan well. The information required for registration and identification of wells includes: (1) name and address of the well operator; (2) well name and location; (3) approximate date of drilling completion and the approximate depth of the well; (4) producing horizons; and (5) well construction information and drillers' logs if available. All forfeited bonds and monies are deposited into the Well Plugging Restricted Revenue Account.

[b]--Future Use and Testing Requirements.

The Pennsylvania program established procedures whereby an operator must demonstrate bona fide future use of an oil or gas well before being granted approval to allow a well to remain idle. The Act specifically sets forth the conditions under which inactive status may be granted. The operator must represent that: the condition of the well is sufficient to prevent damage to the producing zone or contamination of fresh water; the condition of the well is sufficient to stop the vertical flow of fluids or gas within the well bore; the well is of future utility; certify that there is a viable plan for using the well within a reasonable time; and the bonding requirements are satisfied. Once all of these conditions have been met, the Department will grant inactive status for five years for any permitted or registered well. The owner/operator of any well granted inactive status is responsible for monitoring the mechanical integrity of the well and to report the results of those tests annually.
Any well granted inactive status must be plugged in accordance with the act or returned to active status within five years of the date inactive status was granted. The owner or operator may apply for an extension of inactive status, which may be granted on a year to year basis if the Department determines that the owner or operator has demonstrated its ability to continue to meet the five requirements.

If an inactive status well is returned to active status before the expiration of the five year period, the operator must notify the Department of the new status and will not be permitted to apply for another automatic five year inactive status period for that well. An application to return the well to inactive status may be approved on a year to year basis. Finally, the Department has the right to revoke inactive status and order the immediate plugging of a well if it is in violation of the Act or if the owner or operator demonstrates inability to perform its obligations under the Act or becomes financially insolvent.

[c]--Plugging Funds.

The Pennsylvania program includes special plugging funds to address the costs of plugging abandoned and orphaned wells. Under the Act, all fines, civil penalties, permit and registration fees collected are appropriated to the Department. With regard to plugging abandoned wells, a permit fee of $50.00 established by the Department will be assessed for all new wells. Those monies are paid into a restricted revenue account known as the Abandoned Well Plugging Fund. Monies from that fund are to be expended by the Department to plug abandoned wells that threaten safety or persons or property or pollution of the waters of the Commonwealth.

The Act also created a restricted revenue account known as the Orphan Well Plugging Fund. A permit fee is assessed by the Department for new wells. That fee is currently $100.00 for wells to be drilled for oil production and $200.00 for wells to be drilled for gas production. The fees collected are to be placed in the Orphan Well Plugging Fund. The Fund is to be used by the Department to plug orphan wells. The permit fee for orphan wells can be waived if an operator rehabilitates a well abandoned by another operator or an orphan well.

[d]--Enforcement.

To ensure compliance, the Act provides for the following penalties under Sections 505 and 506. Any person who violates any provisions of the Act is guilty of a summary offense and can be sentenced to pay a fine of not more than $300.00, undergo imprisonment for not more than 90 days, or both for each day of violation. Any person who willfully violates any provision of the Act can be charged with a misdemeanor carrying a maximum fine of $5,000.00, imprisonment for not more than one year, or both for each day of the violation. With regard to civil penalties for a violation of the Act or rules and regulations of the Department a person may be subject to assessment of a maximum civil penalty of $25,000.00, plus $1,000.00 for each day of continued violation.

[e]--Liens and Equipment Salvage.

Under the Act, the Department has the right to enter the well site and plug the well or to sell equipment, casing, and pipe at the abandoned or unregistered well site used in the production of the well to recover the costs of plugging. In the case of an operating but unregistered well, the Department is required to make an effort to determine ownership of the well and provide written notice to that owner of any pending actions taken pursuant to this subsection. Costs of plugging have priority over all liens on the equipment, casing, and pipe. Their sale is free and clear of any liens to the extent that the costs of plugging exceed the sale
price. If the price obtained for the salvaged equipment, casing, and pipe is inadequate to pay the costs of plugging the well, the owner or operator of the abandoned or unregistered well is liable for the excess.  

[f]--Data Management.

According the IOGCC Idle Well Study, Pennsylvania maintains data bases containing demographic, drilling compliance, production, and other information in regional offices in Pittsburgh and Meadeville. The information is housed on a mainframe computer, which is currently being updated. Terminals are located in the central office in Harrisburg and the two regional offices.

[3]--Illinois.

Illinois passed legislation as recently as 1991 to revise its abandoned oil and gas well program.

[a]--Assurance of Financial Responsibility.

The Illinois program requires well operators to provide the state with assurance of financial responsibility. The Department of Mines and Minerals has the authority to require each permit applicant to execute a bond coincident with the granting of a permit. For an individual well, the bond must be in an amount estimated to cover the cost of plugging the well and restoring the well site, but not exceeding $5,000.00. There is a $100,000.00 limit for a blanket bond. In lieu of bond, the applicant may provide cash, certificates of deposit, or irrevocable letters of credit under terms and conditions the Department provides by rule. These bonding requirements represent revisions made to the statute in 1990 and 1991. That legislation increased the bond amounts from $1,000.00 for individual bonds and $10,000.00 for blanket bonds.

[b]--Future Use and Testing Requirements.

The Illinois administrative program has established procedures whereby an operator must demonstrate a bona fide future use of an oil or gas well before obtaining approval for the well to remain idle. The following conditions must be met for temporary abandonment of a well: a proper bond must be in effect; the well should have an intact, leakfree wellhead or be capped and configured to monitor casing or annular pressure; if applicable, all injection lines are to be closed; the wellhead is to be above ground level; the fluid level may be no higher than 100 feet below the face of fresh water as evidenced by an annual fluid level test; and, if the fluid level is higher than 100 feet below the base of fresh water, plugging, tubing, and packer options are set forth. Temporary abandonment permission is granted for five years. On the expiration of the five year period, temporary abandonment status is granted on an annual basis. An extension of abandonment is not permitted for Class II UIC wells. To reactivate a well granted temporary abandonment status, the Department must be notified and appropriate testing will be required.

[b]--Plugging Funds.

The Illinois program includes a special plugging fund to address abandoned, orphaned, and pre-regulation wells. The Act establishes the Oil and Gas Well Site Plugging and Restoration Fund. The Department of Mines and Minerals, collects, recovers, and deposits permitting and other fees or grants for the plugging and restoration in the fund. Expenditures from this fund may be made only for plugging, replugging, or repairing any well, and for restoring the site of any well determined by the Department to be abandoned or ordered by the Department to be plugged, replugged, repaired, or restored. The Department has a lien for all fees due or funds expended by the state to plug, replug, repair, or restore the site of the orphaned
This lien extends to the entire owner's and operator's interest in the well and to all equipment used in connection with the operation of the well. The lien created in the case of an orphan well is superior to any mortgage or other lien except that of local property taxes.

**[d]--Priority Listing for Plugging.**

The Illinois statute grants the Department of Mines and Minerals the specific power and duty to administer the oil and gas well site plugging and restoration program and the plugging and restoration fund by adopting rules, *inter alia*, setting priorities for well site plugging, repair, and restoration. As of this writing, the agency has yet to develop prioritization regulations.

**[e]--Enforcement.**

To ensure compliance with the Act, the statute provides for administrative/civil penalties. Civil penalties are limited to $1,000.00 per day for each and every violation. Other administrative penalties include permit modification and, ultimately, permit revocation and bond forfeiture. Civil penalties are deposited in the Underground Resources Conservation Enforcement Fund.

**[f]--Liens and Equipment Salvage.**

The Department has a lien for all fees due for funds expended by the state to plug, replug, repair, or restore the site of an orphan well. This lien extends to the entire owner's and operator's interest in the well and to all equipment used in connection with operating the well. The lien in the case of an orphan well is superior to any mortgage or other lien except that of local property taxes.

**[g]--Data Management.**

According to the *IOGCC Idle Well Study*, Illinois maintains a multi-user network computer data base on well location and current ownership, well construction, MIT and TA test information, and the compliance status of 55,000 production and Class II wells. An additional data base is maintained as to the overall compliance status and on-going enforcement actions for each operator. The state does not have the authority to collect production data.

**[4]--Comparison of IOGCC Recommendations.**

West Virginia, Pennsylvania, and Illinois have, to varying degrees, existing program elements that address the major recommendations of the *IOGCC Idle Well Study*. It is evident from a review of the listed elements that the three states each have abandoned well programs that closely match the IOGCC recommendations.

§ 20.05. Conclusion.

The recent emphasis on environmental issues related to the oil and gas industry has resulted in a new round of national and state interest in abandoned wells. This activity has occurred, however, at a time of difficult economics for both the oil and gas industry and the nation. Accordingly, these new initiatives reflect a number of creative regulatory mechanisms that seek to direct limited financial resources to the environmental issues of highest priority.

§ 20A. Appendix -- Idle Well Survey.
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<th>Illinois</th>
<th>Pennsylvania</th>
<th>Virginia</th>
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<td><strong>1. Wells Drilled Since</strong></td>
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</tr>
<tr>
<td>Inception of State</td>
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</tr>
<tr>
<td>Regulatory Program</td>
<td>93,075</td>
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<td><strong>2. Producing or Injecting Wells</strong></td>
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<td>72,187</td>
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<tr>
<td><strong>3. Plugged and Abandoned Wells</strong></td>
<td>42,868</td>
<td>33,374</td>
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<tr>
<td><strong>4. Wells Not Producing With State Approval</strong></td>
<td>1,321</td>
<td>277</td>
<td>78</td>
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<tr>
<td><strong>5. Wells Not Producing, Without State Approval, Owner Known</strong></td>
<td>3,030</td>
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<td>4,516</td>
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<tr>
<td><strong>6. Wells Not Producing, Without State Approval, Owner Unknown or Insolvent</strong></td>
<td>750</td>
<td>220</td>
<td>18,749</td>
<td></td>
</tr>
</tbody>
</table>

Source: IOGCC Idle Oil Study (December 1992).


4. 2. 42 U.S.C. § 6982(m).

5. 3. 1 EPA, *Management of Wastes from the Exploration, Development and Production of Crude Oil, Natural Gas, and Geothermal*
6. 4. Id. at VIII-12.
7. 5. Id. at VIII-8.
8. 6. Id. at IX-2.


10. 8. Id. at 14.


12. 2. Id. 4 & 5.

13. 3. For EPA guidance with respect to the temporary abandonment of Class II UIC wells, see the EPA's UIC Program Guidance #78 (Management and Monitoring Requirements for Class II Wells in Temporary Abandoned Status, June 22, 1992.).

14. 4. IOGCC Idle Well Study, p. 2.

15. 5. See, infra, at § 20A.

16. 6. IOGCC Idle Well Study at 46 & 47.

17. 7. Id. at 48.

18. 8. Id. at 3.


20. 2. The administrative regulations of the Office of Oil and Gas of the West Virginia Division of Environmental Protection that have been and are currently subject to revision as a result of the new abandoned well legislation are: W. Va Code of St. R., series 18, "Oil and Gas Wells and Other Wells" W. Va. Code of St. R., series 21, "Operators Designation of Bona Fide Future Use of Oil and Gas Wells Qualification for Inactive Status" and W. Va. Code of St. R., series 22, "Abandoned Wells" (1987).


30. Demonstration of designation bona fide future use requirements are set forth under W. Va. Code of St. R. § 21-4. Information and data of specific interest to the Chief in determining bona fide future use would include the following: the date the well was completed; the method by which the well meets the financial responsibility requirement; the date the well first produced; the results of the initial gas-oil ratio test; the last date the well was producing; the average monthly production when production ceased; the formation(s) from which the well produced; the estimated remaining recoverable reserves associated with the well without reworking; whether reworking the well to recover additional reserves is possible; the estimated remaining recoverable reserves associated with the well after reworking; the method used to establish reserve estimates; whether secondary recovery is possible; whether production from other formations is possible; whether the well can be drilled deeper; the estimated cost to deepen the well; whether the well is covered by a gas sales contract; whether the well is connected to a gas meter or the method of measuring production at the transfer of ownership or custody; other equipment connected to the well; whether the well is connected to a pipeline system; a description of the line pressure of the receiving pipeline; whether a compressor is in place and whether it is in use on the well; if the well is not connected to a pipeline, the distance to the nearest pipeline that would accept production from the well; whether a shut-in royalty is being paid; the operator's schedule for putting the well into production; whether the well is currently being used for or capable of being used for gas storage; whether the well is capable of being used as a liquid injection well; whether money has been escrowed for use to plug the well in the future; and any other information the operator considers relevant to establishing a bona fide future use. W. Va. Code of St. R. §§ 21-4.1.1 to .28.


42. W. Va. Code § 22B-5-6(b).


98. 80. See text, infra, at § 20.03[2].