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## AGENCY REVIEW

# OFFICE OF OIL AND GAS DEPARTMENT OF ENVIRONMENTAL PROTECTION

## AUDIT OVERVIEW

The Office of Oil and Gas Is Not Enforcing Statutory Requirements as They Concern Abandoned Oil and Gas Wells Which Is Causing the Number of Abandoned Wells to Increase

The Office of Oil and Gas Should Develop Performance Measures in Order to Better Gauge Agency Performance

The Office of Oil and Gas' Website Is User-Friendly and Transparent But Could Benefit From Some More Improvements



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## EXECUTIVE SUMMARY

The Legislative Auditor conducted a performance evaluation of the Office of Oil and Gas (OOG) as part of the Agency Review of the West Virginia Department of Environmental Protection (DEP) authorized pursuant to West Virginia Code §4-10-8. The report contains the following issues:

### Report Highlights

#### **Issue 1: The Office of Oil and Gas Is Not Enforcing Statutory Requirements as They Concern Abandoned Oil and Gas Wells Which Is Causing the Number of Abandoned Wells to Increase.**

- Currently there are approximately 13,000 abandoned oil and gas wells in West Virginia; 36.1 percent are listed as having no known operator, 44.4 percent are currently registered to known operators that do not have an abandoned well initiative compliance agreement, and 19.2 percent are registered to known operators that are in the 10-year Abandoned Well Initiative program. The remaining 0.3 percent, 34 wells, are in the Bona Fide Future Use Program.
- The OOG is not requiring operators to plug abandoned wells or prove that there is bona fide use for such wells as stated in Code. Data provided by OOG indicates that the number of abandoned wells is increasing, and some wells remain abandoned for 10 or more years.
- Due to the large number of abandoned wells and the difficult-to-get locations, inspections are typically not conducted. Unless an operator applies for a well-work permit that would require an inspection, or a citizen files a complaint, the well site will go uninspected for potential hazards to the public and the environment.
- The Legislative Auditor conducted a random sample of the OOG's ERIS database. The analysis revealed that a large number of wells had missing or inconsistent information.

#### **Issue 2: The Office of Oil and Gas Should Develop Performance Measures in Order to Better Gauge Agency Performance.**

- The mission statement developed by OOG is fully supported by statute. West Virginia Code assigns the OOG with mandates to regulate oil and gas operations.
- The OOG list a relevant performance measure in the *2011 Executive Budget Operating Detail*; however, other performance measures should be included to better gauge agency performance.

### **Issue 3: The Office of Oil and Gas' Website is User-Friendly and Transparent But Could Benefit From Some More Improvements.**

- The OOG website, although it is basically user-friendly and transparent, it could improve in both these areas; scoring 9 out of 18 points for user-friendliness and 15 out of 32 points for transparency, resulting in a total score of 24 out of 50 possible points, or 48 percent.

### **Recommendations**

1. *The Legislative Auditor recommends that the OOG program the ERIS database to alert it any time a well is out of production for a period longer than 12 months since this is a key determination of abandoned well status set by Code.*
2. *The Legislative Auditor recommends that when a well is out of production for a period longer than 12 months, the OOG should enforce Code and require the operator to either:*
  - *plug the well,*
  - *place it back into production,*
  - *place it into Bona Fide Future Use, or*
  - *place it into a long-term compliance initiative agreement.*
3. *The Legislative Auditor recommends that the OOG update its database system and data entry procedures to avoid and eliminate errors such as missing and inconsistent information.*
4. *The Legislative Auditor recommends that the OOG incorporate performance goals and measures to address its compliance with Code for wells that are out of production longer than 12 consecutive months and place them in the Executive Budget Operating Detail and OOG website.*
5. *The Legislative Auditor recommends that the Office of Oil and Gas further develop performance measures in order to better gauge agency performance.*
6. *The OOG should consider providing public access to its performance goals via its website and include the current and historical performance measures, budget information, and other user-friendly and transparency website elements identified by the Legislative Auditor.*

## ISSUE 1

### **The Office of Oil and Gas Is Not Enforcing Statutory Requirements as They Concern Abandoned Oil and Gas Wells Which Is Causing the Number of Abandoned Wells to Increase.**

#### **Issue Summary**

The Office of Oil and Gas (OOG) is not forcing operators to comply with statutory requirements regarding abandoned oil and gas wells, which is causing the number of abandoned wells in the state to increase. Currently there are approximately 13,000 abandoned oil and gas wells in West Virginia. West Virginia Code requires that if a well is out of production longer than 12 months it shall be plugged unless it is proven to have a bona fide future use. The OOG's Bona Fide Future Use Program allows operators to have their wells inactive up to five years; however, this program is rarely used. In 2002, the OOG established a 10-year Abandoned Well Initiative program aimed at helping operators who have large numbers of abandoned wells bring their wells into compliance. However, as this program is coming to an end, the OOG has increased compliance from approximately 45 percent to 83 percent in the past year. The OOG should require all abandoned wells that are registered to known operators to be plugged or placed into a program or initiative where the well can be monitored and scheduled to be put into compliance.

The Legislative Auditor also conducted a survey of wells within the OOG's Environmental Resource Information System (ERIS) database. Sixty-one percent of all wells surveyed were missing information, while 14 percent had inconsistent information. The OOG should update its database system and data entry procedures to eliminate existing errors, such as missing and inconsistent information. In addition, the OOG should incorporate performance goals pertaining to reducing the number of abandoned wells, and establish measures that monitor the agency's progress in achieving its goals.

#### **West Virginia Currently Has Approximately 13,000 Abandoned Oil and Gas Wells**

Over the past 100 years, more than 125,000 oil and natural gas wells have been drilled throughout West Virginia. Approximately 13,000 of these wells are currently identified as abandoned (For a list of abandoned wells throughout the state see Appendix D). Collectively

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*The Office of Oil and Gas (OOG) is not forcing operators to comply with statutory requirements regarding abandoned oil and gas wells, which is causing the number of abandoned wells in the state to increase.*

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*The OOG should require all abandoned wells that are registered to known operators to be plugged or placed into a program or initiative where the well can be monitored and scheduled to be put into compliance.*

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they present a potentially significant environmental and safety threat. In 1929, the State began requiring permits for the drilling of oil and natural gas wells. The OOG has regulatory authority in this area and maintains a database of wells permitted since that time. West Virginia law defines an abandoned well as any well that is not in production for a period of 12 consecutive months. WVC §22-6-19 states:

*Any well which is completed as a dry hole or which is not in use for a period of twelve consecutive months shall be presumed to have been abandoned and shall promptly be plugged by the operator, unless the operator furnishes satisfactory proof to the director that there is a bona fide future use for such well.*

Of the approximately 13,000 wells that fall into the abandoned category, 36.1 percent are listed as having no known operator, 44.4 percent are currently registered to known operators that do not have an abandoned well initiative compliance agreement, and 19.2 percent are registered to known operators that are in the 10-year Abandoned Well Initiative program. This program was established to encourage operators to bring their wells into compliance. The remaining 0.3 percent, 34 wells, are in the Bona Fide Future Use Program.

The cost of plugging abandoned wells, where no responsible party can be located, becomes the State's responsibility.<sup>1</sup> The OOG categorizes abandoned wells to be plugged, based on their environmental and safety risk. While many abandoned wells may actually pose little environmental threat, others are a concern. These wells may be leaking crude oil or salt water at the surface, potentially polluting nearby streams. The sites themselves may also create problems due to a lack of proper reclamation, creating sediment and erosion control problems that consequently affect the state's surface waters. According to DEP's 2011 *State of the Environment*, the greatest concern is the uncertainty of what may be happening below the surface. Unplugged wells or improperly plugged wells can lead to groundwater contamination with crude oil, salt water and natural gas. The problem may go unnoticed for years, resulting in more potential damage to groundwater.

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<sup>1</sup>Plugging of a well refers to when a well reaches the end of its useful life or is a dry hole, the well casing is removed and cement plugs are placed in the borehole to prevent migration of fluids between the different formations. This also prevents the migration of gas or fluids to the surface. According to DEP figures, the average cost to plug an abandoned well is approximately \$25,000.



## **Operators Have the Option to Place Inactive Wells Into Bona Fide Future Use Program**

Operators may place inactive wells into the OOG's Bona Fide Future Use Program to allow wells to remain idle for up to five years. This action relieves the operator's immediate financial responsibility to either plug the well or put it back into production. CSR §35-5-5.4 states:

*The inactive status of any well with a designation of bona fide future use shall be valid for the time period requested by the operator, not to exceed five years from the date of filing with the chief.*

In addition, CSR §35-5-5.6 states:

*Any well that is not in active or inactive status shall be deemed abandoned and shall be promptly plugged by the operator.*

In order for a well to have bona fide future use status, an operator must provide the OOG a Designation of Bona Fide Future Use which includes basic identification, location, construction, and production information along with a viable plan for utilizing an estimated time for commencement of the future use of the well. In addition, it needs to be determined that the condition of the well is sufficient to prevent waste of oil and gas; the condition is sufficient to prevent pollution of waters of the state; and the operator satisfies the bonding requirements of the Code. Operators may extend the inactive or bona fide future use period by an additional five years for each individual well by filing a new Designation of Bona Fide Future Use within two weeks prior to the end of the inactive period.

## **Abandoned Well Initiative Program**

The Abandoned Well Initiative is a program developed by the OOG in 2002 aimed at addressing the extensive number of abandoned wells in the state. The program provides an opportunity for all oil and gas well operators who have wells that are determined to be abandoned, as defined in WV Code §22-6-19, to enter into a compliance agreement with the OOG in which operators agree to bring their abandoned wells

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into compliance, by plugging or putting the well back into production, over a 10-year period. Operators are required to address at least 10-percent of these wells each year, thereby resulting in full compliance at the end of the 10-year period.

## **The OOG Is Not Enforcing Statute Regarding Abandoned Wells**

The OOG is not requiring operators to plug abandoned wells or prove that there is bona fide future use for such wells as stated in Code. According to the OOG, of the approximately 13,000 abandoned wells in West Virginia, approximately 2,500 are in the agency-created 10-year Abandoned Well Initiative, and only 34 wells are in the Bona Fide Future Use Program. When the Legislative Auditor first inquired about wells in the 10-year Abandoned Well Initiative Program on February 17, 2012, approximately 45 percent of the wells were in compliance. Since then, compliance has increased to 83 percent of the wells. However, the OOG does not conduct any type of procedural inspection regarding the abatement status of wells in the program unless they suspect a problem. This leaves approximately 5,800 wells, or 44.4 percent, where the operators are known but the wells are abandoned. This evidence indicates that the OOG is not enforcing statute that requires operators to either plug the abandoned well, put it back into production, place it into Bona Fide Future Use status, or place into the agency-established 10-year Abandoned Well Initiative Program.

Figure 1 provides a breakdown of the percentage of abandoned wells that have a known operator, abandoned wells that have an unknown operator, and the percentage of wells that are currently in the Abandoned Wells Initiative Program.

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*Operators are required to address at least 10-percent of these wells each year, thereby resulting in full compliance at the end of the 10-year period.*

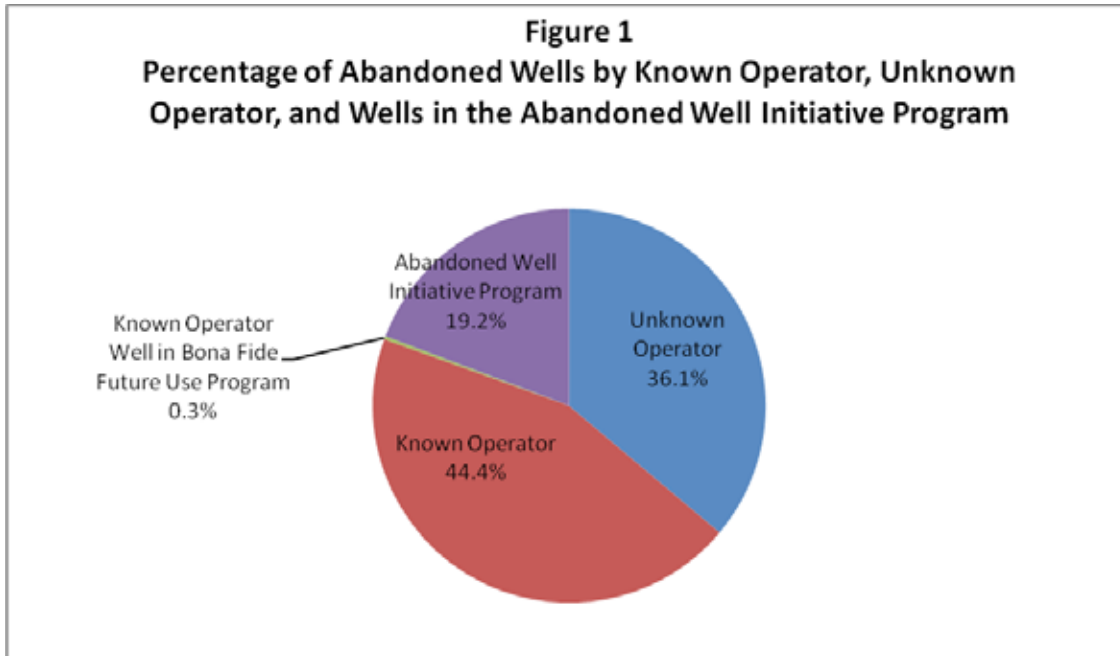
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*Of the approximately 13,000 abandoned wells in West Virginia, approximately 2,500 are in the agency-created 10-year Abandoned Well Initiative, and only 34 wells are in the Bona Fide Future Use Program.*

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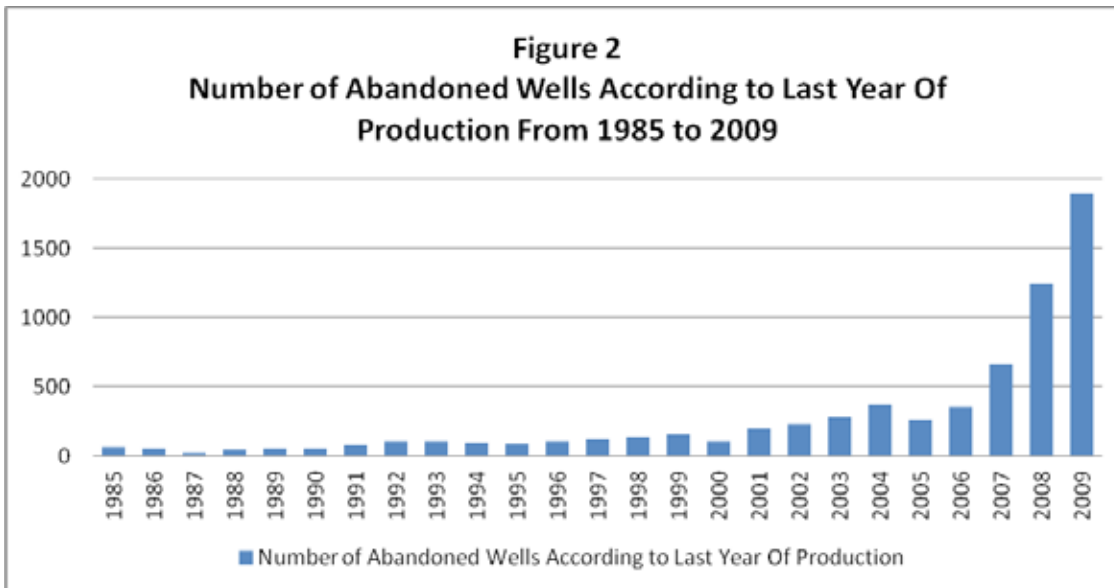
Source: Legislative Auditor’s analysis of data from the West Virginia Office of Oil and Gas.

Figure 2 further indicates that the OOG is not enforcing its statutory responsibility concerning abandoned wells. The chart shows for each year how many wells have ceased production and have become “abandoned.” The data in the chart indicates that from 1985 to 2009 the number of wells abandoned per year is increasing. If the OOG was properly enforcing the Code, the number of abandoned wells should be decreasing.

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If the OOG was properly enforcing the Code, the number of abandoned wells should be decreasing.

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Source: Legislative Auditor's analysis of data from the West Virginia Office of Oil and Gas.

The Legislative Auditor concluded that from 2006 to 2009 over 4,100 wells were out of production longer than 12 months. Therefore, the data indicates that in the past several years the number of wells being abandoned has increased substantially. As a result, the potential health risk to the public increases as does the State's potential financial liability to plug abandoned and potentially hazardous wells.

Table 1 shows the number of wells plugged by OOG and industry from 2006 to 2010. In addition, Table 1 shows the average of abandoned wells plugged by the OOG and industry for each year. The number of wells plugged is relatively small compared to the total number of abandoned wells in the state. However, the Legislative Auditor has concerns about the consistency of the data representing the total number of abandoned wells for each year indicated in Table 1. The analysis shown in Figure 2 indicates a large increase of abandoned wells from 2006 to 2009. However, the information provided by OOG remains consistent over the same timeframe. An inconsistency could be explained by active wells becoming abandoned, abandoned wells being put back into production, and wells being plugged. However, the Legislative Auditor believes the increase of abandoned wells from year-to-year indicated in Figure 2 is too great to explain the difference.

<b>Table 1</b>					
<b>Number of Abandoned Oil and Gas Wells, and Wells Plugged from 2006 to 2010</b>					
<b>Year</b>	2006	2007	2008	2009	2010
<b>Abandoned Wells</b>	13,000	12,800	12,852	13,137	13,054
<b>Wells Plugged by OOG</b>	12	10	9	13	28
<b>Percentage of Abandoned Wells Plugged by OOG</b>	.09%	.08%	.07%	.10%	.21%
<b>Wells Plugged By Industry</b>	294	267	261	263	228
<b>Percentage of Abandoned Wells Plugged by Industry</b>	2.3%	2.1%	2.0%	2.0%	1.7%

*Source: West Virginia Office of Oil and Gas.*

According to the OOG, it has an employee who, as part of his duties, works with operators by establishing schedules for a return of their abandoned wells to either active status or to be plugged in order to improve compliance. The OOG monitors well production by keeping track of annual production reports submitted by each operator. The abandoned wells are tracked in the ERIS database. Operators are identified for contact regarding their abandoned wells based on different “triggers,” one of which is the number of abandoned wells, from where the operators are contacted on a periodic basis. Nevertheless, the ERIS database does not have a reporting mechanism that alerts the OOG when a well is out of production for a period longer than 12 months. **Therefore, the Legislative Auditor recommends that the OOG should program the ERIS database to alert it any time a well is out of production for a period longer than twelve months since this determines when abandoned well status is established, as stated in Code.** This would help the OOG more accurately account for the total number of abandoned wells and also when to contact out-of-compliance operators more efficiently.

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*The ERIS database does not have a reporting mechanism that alerts the OOG when a well is out of production for a period longer than 12 months.*

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Although the OOG states that it is contacting operators to have their abandoned wells put in compliance, the numbers indicate that the OOG is not enforcing its own Enforcement Process Policy (see Figure 3). **The Legislative Auditor recommends that when a well is out of production for a period longer than 12 months, the OOG shall enforce Code and require the operator to either:**

- **Plug the well;**
- **Place it back into production;**
- **Place it into Bona Fide Future Use Program;**
- **Place it into a long-term compliance initiative agreement.**

The current Abandoned Well Initiative will expire at the end of 2012. According to the OOG, it is currently exploring new options. Additionally, the OOG expects to have additional staff in the next few months to assist with the abandoned well issue.

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*According to the OOG, “Beyond the inspections associated with application review, current activity, or a particular initiative, in general, inspections of wells and sites are conducted in response to filed complaints.”*

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## **Abandoned Wells Typically Are Not Inspected**

Due to the large number of abandoned wells and the difficult-to-get locations, inspections are typically not conducted. According to the OOG, “Beyond the inspections associated with application review, current activity, or a particular initiative, in general, inspections of wells and sites are conducted in response to filed complaints.” Therefore, unless an operator applies for a well-work permit that would require an inspection, or a citizen files a complaint, the well site will go uninspected for potential hazards to the public and the environment.

Without inspection, many potentially hazardous abandoned wells may go unnoticed and the operator would evade the OOG Enforcement Process Policy. The Enforcement Process Policy indicates that when an oil and gas inspector conducts a site inspection and a violation is found and determined to present danger to the public, a fresh water source or supply, or appears to be willful and negligent, the inspector will provide the operator with a violation along with compliance requirements and a seven-day period to abate the violation. If the violation is an imminent-danger, the inspector will issue an imminent-danger violation requiring the operator to cease operations. Upon expiration of the seven-day abatement period and the violation has not been abated, the inspector shall issue a failure-to-abate notice requiring the operator to cease further

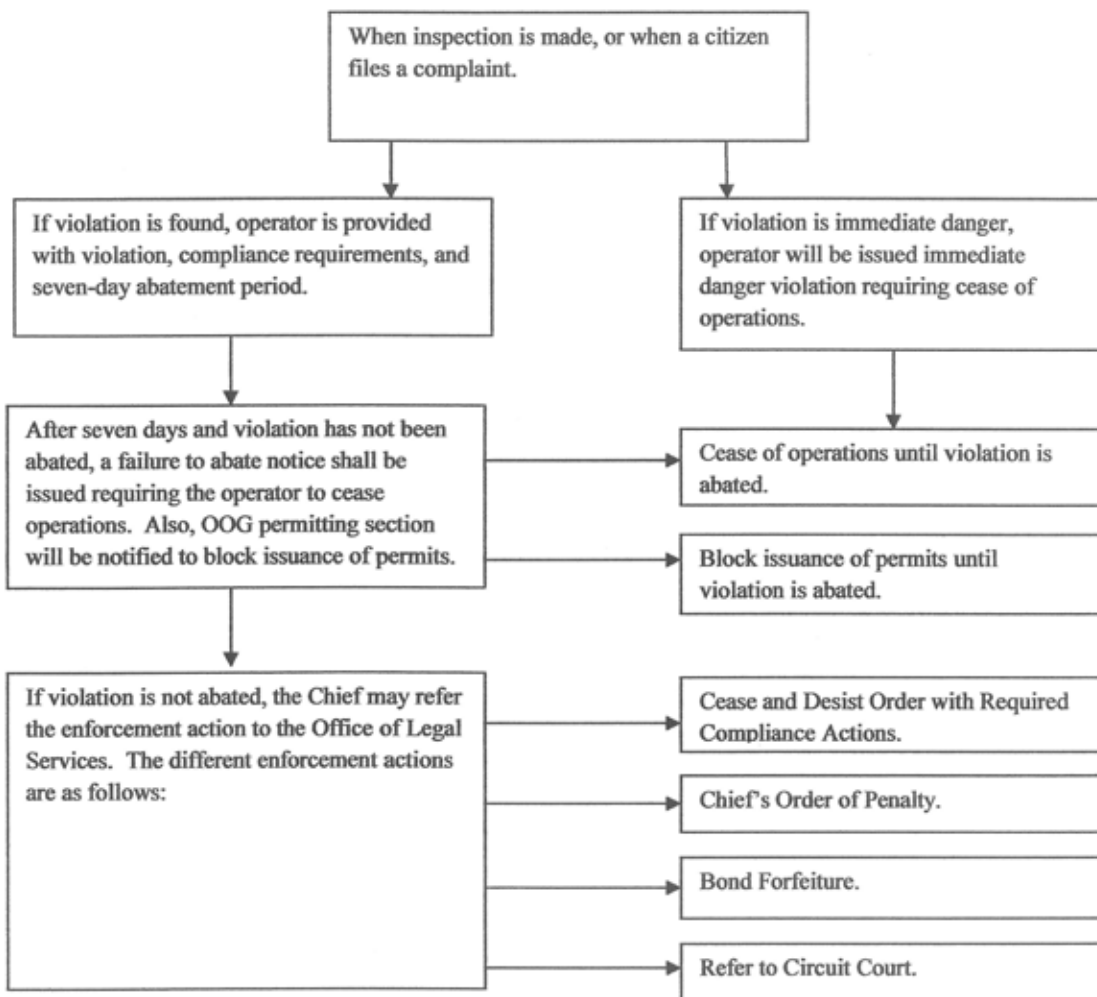
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*Without inspection, many potentially hazardous abandoned wells may go unnoticed and the operator would evade the OOG Enforcement Process Policy.*

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operations. Furthermore, the inspector shall notify the OOG permitting section to block the issuance of permits for that operator. Ultimately, if the violation is not abated, the Chief may refer the enforcement action to the Office of Legal Services where the different enforcement actions are as follows: Cease and Desist Order with Required Compliance Actions; Chief’s Order of Penalty; Bond Forfeiture; Refer to Circuit Court.<sup>2</sup> This process can be seen in Figure 3.

**Figure 3**  
**OOG Enforcement Process Policy**



<sup>2</sup> At any time during the violation and enforcement process, an operator may ask the Chief to enter into a consent order for the resolution of violations.

Due to the fact that most of the abandoned wells will go without inspection unless a citizen files a complaint, the OOG needs to hold the operator accountable for the condition and maintenance of their wells. This can be done by requiring all abandoned wells that are registered to known operators to be either plugged or be placed into a program or initiative where the well can be monitored and scheduled to be put into compliance.

### The Legislative Auditor Conducted A Random Sample to Analyze the OOG Database Information

Data from a random sample of the OOG database conducted by the Legislative Auditor supports the argument that the OOG is not using its authority to enforce operators to bring their abandoned wells into compliance. A random sample was selected from the 110,693 wells the OOG currently has in its database in order to analyze the OOG database information. The wells in the database are identified by its American Petroleum Institute (API) number.<sup>3</sup> A 95 percent confidence level with a 5 percent margin of error sample of 383 wells was selected. Table 2 shows a breakdown of the well-status information for each of the wells selected from the OOG database. The wells sampled showed 14 percent were abandoned while only 2 percent of these wells had been ordered plugged by the OOG. Fifty-three percent are active, 9 percent represent wells that have never been drilled, and 21 percent are wells that have been plugged. However, 3 percent of the wells selected from the database sample had no status listed.

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*Data from a random sample of the OOG database conducted by the Legislative Auditor supports the argument that the OOG is not using its authority to enforce operators to bring their abandoned wells into compliance.*

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<b>Well Status</b>	<b>Abandoned</b>	<b>Active</b>	<b>Never Drilled</b>	<b>Plugged</b>	<b>No Status Listed</b>	<b>Total</b>
<b># of Wells</b>	51	202	36	81	13	383
<b>Percent</b>	14%	53%	9%	21%	3%	100%

*Source: PERD analysis of a sample drawn from OOG database.*

In regard to the length of time the sampled abandoned wells were out of production, at least 27 wells (53 percent) have been out of production 5 or more years; and at least 22 wells (43 percent) have been abandoned for 10 or more years of the 51 abandoned wells sampled (see Table 3). Twelve of the abandoned wells sampled from the OOG

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*In regard to the length of time the sampled abandoned wells were out of production, at least 27 wells (53 percent) have been out of production 5 or more years; and at least 22 wells (43 percent) have been abandoned for 10 or more years of the 51 abandoned wells sampled.*

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<sup>3</sup>An API number can have up to 14 digits. The first two digits are the state code, the next three digits are the county code, the next five digits represent the unique identification number for the well, and sometimes you will see an additional two digits that represent a sidetrack code and another two digits that represent a sequence of events.



database did not list a Last Permit Issue Date. Therefore, it is not possible to determine how long these wells have been abandoned.

<b>Table 3</b>				
<b>Number of Sampled Abandoned Wells Out of Production Longer Than Five or More Years; and Ten or More Years</b>				
	<b>Abandoned ≥ 5 Years</b>	<b>Percent</b>	<b>Abandoned ≥ 10 Years</b>	<b>Percent</b>
<b>Sampled Abandoned Wells</b>	27	53%	22	43%
<i>Source: PERD analysis of a sample drawn from OOG database.</i>				

This information indicates that operators are being allowed to keep their wells abandoned for long periods of time without having to comply with the Code by either plugging the well or proving bona fide future use as required in WVC §22-6-19.

Additionally, of the 51 abandoned wells sampled, 19 wells (37 percent) had no bond attached to it (see Table 4). Although most of these wells had an unknown operator, there were four wells identified without a bond that have a known operator. The Legislative Auditor submitted the API numbers for these four wells with a known operator to the OOG to confirm that they had no bond and why.

<b>Table 4</b>			
<b>Number of Abandoned Wells Without a Bond</b>			
	<b>Abandoned Wells With No Bond</b>	<b>No Bond With Operator Unknown</b>	<b>No Bond With Known Operator</b>
<b>Number</b>	19	15	4
<b>Percent</b>	37%	29%	8%
<i>Source: Source data provided by the OOG and analyzed by PERD.</i>			

The OOG confirmed that there are no bonds for the four sampled wells, and stated, “Unless the wells are actually plugged, they should be under a bond.” It is unclear what the conditions were as to why these wells at one time had bonds and then had them either “cancelled” or “expired” since the last known operations date back to the 1970’s or 1980’s. However, the Legislative Auditor verified that there are regulations concerning oil & gas wells and bonds listed in Code dating back to 1977 such as, any bond shall remain in place until released by the agency.

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*Of the 51 abandoned wells sampled, 19 wells (37 percent) had no bond attached to it.*

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When asked if the OOG has attempted to revoke the bond of any abandoned well that has an active bond and a known operator in order to have the operator comply with the Code, the OOG responded:

*Our research indicates that no notices of violation (which could lead to bond forfeiture) for well abandonment have been issued to these wells except for API number 061-00480. That NOV [Notice of Violation] was issued in August of 1992 but records do not indicate it was abated.*

This evidence suggests that the OOG is not enforcing its own statutory requirements and enforcement policy procedures in order to have operators comply with bond requirements regarding abandoned oil and gas wells.

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*The Legislative Auditor discovered that 61 percent of the 383 wells sampled had some form of information missing.*

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## Missing Information

The Legislative Auditor discovered that 61 percent of the 383 wells sampled had some form of information missing. The OOG database tracks production records back to 1985, a large amount of the missing information can be attributed to missing production reports for certain years, which can be the result of operators not turning in annual production reports. However, it is unclear if this can be attributed to the operator not turning in a report for that year, or if it is an error on the part of the OOG not entering information into the database. In addition, the sample revealed that other types of data were missing as well. As previously mentioned, some wells were missing well status data while others were missing data such as the last permit issue date, farm name, or well number. For one well (API #079-01471) in particular, the database provided no information at all. As a result, the OOG is not keeping an accurate account of current well status and its production within its database.

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*Fourteen percent of the wells sampled had inconsistent information.*

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## Inconsistent Information

The Legislative Auditor also observed that some of the information provided by the OOG database was inconsistent for some wells. Fourteen percent of the wells sampled had inconsistent information. For example, some wells had an active status but had no production records. In some instances, this may be attributed to the well being an injection well, where the well does not produce any oil or gas. However, the database does not provide any information to indicate this. Another example is that one well sampled (API #047-01265) had an active status, but no production records since 1997. One could conclude that this particular well has been abandoned since 1997. However, for the purpose of the sample, the well was identified as active. Table 5 shows the number of wells found to have missing some form of information or having some type of inconsistent information.

<b>Table 5</b>		
<b>Wells With Missing and Inconsistent Information</b>		
	<b>Missing Information</b>	<b>Inconsistent Information</b>
<b>Number Of Wells</b>	234	55
<b>Percent</b>	61%	14%
<i>Source: Source data provided by the OOG and analyzed by PERD.</i>		

The OOG has stated that it is in the process of acquiring a new database system to better administer its oil and gas well information. The OOG should also emplace new data entry procedures to eliminate existing errors, such as missing and inconsistent information.

**The OOG Should Develop Performance Measures to Track the Progress in Reducing Abandoned Wells**

The OOG should incorporate performance goals and measures to address its compliance with Code for wells that are out of production longer than 12 consecutive months. The measures should determine if there is an increase or decrease in wells that are abandoned, put back into production, classified as bona fide future use, or placed into a long-term compliance initiative program. The agency should determine appropriate goals for placing abandoned wells into the aforementioned categories. The goals and measures should be placed into the agency’s section of the *Executive Budget Operating Detail* and posted on the OOG website.

**Conclusion**

The OOG is not using its regulatory authority to force operators to plug or bring their abandoned wells into compliance as required by Code. Furthermore, data from a random sample of the OOG database analyzed by the Legislative Auditor supports this position. As a result, the number of abandoned wells in West Virginia is rising, thus increasing a potentially hazardous risk to the environment and public safety. The cost of plugging abandoned wells where no responsible party can be located becomes the state’s responsibility. The OOG should enforce Code and require all abandoned wells that are registered to known operators either be plugged or be placed into a program or initiative where the wells can be monitored and scheduled to be put into compliance. The OOG should program ERIS, and any system that replaces it, to identify wells that are out of production for a period longer than 12 consecutive months. Additionally, the OOG

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*The OOG has stated that it is in the process of acquiring a new database system to better administer its oil and gas well information. The OOG should also emplace new data entry procedures to eliminate existing errors, such as missing and inconsistent information.*

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*The OOG should incorporate performance goals and measures to address its compliance with Code for wells that are out of production longer than 12 consecutive months.*

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should update its database system and data entry procedures to eliminate existing errors, such as missing and inconsistent information. Finally, the OOG should incorporate performance goals and measures to track wells that are out of production longer than 12 consecutive months in order to better monitor, and enforce oil and gas well compliance requirements. These goals and measures should be published in the agency's section of the *Executive Budget Operating Detail* and its website.

## Recommendations

1. *The Legislative Auditor recommends that the OOG program the ERIS database to alert it any time a well is out of production for a period longer than 12 months since this is a key determination of abandoned well status set by Code.*
2. *The Legislative Auditor recommends that when a well is out of production for a period longer than 12 months, the OOG should enforce Code and require the operator to either:*
  - *plug the well,*
  - *place it back into production,*
  - *place it into Bona Fide Future Use, or*
  - *place it into a long-term compliance initiative agreement.*
3. *The Legislative Auditor recommends that the OOG update its database system and data entry procedures to avoid and eliminate errors such as missing and inconsistent information.*
4. *The Legislative Auditor recommends that the OOG incorporate performance goals and measures to address its compliance with Code for wells that are out of production longer than 12 consecutive months and place them in the Executive Budget Operating Detail and OOG website.*

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*The cost of plugging abandoned wells where no responsible party can be located becomes the state's responsibility.*

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## Issue 2

### **The Office of Oil and Gas Should Develop Performance Measures in Order to Better Gauge Agency Performance.**

#### **Issue Summary**

The State's budget process requires state agencies to submit goals and performance measures for its operations. This process is intended to encourage accountability and gauge how well an agency is performing in achieving its mandated mission. Although the Office of Oil and Gas (OOG) lists a performance measure and goal within the *2011 Operating Detail*, it omits others that are equally relevant. In order to determine whether the OOG is meeting its goals, the agency should develop performance measures that clearly illustrate whether the agency is performing adequately or if improvements should be made.

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*The State's budget process requires state agencies to submit goals and performance measures for its operations. This process is intended to encourage accountability and gauge how well an agency is performing in achieving its mandated mission.*

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#### **Goals and Performance Measures of the Executive Budget**

The State Budget Office requires that state agencies submit division-level performance measures for the *Operating Detail* as part of the appropriation request process. The OOG is a part of the Department of Environmental Protection's (DEP) Executive/Administration section. Other information reported includes the agency's mission statement, goals, and objectives. Although legislative appropriations are not based on the performance measures submitted by state agencies, performance measures are required in order to promote accountability before the Legislature and the public, and to encourage agencies to become result-oriented in their operations.

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*The Legislative Auditor has observed that many state agencies have not provided adequate goals or performance measures in the Operating Detail of the State's Executive Budget.*

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The Legislative Auditor has observed that many state agencies have not provided adequate goals or performance measures in the *Operating Detail* of the State's Executive Budget. In some cases, the performance measures are not strongly tied to the agency's overall mission, while in other cases the list of performance measures is incomplete. In addition, state agencies often do not provide goals or benchmarks for their performance measures. Without a benchmark, a performance measure does not indicate whether performance is good or needs improvement. The Legislative Auditor has taken on the task of assessing the performance measures that state agencies list in the *Operating Detail* in order to facilitate the purpose of having them reported.

In a 2011 review of the DEP's performance measures, the Legislative Auditor concluded that the listed performance measures published in the *Operating Detail* do not describe how well it is doing in achieving its outcomes. The DEP responded by stating:

*Several years ago the Budget Office asked that we reduce the pages of our submission for the Operating Detail of the Budget Narrative. At that time, the agency complied with the request and reduced the number of submission pages. The DEP will continue to improve upon our submission of the Budget Office on Operating Details by providing performance measures that indicate the success of the agency's goals and objectives.*

Although the DEP has limited the amount of information submitted for the *Operating Detail*, and performance measures are only required at the division level, the OOG should still submit performance measures that fully describe how well it is doing in achieving its outcomes. Improved measurement of the agency's performance is needed because of the recent growth of the oil and gas industry in the state. In addition, all measures (those in the *Operating Detail* and those not in the *Operating Detail*) should be listed on the OOG website.

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***Improved measurement of the agency's performance is needed because of the recent growth of the oil and gas industry in the state.***

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The Office of Oil and Gas states its mission statement as follows:

**Office of Oil and Gas  
Mission Statement**

*Protect the public health, environment, and other natural resources through the regulation of oil and gas resource development and the restoration<sup>4</sup> of abandoned oil and gas sites.*

The Legislative Auditor examined the agency's mission statement to determine if the agency's focus is statutorily supported. The performance of an agency is tied to what the agency considers its mission. Therefore, the mission should be clearly understood by the agency and it should not be more or less than what is statutorily required. The Legislative

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<sup>4</sup>According to the Chief of the OOG the usage of the word restoration mentioned in the mission statement refers to the reclamation of oil and gas well sites.

Auditor determines that the agency’s mission statement is supported by statute as indicated below.

<b>The Office of Oil and Gas’ mission statement is:</b>	
fully supported by statute.	X
not supported by statute.	
is less than statutorily required.	
is more than statutorily mandated.	
is determined administratively as allowed by statute.	

The OOG promotes compliance with Chapter 22, Article 1 and 6 of the West Virginia Code. Although the agency’s mission statement is not directly stated in Code, the Secretary of DEP is given broad authority to conduct actions necessary to carrying out these articles, which in effect would define the agency’s mission statement. This authority is given in the following Code citations:

- §22-1-6: *...the Secretary shall organize the department into such offices, sections, agencies and other units of activities as may be found by the secretary to be desirable for the orderly, efficient and economical administration of the department and for the accomplishment of its objects and purposes.*
- §22-6-2(a): *The Secretary shall have as his or her duty the supervision of the execution and enforcement of matters related to oil and gas set out in this article and in articles eight and nine of this chapter.*
- §22-6-2(c)(9): *Conduct such research and studies as the Secretary shall deem necessary to aid in protecting the health and safety of persons employed within or at potential or existing oil or gas production fields within this state, to improve drilling and production methods and to provide for the more efficient protection and preservation of oil and gas-bearing rock strata and properly used in connection therewith;*
- §22-6-23: *All dry or abandoned wells or wells presumed to be abandoned under the provisions of section nineteen of this article shall be plugged and reclaimed in accordance with this section and the other provisions of this article and in accordance with the rules promulgated by the secretary.*

## The OOG List A Relevant Performance Measure But Other Performance Measures Should Be Included To Better Gauge Agency Performance

The OOG listed one performance measure in the *2011 Operating Detail*, which is replicated in the table below. Between fiscal years 2007 and 2009 the OOG processed well-work permit applications within five days of the applicable process end date 100 percent of the time.

Fiscal Year	Actual 2007	Actual 2008	Estimated 2009	Actual 2009	Estimated 2010	Estimated 2011
<b>Process well work permit applications within five days of the applicable process end date.</b>						
Applications processed within the time frame	100%	100%	100%	100%	100%	100%

According to the Office, the measure pertains to the mission by ensuring that quality permit application reviews regarding compliance with environmental requirements are conducted in a timely manner. WVC §22-6-11 states:

*No permit shall be issued less than fifteen days after the filing date of the application for any well work except plugging or replugging... Provided, that if the applicant certifies that all persons entitled to notice of the application under the provisions of this article have been served in person or by certified mail...*

*Between fiscal years 2007 and 2009 the OOG processed well-work permit applications within five days of the applicable process end date 100 percent of the time.*

Surface owners may file comments with the Director within 15 days after the well-work application is filed. After review of the application and comments received, if no timely objection or comment has been filed with the Director or made by the Director, the permit shall be issued.

The methodology used by the OOG to determine and document the conclusions presented in the *Operating Detail* was stated by the OOG Chief as:

*In the past, to generate the information as to processing time we have worked with our IT staff to query the database. We would have looked at the number of permits received and issued during the prior 12 months that were issued within 5 days subsequent to the 15 day comment/objection period from the date of application*



*receipt. We would have compared this number to the total number of permits issued excluding those for which coal objections or surface owner comments were received.*

This performance measure is relevant to the agency's mission and helps to give an indication of how timely the agency is in achieving this goal. However, because the OOG performs many functions, there are a number of additional measures that can be utilized to give a more complete indication of the agency's performance. **Therefore, the Legislative Auditor recommends that the OOG further develop its performance measures in order to better gauge agency performance.**

For the *2012 Operating Detail*, the OOG changed its performance measure to process well work permit applications from 5 days to 10 days of the applicable process end date. The OOG explained this change by stating:

*... the oil and gas industry has seen significant changes in the past few years resulting in a much more involved permit process. When the 2012 detail was prepared approximately two years ago, we were beginning to see the effects of these changes on our permit review times. Consequently, we felt at that time it was unrealistic to continue the five day period as a measure of our performance regarding permit review times and it was changed to ten days.*

In addition to the performance measure, the OOG lists one of its operations as:

- Plug and reclaim abandoned wells and well sites.

Although the operation provided by the agency is an activity rather than a measure of the outcome of an activity, the agency could easily use it to develop a performance measure such as:

- Number of abandoned wells and well sites plugged or reclaimed – does this number or percent increase from year to year, indicating increased effort at meeting the agency's mission?

Since 1978, the OOG has been responsible for plugging orphan wells, which are abandoned wells for which no owner can be found. The chief of the OOG is authorized to expend funds from the Oil and Gas Reclamation

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*This performance measure is relevant to the agency's mission and helps to give an indication of how timely the agency is in achieving this goal. However, because the OOG performs many functions, there are a number of additional measures that can be utilized to give a more complete indication of the agency's performance.*

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*For the 2012 Operating Detail, the OOG changed its performance measure to process well work permit applications from 5 days to 10 days of the applicable process end date.*

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Fund in accordance with the procedures listed in Code, and according to the priority classification procedure. The priority classifications are as follows:

1. Classification One – Abandoned wells in Classification One shall be those that pose an immediate threat to human health, safety, or the environment, or are such an impediment to the development of mineral resources as to require immediate plugging. Wells which pose an immediate threat to human health, safety, or the environment shall take priority over those wells which impede the development of mineral resources.
2. Classification Two – Abandoned wells in Classification Two are those abandoned wells which are not an immediate threat to the environment, or which do not hinder or impede the development of mineral resources of this state, but which should be plugged consistent with funds in the oil and gas reclamation fund, and such other resources as may be available to the chief.
3. Classification Three – Abandoned wells in Classification Three will include all abandoned wells which are not a threat to the environment, and which do not hinder or impede the development of mineral resources of this state and for which plugging may be deferred.

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*Since 1978, the OOG has been responsible for plugging orphan wells, which are abandoned wells for which no owner can be found. The chief of the OOG is authorized to expend funds from the Oil and Gas Reclamation Fund in accordance with the procedures listed in Code, and according to the priority classification procedure.*

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Such classifications shall, among other things, take into consideration the following factors, as appropriate:

- The age of the well;
- The length of time the well has been abandoned;
- The casing remaining in the well;
- The presence of any 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 in close proximity to population.

Although the number of abandoned wells changes year to year due to active wells becoming abandoned, abandoned wells being put back into production, and the amount of revenue available in the Oil and Gas Reclamation Fund, Table 6 shows the total number of oil and gas wells plugged by the State and the average of abandoned wells plugged by the State from years 2006 to 2010. An increase in the average of abandoned wells plugged each year would show an increase in productivity by the OOG and in its effort to protect the public and the environment.

<b>Table 6</b>					
<b>Number of Abandoned Oil and Gas Wells, and Wells Plugged from 2006 to 2010</b>					
<b>Year</b>	2006	2007	2008	2009	2010
<b>Abandoned Wells</b>	13,000	12,800	12,852	13,137	13,054
<b>Wells Plugged by OOG</b>	12	10	9	13	28
<b>Percentage of Abandoned Wells Plugged</b>	.09%	.08%	.07%	.10%	.21%

*Source: West Virginia Office of Oil and Gas.*

The suggested measure mentioned is relevant to the agency’s mission and helps to give an indication of how successful the agency is in achieving this mission with regards to plugging abandoned wells.

**Conclusion**

The performance measure the OOG reports in the *2011 Operating Detail* is relevant to its mission and gives a qualitative assessment of its performance. However, because the OOG performs many functions, there are a number of additional measures that could be utilized to give a more complete indication of the agency’s performance. The OOG

should submit performance measures that fully describe how well it is doing in achieving its outcomes. Improved measurement of the agency's performance is needed because of the recent growth of the oil and gas industry in the state. In addition, all measures (those in the *Operating Detail* and those not in the *Operating Detail*) should be listed on the OOG website. The OOG presently collects the necessary data needed to establish new performance measures as part of its normal activities, such as number of wells plugged, number of inspections made, number of violations recorded, etc., and thus would not incur any additional cost to the agency. Since performance measurement is vital to ensuring that an agency is meeting its goals, the Legislative Auditor recommends that the OOG further develop performance measures that provide a clear indication as to whether the agency is fulfilling its mission.

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*Since performance measurement is vital to ensuring that an agency is meeting its goals, the Legislative Auditor recommends that the OOG further develop performance measures that provide a clear indication as to whether the agency is fulfilling its mission.*

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## **Recommendation**

5. *The Legislative Auditor recommends that the Office of Oil and Gas further develop performance measures in order to better gauge agency performance.*

### Issue 3

## The Office of Oil and Gas’ Website Is User-Friendly and Transparent But Could Benefit From Some More Improvements.

### Issue Summary

A literature review on assessments of governmental websites helped develop a list of attributes that should be incorporated into state agency websites. The most common elements in previous studies were applied to establish a set of criteria used to measure how the Office of Oil and Gas (OOG) website supports online citizen engagement (see Appendix C). The website checklist had two major components, User-friendliness and Transparency, which were evaluated to create a total score for the agency. Table 7 reports that the OOG integrates 48 percent of the checklist items within their website.

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*The OOG integrates 48 percent of the checklist items within their website.*

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<b>Table 7</b> <b>Office of Oil and Gas</b> <b>Website Evaluation Score</b>			
Substantial Improvement Needed	More Improvement Needed	Modest Improvement Needed	Little or No Improvement Needed
0-25%	26-50%	51-75%	76-100%
	OOG 48%		
<i>Source: The Legislative Auditor’s review of the Office of Oil and Gas’ website.</i>			

## The OOG Has Both User-Friendly and Transparency Components, But Improvements Can Be Made

In order for citizens to actively engage with an agency online they must first be able to access and comprehend information on governmental websites. Therefore, governmental websites should be designed with citizens in mind. A user-friendly website is readable, efficient and allows for citizens to easily navigate from page to page. Governmental websites should also be transparent and provide citizens with confidence and trust in the agency. Transparency promotes accountability and provides information for citizens about what government is doing.

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*A user-friendly website is readable, efficient and allows for citizens to easily navigate from page to page. Governmental websites should also be transparent and provide citizens with confidence and trust in the agency.*

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The Legislative Auditor reviewed the OOG website for both user-friendliness and transparency. Table 8 demonstrates the OOG website could be more user-friendly and transparent if improvements were made in areas that are lacking.

<b>Category</b>	<b>Possible Points</b>	<b>Agency Points</b>	<b>Percentage</b>
User-Friendly	18	9	50
Transparent	32	15	47
<b>Total</b>	<b>50</b>	<b>24</b>	<b>48</b>

*Source: Legislative Auditor's review.*

## **The OOG Website Is Well-Designed But More Improvements Are Needed**

The OOG website is easy to navigate as every page is linked to the agency's homepage and has important items such as a search tool and site map which act as an index of the entire website. The OOG website can also be comprehended by most citizens. The OOG has numerous pages on its website, but on average, the readability of the text is on a 10<sup>th</sup> grade reading level making it readable for the majority of citizens.

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*The OOG has numerous pages on its website, but on average, the readability of the text is on a 10<sup>th</sup> grade reading level making it readable for the majority of citizens.*

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### **User-Friendly Considerations**

The following are a few attributes that could lead to a more user-friendly website:

- **Help Link**- A link which allows the user to access assistance if needed.
- **FAQ Section**- A page that lists the agency's most frequently asked questions and responses.
- **Mobile Functionality**- The agency's website is available in a mobile version and/or the agency has created mobile applications (apps).
- **RSS Feeds**- RSS stands for "Really Simple Syndication" and allows subscribers to receive regularly updated work (i.e. blog posts, news stories, audio/video, etc.) in a standardized format.

## The OOG Website Is Transparent, But Could Benefit From Additional Content

A website that is transparent will have elements such as email contact information, the location of the agency, the agency’s phone number, as well as public records, the budget and performance measures. A transparent website will also allow for citizen engagement so that their government can make policies based on the information shared. Appendix C demonstrates that the OOG’s website has less than half of core elements that are necessary for a general understanding of the agency. However, items such as email contact information, the location and telephone number of the Office, and a privacy policy enable citizens to adequately communicate with the agency.

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*A website that is transparent will have elements such as email contact information, the location of the agency, the agency’s phone number, as well as public records, the budget and performance measures.*

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### Transparency Considerations

The OOG’s website is basically transparent, but as with the user-friendly section could benefit from additional improvements. The following are a few attributes that could be beneficial to the OOG in increasing its transparency:

- **OOG Budget-** A link to the annual OOG budget.
- **Complaint Form-** A specific page that contains a form to file a complaint, preferably an online form.
- **OOG Performance Measures-** A link from the homepage explaining the agency’s performance measures.
- **Calendar of Events-** Information on events, meetings, etc., ideally imbedded using a calendar program.
- **Agency History-** The agency’s website should include a page explaining how the agency was created, what it has done, and how, if applicable, has its mission changed over time.

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*The OOG’s website is basically transparent, but as with the user-friendly section could benefit from additional improvements.*

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## Conclusion

The emerging use of technology from paying bills to interactive communication has filtered its way to state government. In order to take advantage of this trend, state agencies are utilizing websites to engage citizens as active participants in the governmental process. Few studies have focused on legislative websites and those that have, use different criteria when reviewing sites. The OOG website is well designed but more improvements are needed. The website could benefit from incorporating

some interactive features such as a help link or by producing its annual budget to become more transparent.

The current OOG website enables users to review oil and gas reports, oil and gas well data, contact information, permit applications, and a summary of the OOG legislative regulations and oil and gas policy information. Currently the OOG's performance measures and budget information are not listed within the website. Providing users with this information would enhance transparency.

## **Recommendation**

- 6. The OOG should consider providing public access to its performance goals via its website and include the current and historical performance measures, budget information, and other user-friendly and transparency website elements identified by the Legislative Auditor.*



## Appendix A: Transmittal Letter

### WEST VIRGINIA LEGISLATURE *Performance Evaluation and Research Division*

Building 1, Room W-314  
1900 Kanawha Boulevard, East  
Charleston, West Virginia 25305-0610  
(304) 347-4890  
(304) 347-4939 FAX



John Sylvia  
Director

August 24, 2012

Randy C. Huffman, Cabinet Secretary  
West Virginia Department of Environmental Protection  
601 57<sup>th</sup> St. SE  
Charleston, WV 25304

Dear Secretary Huffman:

This is to transmit a draft copy of the Agency Review of the Division of Oil and Gas. This report is scheduled to be presented during the September 10-12 interim meeting of the Joint Committee on Government Operations, and the Joint Committee on Government Organization. We will inform you of the exact time and location once the information becomes available. It is expected that a representative from your agency be present at the meeting to orally respond to the report and answer any questions the committees may have.

We need to schedule an exit conference to discuss any concerns you may have with the report. We would like to have the meeting between August 27-31, 2012. Please notify us to schedule an exact time. In addition, we need your written response by noon on September 4, 2012 in order for it to be included in the final report. If your agency intends to distribute additional material to committee members at the meeting, please contact the House Government Organization staff at 340-3192 by Thursday, September 6, 2012 to make arrangements.

We request that your personnel not disclose the report to anyone not affiliated with your agency. Thank you for your cooperation.

Sincerely,

A handwritten signature in blue ink that reads "John Sylvia".

John Sylvia

Enclosure

c: James Martin, Chief, DEP Office of Oil and Gas  
June Casto, Chief, DEP Office of Administration

*Joint Committee on Government and Finance*



## Appendix B: Objective, Scope and Methodology

### Objective

The Legislative Auditor conducted an evaluation of the Office of Oil and Gas as part of the Agency Review of the Department of Environmental Protection required by West Virginia Code §4-10-8. The objective of this review is to examine the effectiveness of OOG's regulation of the oil and gas industry as it pertains to abandoned wells, performance measures, and the user-friendliness and transparency of the OOG's website.

### Scope

The scope of the abandoned wells issue is the data contained in OOG's Environmental Resource Information System (ERIS) database concerning the disposition of oil and gas wells in West Virginia. The scope of the performance measures issue is the performance measures and goals reported in the *Executive Budget Operating Detail* for FY 2011 and FY 2012. The scope of the website evaluation is user-friendliness and transparency demonstrated on the agency website as of August 2012.

### Methodology

In order to evaluate the effectiveness of OOG's regulation of the oil and gas industry as it pertains to abandoned wells, the Legislative Auditor reviewed current regulations in West Virginia Code and Legislative Rules; conducted interviews with administrators and staff from OOG; conducted analysis of data provided by the OOG and from the agency's ERIS database; and reviewed agency documents.

The Legislative Auditor has concerns about the consistency and reliability of some of the data provided by the agency. During its analysis of data concerning abandoned wells provided by OOG, the Legislative Auditor found some data to be inconsistent and contradictory. As a result, the Legislative Auditor conducted a random sample from the 110,693 wells OOG currently has in its database in order to analyze the information. The random sample indicated that there is a large percentage of wells that have missing or inconsistent information. Nevertheless, the objective was primarily to evaluate OOG's compliance with West Virginia Code §22-6-19 to have abandoned wells plugged by operators or give evidence that there is a bona fide future use for the well. Despite the limitations of the DEP's ERIS data, there is sufficient and appropriate evidence to support the findings and conclusions that the OOG is not enforcing statutory requirements concerning abandoned wells and that the number of abandoned wells is increasing.

In order to evaluate the relevancy of the OOG's performance measures, the Legislative Auditor reviewed the *Executive Budget Operating Detail* for FY 2011 and FY 2012, reviewed current regulations in West Virginia Code and Legislative Rules, and corresponded with agency administrators and staff.

In evaluating OOG's website, the Legislative Auditor conducted a literature review of government website studies and performed a review of top ranked government websites and groups that rate government websites in order to establish a master list of elements that would increase citizen engagement. The Brookings Institute's "2008 State and Federal E-Government in the United States" and the Rutgers University's 2008 "U.S. States E-Governance Survey (2008): An Assessment of State Websites" helped identify the top ranked states in regards to e-government. The Legislative Auditor identified three states (Indiana, Maine and Massachusetts) that were ranked in the top ten in both studies and reviewed all three states' main portals for trends and common similarities in transparency and open government. The Legislative Auditor also reviewed a 2010 report from the West Virginia Center on Budget and Policy that was useful in identifying a group of core elements from the master list that should be incorporated into every state and local website to increase its transparency and e-governance. It is understood that not every item listed in the master list is to be found in a department or agency website because some of the technology would not be practical or useful. Therefore, the Legislative Auditor is recommending that an agency or department determine if it is progressing in step with the e-government movement that is emphasizing transparency and user-friendliness. We conducted this performance audit in accordance with generally accepted government auditing standards (GAGAS). Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our conclusions based on our objectives.

## Appendix C: Website Criteria Checklist and Points Systems

<b>Office of Oil and Gas</b>			
<b>User-Friendly</b>	<b>Description</b>	<b>Total Points Possible</b>	<b>Total Agency Points</b>
<b>Criteria</b>	The ease of navigation from page to page along with the usefulness of the website.	<b>18</b>	<b>9</b>
		<b>Individual Points Possible</b>	<b>Individual Agency Points</b>
Search Tool	The website should contain a search box (1), preferably on every page (1).	2 points	2 points
Help Link	There should be a link that allows users to access a FAQ section (1) and agency contact information (1) on a single page. The link’s text does not have to contain the word help, but it should contain language that clearly indicates that the user can find assistance by clicking the link (i.e. “How do I...”, “Questions?” or “Need assistance?”)	2 points	0 points
Foreign Language Accessibility	A link to translate all webpages into languages other than English.	1 point	0 points
Content Readability	The website should be written on a 6 <sup>th</sup> -7 <sup>th</sup> grade reading level. The Flesch-Kincaid Test is widely used by Federal and State agencies to measure readability.	No points, see narrative	
Site Functionality	The website should use sans serif fonts (1), the website should include buttons to adjust the font size (1), and resizing of text should not distort site graphics or text (1).	3 points	3 points
Site Map	A list of pages contained in a website that can be accessed by web crawlers and users. The Site Map acts as an index of the entire website and a link to the department’s entire site should be located on the bottom of every page.	1 point	1 point
Mobile Functionality	The agency’s website is available in a mobile version (1) and/or the agency has created mobile applications (apps) (1).	2 points	0 points

<b>Office of Oil and Gas</b>			
Navigation	Every page should be linked to the agency's homepage (1) and should have a navigation bar at the top of every page (1).	2 points	2 point
FAQ Section	A page that lists the agency's most frequent asked questions and responses.	1 point	0 points
Feedback Options	A page where users can voluntarily submit feedback about the website or particular section of the website.	1 point	1 point
Online Survey/Poll	A short survey that pops up and requests users to evaluate the website.	1 point	0 points
Social Media Links	The website should contain buttons that allow users to post an agency's content to social media pages such as Facebook and Twitter.	1 point	0 points
RSS Feeds	RSS stands for "Really Simple Syndication" and allows subscribers to receive regularly updated work (i.e. blog posts, news stories, audio/video, etc.) in a standardized format. All agency websites should have a RSS link on their websites.	1 point	0 points
<b>Transparency</b>	<b>Description</b>	<b>Total Points Possible</b>	<b>Total Agency Points</b>
<b>Criteria</b>	A website which promotes accountability and provides information for citizens about what the agency is doing. It encourages public participation while also utilizing tools and methods to collaborate across all levels of government.	<b>32</b>	<b>15</b>
		<b>Individual Points Possible</b>	<b>Individual Agency Points</b>
Email	General website contact.	1 point	1 point
Physical Address	General address of stage agency.	1 point	1 point
Phone Number	Correct phone number of state agency.	1 point	1 point

<b>Office of Oil and Gas</b>			
Location of Agency Headquarters	The agency’s contact page should include an embedded map that shows the agency’s location.	1 point	1 point
Administrative Officials	Names (1) and contact information (1) of administrative officials.	2 points	2 points
Administrator(s) Biography	A biography explaining the administrator(s) professional qualifications and experience.	1 point	0 points
Privacy Policy	A clear explanation of the agency/state’s online privacy policy.	1 point	1 point
Public Records	<p>The website should contain all applicable public records relating to the agency’s function. If the website contains more than one of the following criteria the agency will receive two points:</p> <ul style="list-style-type: none"> <li>• Statutes</li> <li>• Rules and/or regulations</li> <li>• Contracts</li> <li>• Permits/licenses</li> <li>• Audits</li> <li>• Violations/disciplinary actions</li> <li>• Meeting Minutes</li> <li>• Grants</li> </ul>	2 points	2 points
Complaint Form	A specific page that contains a form to file a complaint (1), preferably an online form (1).	2 points	0 points
Budget	Budget data is available (1) at the checkbook level (1), ideally in a searchable database (1).	3 points	0 points
Mission Statement	The agency’s mission statement should be located on the homepage.	1 point	1 point
Calendar of Events	Information on events, meetings, etc. (1) ideally imbedded using a calendar program (1).	2 points	0 points
e-Publications	Agency publications should be online (1) and downloadable (1).	2 points	2 points
Agency Organizational Chart	A narrative describing the agency organization (1), preferably in a pictorial representation such as a hierarchy/organizational chart (1).	2 points	1 point

<b>Office of Oil and Gas</b>			
Graphic Capabilities	Allows users to access relevant graphics such as maps, diagrams, etc.	1 point	1 point
Audio/Video Features	Allows users to access and download relevant audio and video content.	1 point	0 points
FOIA Information	Information on how to submit a FOIA request (1), ideally with an online submission form (1).	2 points	0 points
Performance Measures/Outcomes	A page linked to the homepage explaining the agencies performance measures and outcomes.	1 point	0 points
Agency History	The agency's website should include a page explaining how the agency was created, what it has done, and how, if applicable, has its mission changed over time.	1 point	0 points
Website Updates	The website should have a website update status on screen (1) and ideally for every page (1).	2 points	0 points
Job Postings/Links to Personnel Division Website	The agency should have a section on homepage for open job postings (1) and a link to the application page Personnel Division (1).	2 points	1 point



## Appendix D: West Virginia Abandoned Wells by County

<b>West Virginia Abandoned Wells by County</b>					
	<b>County</b>	<b>Abandoned Wells</b>		<b>County</b>	<b>Abandoned Wells</b>
<b>1</b>	Barbour	206	<b>29</b>	Mineral	15
<b>2</b>	Berkeley	0	<b>30</b>	Mingo	164
<b>3</b>	Boone	210	<b>31</b>	Monongalia	246
<b>4</b>	Braxton	317	<b>32</b>	Monroe	0
<b>5</b>	Brooke	19	<b>33</b>	Morgan	0
<b>6</b>	Cabell	118	<b>34</b>	Nicholas	102
<b>7</b>	Calhoun	796	<b>35</b>	Ohio	6
<b>8</b>	Clay	255	<b>36</b>	Pendleton	1
<b>9</b>	Doddridge	648	<b>37</b>	Pleasants	623
<b>10</b>	Fayette	72	<b>38</b>	Pocahontas	4
<b>11</b>	Gilmer	704	<b>39</b>	Preston	52
<b>12</b>	Grant	2	<b>40</b>	Putnam	144
<b>13</b>	Greenbrier	3	<b>41</b>	Raleigh	90
<b>14</b>	Hampshire	2	<b>42</b>	Randolph	112
<b>15</b>	Hancock	63	<b>43</b>	Ritchie	1,599
<b>16</b>	Hardy	0	<b>44</b>	Roane	658
<b>17</b>	Harrison	422	<b>45</b>	Summers	6
<b>18</b>	Jackson	211	<b>46</b>	Taylor	78
<b>19</b>	Jefferson	0	<b>47</b>	Tucker	11
<b>20</b>	Kanawha	589	<b>48</b>	Tyler	335
<b>21</b>	Lewis	434	<b>49</b>	Upshur	251
<b>22</b>	Lincoln	336	<b>50</b>	Wayne	237
<b>23</b>	Logan	158	<b>51</b>	Webster	27
<b>24</b>	McDowell	169	<b>52</b>	Wetzel	409
<b>25</b>	Marion	335	<b>53</b>	Wirt	412
<b>26</b>	Marshall	148	<b>54</b>	Wood	567
<b>27</b>	Mason	52	<b>55</b>	Wyoming	138
<b>28</b>	Mercer	12			

*Source: West Virginia Office of Oil and Gas website database.*



## Appendix E: Agency Response



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west virginia department of environmental protection

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Office of Oil and Gas  
601 57<sup>th</sup> Street, S.E.  
Charleston, WV 25304  
Phone: 304-926-0450  
Fax: 304-926-0452

Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
www.dep.wv.gov

September 5, 2012

John Sylvia, Director  
Legislative Post Audit Division  
Building 1, Room W-314  
1900 Kanawha Boulevard, East  
Charleston, West Virginia 25305-0610



Dear Mr. Sylvia:

Please consider this the Department of Environmental Protection's response to the report of the Agency Review of the Office of Oil and Gas.

### ISSUE 1

**The Office of Oil and Gas Is Not Enforcing Statutory Requirements as They Concern Abandoned Oil and Gas Wells Which Is Causing the Number of Abandoned Wells to Increase.**

#### DEP Response:

The DEP has been short staffed for years due to the lack of funding. During the special Legislative Session last December, a bill was passed to allow the Office of Oil and Gas to increase its permit fees to deal with the Marcellus Shale drilling and fill vacancies. This allows us to hire additional staff for this purpose. In order to address this situation, we will have to dedicate more staff time to inspection and enforcement. Additionally, there are a few items we can implement that may help with the tracking and enforcement of these wells electronically.

The Office of Oil and Gas plans to program the current database system to automatically generate a letter to the operator when the production reports are not received or when a well has been out of production for more than 12 consecutive months. If no action is taken by the operator to bring the well into compliance, enforcement action would be taken and the operator would be required to plug the well, place it back in production, place it in the Future Use Program or place it into a long-term compliance initiative agreement.

Promoting a healthy environment.

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With an increase in enforcement staff, the Office of Oil and Gas may be able to follow up with the operators to ensure the wells are in compliance. Until we know the magnitude of the Marcellus Shale drilling, it will be difficult to commit to this enforcement.

The missing information in the database should also be resolved by a letter to the operator and/or enforcement action.

The Office of Oil and Gas will also write procedures for data entry into the database which should eliminate missing and inconsistent information.

The OOG will incorporate performance goals and measures to address compliance with wells that are out of production and place information on their website.

These efforts should assist in the reduction of the number of Abandoned Wells in the future.

## **ISSUE 2**

**The Office of Oil and Gas Should Develop Performance Measures in Order to Better Gauge Agency Performance.**

### **DEP Response:**

Due to the recent growth in the oil and gas industry, the Office of Oil and Gas will further develop performance measures in order to provide a clear indication of the agency's performance in the oil and gas area.

## **ISSUE 3**

**The Office of Oil and Gas' Website is User-Friendly and Transparent But Could Benefit From Some More Improvements.**

### **DEP Response:**

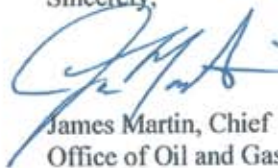
We have made every effort to provide transparency on our website and to provide valuable information to the public. We will continually strive to improve our website by incorporating some of the recommendations made by your office. Recently, we have created a web page which provides online submittal of comments on permit applications, online publishing of comment on permit applications, e-notification of applicants and permit issuance, a search engine for permit applications and a monthly tracking report of permits issued. We have also posted the Oil and Gas Workshop presentations and a checklist for permit applicants to ensure they have all the necessary paperwork before they submit their permit application.

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In addition to the new Oil and Gas website information, we have recently added the history of the agency on our website as well as linked to the Auditor's website for transparency in government funding.

Thank you for the recommendations for improvement and for the opportunity to respond to this report. Should you need additional information or have any questions, please feel free to contact me.

Sincerely,



James Martin, Chief  
Office of Oil and Gas





WEST VIRGINIA LEGISLATIVE AUDITOR

**PERFORMANCE EVALUATION & RESEARCH DIVISION**

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