

## **Risk-Based Inspection Strategy**

In the past, the Inspection Strategy has been based on the amount of production, operator compliance, and High or Low Priority ratings. Production inspections were based on whether the average monthly production met the Federal Oil and Gas Royalty Management Act (FOGRMA) High category or if the operator had a compliance rating which made it a FOGRMA High. The remaining inspection types (drilling, abandonment, environmental, workover, etc.) were rated as either High or Low based on standards for each type of inspection. All the High rated inspections were then the required number inspections needed to be completed. The field offices (FO) would then evaluate the number of inspection hours available to develop a plan to determine which inspections would be completed during the year. Certain types of inspections (drilling and abandonment) were estimated based on what the FO expected would occur during the year.

The risk-based strategy is based on risk factors for each type of inspection. Some of the risk factors are the same for some inspection types, such as production rating. The risk factors are based on a scale of 1 to 10, with 1 being the lowest and 10 the highest. The tables below show the scale for each of the risk factors for all of the inspection types. All of the risk factors are also weighed on importance of the risk. Using these weighting factors, all the risks for an identified type of inspection are averaged together to arrive at a final risk factor. The FOs must then inspect the highest rated cases based on available inspection workmonths.

The six different types of inspections and the one activity to have risk factors are:

- Production
- Records Verification (Production Accountability reviews)
- Drilling
- Abandonment
- Workover
- Environmental
- Well Status Check

There are still two types of inspections that are always required, so no risk factors have been developed. They are:

- Undesirable events
- Alleged theft

Each of the inspection types includes different risk factors and different units of accomplishment. A discussion of each inspection type and the one activity that will include the risk factors follows.

### **Production Inspections**

Production inspections are based on a case/operator basis. Each lease, communization agreement, or unit participating area is a case. In the attached spreadsheet for production inspections, each case/operator will be compiled by each FO. They will then be sent to the state

office (SO) for consolidation. The SO will include any required inspections and the reason the inspection was conducted, and then will send the combined spreadsheet for the state to the Washington Office (WO). The WO will review and identify any required inspections and include reason for inspections. *(For the FY 2012 Strategy there will be no Washington Office review before submission of the final strategy.)*

For the production inspections there are seven risk or rating factors:

Generated by the Automated Fluid Minerals Support System (AFMSS):

- Production Rating
- Missing Oil and Gas Operations Reports (OGOR) Rating
- Compliance Rating
- Last Production Inspection (PI) Rating

Derived from the Office of Natural Resources Revenue (ONRR) risk model:

- OGOR Reporting Error Rating
- Production Variance Rating
- ONRR Audit Findings Rating

The ONRR will submit ratings of 1 to 10 for each of these three ratings to the WO. When the WO receives the three ONRR ratings we will send to the FOs these ratings for inclusion in the strategy. The three ONRR provided ratings with the four ratings generated by AFMSS to determine the overall risk factor for the case/operator prior.

The Production Rating is based upon both oil and natural gas production from the case/operator. Preliminary ratings are given a 1 to 10 rating for both the oil and natural gas production. The table below shows the rating system.

Rating level	Average Monthly Oil Production (Bbls)*	Average Monthly Natural Gas Production (MCF)*
0	0	0
1	1-100	1-1,000
2	101-500	1,001-5,000
3	501-1,000	5,001-10,000
4	1,001-2,000	10,001-20,000
5	2,001-3,000	20,001-30,000
6	3,001-4,000	30,001-40,000
7	4,001-5,000	40,001-60,000
8	5,001-6,000	60,001-80,000
9	6,001-9,000	80,001-100,000
10	>9,000	>100,000

\*Barrels = Bbls, Thousand Cubic Feet (MCF)

These two ratings are added together to give the case/operator an overall rating for production. If the combined rating is higher than 10, the rating will be shown as 10.

The Missing OGORs Rating is based on the number of OGORs that are missing in AFMSS. Without these OGOR reports, the average production could be entered as zero but there could be production on the case/operator. To account for this risk, the table below shows the factors to be used for missing OGORs. Use the number of missing OGORs found during the 12-month period of production used to calculate average production to determine this risk factor. This risk factor should raise the priority of any case/operator not reporting production monthly to ONRR.

Rating level	Number of Missing OGORs for Last 12 months
0	0
1	1
2	
3	2
4	
5	3
6	
7	4
8	
9	5
10	6 or greater

The Compliance Rating is based on the number of Incidents of Noncompliance (INC) issued during a production inspection during the last 2 years. The Compliance Rating is also broken into two parts: the number of INCs which are rated minor and the number of INCs which are rated major. The number of INCs is based on the INCs issued during the last 24 months and entered into AFMSS. The table below shows the rating system used to establish the rating level for INCs.

Rating level	Number Minor INCs Issued Last 24 Months	Number Major INCs Issued Last 24 Months
1	0-3	0
2	4-5	
3	6-7	
4	8	
5	9	1
6	10	
7	11	
8	12	
9	13	
10	14 or greater	2 or greater

These two ratings are combined to give the case/operator an overall rating of between 1 and 10 for compliance.

The Last PI Inspection Rating will give a higher rating to those case/operators that have not been inspected recently. If AFMSS does not have an inspection date or the last inspection date is greater than 10 years, the rating will be 10. The table below shows the rating system used to establish the rating level for last inspection.

Rating level	Number of Years Since Last Inspection
1	0-1
2	1-2
3	2-3
4	3-4
5	4-5
6	5-6
7	6-7
8	7-8
9	8-9
10	10 or greater

The four rating factors and the three provided by the ONRR will then be combined to determine an overall rating factor. Each rating factor will be weighted on importance to determine the overall risk. The weighting factors for each factor are shown below.

Rating Factor	Percent
Production Rating	20%
Missing OGORs Rating	20%
Compliance Rating	20%
Last Inspected Rating	25%
OGOR Reporting Error Rating	5%
Production Variance Rating	5%
ONRR Audit Findings Rating	5%
Total	100%

### **Records Verification (Production Accountability Reviews)**

Production Accountability reviews are based on a case/operator basis. Each lease, communization agreement, or unit participating area is a case. In the attached spreadsheet for production accountability reviews each case/operator will be compiled by each FO. The spreadsheets will then be sent to the SO for consolidation. The SO will include any required inspections and the reason why the inspection was conducted and then send the combined spreadsheet for the state to the WO. The WO will review and identify any required inspections and include reason for inspections. *(For the FY 2012 Strategy there will be no Washington Office review before submission of the final strategy.)*

For the production accountability reviews there are seven risk or rating factors:

Generated by AFMSS:

- Production Rating
- Missing OGORs Rating
- Recovery Rating
- Beneficial Use Rating
- Last Reviewed Rating (Production Accountability Review)

Derived from the ONRR risk model:

- OGOR Reporting Error Rating
- Production Variance Rating

The ONRR will submit ratings of 1 to 10 for the two ratings to the WO. When the WO receives the two ONRR ratings, we will send these ratings to the FOs for inclusion with the strategy. The two ONRR provided ratings with the five ratings generated by AFMSS to determine the overall risk factor for the case/operator prior.

The Production Rating is based upon both oil and natural gas production from the case/operator. Preliminary ratings are given a 1 to 10 rating for both the oil and natural gas production. The table below shows the rating system.

Rating level	Average Monthly Oil Production (Bbls)	Average Monthly Natural Gas Production (MCF)
0	0	0
1	1-100	1-1,000
2	101-500	1,001-5,000
3	501-1,000	5,001-10,000
4	1,001-2,000	10,001-20,000
5	2,001-3,000	20,001-30,000
6	3,001-4,000	30,001-40,000
7	4,001-5,000	40,001-60,000
8	5,001-6,000	60,001-80,000
9	6,001-9,000	80,001-100,000
10	>9,000	>100,000

These two ratings are added together to give the case/operator an overall rating for production. If the combined rating is higher than 10 the rating will be shown as 10.

The Missing OGORs Rating is based on the number of OGORs that are missing in AFMSS. Without these OGOR reports, the average production could be entered as zero but there could be production on the case/operator. To account for this risk, the table below shows the factors to be used for missing OGORs. Use the number of missing OGORs found during the 12-month period of production used to calculate average production to determine this risk factor. This risk factor should raise the priority of any case/operator not reporting production monthly to the ONRR.

Rating level	Number of Missing OGORs for Last 12 months
0	0
1	1
2	
3	2
4	
5	3
6	
7	4
8	
9	5
10	6 or greater

The Recovery Rating is the amount of oil or natural gas that has been found under reported on the case/operator for the last 5 years. The table below shows the ratings given for both oil and natural gas. A rating is given to both oil and to natural gas.

Rating level	Oil Production (Bbls) Recovered	Natural Gas Production (MCF) Recovered
0	0	0
1	1-100	1-1,000
2	101-500	1,001-5,000
3	501-1,000	5,001-10,000
4	1,001-1,500	10,001-15,000
5	1,501-2,000	15,001-20,000
6	2,001-2,500	20,001-25,000
7	2,501-3,000	25,001-30,000
8	3,001-3,500	30,001-35,000
9	3,501-4,000	35,001-40,000
10	>4,000	>40,000

These two ratings are added together to give the case/operator an overall rating for recovery rating. If the combined rating is higher than 10 the rating will be shown as 10.

The Beneficial Use Rating is a rating based on whether a request for beneficial use has been requested and, if so, if it was approved or rejected. In the cases where no request for beneficial use has been made or if beneficial use has been approved, the table below shows the rating. The rating is based on the percent of natural gas being used onsite compared to the total amount produced on the case/operator. The data for these percentages will be obtained from the OGOR data received from the ONRR that is in AFMSS. If beneficial use has been rejected for the case/operator, the rating will be shown as 10.

Rating level	Percent of Natural Gas Used on Site (Beneficial Use)
1	<10%
2	11%-20%
3	21%-30%
4	31%-40%
5	41%-50%
6	51%-60%
7	61%-70%
8	71%-80%
9	81%-90%
10	91% or greater

The Last Reviewed Rating will give a higher rating to those cases/operators that have not been reviewed recently. If AFMSS does not have a review date or the last review date is greater than 10 years, the rating will be 10. The table below shows the rating system used to establish the rating level for last review date rating.

Rating level	Number of Years Since Last Review
1	0-1
2	1-2
3	2-3
4	3-4
5	4-5
6	5-6
7	6-7
8	7-8
9	8-9
10	10 or greater

These five AFMSS-generated rating factors and the two provided by the ONRR will then be combined to determine an overall rating factor. Each rating factor will be weighted on importance for the overall risk. The weighting factors for each factor are shown below.

Rating Factor	Percent
Production Rating	20%
Missing OGORs Rating	20%
Recovery Rating	10%
Beneficial Use Approved/Rejected	20%
Last Reviewed Rating	20%
OGOR Reporting Error Rating	5%
Production Variance Rating	5%
Total	100%

### **Drilling Inspections**

**Follow guidance in the BLM Handbook H-3160-5, *Inspection and Enforcement Documentation and Strategy Development Handbook* and Fiscal Year 2012 Oil and Gas Inspection and Enforcement Strategy Matrices Instructions and Strategy Goals for drilling inspections.**

### **Abandonment Inspections**

**Follow guidance in the BLM Handbook H-3160-5, *Inspection and Enforcement Documentation and Strategy Development Handbook* and Fiscal Year 2012 Oil and Gas Inspection and Enforcement Strategy Matrices Instructions and Strategy Goals for abandonment inspections.**

### **Workover Inspections**

**Follow guidance in the BLM Handbook H-3160-5, *Inspection and Enforcement Documentation and Strategy Development Handbook* and Fiscal Year 2012 Oil and Gas Inspection and Enforcement Strategy Matrices Instructions and Strategy Goals for workover inspections.**

### **Environmental Inspections**

**Follow guidance in the BLM Handbook H-3160-5, *Inspection and Enforcement Documentation and Strategy Development Handbook* and Fiscal Year 2012 Oil and Gas Inspection and Enforcement Strategy Matrices Instructions and Strategy Goals for environmental inspections.**



## Well Status Inspections

Well Status inspections of inactive wells will now be required in the Inspection Strategy. The Strategy will require that each office establish the planned number of well status inspections. To identify the wells to be inspected, the following four risk factors will be used.

- Last Inspection Rating
- Time Inactive Rating
- Well Status Compared to ONRR Rating
- Number of Wells Inactive (Operator) Rating

The Last Inspection Rating will give a higher rating to those idle wells that have not had a Well Status Check (WS) activity completed recently. If AFMSS does not have a WS activity code date or the last WS activity code date is greater than 10 years, the rating will be 10. The table below shows the rating system used to establish the rating level for Last Inspection Rating.

Rating level	Number of Years Since Last Review
1	0-1
2	1-2
3	2-3
4	3-4
5	4-5
6	5-6
7	6-7
8	7-8
9	8-9
10	10 or greater

The Time Inactive Rating will be based on the number of years the well has been reported on OGOR as inactive. An inactive well status would include but limited to OSI, GSI, TA, DSI, WIWSI, and WSWSI codes. The table below shows the rating factor to be used.

Rating level	Number of Years Inactive
1	0-1
2	1-2
3	2-3
4	3-4
5	4-5
6	5-6
7	6-7
8	7-8
9	8-9
10	10 or greater

The Well Status Compared to ONRR Rating is based on whether the well status reported in AFMSS is the same as the well status reported on the ONRR Oil and Gas Operator’s Report (OGOR). If the statuses are the same, the rating will be 1; if they are different, it will be 10.

Rating level	AFMSS and ONRR Same
1	yes
2	
3	
4	
5	
6	
7	
8	
9	
10	no

The Number of Wells Inactive (Operator) Rating will be the total number of inactive wells that an operator has in an FO. An inactive well status would include but limited to OSI, GSI, TA, DSI, WIWSI, and WSWSI codes. The table below shows the rating factor to be used.

Rating level	Number of Wells Inactive
1	0-2
2	3-4
3	5-6
4	7-8
5	9-10
6	11-14
7	15-18
8	19-22
9	23-25
10	26 or greater

These four rating factors will then be combined to come up with an overall rating factor. Each rating factor will be weighted on importance for the overall risk. The weighting factors for each factor are shown below.

Rating Factor	Percent
Last Inspection Rating	40%
Time Inactive Rating	30%
Well Status compared to ONRR Rating	10%
Number of Wells Inactive (Operator) Rating	20%
Total	100%