Inspection Methodology Team Recommendations

1. Recommend a methodology for determining the number of oversight inspections for each State:

- Minimum number of inspectable units (IU) to inspect for States with fewer than 1000 inspectable units is equal to 25% of the IU's
- Minimum number of IU's to inspect in States with more than 1000 IU's is based upon formula
- Both of the above methods establish the minimum number (target)of oversight inspections to conduct in a given State
- Bond release inspections cannot be counted for more than 25% of the target number of inspections
- Field Offices can increase the total number of oversight inspections as needed
- Performance Agreements will contain the number and type of inspections to conduct annually

2. Propose a policy on determining the ratio of complete and partial inspections:

- Minimum number of complete oversight inspections conducted by Field Offices will be 33% of the IU's selected for oversight in each State (number established above)
- Partial inspections can examine as little as one to almost all of the performance standard categories

3. Propose a methodology for selecting random and focused inspections:

- In States with less than 1000 IU's, focused or deliberate inspections should be conducted by the Field Offices
- In States with greater than 1000 IU's, random inspections, along with focused or deliberate inspections may be used
- The number of random inspections to be conducted is left to the discretion of the Field Office

4. Recommend a methodology for selecting independent and joint inspections:

- Vast majority of oversight inspections will remain joint inspections
- Initially, 10% of IU's selected for oversight inspections (Item 1 above) will be subject to independent inspections
- No advance notice to the State or permittee of pending inspection
- State can accompany Field Office on inspection
- Can be partial or complete, focused or random inspections
- If violation is noted, State will be given opportunity to address it prior to the completion of the inspection, which includes completion of the inspection report.

Inspection Methodology Team Report and Recommendations

1. Recommend a methodology for determining the number of oversight inspections for each State:

For the purposes of this discussion, an oversight inspection (i.e. complete inspections, bond release inspections, bond forfeiture sites, focused inspections, special study inspections, etc.) is defined as an inspection that is designed to evaluate the effectiveness of a State program. Inspections that do not specifically address this purpose (i.e. citizen complaint inspections, Federal enforcement inspections, etc.) should not be included in the target number of inspections. These inspections are additional inspections to the target number and can be tracked separately. Bond release inspections can be counted as oversight inspections but cannot be more than 25% of the targeted number of oversight inspections required to be conducted in any given State. Information gathered from these oversight inspections will answer the question, "Are the Regulatory Authorities conducting proper inspection, enforcement, and permitting activities to ensure the successful administration, implementation and maintenance of their approved programs?" which will address the attributes that are measured during these inspections. States vary greatly in the number of Inspectable Units (IU's). Some States have as few as one or two IU's while other States have more than 1,800 IU's. Therefore, a "one size fits all" approach will not work for selecting the proper number of oversight inspections to conduct annually. The team recommends that a two tier method be used to determine the minimum number of inspections. The smaller States, States with less than 1000 inspectable units, would use a 25% selection rate of IU's for inspections; while larger States, States with inspectable units > 1000, would use a selection rate equal to a percentage of what a statistical sample with a 95% confidence level with a confidence interval (margin of error) of $\pm$ 5 would be (typically 15% to 20% of the IU's). The equation that will be used to determine the number of oversight inspections to conduct is $n = \frac{\quad}{\quad}$, were "n" is the sample size and "N" is the number of Inspectable units. The current inspection workload in States where there are greater than 1,000 IU's is at or below the 95% confidence level. Using a selection rate percentage based on a 95% confidence level with a confidence interval (margin of error) of $\pm$ 5 for larger States provides a reasonable **minimum** sample size. For example, a State with an IU population of 1830, would experience a selection rate of approximately 17% when applying this method (318 out of 1830 IU's). The reason for selecting 25% as a target for smaller States is that a 25% inspection rate provides a good representation of the IU's present. Historically (last 5 years), the smaller States had inspection rates ranging from 0% to 110% of IU's. It is not possible to specify an exact number of inspections to conduct in the smaller States because of varying programmatic conditions unique to each State. Therefore, a reasonable **minimum** number of IU's to inspect in the smaller States would be 25% of the IU population and for the larger States the resultant number derived from the sample formula above. Additionally, since there are some States that have less than 4 IU's , these States will receive at least one oversight inspection annually. The Regional Directors (RD's) and the Field Office Directors (FOD's) could increase the number of oversight inspections if warranted by current conditions in a State (i.e. identified problem areas, special studies, etc.). Ultimately, the number of oversight inspections (and any

deviations from the above guidelines) would be addressed in the Performance Agreement with the State Regulatory Authority (RA).

Disposition of Public Comments received

One comment regarding "Establish a methodology for determining the number and type of oversight inspections to be conducted on a state-by-state basis" was received. This comment reads as follows:

- Comment: The number and type of oversight inspections should be driven by state-specific and mining-location specific factors developed as part of the annual oversight plan which should be the subject of public review and comment before being implemented

- Response: Agreed. The procedures as outlined in this proposal allows for the flexibility in determining the number and type of inspections and the establishment of this process in the annual Performance Agreement.

2. Propose a policy on determining the ratio of complete and partial inspections: *Complete inspections* are one of the most comprehensive tools that OSM has to effectively evaluate and monitor the success or failure of an individual State's approved program. If unlimited resources were available, the majority of OSM inspections should be *complete inspections*. However, anticipating unlimited resources is not realistic. A *complete inspection* demands a significant amount of time as it requires a complete file and permit review prior to the site visit *and* focuses on all performance standards categories applicable at the mine site at the time of the inspection. The alternative to c*omplete inspections* is *partial inspections*. *Partial inspections* can examine as little as one to almost all of the performance standards categories. *Partial inspections* generally do not demand as much time and resources as do *complete inspections*. P*artial inspections* provide a mechanism to conduct oversight inspections on a larger number of sites for a given period of time in comparison to the time consuming *complete inspections*. Both types of inspections are very important and have great attributes as oversight evaluation tools for the OSM Field Offices. The method of determining the ratio of *complete* verses *partial inspections* must be a balanced ratio recognizing the value of the each. Because all three regions, Appalachian, Mid-Continent and Western, are different, flexibility is necessary in order to create a plan or ratio for each State and at the same time recognize their inherit differences. A component of flexibility provides OSM with the ability to re-direct their annual inspection plans to pursue problem areas that might arise within the course of an evaluation year. The Surface Mining Control and Reclamation Act (SMCRA) has specific mandates concerning the ratio of *complete* and *partial inspections* in the individual approved States' programs regulations that require the RA's to conduct an average of at least one *complete inspection* per calendar quarter (which equals 33%, 1/3rd of the time) of each active or inactive surface coal mining and reclamation operation under its jurisdiction. As established in 30 CFR 842, Federal Inspections and Monitoring, when OSM is acting as the RA under a federal program, OSM will also conduct an average of at least one *complete inspection* per calendar quarter of each active surface coal mining and reclamation operation. In pursuit of consistency with the authors of SMCRA and 30 CFR, based on this established

rationale, it would follow that a reasonable **minimum** number of *complete oversight inspections* by OSM would also be thirty three percent (33%), or one third (1/3rd) of the IU's selected for oversight inspections in each state. For this methodology document, the proposed ratio of complete and partial inspections is a **minimum** of thirty three percent (33%), one third (1/3rd) of all inspections will be *complete inspections*, with the remaining percentage being *partial inspections*. Ultimately, the maximum number of *complete oversight inspections* and where these inspections would occur will be determined by the FOD's and will be delineated in a Performance Agreement with the State RA. This methodology provides minimum standards and flexibility for each Field Office to establish what ratio of *complete inspections* verses *partial inspections* will provide the most effective use of available resources to successfully monitor and evaluate each State's RA program.

Disposition of Public Comments received

One comment concerning "Establish a methodology for determining the minimum number of complete oversight inspections to be conducted annually in each state ", was received. The comment reads as follows:

- Comment: The minimum number of complete oversight inspections conducted annually should be part of the annual oversight plan worked out between the state and OSM and should be tailored based on the environmental issues of concern.

- Response: Agreed. This comment material is addressed in the proposed methodology, which states, "Ultimately, the maximum number of complete oversight inspections and where these inspections would occur will be determined by the FOD's and will be delineated in a Performance Agreement with the State RA." When the RD's and FOD's determine the number and where the inspections will occur, environmental issues of concern will be considered during this process.

3. Propose a methodology for selecting random and focused inspections: Past history has shown that focused inspections[1] are a better use of limited resources. OSM can direct oversight activities to areas where there may be high levels of activity, public concern, or problem areas. In States that have a smaller number of IU's, only focused or deliberate selection of IU's will achieve the intent of evaluating the effectiveness of State Regulatory programs. For example, it would be impossible to randomly sample an IU when the State only has one IU. Conversely, a random sample[2] of IU's for oversight inspections does provide a means to validate the effectiveness of the State program in a readily apparent, unbiased manner. However, random sampling of IU's for oversight inspections is reasonable only in States that have a larger number of IU's (i.e. States with more than 1,000 IU's). Even then, using

[1] Focused Inspection means an inspection that is not random sample generated. A focused inspection can look at a specific SMCRA requirement such as AOC or be a deliberate unit selection.

[2] Random Sample means a computer generated random sample selected from a population of standard oversight sample inspectable units in which each inspectable unit in the total population has an equal probability of occurrence in the sample. [Definition comes from rescinded INE-20, Transmittal 787]

purely random sampling in a State that has a relatively large IU population, for example 2,161, runs the risk of not inspecting an IU or group of IU's that should be inspected. An example would be the 130 IU's where high hazard impoundments are located in the State. Additional selection criteria that Field Offices are currently using based on stratified selection criteria are:

1. Permits that are listed in the State database as actively moving coal, active reclamation only, or inactive;
2. Permits which consist of at least 400 acres;
3. Steep slope mining operations; and
4. Haul roads permits are not eligible for selection.

The team concludes that when it comes to a methodology for determining when to use random selection and when to use focused inspections, there is no "one size fits all." The team recommends that in States with less than 1,000 IU's, OSM rely on focused and deliberate inspections, and in States with 1,000 or more IU's, OSM use a combination of focused, deliberate and random oversight inspections using a stratified selection criteria. However, in all States, the final decision on the types of inspections to be used should be left to the discretion and expertise of the FOD or Field Division Chief, and the inspection plan delineated in a performance agreement with the State RA.

Disposition of Public Comments received

Comments regarding "Clarify that both random and focused methods of selecting sites to be inspected are acceptable, and to encourage use of a combination of both techniques when conducting oversight inspections" were received. These comments are:

- Comment: Limited agency and staff time will be better spent if inspections focus on sites that exhibit permittee inaction that result in deferred reclamation as well as on sites that exhibit other high risk characteristics such as large open pits, large hollow fills, and slurry disposal areas, and sites under deferred reclamation and permits with large backfilling requirements.

- Response: Agree. The proposed methodology allows for a reasoned determination of the number of inspections that will be focused and random depending on State characteristics.

- Comment: OSM to carefully allocate its resources with regard to random versus focused inspections. Random inspections require inspectors to spend significant amounts of their limited time looking at areas that are generally already in full compliance.

- Response: Agree. The proposed methodology allows for a reasoned determination of the number of inspections that will be focused and random depending on State characteristics.

- Comment: There is an abundance of data available to OSM that can be relied upon to identify those operators, permit characteristics, or geographic areas most likely to result in operations that violate surface mining regulations or permit conditions. Accordingly, OSM should allocate

the majority of its resources toward investigating these operations. However, OSM must also continue to expand its understanding of surface mining operations (and thereby identify additional operators, permit characteristics, or geographic areas likely to result in violations). OSM, therefore, should also use a random approach to assign a smaller proportion of its oversight inspections.

- Response: Agree. The proposed methodology allows for a reasoned determination of the number of inspections that will be focused and random depending on State characteristics. However, in some states with a limited number of IU's, use of the random selection process is impractical.

- Comment: Moreover, the agency needs to carefully consider how to allocate its resources with regard to random versus focused inspections. Random inspections require inspectors to spend significant amounts of their limited time looking at areas that are generally already in full compliance, rather than targeting resources where they are needed most.

- Response: Agree. The proposed methodology allows for a reasoned determination of the number of inspections that will be focused and random depending on State characteristics.

4. Recommend a methodology for selecting independent and joint inspections: The vast majority of oversight inspections will remain joint inspections. However, in order to validate and enhance the credibility of both State Regulatory programs and OSM oversight, OSM will conduct independent, unannounced oversight inspections.

The premise behind independent inspections is the lack of advance notification to the RA or operator of a pending oversight inspection. In this regard, OSM would independently select which site to inspect and also determine when the inspection will occur. However, the RA will be given the opportunity to accompany OSM on the inspection. The Field Offices will maintain the flexibility as to how they will schedule the inspections with the RA while still insuring that the minesite is not known to the RA or operator until the inspection is conducted or prior to meeting the RA to travel to the minesite. If the RA has a conflict and cannot accompany OSM on the inspection, OSM would conduct the oversight inspection without rescheduling.

Independent inspections may consist of partial or complete and focused or random inspections. These inspections will provide observations regarding the effectiveness of State programs and will be reported in OSM's annual oversight reports. An initial number of independent inspections will be 10% of the IU's selected for oversight inspections. The total number of independent inspections should be addressed in a Performance Agreement with the State RA. Deviations from these initial guidelines would also be addressed in the Performance Agreement. The IU's to receive independent inspections will be selected by the Field Office based upon trends, past violations, and other pertinent information. Each Field Office will track and evaluate the results (violations noted, TDN's issued, etc.) of these independent inspections on an ongoing basis. The FOD will then adjust the frequency and number (either up or down) of these inspections as necessary.

If an OSM inspector observes problems during an independent inspection while accompanied by the RA, OSM will not issue a TDN if the State cites the violation or gives adequate reason for not doing so. If the State is not present during an independent inspection, OSM will contact the State RA prior to the completion of the inspection, which includes the writing of the inspection report. The OSM inspector will then provide the State RA with the nature of the problem(s) and any additional information regarding the problem(s). The State RA will be given the opportunity to address these issues in a manner acceptable to the Field Office prior to the completion of the OSM inspection. The OSM inspector will issue a TDN when the State RA is unable or unwilling to take appropriate action. The Field Offices will still retain the flexibility to establish the criteria to determine when the OSM inspector must have their inspection reports completed.

As per 30 CFR 843.11(a), if an OSM inspector observes a condition at the minesite that requires the issuance of a cessation order and the inspector is not accompanied by the State RA, a cessation order should be immediately issued by the OSM inspector.

Disposition of Public Comments received

One comment concerning "Establish a methodology for determining the number and type of oversight inspections to be conducted on a state-by-state basis" was received as a result of OSM's Oversight Improvement Actions outreach effort. The comment reads as follows:

- Comment: The number and type of oversight inspections should be driven by state-specific and mining-location specific factors developed as part of the annual oversight plan which should be the subject of public review and comment before being implemented.

- Response: Agreed. This comment is addressed in the above proposed methodology where it states, "The total number of independent inspections should be addressed in a Performance Agreement with the State RA. Deviations from these initial guidelines would also be addressed in the Performance Agreement."