Introduction and Welcome
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Purpose of the Hearing:
Provide Information on the Proposed Rule
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Provide Information on the Proposed Rule
Provide Information on the Draft Environmental Impact Statement
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Get Your Input on both the Proposed Rule and DEIS
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We Look Forward to Receiving Your Comments
The Hearing Agenda

Welcome and informal poster session  5:00 p.m. – 9:00 p.m.
PowerPoint Presentation (Continuous)  5:00 p.m. – 9:00 p.m.
Written and Private Verbal Comments  5:00 p.m. – 9:00 p.m.
Registration for Public Comments  5:00 p.m.
PowerPoint Presentation (Hearing Room)  5:30 p.m. – 6:00 p.m.
Public Comments (Hearing Room)  6:00 p.m. – 9:00 p.m.
The Need for a New Rule

Revisions needed to:
The Need for a New Rule

Revisions needed to:

• modernize thirty year old regulations to reflect current science and technology
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• provide regulatory certainty to industry
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• modernize thirty year old regulations to reflect current science and technology

• provide regulatory certainty to industry

• more completely implement the Surface Mining Control and Reclamation Act
Addressing the Need:
Material Damage to the Hydrologic Balance

Revisions needed to:

• define the point at which mining impacts on water outside the permit area are unacceptable
Addressing the Need: Premining Data Collection

Revisions needed to:

• collect adequate premining data about proposed mining sites and adjacent areas to provide a baseline for determination of the impacts of mining
Addressing the Need: Water Monitoring

Revisions needed to:

• monitor groundwater and surface water during/after mining

• detect any adverse trends in time to take corrective measures
Addressing the Need:
Protection of Perennial and Intermittent Streams

Revisions needed to:

• ensure protection or restoration of perennial and intermittent streams and related resources
Addressing the Need:
Protection of Perennial and Intermittent Streams

Revisions needed to:

• ensure protection or restoration of perennial and intermittent streams and related resources

• ensure establishment of vegetated riparian corridors along all perennial, intermittent, and ephemeral streams
Addressing the Need: Objective Standards to Make Regulatory and Operational Decisions

Revisions needed to:

- ensure the use of objective standards
Addressing the Need: 
Objective Standards to Make Regulatory and Operational Decisions

Revisions needed to:

• ensure the use of objective standards

• ensure proper, high quality data is available for permitting decisions
Addressing the Need:
Using the Latest Science and Technology Available

Revisions needed to:

• ensure mine operators and regulatory authorities use latest science, technology, and methods
Elements of the Proposed Rule
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• protection of the hydrologic balance
Elements of the Proposed Rule

• protection of the hydrologic balance

• protection of streams and buffer zones for streams
Elements of the Proposed Rule

• protection of the hydrologic balance
• protection of streams and buffer zones for streams
• postmining land contours
Elements of the Proposed Rule

- protection of the hydrologic balance
- protection of streams and buffer zones for streams
- postmining land contours
- improved soils and revegetation on mined lands/protection of fish and wildlife and water
Major Feature of the Rule:
Direct Stream Protection Measures
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- prohibit mining in or within 100 feet of streams unless conditions met
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• restoration of hydrological form/ecological function of streams
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Direct Stream Protection Measures

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• restoration of hydrological form/ecological function of streams
• postmining drainage pattern similar to the premining drainage pattern
Major Feature of the Rule: Direct Stream Protection Measures

- prohibit mining in or within 100 feet of streams unless conditions met
- restoration of hydrological form/ecological function of streams
- postmining drainage pattern similar to the premining drainage pattern
- 100-foot riparian corridor along all streams using suitable native species
Major Feature of the Rule: Handling Excess Spoil
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- excess spoil fills constructed no larger than necessary to dispose of spoil
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- fills covering streams must meet additional criteria for approval
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- end-dumping prohibited consistent with the law
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- fills covering streams must meet additional criteria for approval
- end-dumping prohibited consistent with the law
- new criteria and standards for stability/durability of underdrains in fills
Major Feature of the Rule:
Defining Material Damage to the Hydrologic Balance
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• currently undefined in existing law and regulations
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- the definition would create a standard on allowable impacts on water
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Defining Material Damage to the Hydrologic Balance

• currently undefined in existing law and regulations

• the definition would create a standard on allowable impacts on water

• proposed rule would provide for numerical standards incorporated into permit
Major Feature of the Rule:
Complete Baseline Data
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- more complete water sampling to better document premining conditions and establish a baseline for comparison
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- parameters include selenium and an assortment of parameters relating to conductivity
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- parameters include selenium and an assortment of parameters relating to conductivity
- each location would be sampled once every month for one year
Major Feature of the Rule: Monitoring During Mining and Reclamation
Major Feature of the Rule: Monitoring During Mining and Reclamation

• improved water monitoring that must continue until final bond release

• biological condition of the streams is to be monitored each year

• monitoring data every five years and order any permit revisions necessary to remedy any adverse trends

• evaluation of monitoring data is part of applications for bond release
Major Feature of the Rule: Backfilling and Grading
Major Feature of the Rule: Backfilling and Grading

- coal companies are to minimize the generation of excess spoil
- final mine pit cannot be retained as a pond if doing so would create excess spoil or violate approximate original contour
- use backfilling techniques to minimize increases in conductivity and other parameters
Major Feature of the Rule:
Soils
Major Feature of the Rule: Soils

- salvage/redistribute topsoil and subsoil to improve growing conditions for trees and other vegetation
- salvage and use organic matter to improve plant growth and soil ecology
- minimize grading to avoid excessive compaction of the root zone
Major Feature of the Rule: Revegetation

- mine operators are to use native species to replant mine sites
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- use of professional forester or ecologist to develop planting plan for site revegetation with trees and shrubs
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- mine operators are to use native species to replant mine sites
- use of professional forester or ecologist to develop planting plan for site revegetation with trees and shrubs
- revegetation success standards must demonstrate restoration of premining capability
Major Feature of the Rule:
Fish and Wildlife

- update/strengthen protection of threatened/endangered species
- protect species proposed for listing as threatened/endangered
- enhancement measures mandatory when mining causes long-term environmental harm
The No-Action Alternative

- NEPA requires federal agencies to consider a ‘no action’ alternative
- in this case, the no action alternative would mean mining would continue under the 1983 Stream Buffer Zone Rule
- thirty-plus years have passed since that rule was implemented; shortcomings identified
The No-Action Alternative

- OSMRE may select the no action alternative
- considering the impacts of the no action alternative provides a baseline to compare the current rule with what is proposed
Considering Reasonable Alternatives
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• the no action alternative
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• the no action alternative
• the preferred alternative (the proposed rule)
Considering Reasonable Alternatives

• the no action alternative
• the preferred alternative (the proposed rule)
• an alternative that would be more protective of the environment
Considering Reasonable Alternatives

- the no action alternative
- the preferred alternative (the proposed rule)
- an alternative that would be more protective of the environment
- an alternative that restores the 2008 Stream Buffer Zone Rule
Considering Reasonable Alternatives

- the no action alternative
- the preferred alternative (the proposed rule)
- an alternative that would be more protective of the environment
- an alternative that restores the 2008 Stream Buffer Zone Rule
- alternatives that would apply in special circumstances such as steep slopes
Considering Reasonable Alternatives

- the no action alternative
- the preferred alternative (the proposed rule)
- an alternative that would be more protective of the environment
- an alternative that restores the 2008 Stream Buffer Zone Rule
- alternatives that would apply in special circumstances such as steep slopes
- variations of the previous alternatives
Comparing Alternatives to Protect Streams
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• stream miles not filled under the proposed regulations and each alternative
Comparing Alternatives to Protect Streams

- stream miles not filled under the proposed regulations and each alternative
- miles of mined-through streams restored under the proposed regulations and under each alternative
Comparing Alternatives to Protect Streams

• stream miles not filled under the proposed regulations and each alternative
• miles of mined-through streams restored under the proposed regulations and under each alternative
• miles of stream downstream from the permit area in better condition after mining under the proposed regulations than if mining occurred under the existing regulations
Comparing Alternatives to Protect Streams

- stream miles not filled under the proposed regulations and each alternative
- miles of mined-through streams restored under the proposed regulations and under each alternative
- miles of stream downstream from the permit area in better condition after mining under the proposed regulations than if mining occurred under the existing regulations
- miles of stream that would be preserved indirectly
Projected Benefits to Streams
Under the Preferred Alternative
Results projected for a 21 year period – 2020 to 2040
Projected Benefits to Streams
Under the Preferred Alternative

Results projected for a 21 year period – 2020 to 2040

- 6,153 miles of stream improved
- 21 miles of stream preserved
- 84 miles of stream not filled
- 609 miles of streams restored after mining through them
Comparing Alternatives to Protect Forests

Results projected for a 21 year period – 2020 to 2040

• “Improved Acres,” land with improved forest cover under the proposed rule
Comparing Alternatives to Protect Forests

Results projected for a 21 year period – 2020 to 2040

• “Improved Acres,” land with improved forest cover under the proposed rule

• “Preserved Acres,” forest left uncut under the proposed rule, compared to what would occur under existing regulations
Comparing Alternatives to Protect Forests

Results projected under the preferred alternative, 2020-2040

• 59,010 acres of forest land would be improved under the proposed rule

• 420 acres of forest land would be preserved
Comparing Alternatives: Impact on Coal Production

Results projected under existing regulations, 2020-2040

• forecast coal production will continue to decline under existing regulations
Comparing Alternatives: Impact on Coal Production

Results projected under existing regulations, 2020-2040

- forecast coal production will continue to decline under existing regulations
- this decline is driven by numerous market conditions such as the price of competing alternative fuel sources
Comparing Alternatives: Impact on Coal Production

Results projected under existing regulations, 2020-2040

• forecast coal production will continue to decline under existing regulations

• this decline is driven by numerous market conditions such as the price of competing alternative fuel sources

• declines of approximately 15% (162 million tons) are projected in annual total surface and underground production without any changes to the existing regulations
Comparing Alternatives: the RIA
Draft *Regulatory Impact Analysis* of the Alternatives

- Federal agencies are required to consider the costs and benefits of major regulatory revisions
- OSMRE has developed a draft Regulatory Impact Analysis to provide this information
RIA: Industry Impacts

- proposed regulations are estimated to impact the coal industry
  - compliance costs
  - coal production
  - employment
- impacts would vary by region
### RIA: Compliance Costs

<table>
<thead>
<tr>
<th>COAL REGION</th>
<th>ANNUALIZED COSTS</th>
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<tbody>
<tr>
<td></td>
<td>Surface</td>
</tr>
<tr>
<td>Appalachia</td>
<td>$17,000,000</td>
</tr>
<tr>
<td>Colorado Plateau</td>
<td>$2,500,000</td>
</tr>
<tr>
<td>Gulf Coast</td>
<td>$6,200,000</td>
</tr>
<tr>
<td>Illinois Basin</td>
<td>$14,000,000</td>
</tr>
<tr>
<td>Northern Rocky Mountains</td>
<td>$4,800,000</td>
</tr>
<tr>
<td>Northwest</td>
<td>$98,000</td>
</tr>
<tr>
<td>Western Interior</td>
<td>$550,000</td>
</tr>
<tr>
<td><strong>Total U.S. Compliance Cost</strong></td>
<td><strong>$45,000,000</strong></td>
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</table>
## RIA: Coal Production

<table>
<thead>
<tr>
<th>Region</th>
<th>Baseline (Million Tons)</th>
<th>Proposed Rule (Million Tons)</th>
<th>Change (Million Tons)</th>
<th>Change (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appalachian Basin</td>
<td>236</td>
<td>235</td>
<td>(0.9)</td>
<td>-0.36%</td>
</tr>
<tr>
<td>Colorado Plateau</td>
<td>56</td>
<td>56</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Gulf Coast</td>
<td>54</td>
<td>54</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Illinois Basin</td>
<td>171</td>
<td>170</td>
<td>(0.3)</td>
<td>-0.18%</td>
</tr>
<tr>
<td>North Rocky Mountains/Great Plains</td>
<td>533</td>
<td>532</td>
<td>(0.7)</td>
<td>-0.13%</td>
</tr>
<tr>
<td>Northwest</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Western Interior</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,053</strong></td>
<td><strong>1,051</strong></td>
<td><strong>(1.9)</strong></td>
<td><strong>-0.18%</strong></td>
</tr>
</tbody>
</table>
RIA: Employment Impacts

- production-related employment impacts estimated at 590 to 41 jobs annually, with an average projected annual reduction of 260 jobs.

- compliance-related annual impacts estimated to increase by 210 to 270 jobs annually, with an average annual increase in demand of 250 jobs.

- production related job losses are largely offset by increases in compliance related jobs.
Your Role In the Rulemaking Process

• OSMRE is seeking your input on the proposed rule, the DEIS, and the RIA

• examine the information provided, submit your comments in a timely manner

• comments due no later than October 26, 2015
Next Steps

• OSMRE will consider all comments while developing the final rule and EIS
Proposed Stream Protection Rule