BLM's New Regulations for Submission of Geospatial Data for Oil and Gas Projects

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- Overview of BLM's Revised Onshore Order No. 1
- The Order's Geospatial Data Submission Requirements
- BLM's Electronic Well Permitting and Current Direction
- Examples of Interagency & Industry Collaboration



BLM's Revised Onshore Order No. 1



Wednesday, March 7, 2007

Part II

Department of Agriculture

Forest Service 36 CFR Part 228

Department of the Interior

Bureau of Land Management 43 CFR Part 3160

Onshore Oil and Gas Operations; Federal and Indian Oil and Gas Leases; Onshore Oil and Gas Order Number 1, Approval of Operations; Final Rule

Provides Requirements for:

- Approval of All Proposed Oil & Gas Exploration, Development, or Service Wells on Federal & Indian Onshore Leases
- Includes Leases where Surface is Managed by the U.S. Forest Service
- Covers most Approvals necessary for Subsequent Well Operations, including Abandonment
- Original Order Promulgated in October of 1983



BLM's Revised Onshore Order No. 1 (Cont'd)



Significant Changes:

- Clarified Definition of "Technically and Administratively Complete" Application for Permit to Drill (APD)
- Requires BLM to Notify Applicant within 10-days on whether APD is Complete or Not
- Provides Split-Estate Protocol
- Clarifies BLM Bonding Authority
- Changes Drilling & Surface Use Plan Components of the APD
- <u>Establishes New Approval Process</u> for Master Plans of Development



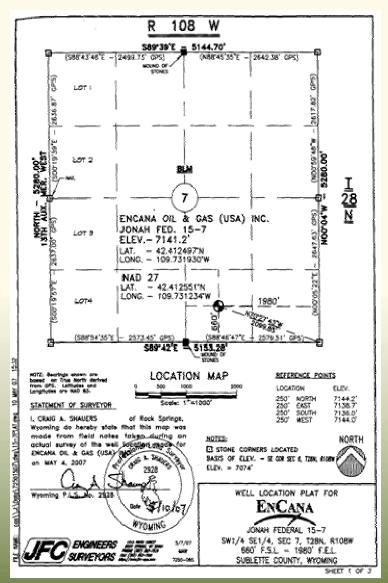
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The Order's Geospatial Data Requirements

- <u>Mandatory</u> The APD must include a Well Survey Plat and <u>Geospatial Database</u> prepared by a Registered Surveyor
 - ✓ Depicting Proposed Surface and Bottom-hole Locations of the Well, and
 - ✓ Identifying the Points of Control and Datum used to Establish the Section Lines or Metes and Bounds
 - ✓ Geographical Coordinates referenced to the National Spatial Reference System, North American Datum 1983 or Latest Edition; and
 - ✓ In Feet and Direction from the Nearest Two Adjacent Section Lines, or, if not within the Rectangular Survey System, the Nearest Two Adjacent Property Lines, Generated from the Public Land Survey System (PLSS)
 - <u>Clarification</u>: Order makes Reference to a Well Location Section Line Footage Offset based Upon the Use of BLM's Geographic Coordinate Database (GCDB). <u>Footage Offsets Should be Based</u> on the Actual PLSS.

Order's Geospatial Data Requirements (Cont'd)



□ Plat and Geodatabase must be:

- ESRI ArcMap "Shape File" or "Personal Geodatabase", or
- AutoCad Export File (*.dwg, *.dxf) including Map Projection Information and/or Spatial Datum Reference
- □ Geodatabase must Include:
 - Well Surface & Bottom-hole Lat / Long
 - Well Name, Number, Operator, Lease No., API no. (if available)
 - Surveyor's Name, State Registration Number, Plat Date
 - Legal Land Description Including Footage Calls

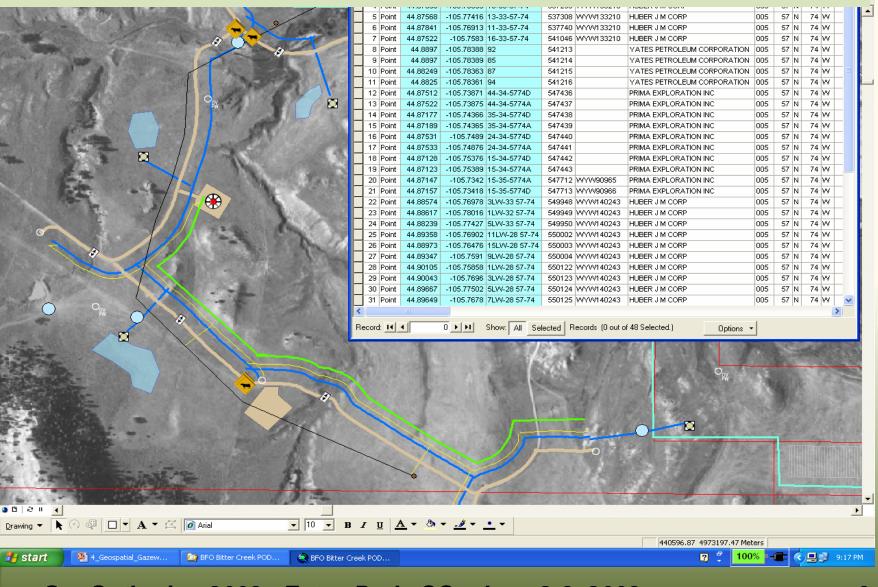


Order's Geospatial Data Requirements (Cont'd)

- APD must include a Surface Use Plan of Operation (SUPO)
- Can Optionally Submit a SUPO geospatial database
- BLM prefers ArcGIS Geodatabase to include:
 - Existing and New Roads, Well Locations
 - Well Site Layouts (Pad, Pits, Topsoil Stockpiles, etc.)
 - Location of Road and Pad Construction Materials and Water Supplies
 - Location of Ancillary Temporary Construction-related Facilities
 - Location of Existing and Proposed Production Facilities
 - Locations of Interim / Final Reclamation and Associated infrastructure



Order's SUPO Geospatial Data Requirements



Order's Geospatial Data Requirements (Cont'd)

Geospatial Database Implementation Guidelines

In Support of

Onshore Oil and Gas Order Number 1,
Approval of Operations

Developmental Draft 1.4 June 26, 2007

Prepared for:

U.S. DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT WASHINGTON, DC 20240

Prepared by:

BLM Washington Office Fluid Minerals Division (WO-310), BLM State, District and Field Offices Onshore Order Number 1 - Geospatial Database Submission Guidelines Developmental Draft 1.2 - May 15, 2007

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BLM Washington Office (WO-310)

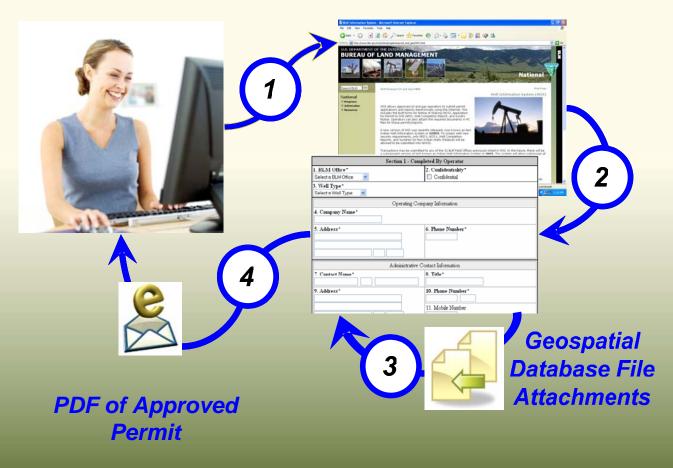


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BLM's Electronic Permitting & Current Direction

- Web-based Well Information System (WIS)
 - Probaris E-Forms System Utilizing BLM Federal Well Database
 - Submissions: NOS, APD, Completion Report & Sundry Notices





BLM's WIS Current Direction (Cont'd)

- Undergoing Enhancements for:
 - Multiple Well-Based Projects (e.g., CBNG POD, GAPs, etc.)
 - Support "Batch" Well Permit Submissions Using ePermit XML
 - ✓ Based on Industry's Well Information Transfer Standard XML
 Schema
 - ✓ Collaboratively Developed Under Auspices of API & POSC by:
 - MMS Offshore
 - BLM Onshore
 - State O&G Commissions via the Ground Water Protection Council (by DOE)
 - Industry Operators



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Interagency and Industry Collaboration

- Oil & Gas Well Permit Data Exchange Standards
 - ePermit XML Schema from Industry's WITSML XML Schema



- Rig/Rig Equipment
- Well
- Wellbore
- Wellbore Geometry
- Trajectory
- Target
- Survey Program
- Formation Marker
- Mud Log
- Log
- Conventional Core
- Sidewall Core
- Fluids Report
- Bottom Hole Assembly Run
- Tubular / Bit / Open Hole
- Cement Job
- Real Time
- Operations Report
- Message
- Subscription



Interagency and Industry Collaboration (Cont'd)

Business Case for Collaborative
Development of Shared Processes and
Procedures by Participating U.S. Federal
and State Regulatory Agencies to
Support Well Permits & Activity Reports

PREPARED BY

Groundwater Protection Council Technical Advisory Group

U.S. Bureau of Land Management

U.S. Minerals Management Service, Minerals Revenue Management & Offshore Minerals Management

API-PIDX REGS

POSC eRegulatory Special Interest Group

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- API-PIDX REGS Business Case
- Mapped State / Federal Permitt
 Data Rqmts to API-based DED
- Mapped to WITSML Schema
- BLM & State Agencies have Mapped to ePermit XML including XML Enumeration
- □ Now Testing in Colorado
- Envision a "Submit Once –
 Receive by Many" Concept



Interagency and Industry Collaboration (Cont'd)

- Development of O&G ePermit Portals
 - Wyoming Natural Resources Gateway (Wyoming NRG) Portal
 - √ Wyoming Oil and Gas Conservation Commission
 - √ Wyoming Dept. of Environmental Quality
 - √ Wyoming State Engineer's Office
 - **✓ BLM Wyoming**
 - ✓ Funded to \$1.8M by Wyoming State Legislature
 - ✓ Includes a ArcIMS Map Server Depicting Regulatory and Resource Information to Help Support the Project Permitting Workflow



Interagency and Industry Collaboration (Cont'd)

- Ongoing OO No. 1 SUPO Geospatial Submission
 - BLM Wyoming Buffalo and Rawlins (Pilot) Offices
 - ✓ Emerging Work with Anadarko and Williams Energy on CBNG PODS
 - ✓ Surface Reclamation Monitoring and Reporting with Anadarko
 - Other BLM States
 - ✓ New Mexico with Devon Energy for Improved Permit Submissions
 - ✓ Colorado with Encana and Williams Energy on Project Submissions



Questions or Comments?

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