

Hydraulic Fracturing (HF) Rule by BLM Onshore Federal and Indian Minerals

BLM Outreach to Stakeholders – 2015



U. S. Department of the Interior
Bureau of Land Management – www.blm.gov



HF - A Game Changer for Domestic Energy

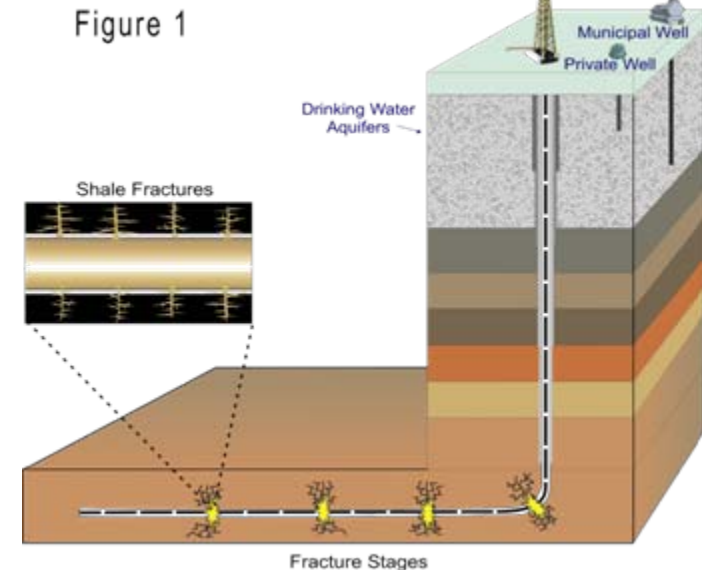
Emergence of New Technologies Involving Hydraulic Fracturing Caused Recovery of Hydrocarbons from Tight Shale Possible

- ❖ US Shale reserves now in top 3rd in World's major gas reserves
- ❖ Bakken Shale (ND) - Largest US oil discovery since Alaska at 3.6 Billion bbls

Innovations Comes with some Concerns

- Protection of groundwater, surface water
- Inter-well Communication or 'Frack Hits'
- Chemicals and additives in the fracturing fluid
- Large volumes of water needed for hydraulic fracturing
- Disposal of recovered fracturing fluid

Typical Hydraulic Fracturing



Rule Making Goals and Objectives

The BLM Hydraulic Fracturing (HF) Rule requires:

- Confirmed Wellbore Integrity (builds from Onshore Order 2)
- Public Disclosure of Chemicals used in the HF Fluid
- Safe Management of Recovered Fluid

The HF Rule –

- Improves public awareness of locations where HF has occurred
- Provides public disclosure of chemical used
- Clarifies and strengthens existing rules related to well construction
- Enhances safe management of recovered fluids
- Aligns requirements for protection of usable water zones with state and tribal authorities
- Provides opportunities to coordinate standards and processes with individual states and tribes

Wellbore Integrity

APD

requirements

The operator must:

•Protect Usable Water

- Identify usable water zones for isolation and protection.

•Prevent 'Frack Hits'

- Show suspected faults or fractures within ½ mile of the wellbore trajectory.
- Show all existing other wellbore trajectories within ½ mile of the HF well.

Operations

- Verify proper isolation and protection using adequate cementing.
- **Notify BLM if there is problem with the cement job.**
- Use BLM approved requirement practices to isolate and protect usable water.
- Monitor, record, and report cement flow rate, density, pressure, etc.
- Conduct or perform Mechanical Integrity Tests (MIT, a pressure test)-before HF operations.

Public Awareness and Transparency

APD
Process

The BLM will:

- Continue posting APD status and availability for 30-day public review.
- Include proposed HF well locations and other information.

Operations

- **Ensure public disclosure of chemicals used in HF Fluid by/through FracFocus (FF):**
 - Operator submits to FF within 30 days after completion of HF operations.
 - Provides description of each additive in the hydraulic fracturing fluid except proprietary additives (protected by the Trade Secret Act).
 - Provide trade name, supplier, purpose, ingredients, Chemical Abstract Service (CAS) Number, and maximum ingredient concentration in HF fluid (% by mass).
 - **Require submission of affidavit(s) to the BLM if claiming trade secret.**

Management of Recovered Fluids

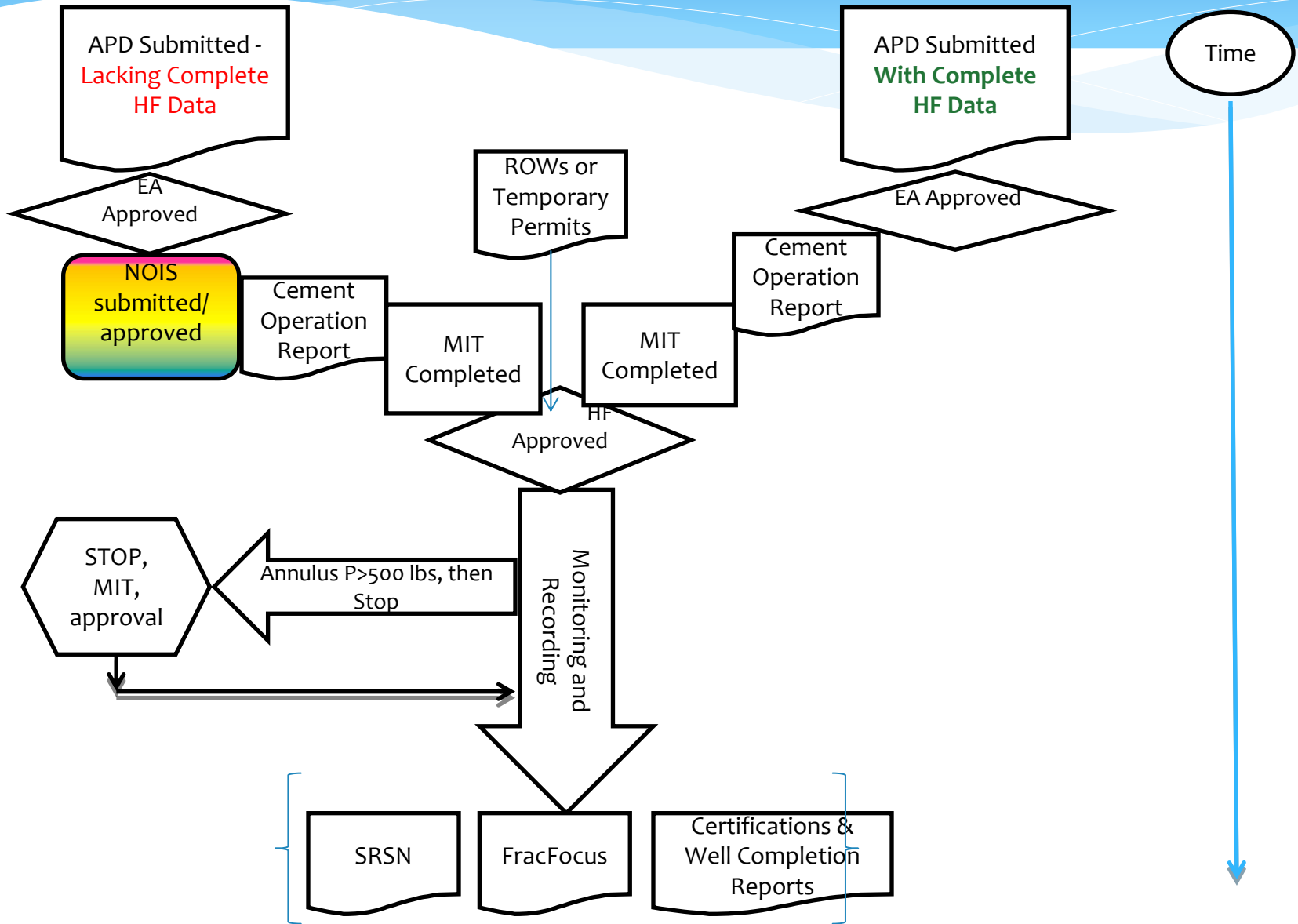
The Operator must:

- Use rigid above-ground tanks for recovered fluids until BLM approves produced water disposal plan.
- Use double-lined pits only with approval under very limited conditions (leak detection system if required).
- Certify the accuracy and correctness of data.

The BLM will:

- Require additional inspections.

APD and Notice of Intent Sundry (NOI's) for Hydraulic Fracturing



Rule Effective Date

- * Rule effective **June 24, 2015**
- * After, new APDs and operations under APD must meet all requirements
- * APDs approved before effective date will not require submittal of new information on HF
- * Certain operations will be grandfathered while others must comply

FR Publication + Correction Notice

The **BLM Hydraulic Fracturing (HF) Rule Published:**

- **March 26, 2015**

<http://www.gpo.gov/fdsys/pkg/FR-2015-03-26/pdf/2015-06658.pdf>

[Link to the Published HF Rule](#)

- **Correction Notice Published March 30, 2015**

<http://www.gpo.gov/fdsys/pkg/FR-2015-03-30/pdf/C1-2015-06658.pdf>

- On page 16218, in § 3162.3–3 (a)(5), first column, entry “(5) Authorized drilling operations were completed after ~~September 22, 2015.~~” should read “ **December 26, 2014.**”
- On the same table in the sixth row, the entry “(6) Authorized drilling activities were completed before ~~September 22, 2015~~” should read **December 26, 2014.**”

Usable Water

- * 43 CFR 3162.3-3(b)

Isolation of usable water to prevent contamination. All hydraulic fracturing operations must meet the performance standard in section 3162.5-2(d) of this title.

How to submit a request for Hydraulic Fracturing

- With an APD
- Via Sundry Notice

NOTE: Master HF Plan Can be submitted ahead of APD for NEPA evaluations/EAs of a multiple well site/area.

Other Requirements

- Wellbore/Casing Integrity Documentation
- Chemical Reporting Requirements
- HF (Fracking) Operations Monitoring
- Recovered Fluids Disposal Containment Requirements

Operator Requested Variances

43 CFR 3162.3-3(k)(1)

- Variance is submitted to the Authorized Officer (Field Manager)
- Authorized Officer can:
 - Approve
 - Approve with Conditions of Approval
 - Deny
- The decision on a variance request is not subject to administrative appeals either to the State Director or under 43 CFR part 4

Timeline (p. 16218)

If [**new wells**]

- * No APD was submitted as of June 24, 2015
- * An APD was submitted but not approved as of June 24, 2015 or an APD or APD extension was approved before June 24, 2015, but the authorized drilling operations did not begin until after June 24, 2015

Then

- * The operator must comply with all paragraphs of this section
- * To conduct hydraulic fracturing within 90 days after June 24, 2015, the operator must comply with all paragraphs of this section, except (c) and (d) (No new APD or NOIS required)

Timeline (p. 16218)

If [**ongoing wells**]

Then

- * Authorized drilling operations began, but were not completed before June 24, 2015; authorized drilling operations were completed after December 26, 2014; or

- * To conduct hydraulic fracturing within 90 days after June 24, 2015, the operator must comply with all paragraphs of this section, except (c) and (d) (No new APD or NOI's required)

Timeline (continued)

If [**old wells**]

- * Authorized drilling activities were completed before December 26, 2014

Then

- * The operator must comply with all paragraphs of this section [see section (e)(ii), submit documentation for wellbore integrity]

Coordination with States and Tribes

- MOU with States to facilitate O&G coordination and information sharing.
- HF rule explicitly does not preempt state regulation.
- Adopts state and tribal decisions on underground sources of usable water that do not need to be isolated and protected.
- Allows for broad variances that can apply to all wells within a state or within Indian lands.
- The BLM's decision on a variance request is not subject to administrative appeals.

Other Considerations

Regulations require operators to submit chemical data to FracFocus

MOU with GWPC – For Operation of FracFocus Data Base

(The Ground Water Protection Council (GWPC) runs the Chemical Disclosure Registry through FracFocus.org website)

- Notify BLM when operator uploads data.
- Provide BLM the ability to enter records, upload, download and view data in FF.
- Provide an operator's certification statement on accuracy and compliance.
- Use established records management standards in storing the disclosure data.
- Address specific issues (ex: data quality, search-ability) raised by the Secretary of Energy Advisory Board Task Force Report on FF 2.0, Mar 28, 2014.
- Include BLM as a member of their Technical Committee.



Questions?