WELL LOCATION RESTRICTIONS

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DEP Office of Oil and Gas
H6A Well Location Restrictions

- Public water supply intake
- Water well or developed spring
- Proposed H6A well
- Center of pad
- Cattle/poultry building
- 2500sq
- Dwelling
- 200'
- 100'
- 100'
- 250'
- 625'
- 825'
- Wetland
- Personnel stream
- Problematic stream

*Unless a waiver is provided from owner of water well, dwelling or farm
**Unless a DEP waiver or ACOE 404 permit is obtained
WELL LOCATION
RESTRICTIONS

WATER WELL OR DEVELOPED SPRING

• Wells may not be drilled within 250’ measured horizontally from any existing water well or developed spring used for human or domestic animal consumption.
H6A Well Location Restrictions

Proposed H6A well

Center of pad

Public water supply intake

Water well or developed spring

E & S Controls

>250 sq. ft. cattle/poultry building

Naturally-producing Trout Stream

Wetland

Personal stream

* Unless a waiver is provided from owner of water well, dwelling or farm

** Unless a DEP waiver or ACOE 404 permit is obtained
WELL LOCATION RESTRICTIONS

DWELLINGS OR CATTLE POULTRY BUILDINGS

• The center of well pads may not be located within 625’ of an occupied dwelling structure, or a building 2,500 square feet or larger used to house or shelter dairy cattle or poultry husbandry.

• Dwellings or cattle/poultry housings that are less then 625’ please provide a label showing the distance on the engineering plans.

• If there are structures that are within 1000’ of the center of the pad, provide a label. The label saves time during review determining whether or not a structure needs a waiver.
WELL LOCATION RESTRICTIONS
WELL LOCATION RESTRICTIONS

• This location restriction is applicable to those water wells, developed springs, dwellings or agricultural buildings that existed on the date the following are mailed:
  • Notice to the surface owner of planned entry for surveying or staking (WW-6A3)
  • Notice of intent to drill a horizontal well (WW-6A4)
• This includes any dwelling under construction prior to that date.
WELL LOCATION RESTRICTIONS

• This limitation may be waived by written consent of the surface owner.

• The Well Location Restriction Waiver WW-6RW must be recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located.
H6A Well Location Restrictions

- Public water supply intakes
- Wetland
- Water well or developed spring
- E & S Controls
- LOD - Sed
- Proposed H6A well
- Center of pad
- Natural trout stream
- > 2500 sq ft cattle/poultry building
- Dwelling

* Unless a waiver is provided from owner of water well, dwelling or farm
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WELL LOCATION RESTRICTIONS

PUBLIC WATER INTAKES

- No well pad may be located within 1000' of a surface or ground water intake of a public water supply.
- The distance from the public water supply as identified by the department shall be measured as follows:
  - For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir.
  - For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake.
  - For a groundwater source, the distance shall be measured from the wellhead or spring.
H6A Well Location Restrictions

- Distance from wetlands: 100 ft
- Distance from public water supply intake: 100 ft
- Distance from proposed H6A well: 250 ft
- Distance from center of pad: 200 ft (§ 22-6-27)
- Distance from dwelling: 300 ft
- Distance from >2500 sq. cattle/poultry building: 300 ft

* Unless a waiver is provided from owner of water well, dwelling or farm
** Unless a DEP waiver or ACOE 404 permit is obtained
WELL LOCATION RESTRICTIONS

NATURALLY REPRODUCING TROUT STREAMS

• No well pad may be prepared or well drilled within 300’ of a naturally reproducing trout stream
• This is measured from the Limits of Disturbance to the edge of the stream.
H6A Well Location Restrictions

* Unless a waiver is provided from owner of water well, dwelling or farm
** Unless a DEP waiver or ACOE 404 permit is obtained
WELL LOCATION
RESTRICTIONS

Perennial Streams, Wetlands, etc.

• No well pad may be prepared or well drilled within 100’ measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland.

• This is measured from the Limits of Disturbance or LOD of the well pad to the edge of the stream, lake or pond.
WETLAND AND PERENNIAL STREAM WAIVERs

• Distance restrictions for perennial streams, natural or artificial lakes, ponds or reservoirs, or wetlands may be waived upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state.

• A waiver, if granted, shall impose any permit conditions as the secretary considers necessary.

• Any proposed activity that will directly impact a wetland and/or perennial stream will require permit coverage from the United States Army Corps of Engineers (USACE).
WETLAND AND PERENNIAL STREAM WAIVERS

Request form can be found on the Horizontal Well Permit Packet – Application page

Updated 11/3/14

http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Horizontal%20Well%20Permit%20Packet/Pages/default.aspx
WETLAND AND PERENNIAL STREAM WAIVERS

• What do the engineering plans need to show?
  • Distance between the LOD and the stream or wetland
  • Increased BMP’s for the area that runoff will occur feeding the stream or wetland.
  • If possible redirect possible sediment laden water away from the stream or wetland, without eliminating their water source.
  • Any streams or wetlands that are close to the LOD but are greater 100’ provide a buffer dimension or other distance label.
WETLAND AND PERENNIAL STREAM WAIVERS

Compost Filter Sock backed with Super Silt Fence

Stacked Compost Filter Sock
WETLAND AND PERENNIAL STREAM WAIVERS
WETLAND AND PERENNIAL STREAM WAIVERS

WE LAND NOT TO BE DISTURBED. CONTRACTOR TO INSTALL ORANGE PROTECTION FENCE AROUND PERIMETER.

32” COMPOST Sock BACKED BY SUPER Silt FENCE AROUND WETLAND #2
Engineering Plans for H6A Pads

- Show and label the mountable berm
- Make sure all required notes are in the submitted plans
  - Compaction specs
  - Fill thickness
- Provide sections of associated pits/impoundments and large stock piles. Include volumes for each location.
- Show the sumps and their detail on the plans. Include the note “that there will be no discharge during drilling or completion activities”.
- Include berm breach locations and a detail for construction in the reclamation plans.
As-Builts

- Survey to the limits of the LOD; include any sediment and erosion control features that are still in place.
- Show and label all features on the well pad and associated structures, including the berm, sumps, production facilities, and tanks (with type, use and UTM coordinates).
- Provide an as-built of access road from the entrance at the public road to the well pad, including plan & profile with culvert locations, size & type and road grades.
- If you have not disturbed everything permitted in your original LOD, you do not need to submit a modification, just show the original LOD and the area disturbed in your as-built. Add a comment to indicate that the area was not disturbed.
**As-builts**

- Show API numbers for all wells on the well pad.
- On as-builts of pre-22-6A well pads, provide a short step-by-step reclamation plan.
- On as-built drawings for centralized impoundments or pits including berms, fencing, safety features, monitoring wells (if pit) & as-built of the access road from the entrance at the public road to the impoundment or pit.
- Have local oil & gas inspector review as-built drawings and initial prior to submittal to WVDEP-OOG
- Must be signed, sealed and dated by a West Virginia professional engineer.
ENGINEERING UPDATE

Centralized Pits & Impoundments

- MEAP's need to include the OEM director for the county the facility located in the contact list. The OEM director should be sent notification prior to construction.
- County inspector must sign off on the plans before we can issue the COA.
QUESTIONS