Construction Plans

Steve Young, PE, PS

Contact Information:

Steven.A.Young@wv.gov

Cell: 304 395-1835

Schedule: Tuesday thru Friday, 7:00 am-5:00 pm

dep

west virginia department of environmental protection

MODIFICATIONS FOR 22-6A WELL PADS

- **WHEN IS A MODIFICATION REQUIRED?:**

- *If the Limit of Disturbance(LOD) is expanded for any reason.*
- *Adding a waste storage pit or tank even if the LOD does not change.*
- *Adding a freshwater impoundment even if the LOD does not change.*

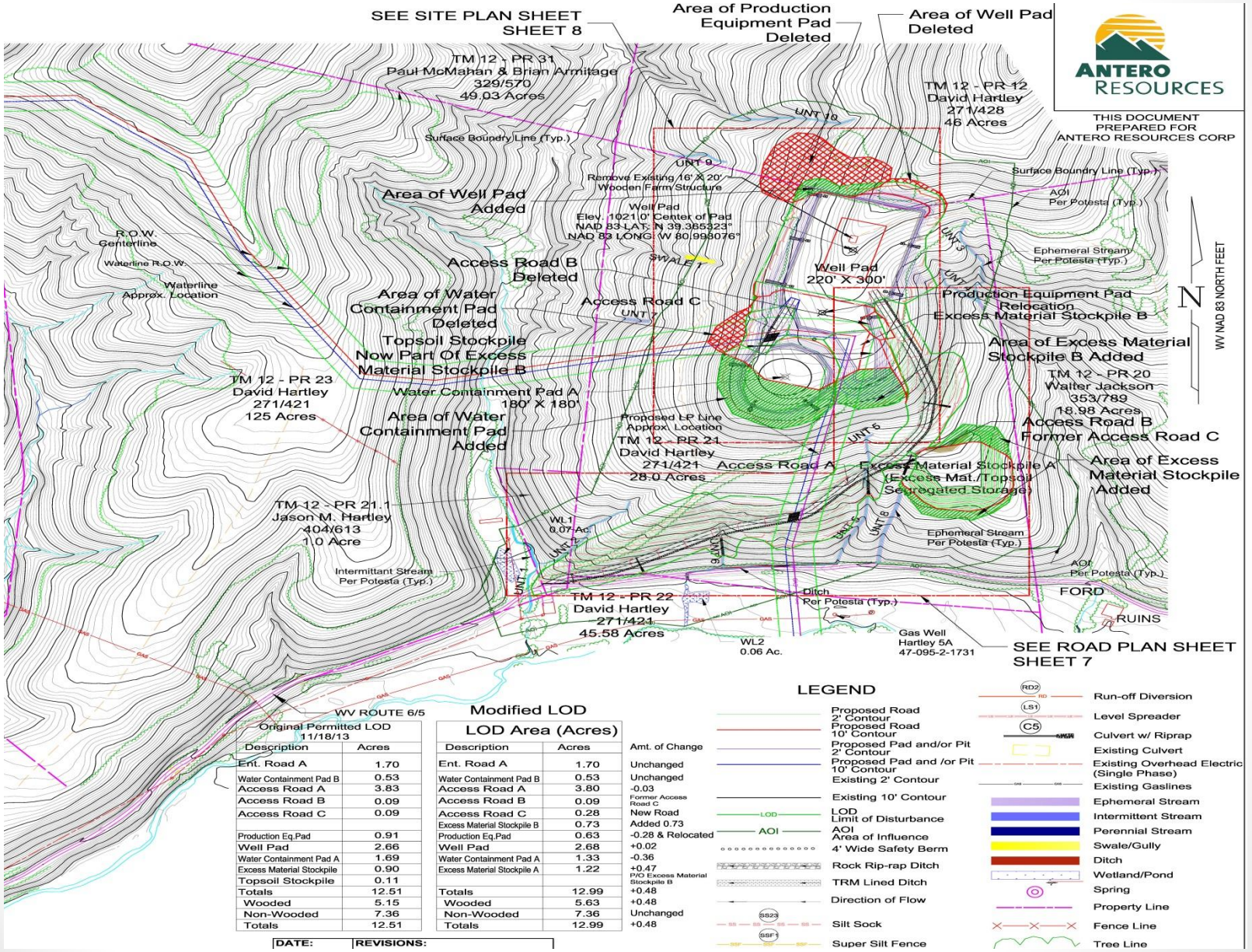
WHEN IS A MODIFICATION NOT REQUIRED?:

- Adding a culvert to a road.
- Adding sediment control measures over and above what was in the approved plan, but staying in the original LOD.

WHEN SUBMITTING A MODIFICATION:

- Do an As-Built drawing of the site showing the original LOD and corresponding acreage for the original permit. Clearly show the revised LOD and corresponding acreage to be added and/or deleted. Show the total acres after modification is approved(original acres + proposed acres – deleted acres = total acres)
- ***The use of color is strongly recommended for all mapping, Permitting or Modification***

Example Modification Map



WHEN SUBMITTING A MODIFICATION:

- Show the proposed sediment control for the added area as well as the existing sediment control for the existing area.
- Include all the API numbers on the plans(Title Sheet) that are currently permitted on the well pad.
- Mark the center of the well pad on the plans.
- Include a short step-by-step construction sequence.

WHEN SUBMITTING A MODIFICATION:

- Include compaction specifications for the construction.(12 inch maximum thickness lifts and compaction to at least 95% of the Standard Proctor density(ASTM D698))
- Be sure the pad is bermed or has other approved containment and there is no discharge during drilling and completion operations.
- Include a Reclamation Plan for the entire newly revised site.
- Be sure to breach berm and remove sumps at reclamation.

WHEN SUBMITTING A MODIFICATION:

- Include compaction specifications for reclamation.(24 inch maximum thickness lifts and compaction to at least 90% of the Standard Proctor density(ASTM D698))
- Include a transmittal letter clearly describing the modification.
- Show property lines and property ownership information.
- Surface owner notification/waiver(Form WW-6AW) for the modification.
- **When adding an AST, identify type of tank, freshwater or waste. Include tank volume, and mark tank center and provide center coordinates(UTM NAD83).**

WELL PAD REVIEW 22-6A

- Center of well pad marked?
- Fills compacted to 95% of Standard Proctor density(ASTM D-698), 12” maximum thickness lifts, not frozen or too wet, nothing larger than 6 inches?
- Construction entrance at intersection of public road & route number of public road noted?
- Road plans from well pad to public road? Culvert location, size & type shown on both road plan and profile? 12 inch minimum size culverts proposed?
- 10-20-20 fertilizer proposed for seeding?

WELL PAD REVIEW 22-6A

- Entire Well Pad should be bermed or have other approved containment and there is no discharge during drilling and completion operations.
- Sumps removed at reclamation, berms breached or removed and slopes protected below berm breach or where surface runoff is discharged from the pad? Breach

WELL PAD REVIEW 22-6A

- Liners for sumps, pit and impoundments proper thickness and disposed of off-site at reclamation?
- Short step-by-step reclamation sequence that includes lift thickness and compaction specifications? Plan View of site shown with post reclamation contours? 24” inch thick lifts maximum and a minimum of 90% compaction of Standard Proctor(ASTM D-698) for reclamation fills?
- Existing centralized pits and impoundments identified with ID numbers?

WELL PAD REVIEW 22-6A

- All existing wells shown on the plans with API numbers listed?
- All structures shown on map identified as to type? i.e. residence, outbuilding, church school, barn, etc. Show all schools and public buildings within a minimum of ½ mile of any proposed disturbance.
- Disturbed area broken down with acres listed for road(s), well pad, etc? Also, disturbed area by surface landowner.
- Step by Step Construction Sequence?
- Proposed pits, impoundments, & AST's need center coordinates(UTM NAD83), volume and type for tanks(waste or freshwater).

WELL PAD REVIEW 22-6A

- Show all symbols used in a legend. Place legends on all sheets where symbols are used.
- For existing access roads, show plan view on topographic map and provide profile of road showing culvert location, size and type, and show proposed construction entrance at the intersection with all public roads.
- Provide scale bars on all drawings.
- The use of color on drawings aids in the review of drawings.

Questions??