

# CENTRALIZED PIT & IMPOUNDMENT CONSTRUCTION and OTHER ISSUES

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INDUSTRY SEMINAR

CHARLESTON, W.VA.

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# *PITS & IMPOUNDMENTS* *HOW TO SUBMIT*

- SUBMIT FORMS (IMP-1B),  
MONITORING & EMERGENCY ACTION  
PLAN (MEAP) & CONSTRUCTION  
PLANS TO OFFICE OF OIL & GAS AS  
A PDF FILE

# *HOW TO SUBMIT??*

- SEND A COVER LETTER, APPLICATION FEE CHECK AND A CD OF FORMS, MEAP & PLAN DRAWINGS TO:

W.VA. DEPARTMENT OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL & GAS  
601 57<sup>TH</sup> STREET, SE  
CHARLESTON, WV 25304  
ATTENTION: KELLY KEES

- EMAIL ADDRESS: [KELLY.L.KEES@WV.GOV](mailto:KELLY.L.KEES@WV.GOV)
- PHONE NUMBER: 304 926-0499, EXT. 1734 OR  
CELL : 304 389-9577

## *HOW TO SUBMIT??*

- JUST LIKE THE 22-6A WELL PAD PLANS, HAVE THE LOCAL OIL & GAS INSPECTOR LOOK AT THE SITE, E & S PLANS AND INITIAL THE PLANS PRIOR TO SUBMITTAL TO WVDEP/OOG
- PROVIDE A COPY OF THE SIGNED OFF PLANS WITH THE APPLICATION PACKAGE

# MONITORING & EMERGENCY ACTION PLANS

- INSPECTION FREQUENCY FOR NORMAL CONDITIONS, USE A MINIMUM OF ONCE EVERY OTHER WEEK AND AFTER EVERY MAJOR RAIN EVENT PER 35-8-17.9.b
- ALWAYS INCLUDE THE COUNTY OEM DIRECTOR AS AN EMERGENCY CONTACT & INCLUDE OEM DIRECTOR ON THE DISTRIBUTION LIST
- INCLUDE IN MONITORING PLAN THAT THE PIT OR IMPOUNDMENT WILL BE MONITORED CONTINUOUSLY DURING THE INITIAL FILLING

# *PIT & IMPOUNDMENT INSPECTION*

- USE FORM PROVIDED BY THE WVDEP-00G FORM IR-11B
- SUBMIT A MONTHLY CERTIFICATION THAT INSPECTION HAS BEEN COMPLETED AS A PDF AND E-MAIL TO KELLY KEES
- MAINTAIN A FILE OF INSPECTIONS AT THE CLOSEST OFFICE TO THE PIT OR IMPOUNDMENT, AND FILE MUST BE AVAILABLE FOR REVIEW BY THE INSPECTOR OR OTHER AUTHORIZED WVDEP/OOG PERSONNEL UPON REQUEST

# ANNUAL REGISTRATION FEE

- “ALL OPERATORS HOLDING CERTIFICATES OF APPROVAL SHALL BE ASSESSED AN ANNUAL REGISTRATION FEE OF \$100.00. “ (35-8-17.7.b)
- THERE MUST BE AN UP TO DATE INSPECTION REPORT PROVIDED
- MEAPS MUST BE UPDATED EVERY YEAR WITH THE MOST CURRENT CONTACT INFORMATION OR A CERTIFICATION THAT THERE HAS BEEN NO CHANGES
- USE THE SAME METHOD OF SUBMITTAL AS THE APPLICATION – COVER LETTER, CHECK AND A CD OR THUMB DRIVE CONTAINING ALL FORMS (IMP-4), INSPECTION REPORT, AND MEAPs.

# LAND APPLICATION FROM FWI

- USE FORM PROVIDED BY THE WVDEP-00G FORM FWLP-88
- HAVE THE LOCAL OIL & GAS INSPECTOR LOOK AT THE SITE AND INITIAL THE FORM/PLANS PRIOR TO SUBMITTAL TO WVDEP-00G
- LOCATIONS MAY NOT DISCHARGE DIRECTLY INTO A STREAM
- MAKE SURE YOUR LAB ANALYSIS IS COMPLETE AND INCLUDING RESULTS FOR BTEX, OIL & GREASE AND CHLORIDES



The background of the slide is a dark, muted blue-grey color. It is decorated with numerous silhouettes of red leaves and flowers, scattered across the frame, particularly concentrated in the corners. The leaves vary in shape, including some with distinct veins and others that are more rounded or pointed.

# WELL PAD CONSTRUCTION

FREQUENTLY ASKED QUESTIONS.....

# FREQUENT NOD'S ON WELL PADS

- IF ROCK FILLS ARE TO BE USED THE MAXIMUM LIFT THICKNESS IS 36" PER DOH SPEC 207.73.2.3
- IN STANDARD SOIL FILLS THERE CAN BE NOTHING LARGER THAN 6" IN A 12" LIFT
- LOCATE THE MOUNTABLE BERM ON THE CONSTRUCTION PLANS AND PROVIDE A DETAIL
- IF THE BERM WILL BE BREACHED DURING RECLAMATION PROVIDE A BERM BREACH DETAIL
- LABEL ANY EXISTING STRUCTURES WITH THE TYPE, RESIDENCE, BARN, GARAGE, ETC.
- SHOW API# OF EXISTING WELLS ON THE CONSTRUCTION PLANS

# REVIEW CHECKLIST



## Well Pad Review 22-6A Checklist

**Pad Name:** \_\_\_\_\_ **Date of Application:** \_\_\_\_\_  
**Pad Operator:** \_\_\_\_\_ **Date of Review:** \_\_\_\_\_  
**Project Consultant:** \_\_\_\_\_ **API#’s:** \_\_\_\_\_

Title Sheet			
	Yes	No	Comments
Center of well pad marked including coordinates	<input type="checkbox"/>	<input type="checkbox"/>	
Location Map	<input type="checkbox"/>	<input type="checkbox"/>	
Construction entrance at intersection of public road (route number)	<input type="checkbox"/>	<input type="checkbox"/>	
Restrictions list ok?	<input type="checkbox"/>	<input type="checkbox"/>	
Breakdown of disturbed areas listed for roads, well pad, etc.	<input type="checkbox"/>	<input type="checkbox"/>	
Breakdown of disturbed area by property owner	<input type="checkbox"/>	<input type="checkbox"/>	
Signed by a WV PE	<input type="checkbox"/>	<input type="checkbox"/>	
General Notes and Specifications			
	Yes	No	Comments
Construction Sequence	<input type="checkbox"/>	<input type="checkbox"/>	
Erosion and Sediment control plan showing 10-20-20 fertilizer	<input type="checkbox"/>	<input type="checkbox"/>	
Fills compacted to 95% of Standard Proctor density (ASTM D-698)	<input type="checkbox"/>	<input type="checkbox"/>	
12" maximum thickness lifts, nothing frozen or too wet	<input type="checkbox"/>	<input type="checkbox"/>	
Nothing larger than 6" in the fill, free of objectionable material	<input type="checkbox"/>	<input type="checkbox"/>	
Rock fill lifts no greater than 36"	<input type="checkbox"/>	<input type="checkbox"/>	
Reclamation sequence	<input type="checkbox"/>	<input type="checkbox"/>	
24" maximum lift thickness for reclamation	<input type="checkbox"/>	<input type="checkbox"/>	
Reclamation fills compacted to 90% of Standard Proctor density (ASTM D-698)	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	

Plans			
	Yes	No	Comments
All symbols used in a legend	<input type="checkbox"/>	<input type="checkbox"/>	
Scale bars	<input type="checkbox"/>	<input type="checkbox"/>	
Existing structures identified on map	<input type="checkbox"/>	<input type="checkbox"/>	
Center of well pad marked including coordinates	<input type="checkbox"/>	<input type="checkbox"/>	
Center of proposed pits, impoundments, & AST with coordinates (volume & type for tanks) Secondary containment for pits	<input type="checkbox"/>	<input type="checkbox"/>	
Plans show from public road to the well pad	<input type="checkbox"/>	<input type="checkbox"/>	
Existing well locations shown with API#	<input type="checkbox"/>	<input type="checkbox"/>	
Centralized Pits and Impoundments shown with ID#	<input type="checkbox"/>	<input type="checkbox"/>	
Culvert locations, size and type shown on both plan and profile (12" minimum)	<input type="checkbox"/>	<input type="checkbox"/>	
Berm shown on Well pad (w/ sumps)	<input type="checkbox"/>	<input type="checkbox"/>	
Surface water diversion ditches	<input type="checkbox"/>	<input type="checkbox"/>	
Top soil removed and stockpiled for reuse	<input type="checkbox"/>	<input type="checkbox"/>	
Utilities identified and relocated?	<input type="checkbox"/>	<input type="checkbox"/>	
Toe bench detail	<input type="checkbox"/>	<input type="checkbox"/>	
Sump Detail	<input type="checkbox"/>	<input type="checkbox"/>	
No from sump during operation note	<input type="checkbox"/>	<input type="checkbox"/>	
Mountable berm detail	<input type="checkbox"/>	<input type="checkbox"/>	
Terracing of steep fills, 10' wide for each 50 vertical feet	<input type="checkbox"/>	<input type="checkbox"/>	
No fills steeper than 2:1	<input type="checkbox"/>	<input type="checkbox"/>	
Profiles – access road no more than 20% grade	<input type="checkbox"/>	<input type="checkbox"/>	
Cross sections of the pad (L & W)	<input type="checkbox"/>	<input type="checkbox"/>	
Reclamation – Berms breached or removed and slopes protected below breach or where surface runoff is discharged	<input type="checkbox"/>	<input type="checkbox"/>	
Reclamation – Berm breach detail	<input type="checkbox"/>	<input type="checkbox"/>	
Reclamation – sumps removed	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	

# PERMITTING NEW WELLS ON

## PRE-22-6A PADS

- ANY WELL PADS THAT WERE BUILT PRE-22-6A AND NEW WELL WORK PERMITS ARE BEING APPLIED FOR, THEY NEED TO BE BROUGHT UP TO CURRENT STANDARDS
- MODIFY AS-BUILTS PLANS OF SITE TO ADD BERM AROUND THE PAD
- MOUNTABLE BERM AT THE ENTRANCE, INCLUDING A DETAIL
- PROVIDE A RECLAMATION PLAN
- NEED TO BE SIGNED AND SEALED BY A WV PE

# AS-BUILT PLANS

- ALL FEATURES ON THE WELL PAD AND ASSOCIATED STRUCTURES, INCLUDING THE BERM, SUMPS, PRODUCTION FACILITIES, IMPOUNDMENTS/PITS AND TANKS (TYPE, SIZE AND UTM COORDINATES FOR THE CENTER)
- THE ACCESS ROAD MUST BE SHOWN FROM ITS CONNECTION TO THE LOCAL ROAD TO THE WELL PAD, PROVIDE PLAN AND PROFILE WITH ALL DRAINAGE FEATURES.
- SURVEY TO THE LIMITS OF THE LOD, INCLUDE ANY SEDIMENT AND EROSION CONTROL FEATURES THAT ARE STILL IN PLACE.
- 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
- NEED TO BE SIGNED AND SEALED BY A WV PE
- PROVIDE ENGINEER'S CERTIFICATION THAT CONSTRUCTION PLANS & SPECIFICATIONS WERE FOLLOWED, OR PROVIDE DETAILS ON CHANGES MADE TO THE ORIGINAL PLANS ON THE AS-BUILT DRAWINGS
- HAVE LOCAL OIL & GAS INSPECTOR REVIEW AS-BUILT DRAWINGS AND INITIAL PRIOR TO SUBMITTAL TO WVDEP-OOG

# MODIFICATIONS FOR 22-6A WELL

## PADS

### ➤ WHEN IS A MODIFICATION REQUIRED?

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

### ➤ WHEN IS A MODIFICATION NOT REQUIRED?

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

### ➤ WHEN CAN A MODIFICATION NOT BE DONE?

- When all wells on a pad have been totally released. Once well permits have been released, you must go thru OOG Inspection & Enforcement and request an order be issued by the chief.

# MODIFICATIONS FOR 22-6AWELL

## PADS

### ➤ WHEN SUBMITTING A MODIFICATION:

1. 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 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!!
2. Show the proposed sediment control for the added area as well as the existing sediment control for the existing area.
3. Include all the API numbers on the plans (title sheet) that are currently permitted on the well pad.
4. Mark the center of the well pad on the plans.
5. Include a short step-by-step construction sequence.
6. Include compaction specifications for the construction. (12 inch maximum thickness lifts and compaction to at least 95% of the Standard Proctor density (ASTM D698))
7. Be sure the pad is bermed and that there is no discharge during drilling and completion operations.

# MODIFICATIONS FOR 22-6A

## WELL PADS

### ➤ WHEN SUBMITTING A MODIFICATION:

8. Include a Reclamation Plan for the entire newly revised site.
9. Be sure to breach berm and remove sumps at reclamation.
10. Include compaction specifications for reclamation. (24 inch maximum thickness lifts and compaction to at least 90% of the Standard Proctor density (ASTM D698) (22-6A FAQ-MOD-1.0 2014-9-30)
11. Include a transmittal letter clearly describing the modification. Include the API numbers for all the wells currently permitted on the well pad.
12. Show property lines and property ownership details.
13. Surface owner notification/waiver (Form WW-6AW) for the modification.
14. When adding an AST, identify type of tank, freshwater or waste. Include tank volume, and mark tank center and provide center coordinates (UTM NAD83).
15. Have the Oil & Gas Inspector review & sign the plans prior to submittal.



# MODIFICATIONS FOR 22-6A WELL PADS

- IN THE TRANSMITTAL LETTER EXPLAIN THE MODIFICATIONS TO THE PLANS.
- INCLUDE THE API# IN THE LETTER.
- ON THE CONSTRUCTION PLANS SHOW THE CHANGES WITH EITHER A CLOUD OR A COLORED OUTLINE

THIS EXPEDITES THE REVIEW PROCESS



QUESTIONS??????????