

Title V Permit Modifications In North Carolina

Carolinas Air Pollution Control Association

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Regulations

15A NCAC 02Q .0500
“Title V Procedures”



WEBSITE

- Website front door

<https://deq.nc.gov/about/divisions/air-quality>

- Rules

*/air-quality/air-quality-rules

- Permitting

*/air-quality/air-quality-permitting

- Links to forms, guidance memos, procedures, etc.

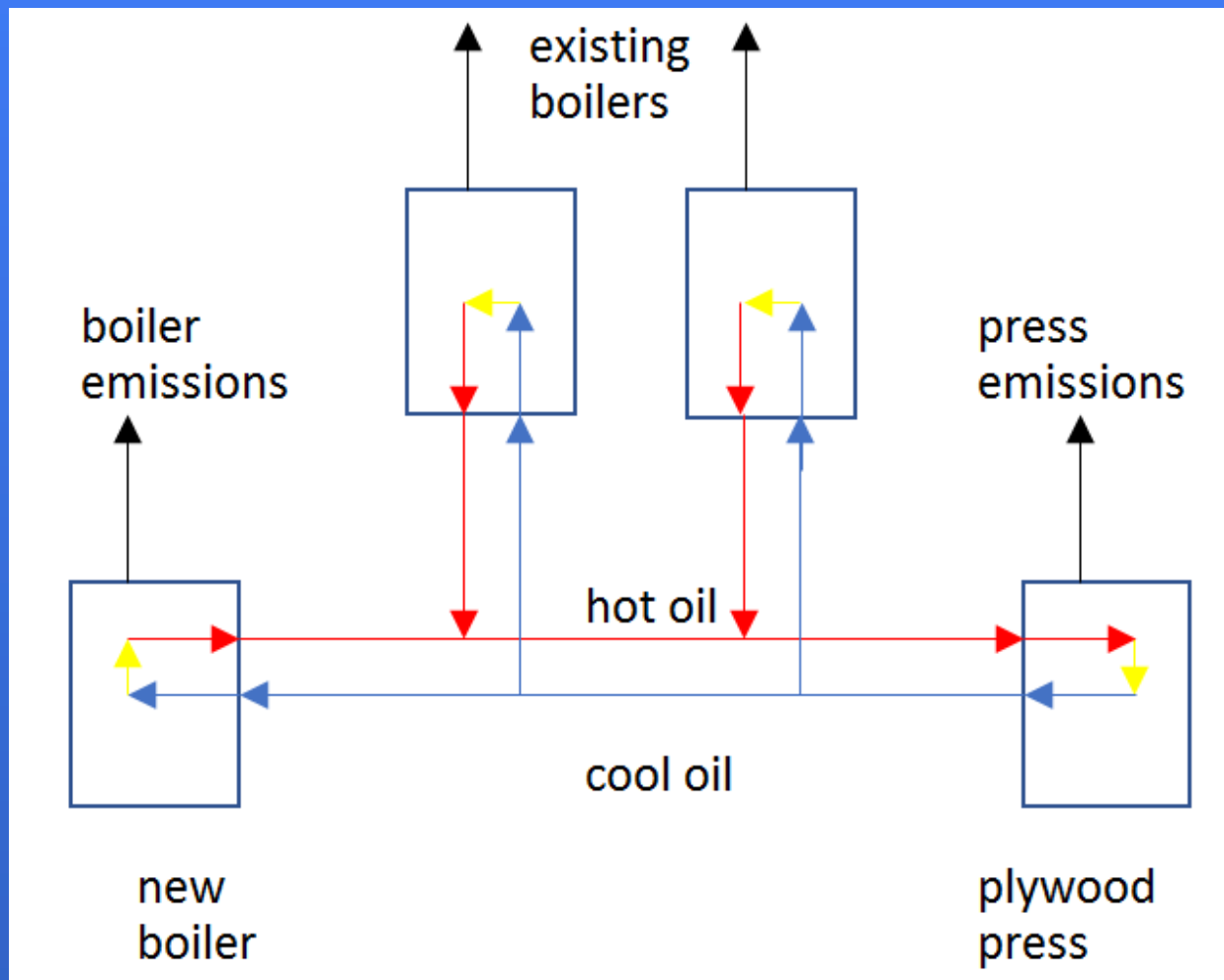


Base scenario

- Plywood production facility that operates a hot oil heated press
- Press is operated at maximum capacity
- Facility is major for Title V, PSD, HAPs
- The press is subject to MACT and PSD requirements
- Source of heat are two existing natural gas-fired boilers
- ADD a new 10 MMBtu/hr natural gas-fired boiler.
- Is a permit required?



Base scenario



Permitting Required?

- The changes not requiring a permit are addressed in 02Q .0523(b), “Changes Not Requiring Permit Revisions”
 - Changes that affect only insignificant activities and the activities remain insignificant after the change; or
 - the change is not covered under any applicable requirement;



Permitting Required?

- Press Emissions are unaffected since already operating at maximum utilization
- Emission increase associated solely with new boiler



Off-permit changes 02Q 0523(b)

- (1) The change affects only insignificant activities and the activities remain insignificant after the change.
- Insignificant Activities are defined in 02Q .0503 “DEFINITIONS” at (7) and (8).
 - 02Q .0503(7) activities because of category
 - e.g., mobile sources, small comfort heating units
 - 02Q .0503(8) activities because of size or production rate
 - Less than 5 tpy of uncontrolled criteria pollutants and 0.5 tpy of HAP
- Consider size exemption



Off-permit changes 02Q 0523(b)

- Estimate potential controlled emissions (PTE)
 - Natural gas-fired
 - 10 MMBtu/hr maximum heat input
 - Assume 8,760 hours per year operation
 - Use AP-42 emission factors
 - DAQ spreadsheets
- PTE
 - Criteria pollutant, maximum, NOX = 4.3 tpy
 - HAP, maximum, hexane = 155 pounds per year



Off-permit changes 02Q 0523(b)

- NO permit required for boiler
- However, still subject to all other applicable requirements
 - SO2 (02D .0516)
 - Visible emissions (02D .0521)
 - NSPS Subpart Dc (02D .0524)
 - MACT 5D (02D .1111)



Off-permit changes 02Q 0523(b)

- Pursuant to General Condition T, must keep records demonstrating insignificant activity status
- The permittee shall submit a current list of insignificant activities with the next permit application pursuant to 02Q .0507



Removing an Emission Source

- Consider: Remove an existing boiler from the permit.
- Is a Permit Required?



Removing an Emission Source

- **No**
 - Permittee must simply comply with the recordkeeping requirements of General Condition LL in Section 3 of the TV permit.
- **OR**
 - Request to remove the source and permit conditions form the permit pursuant to 02Q .0514” Administrative Permit Amendments”
 - No fee
 - Revised permit will be issued



15 MMBtu/hr boiler

- Assume base scenario except:
 - Boiler is 15 MMBtu/hr instead of 10 MMBtu/hr
- Is a permit required?



15 MMBtu/hr boiler

- Estimate potential controlled emissions (PTE)
- PTE
 - Criteria pollutant, maximum, NOX = 6.5 tpy
 - HAP, maximum, hexane = 232 pounds per year
- YES a permit required BUT, what are my options?



15 MMBtu/hr boiler

- Type of permit application required is a function of the changes necessary to the permit.
- What new permit conditions are required for the new boiler?
 - conditions for 02D .0516, 0521, 0524 and 02D .1111.)
- What changes are necessary to the existing conditions none?
 - None



Minor Modifications

- In accordance with 15A NCAC 2Q .0515 “Minor Modifications”, permittees may make changes to their facility prior to receiving a revised permit if the following four conditions are met:
 - Changes meet the requirements at 02Q 0515(a):
 - The permittee submits a complete Title V permit application.
 - The permittee has received an acknowledgment letter that the application is complete.
 - The Permittee follows the proposed interim permit terms and conditions and any other applicable requirements governing the change(s) until the DAQ takes final action on the application.



Minor Modifications

- Upon receipt the DAQ will review the application for completeness only and will send a completeness determination letter within 10 days of receipt.
- The DAQ will proceed with processing the application with a 90 calendar day clock.
- The permit will be issued incorporating the changes but will not be covered under the permit shield (02Q . 0512) until the changes are subject to public notice procedure.
- If the DAQ subsequently determines that the application is inadequate, the facility may be subject to enforcement for having failed to obtain a permit revision prior to the change.



Minor Modifications

- If the Permittee is not time constrained, the permit may request a minor modification and simply not construct prior to permit issuance.



Big Boiler

- What if the permittee wants to install a 99 MMBtu/hr boiler instead of a 15 MMBtu/hr boiler?
- Sure, a permit is required, but is it still a minor modification?



99 MMBtu/ hr boiler

- Estimate potential controlled emissions (PTE)
- PTE
 - Criteria, maximum, NOX = 42.5 tpy
- Since PTE over 40 tpy of NOx, modification is major for PSD purposes.
- PSD permitting requirements found at 02D .0530 and .0544



Minor Modifications 02Q .0515(a)

- (a) The procedures in this rule shall apply to permit modification if the modifications:
 - (5) are not modifications pursuant to any provision of Title I of the federal Clean Air Act;
- (a)(5) means PSD major modification



Significant Modification

- But what if they facility does not need the new boilers full capacity and hence is willing to operate such that its PTE will be less than 40 tpy?



Significant Modification

- But what if they facility does not need the new boilers full capacity and hence is willing to operate such that its PTE will be less than 40 tpy.
- Can the permittee request an operating restriction to limit emissions below the levels that trigger PSD review AND avail itself of the ability to construct and operate prior to receiving an air permit?



Significant Modification

- But what if they facility does not need the new boilers full capacity and hence is willing to operate such that its PTE will be less than 40 tpy.
- Can the permittee request an operating restriction to limit emissions below the levels that trigger PSD review AND avail itself of the ability to construct and operate prior to receiving an air permit?

NO



Minor Modifications 02Q .0515(a)

- (a) The procedures in this rule shall apply to permit modification if the modifications:
 - (4) do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the facility has assumed to avoid an applicable requirement to which the facility would otherwise be subject. Such terms and conditions include:
 - (A) a federally enforceable emissions cap assumed to avoid an applicable requirement pursuant to any provision of Title I of the federal Clean Air Act;



Significant Modifications 02Q .0516

- If not minor pursuant to 02Q .0515, modification is significant and processed pursuant to 02Q .0516 “Significant Modifications”
- 02Q .0516 “Significant Modifications” captures all modifications or changes not covered elsewhere in 02Q .0500 Title V Procedures.



Significant Modifications 02Q .0516

- Significant modifications are allowed up to 270 days to issue a draft permit
- Public and EPA review adds at least 45 days
- Usually review does not take 270 days
- 02Q .0516 allows for two options
 - public and EPA review prior to permit issuance
 - Permit issuance and subsequent public and EPA review



Significant Modifications 02Q .0516

- The permittee requests an operating restriction to limit emissions below the levels that trigger PSD review.
- Implemented through 02Q .0317 “Avoidance Conditions”
- In this scenario, no conditions are added to the permit that conflict with the existing permit conditions.



Significant Modifications 02Q .0516

Two Step

- 02Q .0516(c) allows for a two step process in this scenario via 02Q .0504 “Option for Obtaining Construction and Operation Permit”
- Obtain a permit via 02Q .0300 “Construction and Operation Permits”
- Permit issued under “State” permitting rules
- 90 day clock
- Looks like TV permit but no permit shield



Significant Modifications 02Q .0516

Two Step

- Permit condition requiring the submittal of another complete application within 12 months after commencing operation to modify the construction and operation permit to meet the requirements of Section 02Q .0500
- Second step also requires another application fee.
- Is then subjected to public and EPA review.



Significant Modifications 02Q .0516

One Step

- Permit issuance time same as for minor modification (90 days) but no allowance to construct and operate.
- If permittee cannot take a limit, a one step modification.
- Are there any options to expedite the permit issuance?



Notice of Intent to Construct (NOI)

- Allowed pursuant to GS. 143-215.108A
- Detailed information is provided on the website
- All types of applications EXCEPT New facilities, PSD and PSD avoidance
- Permitted facility may start the construction process of the modification prior to the receipt of a permit if certain criteria are met.



Notice of Intent to Construct (NOI)

- Publication of a NOI in local newspaper at least 15 days prior to construction; submit proof of publication to DAQ. The notice must include a full description of the project, its emissions etc.
- Submit NOI “application” and fee to the DAQ
- DAQ will approve or deny permission within 15 days of receipt of a complete NOI and receipt of proof of publication.
- Construction at Permittee’s own risk



Notice of Intent to Construct (NOI)

- In the scenarios discussed, can the Permittee take advantage of the NOI?



Notice of Intent to Construct (NOI)

- In the scenarios discussed, can the Permittee take advantage of the NOI?
- Yes, it can for any of the projects that do not involve the 99 MMBtu/hr boiler
- No, if the project involves
 - PSD
 - PSD avoidance



Conclusion

- 02Q .0513 “Permit Renewal and Expiration” revised
- Renewal applications now due six months in advance (instead of nine)
- All TV permits issued after April 1, 2018 will reflect this change
- You must comply based on your permit
 - Can be revised administratively upon request.



Conclusion

- Please call the TV permitting section if any questions
- Submit an applicability determination
- Submit application with NOI
- Use up-to-date forms
- Complete all forms
- Submit supporting calculations in Excel upon request



QUESTIONS?

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END

