

IOWA DEPARTMENT OF NATURAL RESOURCES

LEADING IOWANS IN CARING FOR OUR NATURAL RESOURCES



Effective Permit Writing Tips

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Air Quality – Core Purpose

- Protect Public Health & Welfare
 - Health
 - National Ambient Air Quality Standards (NAAQS)

– Public Welfare

- Economic viability of an area
- Property values
- Other more traditional measures





Corollary Goals



- Require permits for sources important to Air Quality Management (AQM) purposes
- Allocate limited air resources effectively
- Issue Permits
 - Each term & condition furthers core purpose
 - No arbitrary requirements
 - Effective, workable, and prepared efficiently
 - Timely



What is a Permit?

- Legal tool
 - Extension of the regulations
 - \circ Reflects outcome of permit review process
 - \circ Defines what is expected of source
 - Primary basis for enforcement
 - Basically a contract
 - $\circ\,$ Between company and regulatory agency





Goals of a Permit

- "Stand-alone" document that:
 - Identifies emission unit(s) to be regulated
 - Establishes emission standards and/or other operational limits to be met
 - Specifies methods for determining compliance
 - Outlines procedures necessary to maintain continuous compliance with standards & limits



How to Achieve Permit Goals

- Process consistency
 - Everyone is aided
 - Applicability decisions
 - Between permits
- Permit must contain conditions that are:
 - Specific
 - 3 C's
 - o Clear
 - o Concise
 - Consistent
 - Enforceable



Process Consistency

- No consistency **=** moving target
- Consistency 🚅 exact same permits/decisions
 - Still case-by-case

• Can lead to different results even with consistent thought process







(aka long term success)

PROCESS CONSISTENCY



Consistency – Construction Permit Section

- Use good permits as templates
 - Concept of "good" is elusive
 - Gather input from
 - \circ inspectors
 - o attorneys
 - o compliance personnel
 - o permittees
- Peer review (Senior Engineer)
 - Each permit & determination letter
 - Each Senior assigned
 - $\circ 1-2$ engineers
 - Rotate each year





Consistency – Construction Permit Section

Construction Permit Manual

- Procedures
- Periodically updated
- Consistency topics
 - Started in 2015
 - 1 topic each staff meeting
 - "Consistency Engineer"
 - Senior Engineer on a 1 year rotation
 - Written document
 - Stored in electronic library
 - Keep an updated list of future topics





Sampling of Past Consistency Topics

- Rounding/significant digits
- Redundant limits
- Number of digits in permit limits
- Proper citation of
 - Rules
 - Orders
- Smokehouse permitting
- Terminology
 - Example: major vs. area





Sampling of Future Consistency Topics

- Ethanol plant testing
- CISWI language
- Evaluating old stack test data
- Engineering evaluations
- VOC recordkeeping
- Minimum detection limits
- Averaging times
- Replacement of components for combustion turbines



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EFFECTIVE PERMITS



Minimal Number of Permit Requirements

- Past Practice
 - Have an emission limit for every pollutant
 - Have as many operating conditions as possible
 - Problems
 - Not best use of resources
 - More work for permit writer
 - More work and higher cost for company
 - More chance of noncompliance
 - Dilutes attention from most important conditions
 - Some conditions are "bootstrap"



Minimizing Permit Requirements

- Examine need for each requirement
 - Discuss amongst staff (if needed)
 - Make sure to have a basis
- Emission Limits are always core requirement
 - Responsible for environmental impacts
 - Regulation of emissions == strongest part of authority





Minimizing Permit Requirements (Continued)

- Focus on:
 - Protecting public health and welfare
 - Calling attention to requirements in rules & regulations
 - Requirements that
 - \circ Improve unit/process/control equipment operation
 - Ensure continual compliance
- Leave out conditions that are:
 - Redundant
 - Unauthorized
 - Unnecessary



Permit Language



- Permit is a legal document
 - Therefore, will have legal terminology
 - However, know the reader
 - \circ Might not have detailed knowledge of rules or terminology
 - \circ Keep it simple if possible
- Basic purpose of permit requirements are to tell permittee
 - What is allowed,
 - What is prohibited, and/or
 - What is required
 - \circ Including how and when



Permit Language (Continued)

- Regardless of purpose each requirement needs to be
 - Clear
 - Concise
 - Consistent



Clear

- Positive & direct terms
- Avoid vague and negative language
- Minimize exceptions or conditional statements
 - Shall, will, and must instead of *should*, *would*, *and may*
 - "Within 24 hours" instead of "as soon as possible"
 - "This requirement applies to Units 1 3." instead of "This requirement does not apply to Units 4 and 5."
 - Recent Example company requested:
 - o "If the owner wishes to..."
 - Was not accepted





Concise

- Don't try to fit too much into a single term or condition
- Tables are one way to improve both conciseness and clarity
 - Best with numeric limits
 - Can be difficult to read with written conditions



Consistency is Key

- Use the same terms throughout permit
 - A permit is not literature
 - \circ Not trying to write the next great novel!!
 - Do **NOT** use thesaurus
 - Don't need to show off your vocabulary
 - Once a term is selected stick with it
 - Examples:
 - Baghouse (CE 1) used on cover page
 - Don't switch to fabric filter, control device, etc. elsewhere in permit
 - Term "sprayed material" is used in requirement
 - Don't switch to paint or paint mixture to describe the same thing





Establishing Permit Requirements

- Factors to consider
 - Basis of the requirement
 - Units of measure
 - Averaging time
 - Measurements
 - \circ the company already tracks or
 - \circ can be tracked for proper operation
 - Emission unit
 - Process
 - Control equipment
 - o Ensure values are realistic and valuable





Permit Requirement Basis

- Why is the requirement there?
 - If no basis/reason then it shouldn't be there
- Main reasons
 - Statute/regulation
 - Synthetic minor
 - Dispersion modeling
 - Requested by the company
 - Ensure proper operation of equipment
 - o Example: pressure drop requirement on a baghouse







PERMIT WRITER EFFICIENCY



How to Increase Efficiency & Permit Quality

- Constant training on
 - Regulations
 - Processes that are regulated
- Site visits
 - See equipment in operation
 - Face-to-face discussions with plant personnel
 - Resource dependent



Top 10 Permit Writer Efficiency Tips

- 1) "Do Not Disturb Time" in the morning
- 2) Break up the day
- 3) At least 3 active projects
- 4) Quick application review



5) Set your own personal deadlines



Top 10 Permit Writer Efficiency Tips (Continued)

6) Trust but verify

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- 7) Don't let a project become stale
- 8) Gather all information before writing permit
- 9) Take ownership of your evaluation, but keep simple
- 10) Don't be afraid of making a mistake







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