

**PERMIT AND INSPECTION
CONNECTION**

**DAVID LUSK
SENIOR AIR QUALITY ENGINEER
BUTTE COUNTY AQMD**

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EFFECTIVE PERMIT WRITING

“Put Yourself in the Safety Shoes of Your Compliance Inspector and the Permit Holder”



TOPICS FOR TODAY



- ◆ **Steps to setting Permits Requirements**
- ◆ **Permit Writing**
- ◆ **Inspection Preparation**
- ◆ **Review Exercise**

THE ENGINEER'S ROLE

WHAT SHOULD BE REVIEWED?

- ◆ Identification Information – Facility Description
- ◆ Reason for Application
- ◆ Equipment Description
- ◆ Process Description
- ◆ HSC 42301.6 (School Notice) Compliance Applicability
- ◆ Toxic Air Contaminant (TAC) Review
- ◆ Assumptions and Stipulations
- ◆ Key Pollutant Emissions Changes
- ◆ NSR Requirements
- ◆ Rule Applicability and Compliance
- ◆ Source Testing Requirements
- ◆ Findings and Recommendations

APPLICATION REQUIREMENTS

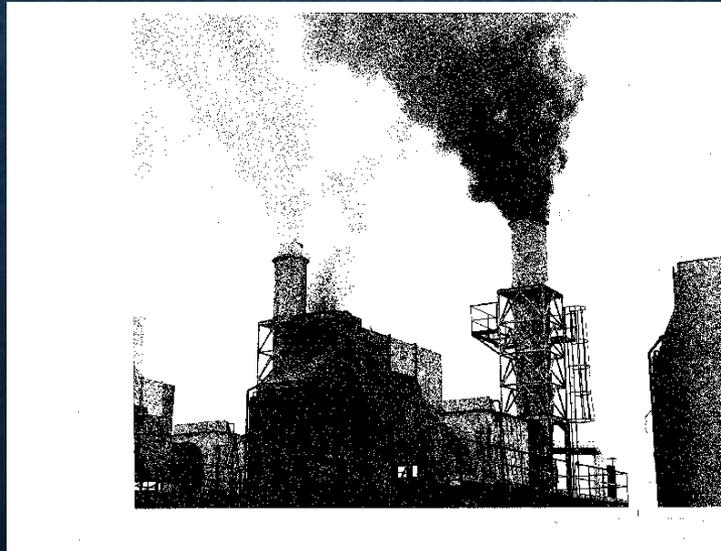
- ◆ Listing of all air contaminants emitted
- ◆ Mechanisms by which each is emitted
- ◆ Physical layout of each process
- ◆ Air contaminant chemistry
- ◆ Emission points with quantities emitted
- ◆ Description of control devices
- ◆ Hourly, daily and annual operating schedule

PERMIT EVALUATION TOOLS

- ◆ **Air District Rules and Regulations**
- ◆ **California Health & Safety Code**
- ◆ **EPA Code of Federal Regulations**
- ◆ **Air District Policies and Procedures**
- ◆ **EPA and ARB Emission Factors**
- ◆ **Technical Reference Materials (Text Books, Control Technologies Handbooks, etc.)**

AUTHORITY TO CONSTRUCT APPROVAL CRITERION:

“Determination that the proposed equipment or activity can be reasonably expected to comply with all Applicable Requirements.”



WHAT ABOUT EXEMPTIONS???

- Very minor/insignificant sources
- Specific classes and category of sources
- Threshold depends on district but California typically 2 pounds per day per uncontrolled criteria pollutant
- Most do not require applications; just claim exemption
- Check district exemption rules
- Sources subject to NESHAPs or NSPS usually not exempt
- Discretion of the APCO

AFTER ATC ISSUANCE.... WHAT HAPPENS NEXT?

- Applicant (now a Permittee or Permit Holder,) completes permitted activity in accordance with the permit requirements.
- Permit Holder notifies district when construction is complete.
- Facility is inspected to ensure constructed in accordance with permit conditions and the application.
- A Permit to Operate is issued if the project or facility complies with all Applicable Requirements and can reasonably be expected to comply with all Applicable Requirements in the future on an ongoing basis.

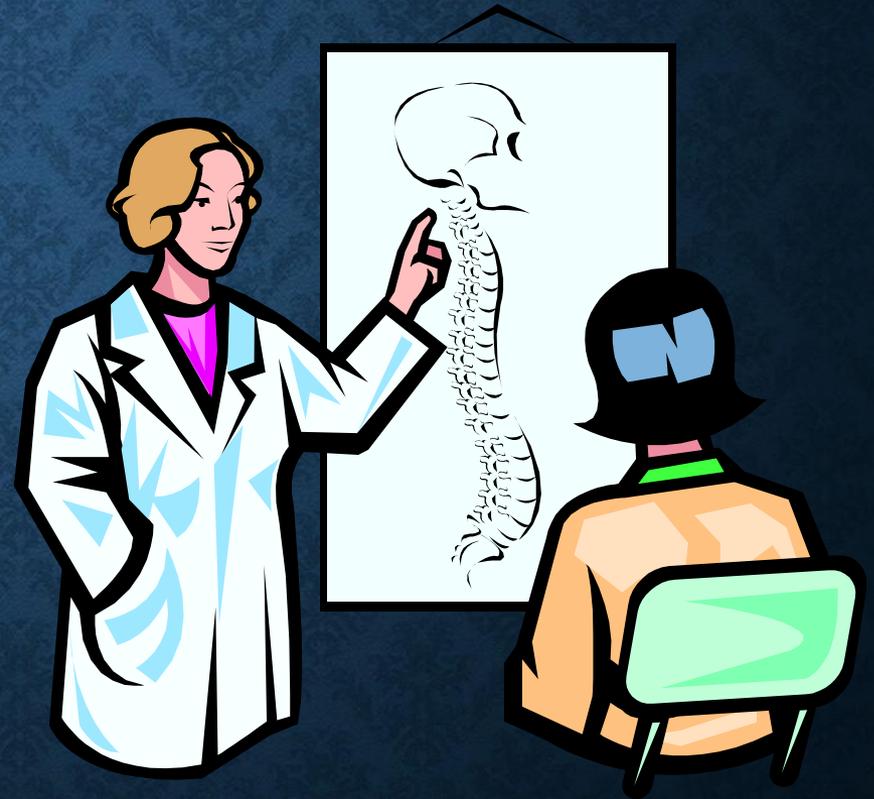
GOALS OF AN EFFECTIVE PERMIT

- ◆ Clearly Communicates Applicable Requirements to Compliance & Source
- ◆ Uses Clear and Unambiguous Language/Easily Understood
- ◆ Completely Covers Requirements
- ◆ Provides Compliance Staff with Practical Means to Determine Compliance
- ◆ Uses Minimum Number of Conditions
- ◆ Provide consistency between similar sources
- ◆ Enforceable



ANATOMY OF A PERMIT

- ◆ Agency Identification
- ◆ Permit Number, Expiration and Renewal Information
- ◆ Permittee Identification
- ◆ Equipment Description
- ◆ Permit Conditions
- ◆ Applicable Rule References
- ◆ General Advisements and Requirements



EQUIPMENT DESCRIPTION

- ◆ Includes the source category name
- ◆ Includes all emitting components of the equipment by “key words”
- ◆ Includes all control devices associated with the equipment
- ◆ Needs to include all devices used to measure process parameters involved in any limit established for the permit
- ◆ Needs to describe the materials used in the process

PERMIT CONDITIONS

- ◆ Necessary to ensure compliance of an emission unit
- ◆ May include specific or general references to applicable rules
- ◆ Necessary to provide operating requirements, information and limits to site personnel
- ◆ Necessary to provide operating requirements, information and limits to District Compliance Inspectors

CONDITION TYPES

1. **Prohibitory rule requirements**



2. **Specific emission limits**

3. **NSR emission limits w/usage reference**

4. **Fee schedule-related emission limits**

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5. **Specific operation/equipment provisions**

6. **Operating requirements or treatment specifications**

CONDITION TYPES

7. **Leakage limits/prohibitions**
8. **Recordkeeping/logs requirements**
9. **Source testing requirements**
10. **Self-testing and monitoring requirements**
11. **On-going equipment calibration requirements**

CONDITION TYPES

- 12. Mass/rate /volume/ppm limits**
- 13. Waste storage requirement w/ rule reference**
- 14. Access, facilities, utilities, etc. For site inspection**
- 15. Prior notification of changes in solvent, usages, etc.**
- 16. SDS maintenance requirement**

PERMIT WRITING 101

District

Permit

Permit

Holder



THE BASICS

- Conditions backed by the evaluation and evaluation backed by the conditions
- Remember broader federal and state guidance
- Sentence structure and punctuation
- Keeping the condition simple
- Focus on one topic per condition
- Word placement
- Vague or subjective phrases
- Use Active versus Passive voice

CORRELATION: ENGINEERING EVALUATION AND PERMIT CONDITIONS



One-to-One
Correlation



FEDERAL PERSPECTIVE

- ◆ Enforceable as a Practical Matter
- ◆ Credible Evidence

“ENFORCEABLE AS A PRACTICAL MATTER” – EPA



- ◆ Process monitoring to demonstrate compliance
- ◆ Conditions and Limits clearly expressed
- ◆ Conditions and Limits easily measurable
- ◆ No Subjectivity Allowed in Conditions and Limits

CREDIBLE EVIDENCE

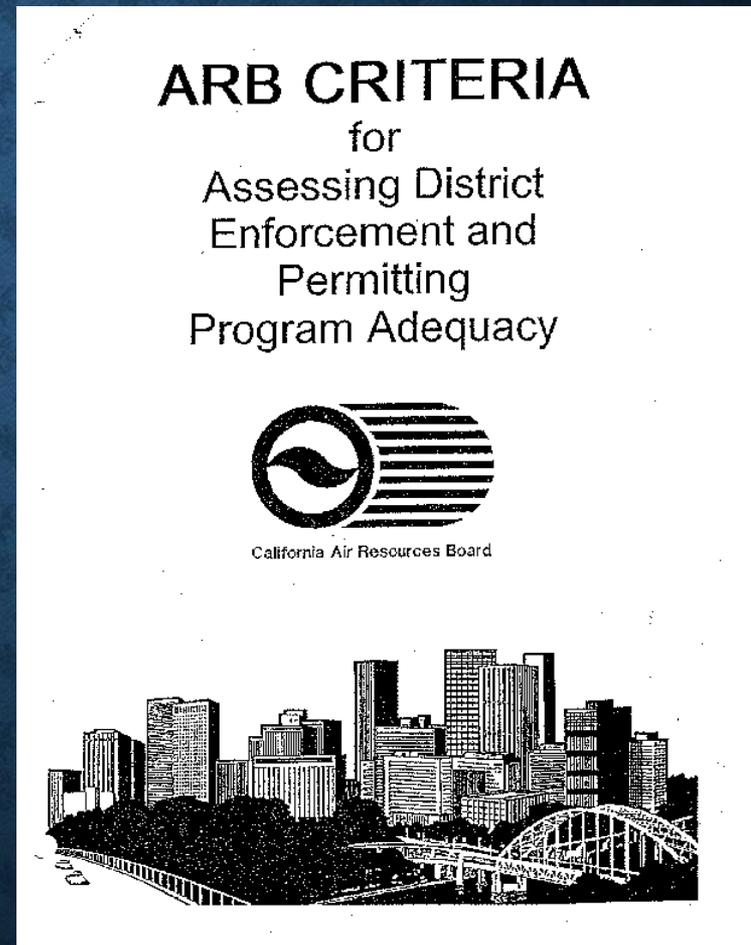


- ◆ Credible Evidence Rule published Feb. 24, 1997
- ◆ Used as an instrument to expand and not limit a District's ability to issue a violation
- ◆ Unacceptable Example ☹️: "Compliance with the emissions limit shall **only** be determined by test Method X."



ADVICE: Review most recent ARB Audit Report for your District for specific comments or requirements related to permit writing.

<http://www.arb.ca.gov/audits/audits.htm>



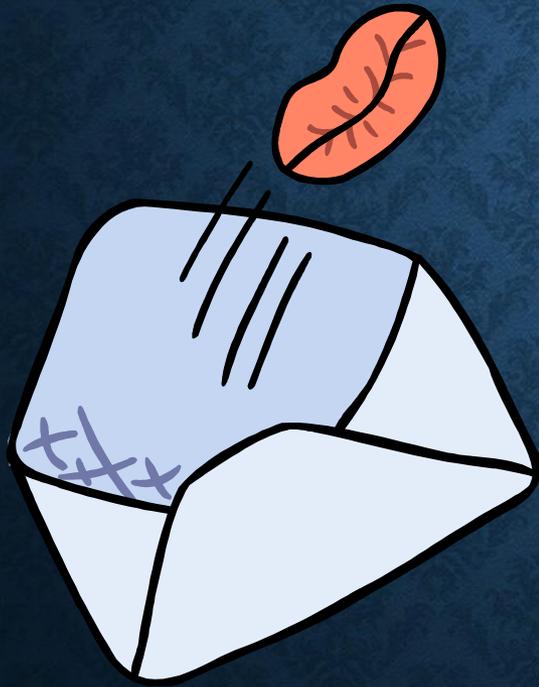
SENTENCE STRUCTURE

- ◆ **Use Simple Declarative Sentences**
- ◆ **Avoid Compound Sentence Structure**
- ◆ **Avoid Complex Sentence Structure**
- ◆ **Keep It Short Simple And To The Point**



KISS: KEEP IT SHORT AND SIMPLE

Short statements are
inherently subject to
less ambiguity



PERMIT CONDITION EXAMPLES...

The Good, the Bad and the Ugly.....



and not necessarily in that order...

**Use of nickel alloys TAFA bondarc wire
– 75B (#700007) or TAFA 79B 80/20
nickel aluminum shall be limited to
1.8 pounds in any hour and 183.6
pounds per year.**

Combined use of nickel alloys TAFA bondarc wire – 75B (#700007) and TAFA 79B 80/20 nickel aluminum shall be limited to 1.8 pounds total in any one hour. Cumulative use of these materials shall not exceed 183.6 pounds in any consecutive 12 month period.

Material usage shall not exceed 32.2 gallons per day or 7,467 gallons in any consecutive 12 month period.

Daily material usage shall not exceed 32.2 gallons. Usage during any consecutive 12 month period shall not exceed 7,467 gallons.

One topic per
condition



The permittee shall ensure that the phase I tank truck and trailer vapor recovery systems are utilized during each transfer of gasoline and that product and vapor (poppet) caps are securely replaced and remain in place following each transfer. The phase I and phase II vapor control systems shall be operated in accordance with district rules 61.3, 61.4 and 61.7 and the ARB executive orders specified above.

Condition #1: the phase I and phase II vapor control systems shall be operated in accordance with district rules 61.3, 61.4 and 61.7 and the ARB executive orders specified above.

Condition #2: the permittee shall ensure that the phase I tank truck and trailer vapor recovery systems are utilized during each transfer of gasoline and that product and vapor (poppet) caps are securely replaced and remain in place following each transfer.

AMBIGUITY TO REDUCE WORDS, CAREFULLY PLACE



PLACE WORDS CAREFULLY TO REDUCE AMBIGUITY

Put modifiers after the
main clause.

For Example: "Complete the
attached form each day your
equipment uses MEK and liquid
surface area exceeds one square
foot."



Not: " Each day your equipment
uses MEK and liquid surface area
exceeds one square foot, complete
the attached form."

HOW TO AVOID CONFUSION

Common sources of confusion include--

- ◆ Undefined abbreviations and acronyms
- ◆ Two different terms used for the same thing (car, vehicle, auto, conveyance -- choose one)
- ◆ Giving an obscure technical or legal meaning to a word commonly understood to mean something different (defining "car" to include trucks)
- ◆ Legal, technical, and "fashionable" but confusing jargon (Notwithstanding the above,)
- ◆ Strings of nouns forming complex constructions (primary air quality protection procedures)
- ◆ Wordy language

PROBLEMS WITH USING VAGUE OR SUBJECTIVE TERMS

*“Excessive spraying of
paint is prohibited.”*



“NORMALLY AND SIGNIFICANT”

“Normally” is subject to misinterpretation.

“Significant” a quantifiable level must be specified.



“AS SOON AS POSSIBLE” OR “PROMPTLY”



Despite being used extensively, this phase is not specific enough -- an outer time limit must be set instead of leaving the condition open-ended.

“Spent filter cartridges should be drained for at least 24 hours and disposed of in accordance with DEH requirements.”

“Should” or “May” vs. “Shall” or “Must”

Both “Should” or “May” indicate that the condition is up to the permittee and is not required. If not required, why have it in the permit?

Enforcing Requirements of Other Agencies

If you are not delegated enforcement of another agencies regulations, do not include these requirements in the permit.

“Operation of the smelting furnaces and the ingot pot shall take place only with the associated emission control equipment in operation and in good working order .”

“The overall VOC destruction efficiency of the control device shall be at least 95% by weight.”

“The overall VOC destruction efficiency of the control device shall be at least 95% by weight. All source testing shall be done in accordance with a district-approved test protocol and shall be witnessed by the district. The source test protocol shall comply with the following requirements...”

“IN ACCORDANCE WITH THE MANUFACTURER’S SPECIFICATIONS”

Specific numbers
must be incorporated
in the permit rather
than a reference to a
document that may
not include clear
requirements or may
not be available



“TAKE REASONABLE PRECAUTIONS”



The permit must specifically identify the minimum activities that constitute reasonable precautions

“USE BEST ENGINEERING PRACTICES”

“Best Engineering Practices” must be specified in the permit



ACTIVE VS. PASSIVE

USE ACTIVE VOICE SENTENCES

In an active sentence, the person who is taking an action is the subject of the sentence.

In a passive sentence, the person or item that is acted upon is the subject of the sentence.

ADVANTAGES OF ACTIVE VOICE

- Active voice more clearly identifies who is responsible
- ◆ Can use fewer words – perhaps as much as 25% less

Active Voice Example: Permit holder shall maintain records in accordance with all provisions of District Rule 25.

Passive Voice Example: Records shall be maintained in accordance with all provisions of District Rule 25.

THE INSPECTION CONNECTION

- ◆ Compliance Staff input strongly recommended
- ◆ All New Conditions
- ◆ New Standards Applied Using Existing Conditions
- ◆ Consider Providing Draft Conditions To The Applicant



BEING PRACTICAL IS THERE ANY ROOM FOR FLEXIBILITY?

- Being careful to not require impractical actions from the permit holder.

“All unpaved roadways and work areas shall have water or other dust surfactant applied a minimum of three (3) times per day, as needed, with additional applications as necessary to minimize fugitive emissions during periods of elevated ambient temperatures, increased wind velocity or low humidity.”

FLEXIBILITY?

“All active working areas and other dust generating sources shall be watered until the surface is visibly moist and shall be maintained in a moist condition at all times while work is in progress. Water shall be applied as frequently as necessary to minimize fugitive dust emissions during periods of elevated ambient temperatures, increased wind velocity, or low humidity.”

FLEXIBILITY?

The permit holder shall not cause or allow the emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area to remain visible in the atmosphere beyond the property line of the emission source and shall, as necessary, implement the best available control measures included in Table 1 of Rule 205, including, but not limited to, applying water or other dust suppressants to mitigate fugitive dust.

REGULATORY WRITING RESOURCES TOOLBOX

www.plainlanguage.gov/

<http://owl.english.purdue.edu/>

www.crockford.com/wrrrld/style.html

CLOSING RECOMMENDATIONS

- Perform Evaluations with Permit Conditions in Mind
- **Link Permit Conditions to Evaluation Findings**
- Carefully Construct Permit Conditions
- **Engineering Staff Review Permit Conditions with Compliance Staff and vice versa**
- Must be Easily Understood!
- **Must be Enforceable!**

QUESTIONS???