

# 5 Steps

To A Successful Air Permit Application

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# Meet Our Panelist

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# Agenda

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- Introduction
- 5 Steps
  - Compile
  - Calculate
  - Classify
  - Complete
  - Communicate



# Introduction

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- The Clean Air Act enables federal, state, and local agencies to regulate air emissions via permitting programs.
- It is a federal law designed to protect human health and the environment.
- The resulting permitting programs can be quite difficult to navigate.

# Do I need an air permit?

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## Action

- Building a new facility?
- Modifying equipment or operations at your existing facility?
- You may need an air permit or permit modification.

## Location, Location, Location

- With over 130 permitting agencies in the US, there is no general “how to” that covers all situations.
- **However**, there are certain steps to the permitting process that are essential regardless of location.





## New Permit & Permit Modifications

- Sometimes the permitting process can be long and painful.
- There are steps you can take to help make sure things go as smoothly as possible.

# 5 Steps

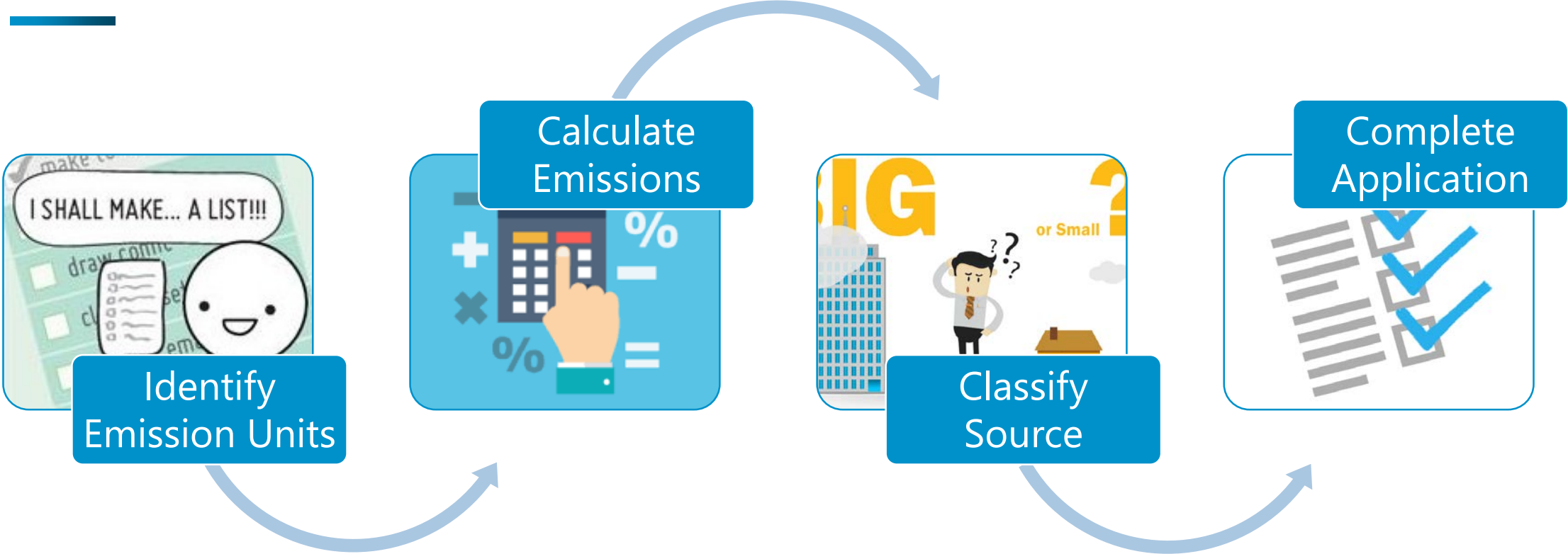
## To a Successful Air Permit Application

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# Permit Application Process







## Step One: **Compile**

**Compile** a list of all equipment and processes planned for your facility that have the potential to emit air pollutants to the atmosphere. Many agencies refer to these equipment and processes as emission units.



# Common Emission Units

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Examples of common emission units:

- Boilers
- Emergency generators
- Fuel storage and dispensing
- Spray coating
- Rock crushing and screening





## Cool Tips

- If your equipment or process has a stack, it is probably a source of regulated air pollutants.
- If it is connected to a control device such as a baghouse or scrubber, it is almost definitely a source.
- If it makes dust or odors, it certainly could be a source.



# Exempt Activities

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- Compare the activity against your local agency's exemption list.
- Set aside emission sources that don't need to be included in calculations.
- Document that activity was evaluated against air quality regulations.



# Step Two: Calculate

Once emissions sources have been identified, *calculate* the potential to emit (PTE) for each pollutant associated with the source.



# What is PTE?

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- Potential emissions are **not** the emissions your facility actually generates on a daily basis; they are emissions your facility could potentially generate when operating at maximum capacity.
- For a boiler, this would mean 24/7 operation at full-fire.



# Why not actual emissions?

- PTE vs. actual emissions – what's the difference?
- When can actual emissions be considered?
- Choosing the right *enforceable limits*.





# Calculation Resources

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- State and local agency tools
- Published emission factors like AP-42
- Equipment manufacturers

Depending on the complexity of your source and emission units, it may be more practical to engage the help of the agency or a consultant for this step.



# Source-Wide Summary

The final step in calculating emissions is preparing a source-wide PTE summary. This will prepare you for **Step 3**.

## *Facility Totals*

<b>Pollutant</b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>SO<sub>2</sub></b>	<b>VOC</b>	<b>HCI</b>
Emissions, TPY	12.23	9.51	23.83	76.05	4.99	11.71	3.72
Significance, TPY	15	NA	25	100	40	25	NA

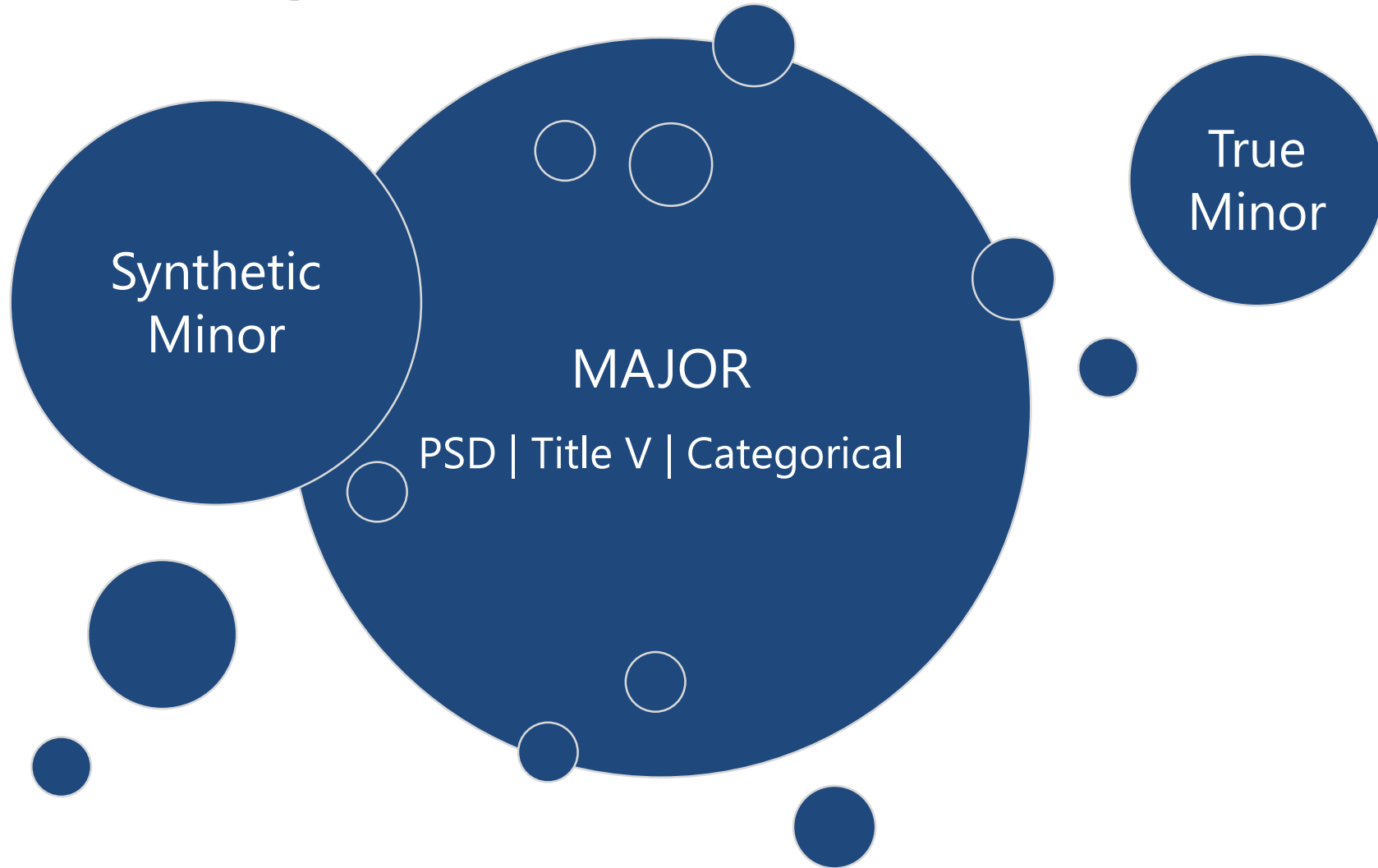
## Step Three: **Classify**

Now that you have the PTE for each air pollutant, the results can be compared to the appropriate emissions thresholds for your local permitting agency. And based on this comparison, you will be able to ***classify*** the source.



# Source Categories

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# Enforceable Limits to Avoid Source Status

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## Accepting Limits

- Accepting operational limits to reduce emissions.
- Make sure limits can be demonstrated.

## Controlling Emissions

- Implementing control devices to limit emissions.
- Will likely trigger additional monitoring.
- Remember – can't go back on BACT!

## Plant-Wide Strategy

- Proposing an emissions cap or PAL.





## Step Four: Complete

Time to **complete** the appropriate air permit application. Applications vary widely across agencies, so a good starting point is the local air district website. Most have all application forms available online, and some permitting agencies even allow sources apply online, although this benefit is typically restricted to minor sources.





# Typical Application Requirements

- Address and ownership information
- Site plan
- List of emission units
- Emission unit specifications
- Control equipment specifications
- Process description
- Operation and production data
- Potential to emit calculations
- Designation of a responsible party

# Other Potential Requirements

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- Location Map
- Process Flow Diagrams
- Control Technology Analyses (RACT, BACT, LAER)
- Dispersion Modeling
  - Equipment and fence line coordinates
  - Stack information such as height and diameter
  - Building dimensions
  - Exhaust parameters such as flow and temperature



# Permit Writer's #1 Gripe

This application is INCOMPLETE!

**WARNING:** The agency cannot issue a permit if they do not have all of the information necessary to process your application.



# Step Five: Communication

Clear **communication** is the key to obtaining an accurate permit in a timely manner.



# Where's my permit?

- An application was submitted months ago, but you have not heard a peep from the agency. What gives?
- Most agencies have regulatory timelines they must follow, but it never hurts to stay on top of the situation.

Consider a pre-application meeting.



# Agency Communication

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- Was the application received?
- Was it assigned to a permit writer?
- How long do they have to determine completeness?
- Is further information required to process the application?
- What is the typical timeline for issuance?

If you are using a consulting firm, they can communicate with the agency on your behalf.



# Consultant Communication

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- Did you receive an incompleteness determination or information request from the agency?
- Have the equipment or processes been modified since the application was submitted?
- Is upper management on your case about permit status?
- When can construction commence?





# Summary

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- Calculate
- Classify
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Questions?

# Get in Touch



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