

## **ADVICE FOR OBTAINING “PERMIT EXEMPT” APPLICABILITY DETERMINATIONS**

It is the intent of this document to guide applicants into preparing Applicability Determination requests which include only the information which is both necessary and sufficient, saving the applicants’ time and effort in preparing the AD requests and minimizing the time and effort for the AQD staff in reviewing these requests.

In June 2004, the category “permit exempt facility” was added to the Air Pollution Control Rules, allowing numerous facilities to operate without Air Quality permits. There have been a large number of facilities which have obtained Applicability Determinations to void old permits and allow operation without continuing the previous operational monitoring, tracking of raw material usage, filing annual Emissions Inventories and paying Emission Fees, etc. If you are eligible for “permit exempt” status, there are still various Air Pollution Control Rules with which you must continue to comply, including prohibitions on open burning, limits on opacity of emissions, sulfur content of fuels, etc.

You do not need to obtain an Applicability Determination to void an old permit. However, for facilities which do not have permits (including facilities which are new or not yet constructed), you can follow the guidance in this document.

### **EMISSIONS ESTIMATES**

Presumably, if you already have a permit, you are already calculating emissions in a manner acceptable to the AQD Emissions Inventory Section. This includes:

- Portable engine analyzer data is not acceptable to determine actual emissions.
- Use only the latest data for both actual and potential emissions from either AP-42 or the manufacturer.
- The effect of air pollution controls can be used for determining actual emissions but not potential emissions.

### **CRITERIA FOR BEING “PERMIT EXEMPT”**

- The facility must have actual emissions of less than 40 tons per year (TPY) of each regulated pollutant. (Please note that you do not add together emissions of individual pollutants before comparing emissions with the 40 TPY threshold; a facility with emissions of 30 TPY nitrogen oxides and 12 TPY sulfur dioxide is considered to be a 30 TPY facility, therefore eligible for “Permit Exempt” status.)
- The facility must not have potential emissions above major source thresholds: 100 TPY for regulated air pollutants (nitrogen oxides, sulfur dioxide, volatile organic compounds, carbon monoxide, particulate matter, or lead), more than 10 TPY of any federally-defined “Hazardous Air Pollutant,” or a total of 25 TPY of Hazardous Air Pollutants.
- The facility cannot be operated in conjunction with another source that is subject to having an Air Quality permit.

- The facility cannot be subject to an emission standard, equipment standard, or work practice standard of federal New Source Performance Standards (40 CFR Part 60) or National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61 or 63). The facility may be subject to reporting or recordkeeping standards of these regulations without being subject to emissions, equipment, or work practice standards.

Please note that new federal standards are released on a regular basis and that while a facility may become subject to an emission, equipment, or work practice standard and therefore be unable to claim permit exempt status, this does not mean that the facility now requires a permit. Permitting in the minor source program is driven by construction or modification activity initiated by the applicant. Because the facility no longer qualifies for “Permit Exempt” status, a construction and subsequent operating permit will be required to modify the facility. Further guidance is available in “**Minor Source Permitting Guidance for Facilities Subject To Federal Standards**”, <http://www.deq.state.ok.us/aqdnew/permitting/AdviceDocuments.htm>

While “Potential to Emit” is discussed at length in other guidance documents available from the AQD web page or EPA’s “OAR Policy & Guidance” web page, the key elements are calculating emissions based on round-the-clock operations, 365 days per year, at maximum design capacity of a facility and without taking into account air pollution control devices.

#### COMMON TYPES OF MINOR FACILITIES

Some of the most common types of facilities which may be “permit exempt” facilities include:

- hydrocarbon storage tanks
- stationary internal combustion engines
- cement batch plants
- sand and gravel plants
- human / animal crematoria

However, the following types of minor sources are unlikely to be eligible for “permit exempt” status:

- asphalt plants
- facilities with printing or painting lines
- dry cleaners
- feed & grain operations

In the past, federal New Source Performance Standards Subpart Kb affected a very large number of hydrocarbon storage tanks. That regulation was revised in October 2003 to where it ceased to affect a great deal of sources. Previously, the Air Permits Rule also required any facility subject to an NSPS standard to obtain a permit, even if that standard was only a recordkeeping requirement. Since both state and federal rules have changed,

there are numerous facilities consisting of only hydrocarbon storage tanks that are eligible for “permit exempt” status.

Conversely, most painting operations will not qualify as “permit exempt” facilities since the operations are capable of emitting more than 10 TPY volatile organic compounds, and without a permit limit on the composition of the coatings used, that VOC could all be a Hazardous Air Pollutant such as toluene or xylene.

It is only under the rarest of cases where a line can be drawn through a property separating it into two or more separate plants. In general terms, all operations which serve to create the same end product are part of the same plant. For example, widget casting and welding operations cannot be separated from widget painting operations. However, if a natural gas transmission operation were on the same property as widget manufacturing, those two would be considered separate and independent. In most cases, however, all operations on a property support the primary purpose, and therefore are not independent.

If your facility currently has a Title V operating permit, the burden of proof will be on you to show that potential emissions have declined below major source thresholds. If there has been no physical change to the facility, your chances of success are slim.

#### PREPARING THE APPLICABILITY DETERMINATION REQUEST

All permitting actions, including Applicability Determinations, begin with completing an administrative General Information form and continue with a process description and emissions calculations. In this case, there will be two sets of emissions calculations, potential emissions and actual emissions.

Forms: Log onto [www.deq.state.ok.us](http://www.deq.state.ok.us) and select “Air Quality”, then “Forms” and next “Air Forms” to obtain the Minor Source Application forms. There is a selection for “Applicability Determination” on the “Application Type” line.

Fee: \$250. Fees are subject to change. Please consult the current fee schedule in OAC 252:100-7 (<http://www.deq.state.ok.us/rules/100.pdf>).

Emission Factors: log onto [www.epa.gov/ttn/](http://www.epa.gov/ttn/) and go to “CHIEF”, emission factor site “AP-42 5<sup>th</sup> Edition by Section”. You would be well advised to print the index to AP-42 first, seeing which operations have readily-available emissions factors.

Some equipment vendors will have more reliable factors than are available from AP-42. It is best to use the vendor factors instead of AP-42.

Process Descriptions: These can be fairly brief. If you already have a permit, the process description on that permit shows how much of a description is needed. The description should touch on material flow from operation to operation, but is primarily intended to show air pollution emitting activities.

Emissions Calculations: These are split into two parts, “potential” and “actual.” Remember, “potential emissions” generally exclude the effect of any add-on air pollution control device unless that device is also process equipment (for example, a cyclone in a material separation operation). “Actual” emissions are generally the amount actually emitted over the previous two years. For a brand new facility with no operating history, a facility would have to use “potential emissions” but may account for the effect of add-on air pollution controls.

The following is an example feed mill set of emissions calculations. Emission factors were taken from AP-42, Section 9.9.1 (5/03), for feed processing.

Operation	Throughput		Emission Factor, lb/ton	Control Efficiency	PM Emissions	
	TPH	TPY			lb/hr	TPY
Receiving	30	262,800	0.17	-0-	5.10	22.33
Hammermills	30	262,800	0.067	-0-	2.01	8.80
Pellet Coolers - Cyclone	30	262,800	0.36	-0-	10.8	47.30
Feed Shipping	30	262,800	0.0033	-0-	0.10	0.43
<b>TOTALS</b>					<b>18.01</b>	<b>78.86</b>

For this example, it has been shown that potential emissions of PM are below 100 TPY. The next step is calculating actual emissions. For that step, we can include the effect of 90% efficiency cyclones on the hammermills and pellet coolers. Also, we can put in the actual throughput of the facility (hypothetically, 200,000 tons per year from inventory and production records).

Operation	Throughput, TPY	Emission Factor, lb/ton	Control Efficiency	PM Emissions TPY
Receiving	200,000	0.17	-0-	17.0
Hammermills	200,000	0.067	-0-	6.7
Pellet Coolers - Cyclone	200,000	0.36	90%	3.6
Feed Shipping	200,000	0.0033	90%	0.03
<b>TOTAL</b>				<b>27.33</b>

The above application will be successful in obtaining “permit exempt” status.

For examples of stationary internal combustion engines refer to guidance document, “**Minor Source Permitting Guidance for Facilities Subject To Federal Standards**”, <http://www.deq.state.ok.us/aqdnew/permitting/AdviceDocuments.htm>.

## SUMMARY

You can be “permit-exempt” based on potential emissions of any one regulated pollutant below 100 TPY and actual emissions below 40 TPY. To obtain written agreement from AQD that this conclusion is valid, you will need to file for an Applicability Determination. This request consists of the correct fee, an administrative form (Form 884), then a process description and calculations of both potential and actual emissions.