



State of Oregon
Department of
Environmental
Quality

PLANT SITE EMISSIONS DETAIL SHEET
CURRENT/FUTURE OPERATIONS

FORM AQ402
INSTRUCTIONS

Complete one form to describe emissions from all emissions points at the facility during the pending permit term. Emissions data provided in the form may be used by DEQ to establish the pollutant-specific Plant Site Emission Limits (PSELs) for the facility. The owner/operator should estimate the annual emissions reported on this form by taking into consideration the *highest annual emissions* likely to be reached during the coming permit term, given any increases in production/operation that might take place during that period. If additional space is required complete as many copies of the answer sheet as needed.

Use the first table below to calculate the PSEL for all pollutants, except PM_{2.5}. Use the second table to calculate the PSEL for PM_{2.5}. To calculate a PSEL for GHGs, see the greenhouse gas calculator at <http://www.deq.state.or.us/aq/permit/acdp/simple.htm>.

Instructions for the first Table:

For *each* emissions point at the facility provide the following information. If the owner/operator indicated in a Device/Process form that a new device or process will be brought on-line during the pending permit term, then include the associated emissions on this form. Identify the new emissions point(s) on this form and estimate the associated emissions.

1. Identify the emissions point.
2. Provide the short-term production rate for the emissions point. The short-term production rate should reflect the highest anticipated production rate for the upcoming permit term for the emissions point. Usually, an *hourly* time period is specified on which to base the production rate (e.g., pounds per hour). An alternate time period (e.g., daily production) may be used if the longer time period is more appropriate to the operation of the emissions point in question. Be sure to specify the appropriate unit of measure (e.g., pounds per day) for the short-term production rate.
3. Provide the projected maximum annual production rate for the emissions point. Specify the unit of measure (e.g., tons per year).
4. Identify the pollutant(s) emitted by this emissions point. List the pollutants under column 4 on the answer sheet—one pollutant per row. (If, for example, the emissions point in column 1 emitted three pollutants, then the emissions point overall would require three rows of the table.)
5. Provide the short-term emission factor, for the pollutant in column 4 from the emissions point in column 1. Specify the appropriate unit of measure as per the time period specified in column 2. If emissions are calculated using a mass balance procedure, leave this column blank and attach all supporting documentation for the material balance calculation, including accounting for pollutants retained in the product, disposed of as waste, or captured and collected or destroyed by a pollution control device.
6. Provide the annual emission factor. If emissions are calculated using a mass balance procedure, see item 5 above.
7. Identify the references for the emission factors identified in columns 5 and 6 (e.g., AP-42, DEQ). Use MB for material balance procedures.
8. Calculate the total short-term emissions in *pounds per unit of time*, as per the time period identified in column 2. If emissions are estimated using a material balance procedure, just enter the total here.
9. Calculate the total annual emissions, in *tons per year*. If emissions are estimated using a material balance procedure, just enter the total here.

If the owner/operator has identified more than one emissions point on this form for a given pollutant, then *summarize* the data by pollutant, by adding a category of TOTAL in column 1, and completing columns 4, 8, and 9.

The example at the bottom of the first form is for a rock crusher that has a design capacity of 200 tons per hour and a projected maximum annual production of 400,000 tons per year. Particulate matter (PM) emissions are calculated using the DEQ emission factor on a short term (hourly) and annual basis.



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PM_{2.5} PSEL

Instructions for the second Table:

See “Instructions for Determining the PM_{2.5} Plant Site Emission Limit and Netting Basis” at <http://www.deq.state.or.us/air/permit/acdp/series400.htm> for more detail on calculating the PM_{2.5} PSEL. The second Table applies to existing sources of PM_{2.5} emissions as of 05/01/11 and should be included in the first permit application required after 05/01/11. Subsequent changes to the PM_{2.5} PSEL should be requested using the first Table.

For each emissions point at the facility provide the following information.

1. Enter a device or process in the first column.
2. Enter the PM₁₀ PSEL in the second column.
3. Enter the PM_{2.5} fraction of PM₁₀ emissions in the third column
4. Provide the reference for the PM_{2.5} fraction (e.g., AP-42, DEQ, Source Test, etc.). Provide further explanation if the factor was not obtained from documents readily available to DEQ.
5. Calculate the annual emissions by multiplying the PM₁₀ PSEL by the PM_{2.5} fraction.
6. Enter the next device or process and repeat the steps for devices/processes outlined above.
7. Total the PM₁₀ and PM_{2.5} PSELs at the bottom of columns 2 and 5.

