The following data, specifications, plans, and drawings must be submitted with each application for Permit to Construct and/or Permit to Operate. Also, if a Form 400-E-xx does not exist for a specific piece of equipment, then the information requested in this Form shall be submitted in its place.

1. **EQUIPMENT/PROCESS LOCATION DRAWING**

   The drawing or sketch shall be submitted to scale (suggested scale: 1 inch = 100 feet; accuracy of measurements to the nearest 5 feet will be satisfactory) and shall show at least the following:
   a. The property involved and outlines and heights of all buildings on it. Identify property lines plainly.
   b. Location and identification of the proposed equipment on the property.
   c. Property location with respect to public and private streets, and all adjacent properties. Show surrounding property owners and uses within 600 feet radius of property. Identify all buildings (as residence, apartment house, machine shop, warehouse, etc.) specifying height of each building (number of stories). Indicate direction (north) on the drawing. Identify schools which have their outer boundaries located within 1000 feet of the equipment.

2. **EQUIPMENT DESCRIPTION**

   Provide detailed description of equipment, including but not limited to, function, make, model, dimensions, size, and maximum capacity. Attach manufacturer’s catalog or brochure, if available.

3. **PROCESS DESCRIPTION**

   Provide a general description of each process line (i.e., the process to be carried out by the equipment) or the function of the equipment with respect to a process line. The descriptions must be complete and detailed. Explain all stages in the process where there may be a discharge of emissions to the atmosphere. Supply all obtainable data regarding the nature, volumes, particle sizes, weights, and concentrations of all types of air contaminants that may be discharged at each stage in the process. Similarly, control procedures must be described in sufficient detail to show the extent of the control of air contaminants anticipated, including the expected control efficiency.

4. **OPERATING SCHEDULE**

   Specify the average and maximum number of hours per day, days per week, days per month, and weeks per year the equipment/process is to be operated.

5. **PROCESS RATE**

   On the basis of pounds per hour, or other specified unit of time, indicate the type and total weight of each material charged into the equipment or the process. Include Material Data Safety Sheets (MSDS), when applicable.

6. **FUELS AND BURNERS USED**

   a. For fuel gas, indicate the type and average and maximum cubic feet per hour burned. Except for natural gas, attach fuel gas analysis.
   b. For fuel oil, indicate grade and average and maximum gallons per hour burned. Also, indicate the sulfur content of fuel oil.
   c. For solid fuels, indicate the type and average and maximum pounds per hour burned. Also, attach fuel analysis.
   d. For burners, indicate the make, model, size, type, number of burners, and capacity of each burner.

7. **FLOW DIAGRAM**

   The diagram should illustrate the flow of materials processed or burned either on a separate flow diagram or on the drawings accompanying the application. Show all venting of equipment (see instruction # 9).
8. DRAWINGS OF EQUIPMENT/PROCESS

Supply an assembly drawing, dimensioned and to scale, in plan, elevation and as many sections as are needed to clearly show the design and operation of the equipment/process and the means by which air contaminants are controlled. The following must be shown:

a. Locations, size, and shape of the equipment. Show exterior and interior dimensions and features.

b. Locations, size, and shape details of all features which may affect the production, collection, conveyance, or control of any air contaminant. This includes the size of pressure relief devices.

c. All data and calculations used in selecting or designing the equipment/process.

NOTE: Structural design calculations and details are not required. When standard commercial equipment is to be installed, the manufacturer’s catalog describing the equipment may be submitted in lieu of the above items. All information required above which the catalog does not include must be submitted by the applicant.

9. DRAWINGS OF THE EXHAUST SYSTEM

Supply drawing(s) clearly showing all ductwork and the connection between air pollution generating (basic) and control equipment. Show all of the following details which apply, using auxiliary drawings, if necessary:

a. Sizes and shapes of all hoods. Show accurately where and how the hood fits over the spot or area where air contaminants are generated or discharged. Show all openings clearly.

b. Diameters or cross-sectional dimensions and lengths of all branch and main ducts.

c. Locations, sizes and shapes of all bends, junctions and transition pieces.

d. Locations, sizes and shapes of all passageways other than ordinary ducts. Also show all cooling devices (spray chambers, heat exchangers, cooling columns, etc.).

e. Locations and descriptions of all dampers, baffles, and similar controls.

f. Locations of any by-passes around the control equipment. Describe how operated, stating under what conditions and for what lengths of time these by-passes are to be used.

g. Locations of all fans or blowers.

h. Location of control equipment and vent(s).

10. STACK/EXHAUST EMISSIONS DATA

Provide emissions data at each source. Include the following information:

a. The maximum mass emission rates (mass per hour) and stack concentrations of all air pollutants. Include emission calculations if available.

b. Stack diameter.

c. Stack height above ground level.

d. Exhaust temperature.

e. Exhaust flow rate (volumetric).

11. AIR QUALITY IMPACT

Provide an analysis of the air quality impact (including risk assessment) in accordance with specific AQMD requirements. Procedures for preparing air quality impact analysis, including screening analyses are available from the AQMD.

12. GENERAL PERMITTING INFORMATION

Further information or clarification concerning permits can be obtained by writing or calling:

South Coast Air Quality Management District
Permitting
21865 Copley Dr.
Diamond Bar, CA 91765
(909) 396 - 2000