



# ARD-8 FORM

## INFORMATION REQUIRED FOR PERMITS FOR STATIONARY HOT MIX ASPHALT PLANTS



Air Resources Division/Permitting and Environmental Health Bureau

RSA/Rule: RSA 125-C:12 and Env-A 1700

**I. EQUIPMENT INFORMATION** – Complete a separate form for each hot mix asphalt plant.

Hot Mix Asphalt Plant Description: \_\_\_\_\_

Date Construction Commenced<sup>1</sup> \_\_\_\_\_ Start-Up Date<sup>1</sup>: \_\_\_\_\_

Equipment Manufacturer: \_\_\_\_\_

Model Number: \_\_\_\_\_ Serial Number: \_\_\_\_\_

Plant Type:     Batch     Drum

Maximum Plant Capacity (tons HMA/hr) \_\_\_\_\_

Dryer Burner Heat Input Rating (MMBtu/hr): \_\_\_\_\_

Hot Oil Heater Burner Input Rating (MMBtu/hr): \_\_\_\_\_

**II. OPERATIONAL INFORMATION**

**A. Fuel Information** List each fuel utilized by each device, as applicable:

Device	Fuel Type	Heat Value <sup>2</sup>	Units	Sulfur Content (%)	Maximum Fuel Flow Rate	Units	Maximum Gross Heat Input Rate	Units
Dryer Burner (Example)	ULSD (Example)	137,000 (Example)	Btu/gal (Example)	0.0015 (Example)	20 (Example)	gal/hr (Example)	2.74 (Example)	MMBtu/hr (Example)
Dryer Burner								
Hot Oil Heater								

**B. Operating Hours and/or Production Rates**

Hours per day: \_\_\_\_\_ Tons per day: \_\_\_\_\_

Days per year: \_\_\_\_\_ Tons per year: \_\_\_\_\_

**C. Stack Information**

Is device equipped with multiple stacks?     Yes     No (If yes, provide data for each stack)

Are multiple units connected to this stack?     Yes     No

(If yes, identify other devices on this stack: ) \_\_\_\_\_

Stack #	Discharge Height Above Ground Level (ft)	Inside Diameter (ft) or Area (ft <sup>2</sup> ) at Stack Exit <sup>3</sup>	Exhaust Temperature (°F)	Exhaust Flow (acfm)	Stack Capped or Otherwise Restricted <sup>4</sup> (Yes-Type/No)	Exhaust Orientation <sup>5</sup>	Stack Monitor (Yes/No) and Description
#5 (Ex)	65 ft (Example)	4 ft (Example)	70 °F (Example)	1500 acfm (Example)	Yes - Rain Cap (Example)	Vertical (Example)	Yes – CEM for PM (Example)

**III. UNCONTROLLED AIR POLLUTANT EMISSIONS (list emissions that result from the burning of each fuel utilized by the hot mix asphalt plant prior to add on controls – use *additional sheets if necessary*)**

Pollutant	Emission Factor	Units	Emission Factor Source <sup>6</sup>	Actual (lb/hr)	Potential (lb/hr)	Actual (tpy)	Potential (tpy)

Provide an example of the calculations used to determine uncontrolled air pollutant emissions, if applicable:

**IV. NEW HAMPSHIRE REGULATED TOXIC AIR POLLUTANTS (RTAPS) – ENV-A 1400**

Do any of the devices burn a non-exempt fuel<sup>7</sup> and emit any of the RTAPs listed in Env-A 1400?

Yes  No

If **Yes**, attach your facility’s most recent compliance demonstration.

**V. POLLUTION CONTROL EQUIPMENT**

**Not Applicable**

Note: If the devices utilize more than one type of pollution control equipment, provide data for each type of equipment.

**A. Type of Equipment**

cyclone or knock-out box

baffled settling chamber

baghouse

wet scrubber

other (specify): \_\_\_\_\_

**For each control device, include an Air Pollution Control Equipment Monitoring Plan pursuant to Env-A 810.**

**B. Controlled Air Pollution Emissions** (list emissions that result from the burning of each fuel utilized by the hot mix asphalt plant after all add on controls – *use additional sheets if necessary*)

Pollutant	Controlled Emission Factor	Units	Emission Factor Source <sup>6</sup>	Actual (lb/hr)	Potential (lb/hr)	Actual (tpy)	Potential (tpy)

Provide an example of the calculations used to determine controlled air pollutant emissions, if applicable:

**ARD-8 FORM INFORMATION INSTRUCTIONS**

- 1 If exact date is unknown for Date Construction Commenced or Start-Up Date, you may use 01/01/year. If dates are not available at the time of application, please provide to the department upon installation. Date Construction Commenced refers to the date the owner or operator has entered into a contractual obligation to undertake and complete a continuous program of construction, reconstruction, or modification of the emission unit. Start-Up Date refers to the date the emission unit is first operated at the facility.
  
- 2
 

<u>Liquid Fuels</u>	<u>Heat Value</u>
Ultra-Low Sulfur Diesel (ULSD)	137,000 Btu/gal
#2 Fuel Oil	140,000 Btu/gal
Kerosene	135,000 Btu/gal
Other – Liquid	Obtain from Fuel Supplier
<u>Gaseous Fuels</u>	<u>Heat Value</u>
Natural Gas	1,020 Btu/cubic foot
Propane (LPG)	94,000 Btu/gal
Gasoline	130,000 Btu/gal
Other (Gaseous)	Obtain from Fuel Supplier
  
- 3 Examples of Inside Diameter or Area at Stack Exit: Diameter at discharge point of convergence cone, if applicable
  
- 4 Flapper valves and other devices which do not restrict the vertical exhaust flow while the device is operating are not considered obstructions or restrictions.
  
- 5 Examples of Exhaust Orientation: Vertical, Horizontal, Downward  
**Note:** for a stack to be considered vertical and unobstructed, there shall be no impediment to vertical flow, and the exhaust stack extends 2 feet higher than any roofline within 10 horizontal feet of the exhaust stack
  
- 6 Emission factor sources may include:
  - Continuous Emissions Monitor (CEM)
  - Stack Test (Provide Date)
  - Vendor Guaranteed Rates (Provide Documentation)
  - AP-42 Emission Factors
  - Material Balance (Provide Sample Calculation)
  - Engineering Estimate
  
- 7 Fuels exempt from Env-A 1400 include:
  - Virgin Petroleum Products (#2, #4, or #6 fuel oil, gasoline, kerosene, jet fuel, etc.)
  - Coal
  - Natural Gas
  - Propane
  - Biofuels – as defined in Env-A 1401.03(b)
  - Biomass – as defined in Env-A 1401.03(c)

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