

## Subpart F - Standards of Performance for Portland Cement Plants

### Applicability - §60.60

General	<ol style="list-style-type: none"><li>1.) Facilities in portland cement plants: Kiln, clinker cooler, raw mill system, finish mill system, raw mill dryer, raw material storage, clinker storage, finished product storage, conveyor transfer points, bagging and bulk loading and unloading systems.</li><li>2.) Any facility above that commences construction or modification after August 17, 1971.</li></ol>
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### Emission Standards - §60.62

Source	PM
General	<ol style="list-style-type: none"><li>1.) Facility shall not emit any gases which contain particulate matter in excess of 0.15 kg per metric ton of feed (dry basis) to the kiln (0.30 lb per ton).</li><li>2.) Facility shall not emit any gases which exhibit greater than 20 percent opacity.</li><li>3.) Facility shall not emit any gases from any clinker cooler which contain particulate matter in excess of 0.050 kg per metric ton of feed (dry basis) to the kiln (0.10 lb per ton).</li><li>4.) Facility shall not emit any gases from any clinker cooler which exhibit 10 percent opacity, or greater.</li><li>5.) Facility shall not emit from any kiln and clinker cooler any gases which exhibit 10 percent opacity, or greater.</li></ol>

## Monitoring of Operations - §60.63

Source	All Emissions
General	<ol style="list-style-type: none"><li>1.) Any portland cement plant subject to the provisions of this part shall record the daily production rates and kiln feed rates.</li><li>2.) Any kiln or clinker cooler that is subject to the provisions of this subpart shall install, calibrate, maintain, and operate in accordance with §60.13 a continuous opacity monitoring system to measure the opacity of emissions.</li><li>3.) A continuous opacity monitoring system shall be installed on each stack of any multiple stack device controlling emissions from any kiln or clinker cooler. If there is a separate bypass installed, each owner or operator of a kiln or clinker cooler shall also install, calibrate, maintain, and operate a continuous opacity monitoring system on each bypass stack in addition to the main control device stack</li><li>4.) Each kiln or clinker cooler for which the performance test required under §60.8 has been completed on or prior to December 14, 1988, shall install the continuous opacity monitoring system within 180 days after December 14, 1988.</li><li>5.) Each kiln or clinker cooler subject to the provisions of this subpart using a positive-pressure fabric filter with multiple stacks, or a negative-pressure fabric filter with multiple stacks, or an electrostatic precipitator with multiple stacks may, in lieu of installing the continuous opacity monitoring system required by §60.63(b), monitor visible emissions at least once per day by using a certified visible emissions observer.</li><li>6.) If the control device exhausts gases through a monovent, visible emission observations in lieu of a continuous opacity monitoring system are required. These observations shall be taken in accordance with EPA Method 9.</li><li>7.) Visible emissions shall be observed during conditions representative of normal operation.</li><li>8.) Observations shall be recorded for at least three 6-minute periods each day. In the event that visible emissions are observed for a number of emission sites from the control device with multiple stacks, Method 9 observations shall be recorded for the emission site with the highest opacity.</li><li>9.) All records of visible emissions shall be maintained for a period of 2 years.</li><li>10.) For the purpose of reports under §60.65, periods of excess emissions that shall be reported are defined as all 6-minute periods during which the average opacity exceeds that allowed by §60.62(a)(2) or §60.62(b)(2).</li></ol>

## Test Methods and Procedures - §60.64

Source	All Emissions
General	<ol style="list-style-type: none"> <li>1.) Facility shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).</li> <li>2.) The owner or operator shall determine compliance with the particulate matter standard in §60.62 as follows: <ol style="list-style-type: none"> <li>a.) The emission rate (E) of particulate matter shall be computed for each run using the following equation:  <math display="block">E = (cs \text{ Qsd}) / (P \text{ K})</math> <p>*See §60.64 (b) (1) for variables and units.</p> </li> <li>b.) Method 5 shall be used to determine the particulate matter concentration (cs) and the volumetric flow rate (Qsd) of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30.0 dscf) for the kiln and at least 60 minutes and 1.15 dscm (40.6 dscf) for the clinker cooler.</li> <li>c.) Suitable methods shall be used to determine the kiln feed rate (P), except fuels, for each run. Material balance over the production system shall be used to confirm the feed rate.</li> <li>d.) Method 9 and the procedures in §60.11 shall be used to determine opacity.</li> </ol> </li> </ol>

## Record Keeping and Reporting Requirements - §60.65

Source	All Emissions
General	<ol style="list-style-type: none"> <li>1.) Each Facility required to install a continuous opacity monitoring system under §60.63(b) shall submit reports of excess emissions as defined in §60.63(d). The content of these reports must comply with the requirements in §60.7(c). Notwithstanding the provisions of §60.7(c), such reports shall be submitted semiannually.</li> <li>2.) Each owner or operator monitoring visible emissions under §60.63(c) shall submit semiannual reports of observed excess emissions as defined in §60.63(d).</li> <li>3.) Each facility subject to the provisions of §60.63(c) shall submit semiannual reports of the malfunction information required to be recorded by §60.7(b). These reports shall include the frequency, duration, and cause of any incident resulting in deenergization of any device controlling kiln emissions or in the venting of emissions directly to the atmosphere.</li> <li>4.) The requirements of this section remain in force until and unless the Agency, in delegating enforcement authority to a State under section 111(c) of the Clean Air Act, 42 U.S.C. 7411, approves reporting requirements or an alternative means of compliance surveillance adopted by such States. In that event, affected sources within the State will be relieved of the obligation to comply with this section, provided that they comply with the requirements established by the State.</li> </ol>