**Section 212.443 Coke Plants**

a) Subpart B of this Part shall not apply to coke plants.

b) Charging.

1) Uncaptured Emissions:

A) No person shall cause or allow the emission of visible particulate matter from any coke oven charging operation, from the introduction of coal into the first charge port, as indicated by the first mechanical movement of the coal feeding mechanism on the larry car, to the replacement of the final charge port lid for more than a total of 125 seconds over 5 consecutive charges; provided however that 1 charge out of any 20 consecutive charges may be deemed an uncountable charge at the option of the operator.

B) Compliance with the limitation set forth in subsection (b)(1)(A) of this Section shall be determined in the following manner:

i) Observation of charging emissions shall be made from any point or points on the topside of a coke oven battery from which a qualified observer can obtain an unobstructed view of the charging operation.

ii) The qualified observer shall time the visible emissions with a stopwatch while observing the charging operation. Only emissions from the charge port and any part of the larry car shall be timed. The observation shall commence as soon as coal is introduced into the first charge port as indicated by the first mechanical movement of the coal feeding mechanism on the larry car and shall terminate when the last charge port lid has been replaced. Simultaneous emissions from more than one emission point shall be timed and recorded as one emission and shall not be added individually to the total time.

iii) The qualified observer shall determine and record the total number of seconds that charging emissions are visible during the charging of coal to the coke oven.

iv) For each charge observed, the qualified observer shall record the total number of seconds of visible emissions, the clock time for the initiation and completion of the charging operation and the battery identification and oven number.

v) The qualified observer shall not record any emissions observed after all charging port lids have been firmly seated following removal of the larry car, such as emissions occurring when a lid has been temporarily removed to permit spilled coal to be swept into the oven.

vi) In the event that observations from a charge are interrupted, the data from the charge shall be invalidated and the qualified observer shall note on his observation sheet the reason for invalidating the data. The qualified observer shall then resume observation of the next consecutive charge or charges and continue until a set of five charges has been recorded. Charges immediately preceding and following interrupted observations shall be considered consecutive.

2) Emissions from Control Equipment

A) Emissions of particulate matter from control equipment used to capture emissions during charging shall not exceed 0.046 g/dscm (0.020 gr/dscf). Compliance shall be determined in accordance with the procedures set forth in 40 CFR part 60, Appendix A, Methods 1 through 5 incorporated by reference in Section 212.113 of this Part. *The provisions of Section 111 of the Clean Air Act...relating to standards of performance for new stationary sources...are applicable in this State and are enforceable under* *the* *Act* [415 ILCS 5/9.1(b)]*.*

B) The opacity of emissions from control equipment shall not exceed an average of 20 percent, averaging the total number of readings taken. Opacity readings shall be taken at 15-second intervals from the introduction of coal into the first charge port as indicated by the first mechanical movement of the coal feeding mechanism on the larry car to the replacement of the final charge port lid. Compliance, except for the number of readings required, shall be determined in accordance with 40 CFR part 60, Appendix A, Method 9, incorporated by reference in Section 212.113 of this Part. *The provisions of Section 111 of the Clean Air Act...relating to standards of performance* *for new* *stationary sources...are applicable in this State and are enforceable under* *the* *Act* [415 ILCS 5/9.1(b)].

C) Opacity readings of emissions from control equipment shall be taken concurrently with observations of fugitive particulate matter. Two qualified observers shall be required.

3) Qualified observers referenced in subsection (b) of this Section shall be certified pursuant to 40 CFR part 60, Appendix A, Method 9, incorporated by reference in Section 212.113 of this Part. *The provisions of Section 111 of the Clean Air Act...relating to standards of performance for new stationary sources ... are applicable in this State and are enforceable under the Act* [415 ILCS 5/9.1(b)].

c) Pushing:

1) Uncaptured Emissions:

A) Emissions of uncaptured particulate matter from pushing operations shall not exceed an average of 20 percent opacity for 4 consecutive pushes considering the highest average of six consecutive readings in each push. Opacity readings shall be taken at 15-second intervals, beginning from the time the coke falls into the receiving car or is first visible as it emerges from the coke guide whichever occurs earlier, until the receiving car enters the quench tower or quenching device. For a push of less than 90 seconds duration, the actual number of 15-second readings shall be averaged.

B) Opacity readings shall be taken by a qualified observer located in a position where the oven being pushed, the coke receiving car and the path to the quench tower are visible. The opacity shall be read as the emissions rise and clear the top of the coke battery gas mains. The qualified observer shall record opacity readings of emissions originating at the receiving car and associated equipment and the coke oven, including the standpipe on the coke side of the oven being pushed. Opacity readings shall be taken in accordance with the procedures set forth in 40 CFR part 60, Appendix A, Method 9, incorporated by reference in Section 212.113 of this Part, except that Section 2.5 for data reduction shall not be used. The qualified observer referenced in this subsection shall be certified pursuant to 40 CFR part 60, Appendix A, Method 9, incorporated by reference in Section 212.113. *The provisions of Section 111 of the Clean Air Act...relating to standards of performance for new stationary sources...are applicable in this State and are enforceable under the Act* [415 ILCS 5/9.1(b)].

2) Emissions from Control Equipment

A) The particulate emissions from control equipment used to control emissions during pushing operations shall not exceed 0.040 pounds per ton of coke pushed. Compliance shall be determined in accordance with the procedures set forth in 40 CFR part 60, Appendix A, Methods 1-5, incorporated by reference in Section 212.113 of this Part. *The provisions of Section 111 of the Clean Air Act...relating to standards of performance for new stationary sources...are applicable in this State and are enforceable under* *the* *Act* [415 ILCS 5/9.1(b)]. Compliance shall be based on an arithmetic average of three runs (stack tests) and the calculations shall be based on the duration of a push as defined in subsection (c)(1)(A) of this Section.

B) The opacity of emissions from control equipment used to control emissions during pushing operations shall not exceed 20%. For a push of less than six minutes duration, the actual number of 15-second readings taken shall be averaged. Compliance shall be determined in accordance with 40 CFR part 60, Appendix A, Method 9, incorporated by reference in Section 212.113 of this Part. *The provisions of Section 111 of the Clean Air Act ... relating to standards of performance for new stationary sources ... are applicable in this State and are enforceable under* *the* *Act* [415 ILCS 5/9.1(b)]*.* Section 2.5 of 40 CFR part 60, Appendix A, Method 9, incorporated by reference in Section 212.113 of this Part, for data reduction shall not be used for pushes of less than six minutes duration.

d) Coke Oven Doors.

1) No person shall cause or allow visible emissions from more than 10 percent of all coke oven doors at any time. Compliance shall be determined by a one pass observation of all coke oven doors on any one battery.

2) No person shall cause or allow the operation of a coke oven unless there is on the plant premises at all times an adequate inventory of spare coke oven doors and seals and unless there is a readily available coke oven door repair facility.

e) Coke Oven Lids. No person shall cause or allow visible emission from more than 5 percent of all coke oven lids at any time. Compliance shall be determined by a one pass observation of all coke oven lids.

f) Coke Oven Offtake Piping. No person shall cause or allow visible emissions from more than 10 percent of all coke oven offtake piping at any time. Compliance shall be determined by a one pass observation of all coke oven offtake piping.

g) Coke Oven Combustion Stack.

1) No person shall cause or allow the emission of particulate matter from a coke oven combustion stack to exceed 110 mg/dscm (0.05 gr/dscf); and

2) No person shall cause or allow the emission of particulate matter from a coke oven combustion stack to exceed 30% opacity. Compliance shall be determined in accordance with 40 CFR part 60, Appendix A, Method 9, incorporated by reference in Section 212.113 of this Part. However, the opacity limit shall not apply to a coke oven combustion stack when a leak between any coke oven and the oven's vertical or crossover flues is being repaired, after pushing coke from the oven is completed, but before resumption of charging. The exemption from the opacity limit shall not exceed three (3) hours per oven repaired. The owner or operator shall keep written records identifying the oven repaired, and the date, time, and duration of all repair periods. These records shall be subject to the requirements of Section 212.324(g)(4) and (g)(5) of this Part.

h) Quenching.

1) All coke oven quench towers shall be equipped with grit arrestors or equipment of comparable effectiveness. Baffles shall cover 95 percent or more of the cross sectional area of the exhaust vent or stack and must be maintained. Quench water shall not include untreated coke by-product plant effluent. All water placed on the coke being quenched shall be quench water.

2) Total dissolved solids concentrations in the quench water shall not exceed a weekly average of 1200 mg/L.

3) The quench water shall be sampled for total dissolved solids concentrations in accordance with the methods specified in Standard Methods for the Examination of Water and Wastewater, Section 209C, "Total Filtrable Residue Dried at 103-105° C," 15th Edition, 1980, incorporated by reference in Section 212.113 of this Part. Analyses shall be performed on grab samples of the quench water as applied to the coke. Samples shall be collected a minimum of five days per week per quench tower and analyzed to report a weekly concentration. The samples for each week shall be analyzed either:

i) Separately, with the average of the individual daily concentrations determined; or

ii) As one composite sample, with equal volumes of the individual daily samples combined to form the composite sample.

4) The records required under this subsection shall be kept and maintained for at least three (3) years and upon prior notice shall be available for inspection and copying by Agency representatives during work hours.

i) Work Rules: No person shall cause or allow the operation of a by-product coke plant except in accordance with operating and maintenance work rules approved by the Agency.

(Source: Amended at 20 Ill. Reg. 7605, effective May 22, 1996)