ILLINOIS POLLUTION CONTROL BOARD October 20, 2005

IN THE MATTER OF:)	A C O C 1
PETITION OF LAFARGE MIDWEST, INC. FOR AN ADJUSTED STANDARD FROM))	AS 06-1 (Adjusted Standard - Land)
35 ILL. ADM. CODE 739.161. ORDER OF THE BOARD (by J.P. Novak):)	

In today's order, the Board directs the petitioner to provide additional information in support of its request for an adjusted standard.

On September 12, 2005, petitioner Lafarge Midwest, Inc. (Lafarge) filed a petition (Pet.) seeking an adjusted standard from 35 Ill. Adm. Code 739.161, the Board's waste disposal regulations restricting the burning of off-specification used oil for energy recovery. Lafarge has waived its right to a hearing on the petition. Pet. at 31; *see* 35 Ill. Adm. Code 104.422(a)(1) (requiring hearing when petitioner requests that one be held). The Illinois Environmental Protection Agency (Agency) has not yet filed its recommendation regarding the petition. *See* 35 Ill. Adm. Code 104.416(a) (requiring filing of recommendation within 45 days after filing of petition).

Lafarge owns and operates the South Chicago Slag Grinding Plant ("plant"), which is located at 2150 East 130th Street, Chicago, Cook County. Pet. at 1-2. In 2001 and 2002, Lafarge developed the plant on existing Lafarge property that had been used since approximately 1987 as a terminal for storage and distribution of cement products. Pet. at 2. Lafarge characterizes the vicinity of the plant as "heavily industrialized." *Id*.

The plant principally produces a slag cement product marketed under the trade name "NewCem." Pet. at 3, 8. For that production, Lafarge first obtains blast furnace slag from Ispat-Inland, Inc., which generates slag at its integrated steel facility in East Chicago, Indiana. *Id.* A blast furnace generates molten slag in the process of producing iron from iron ore. Pet. at 3. Molten slag is removed separately from the furnace and forms granules or pellets when quenched with water. *Id.*

Lafarge reports that pelletized slag is delivered to it with moisture content of 10-12%. Pet. at 8. The slag first moves through Lafarge's grinding operation for magnetic removal of metallic compounds before it enters the drying system. *Id.* "The slag dryer functions as a direct-fired process heater to reduce the moisture content of the blast furnace slag so that the slag can be ground into a fine powder and processed into slag cement." *Id.* Lafarge states that slag cement such as its NewCem product can replace a portion of the cement in a concrete mix. Pet. at 3.

In its petition, Lafarge proposes to use off-specification used oil as fuel in its slag drying process. Lafarge notes that Board regulations limit the burning of off-specification used oil to

specified devices including "boilers." Pet. at 5; 35 Ill. Adm. Code 739.161(a)(2). Lafarge also notes, however, that the Board has adopted procedures and standards through which it may determine that a certain device is a "boiler" for the purpose of burning off-specification used oil even if it does not meet the definition of "boiler" in the Board's general hazardous waste management regulations. Pet. at 5-6; 35 Ill. Adm. Code 104.400-104.428 (Adjusted Standards); 35 Ill. Adm. Code 720.110 (defining terms including "boiler by designation"); 35 Ill. Adm. Code 720.132 ("Boiler Determinations"); 35 Ill. Adm. Code 720.133 (requiring use of adjusted standard procedures). Accordingly, Lafarge requests that the Board determine that its slag dryer satisfies the criteria for boiler designations so that it may use off-specification used oil. Pet. at 32-33; *see* 35 Ill. Adm. Code 720.132; 35 Ill. Adm. Code 739.161 (restricting burning of used oil).

The Environmental Protection Act (Act) and the Board's procedural rules require publication of notice of a petition for an adjusted standard in a newspaper of general circulation in the area likely to be affected by the petitioner's activity. 415 ILCS 5/28.1 (2004); 35 Ill. Adm. Code 104.408(a). The notice must be published within 14 days of filing a petition for an adjusted standard with the Board. 35 Ill. Adm. Code 104.408(a). Lafarge on September 30, 2005 timely filed with the Board a certificate stating that the *Daily Southtown* published notice of the petition on September 15, 2005. *See* 35 Ill. Adm. Code 104.410 (requiring filing of certificate within 30 days after filing of petition). No party requested a hearing in this matter within 21 days after publication of notice of the petition. *See* 35 Ill. Adm. Code 104.422(a)(2).

The Board finds that Lafarge's petition has not fully satisfied informational requirements contained in the Board's rules. 35 Ill. Adm. Code 104.406. Specifically, the petition fails to provide the following information:

- 1. Under 35 Ill. Adm. Code 104.406(a), Lafarge requests an adjusted standard from 35 Ill. Adm. Code 739.161(a). Pet. at 6. Section 739.161(a)(2)(A) allows the use of off-specification used oil for energy recovery in industrial boilers located on the site of a facility engaged in a manufacturing process where substances are transformed into new products. In providing a narrative description of its proposed adjusted standard, however, Lafarge apparently seeks a boiler determination allowing its slag dryer to burn off-specification used oil. Pet. at 11 (referring to "boiler by designation"). The Board requests that Lafarge clarify that it seeks a boiler determination through 35 Ill. Adm. Code 720.132 and 720.133 and does not seek an adjusted standard from 35 Ill. Adm. Code 739.161(a).
- 2. Under 35 Ill. Adm. Code 104.406(b), Lafarge states that the regulation of general applicability, 35 Ill. Adm. Code 739.161(a), implements in whole or in part the state's program for management of solid and hazardous waste, which is the equivalent of the federal program under the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act (RCRA). Pet. at 6. If in response to paragraph one above Lafarge clarifies that it seeks a boiler determination, the Board requests that Lafarge clarify whether 35 Ill. Adm. Code 720.132 and 720.133 implement RCRA or other federal programs.

- 3. Under 35 Ill. Adm. Code 104.406(c), Lafarge states that 35 Ill. Adm. Code 739.161(a) does not specify the information or requirements necessary to justify an adjusted standard. Pet. at 6. Lafarge does note that 35 Ill. Adm. Code 720.132 provides criteria for boiler determinations. Pet. at 7. If in response to paragraph one above Lafarge clarifies that it seeks a boiler determination, the Board requests that Lafarge clarify its response regarding the level of justification.
- 4. Under 35 Ill. Adm. Code 104.406(d), Lafarge reports that it complies with a permit issued by the Agency that limits emissions of particulate matter (PM), sulfur dioxide (SO₂), carbon monoxide (CO), volatile organic material (VOM), and nitrogen oxides (NO_x). Pet. at 14. The Board request that Lafarge submit data regarding both controlled and uncontrolled emissions from the slag dryer if that data is collected as part of an emissions monitoring program at the plant. Also under 35 Ill. Adm. Code 104.406(d), the Board asks Lafarge to clarify whether operation of the plant results in any discharges other than air emissions.
- 5. Under 35 Ill. Adm. Code 104.406(e), Lafarge states that it seeks a boiler determination in order to use off-specification used oil as a supplemental fuel. Pet. at 11-2. Since Lafarge cannot now burn off-specification oil in its slag dryer, it states that there are no compliance alternatives, capital improvements or operational changes are necessary to comply with the generally applicable regulation. Pet. at 11. The Board requests that Lafarge provide a comparison of the cost of using specification fuel under the regulation of general applicability and of using off-specification fuel under the requested relief.
- 6. Under 35 Ill. Adm. Code 104.406(f), Lafarge has not presented efforts or costs necessary to comply with the adjusted standard but suggests that the use of off-specification used oil may require modification of its current operating permit. Pet. at 15. The Board requests that Lafarge state whether any additional air pollution control devices or modification of existing equipment would be necessary if it slag dryer uses off-specification used oil as fuel in its slag dryer. If additional or modified devices are necessary, the Board also requests that Lafarge provide information about any costs associated with the installation or modification of that equipment.
- 7. Under 35 Ill. Adm. Code 104.406(g), Lafarge states that issues regarding emissions associated with the combustion of off-specification used oil would be addressed in the Agency permitting process. Pet. at 15. With its responsibility to review the environmental impacts of Lafarge's proposed activity, the Board requests that Lafarge submit a copy of its lifetime operating permit issued by he Agency. Second, the Board requests that Lafarge provide emission levels, whether monitored or estimated, under both the rule of general applicability and the proposed relief for all contaminants of concern: PM, SO₂, CO, VOM, and NO_x. Third, the Board requests that Lafarge describe the quantitative and qualitative impacts on the environment of using off-specification used oil as fuel

instead of natural gas. Fourth, the Board requests that Lafarge describe the nature and source of the used oil that it intends to use as fuel in terms of its previous use, handling, and presence of contaminants. Finally, the Board requests that Lafarge address whether it intends to institute any quality control measures on the offspecification used oil it plans to use as fuel for its slag dryer.

8. Under 35 Ill. Adm. Code 104.406(h), the Board notes that, in calculating the thermal energy recovery efficiency of its slag drying system, Lafarge has relied on significant assumptions regarding "false air" and "shell radiation." Pet. at 22-23. While Lafarge has named a design engineer with which it verified these assumptions, the petition does not include any supporting documentation or affidavits. The Board requests that Lafarge submit documentation or affidavits supporting the assumptions made in calculating the energy recovery efficiency of the slag dryer system.

Without the additional information described above, the Board cannot grant the petition for an adjusted standard. Because Lafarge has waived its right to a hearing (Pet. at 31), and because the Board has received no request that it hold one, the Board does not now expect to hold a hearing on this petition. Accordingly, the Board directs the petitioner to address the information requirements of 35 Ill. Adm. Code 104.406 as described above in an amended petition. If an amended petition is not filed within 45 days of this order, this petition may be subject to dismissal.

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above order on October 20, 2005, by a vote of 5-0.

Dorothy M. Gunn, Clerk

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