# ILLINOIS POLLUTION CONTROL BOARD July 31, 1975

PEOPLE OF THE STATE OF ILLINOIS, Complainant, v. OLD FORT INDUSTRIES, INC., an Indiana Corporation, ILLINOIS BRICK COMPANY DIVISION, Respondent, PCB 74-192 and and PCB 74-221 Consolidated ILLINOIS BRICK COMPANY. Petitioner, v. ENVIRONMENTAL PROTECTION AGENCY, Respondent.

Mr. Lorence H. Slutzky, Assistant States Attorney, appeared on behalf of the State of Illinois;
Mr. Fredric J. Entin, Assistant Attorney General, appeared on behalf of the Environmental Protection Agency; and
Mr. Patrick J. Phillips, Jenner and Block, appeared on behalf of Old Fort Industries.

#### OPINION AND ORDER OF THE BOARD (by Mr. Goodman):

This case comes before the Pollution Control Board (Board) upon stipulation of facts and proposed settlement by the parties, People of the State of Illinois and the Environmental Protection Agency (Agency) and Illinois Brick Company Division, Old Fort Industries, Inc. (Illinois Brick).

Illinois Brick owns and operates a brick manufacturing facility located at 127 Street and Francisco Avenue, Blue Island, Cook County, Illinois, where it manufactures common brick, hand molded colonial brick, and various other building type bricks. Clay, which is the principle raw material in Illinois Brick's manufacturing operation, is extracted from a clay pit located on the premises of the facilities. The clay is transported to the plant, introduced into a granulator where either water or grog, if necessary, is introduced. The material is then introduced into stone extracting rolls, where most of the stone is removed, conveyed to crusher rolls where remaining stone is crushed within the capabilities of such equipment, conveyed to the

plug mill where necessary water is added for proper extrusion by brick machine and introduced into the brick machine where the clay is compressed and extruded in a twin column. The twin column is passed through a brick cutter which cuts the bricks into proper lengths and the bricks, thus cut, are conveyed along a belt beside which are stationed men who pick the bricks off the belt and place them on dryer cars. When filled, conveyer cars are transported to the dryer and are placed in the dryer on various tracks. Succeeding cars are placed on the tracks and the cars are moved through the dryer. When the cars reach the discharge end of the dryer, they are placed on the transfer car which transports the cars to the kiln setting site.

Illinois Brick utilizes the scove-kiln process in the actual firing of their bricks. The scove-kiln is constructed entirely of bricks. After the green bricks are stacked in an area, they are enclosed by walls of burned bricks and sealed with clay slurry through which gas burners are fired into the mass of green bricks. Some anthracite coal screenings had been added to the clay prior to the plug mill for bricks located near the walls of the kiln. Recently Illinois Brick found it necessary to add anthracite screening to all of the green bricks due to hardness problems with their finished product.

The scove-kiln is fired for an average period of 55 hours, at which time the gas burners are turned off. After this, the kiln remains undisturbed for 18 hours to complete the firing and cooling process. In general, Illinois Brick schedules their kiln burns over the weekend.

On the basis of the land survey dated May 3, 1961, and updated on July 1, 1974, and the quantity of bricks sold, Illinois Brick estimated that on August 30, 1974, the clay pit had a remaining useful life of approximately 3 to 6 years. The facility is located in a mixed area. To the east and south and northwest of the facility is a residential neighborhood in which the closest homes are 750 feet away. To the north is Mount Hope Cemetary, and to the west is Beverly Cemetery. To the southwest, approximately 3/4 of a mile from Illinois Brick's facility on the Cal-Sag Canal, is a Texaco Oil Company Refinery.

Emissions are produced throughout the length of the kiln burn and during the 18 hours after the natural gas burners are shut off. The nature of the emissions change throughout the burn and correspond to three identifiable processes: dehydration, oxidation, and vitrification. In dehydration, most of the emissions are steam caused by a mechanical water dehydration. After all the mechanical water has been evaporated, oxidation takes place in which

all of the organic material, including the coal, is oxidized and a blueish grey haze is emitted along with some chemically combined moisture causing a small amount of steam emission. Vitrification takes place immediately after and also concurrently with the oxidation phase, the blue-grey emission continuing throughout from oxidation of the impurities in the clay.

## Background of Litigation

Investigation of Illinois Brick's manufacturing facilities began in January of 1970 after receipt of complaints from a nearby resident. Investigations continued through 1970 and 1971 and interviews with citizens and observations of investigators indicated that the problem was continuing. In 1972 discussions were held between Illinois Brick and the Agency and the Attorney General resulting in Illinois Brick engaging several consulting engineering firms of various types to determine whether Illinois Brick's emissions complied with applicable local and state statutes, regulations, and ordinances.

On May 24, 1974, the Complaint was filed by the Agency against Illinois Brick Company alleging the operation of the scove-kiln without operating permits in violation of Rule 103(b)(2) of Chapter 2 of the Pollution Control Board Air Regulations (Regulations) and Section 9(b) of the Environmental Protection Act (Act). In addition, violation of Section 9(a) of the Act was alleged in that the emissions from the brick making facility caused an unreasonable interference with the enjoyment of life and property. The Agency also alleged that Illinois Brick had allowed emissions of smoke and particulate matter of an opacity greater than 30% as measured by equilavent numbers on the Ringlemann chart in violation of 202(b) of the Regulations.

On June 12, 1974, Illinois Brick filed a petition for review of refusal to issue permit before the Board. This action was consolidated with the enforcement action pursuant to a Motion for Corsolidation filed on July 2, 1974. The stipulation of facts and the proposed settlement comes to the Board addressing the issues raised by Complainant's Fourth Amended Complaint filed on April 18, 1975, and the Consolidated Permit Denial Appeal. The Fourth Amended Complaint incorporated some legal refinements of the first complaint and added an allegation of violation of Rule 203(f)(1) of the Fegulations, allowing the emission of fugitive particulate matter.

#### Terms of Proposed Settlement

The parties, herein, decided, after extensive discovery, that the interests of the public and of the parties would best be served by resolution of the proceedings without further litigation under terms and conditions agreed

upon by all concerned pursuant to Rule 333 of the Board Regulations. Illinois Brick stipulates that it has only enough clay left in its pit to continue operations at the facility for, at the most, six years and that in the year 1974 and the first quarter of 1975, the facility operated at a net loss to the Company. Illinois Brick has decided, in recognition of the limited time for continued operations and the current unprofitability of their Blue Island, Illinois, brick manufacturing operation, that the expenditure of additional funds for the installation of emission reduction devices would not be in their best economic interest. It is additionally stipulated that at no time during the course of this litigation did the Complainant ever propose that Illinois Brick discontinue its operation.

The stipulation entered into between the parties proposes that Illinois Brick permanently discontinue the present brick manufacuring operation operated by Illinois Brick in Blue Island, Illinois, within 90 days of the date of the signing of the stipulation. In addition Illinois Brick agrees that during this 90-day operation only one kiln burn will be made in any calendar week, commencing no earlier in the week than Monday at 6 a.m. nor later in the week than Tuesday at 5 p.m. and that there will be no increase of the present weekly rate of production of 1,500,000 bricks per Illinois Brick will pay a penalty of \$5,000 per burn for each and every burn that might occur after 90 days from the date of signing of the stipulation and, if it decides to resume brick manufacturing at the Blue Island, Illinois, brick manufacturing facility, Illinois Brick will not do so prior to obtaining all necessary state, county, and local permits and licenses. Illinois Brick will withdraw its petition for Review of Refusal to Issue Permit, Pollution Control Board Case No. 74-221.

We do not, by our acceptance of the stipulation herein, prejudge any future violation which may occur, nor do we intend to pre-assess any penalties for said future violations.

It is further stipulated that nothing in the stipulation shall be construed to be an admission by Illinois Brick of the existence of violations alleged in complaints filed herein and that Illinois Brick agrees that, in the event the Board finds any violations alleged have occurred, Illinois Brick shall remit and shall pay the sum of \$5,000 to the Treasurer of the State of Illinois. In addition, all parties agree that if and when the stipulation and proposed settlement is accepted by the Board, and so long as the parties adhere to the provisions set forth in the stipulation, no further litigation will be taken by the parties with respect to the subject matter of the case.

## Stipulation of Testimony and Evidence

It is agreed by the parties that the following testimony and evidence would be introduced at a hearing should it be held.

- 1. Concerning the allegation that Illinois Brick has operated the facility without an operating permit: a) Illinois Brick still does not have an operating permit despite the continuation of its operations; b) that it applied in November of 1972 for such permit and was rejected by the Agency because, in the Agency's opinion, the operation was in violation of standards and limitations of the Pollution Control Board Air Regulations. Illinois Brick contends that its failure to obtain an operating permit was due to the improper refusal of the Environmental Protection Agency to issue said permit.
- Concerning the alleged violation of Section 9(a) of the Act, interference with the enjoyment of life and property: a) approximately 21 residents of the nearby area would testify that they have suffered interference with their enjoyment of life and property as a result of emissions from Illinois Brick's facilities; b) that they experienced the emissions throughout the year and almost always on weekends; c) that the emissions cause them to keep their windows closed; d) at times they were unable to use the yard and engage in outdoor activies in the summer. In addition, certain citizens have complained that the emissions cause a burning sensation of their eyes, noses and throats, cause nausea, coughing, and difficulty in breathing. In opposition, approximately five residents of the nearby area would testify, if called by Illinois Brick, that while they have observed the above-described emissions, that such emissions did not interfere with their enjoyment of life and property.
- Evidence would be introduced to the effect that suitable control equipment exists for the abatement of Illinois Brick's pollution. In addition, the Agency is prepared to introduce evidence that one of their investigators, who is a certified smoke reader, has observed the emissions from the brick manufacturing facility to have an opacity of greater than 30%. An investigator for the Cook County Department of Environmental Control is also prepared to testify that he observed emissions from the brick manufacturing facility at an opacity greater than 30%. opposition, representatives of commercial testing companies, if called as witnesses by Illinois Brick, would testify that on various dates other than those referred to by Complainants, they observed emissions from Illinois Brick's manu-facturing facility which had an opacity of less than 30%.

Illinois Brick contends the particulate emission test conducted by Particle Data Laboratories on January 13 through 15, 1975, establishes that Illinois Brick is in compliance with Rule 203(b) of the Regulations which, they allege, constitutes a defense to the allegations in the complaint. The Agency disagrees that Illinois Brick, as a result of a test, established compliance with Rule 202(b) stating they are prepared to call Howard O. Chinn, Chief Engineer of the Environmental Control Division, Office of the Attorney General, to testify that there could be particulate emissions in excess of that allowed by Rule 202(b) of the Regulations. The Agency, in addition, is prepared to present testimony that an observer saw particulate matter emitted from Illinois Brick's manufacturing facility that was visible to him, looking generally toward the Zenith at a point beyond the property line of the facility.

### Consideration of the Rules, Stipulation of Facts and Settlement

The Board accepts the stipulation of facts as being the most reasonable method of determining this case. Considering the stipulated evidence, the Board finds that Illinois Brick has violated Rule 103(b)(2) of Chapter 2 of the Board's Air Pollution Regulations and Section 9(b) of the Act in that they operated their scove-kiln without obtaining the required operating permits from the Agency. In addition, the Board finds a violation of Section 9(a) of the Act in that the emissions from the brick making facility caused unreasonable interference with the enjoyment of life and The Board finds a violation of Rule 202(b) of the Regulations in that Illinois Brick has allowed emissions of smoke and particulate matter of an opacity of greater than 30% to be emitted by their facilities. The Board fails to find violation of Rule 203(f)(1) of the Regulations since the stipulated evidence was insufficient to find such violation.

The stipulation, as submitted, calls for penalty in the sum of \$5,000 should the Board find any of the violations alleged to have occurred. The Board finds from the stipulated evidence that said violations have occurred and finds that a penalty of \$5,000 is appropriate. The Board accepts the proposed stipulation of facts and settlement in this case and incorporates, by reference, the terms thereof in this Opinion and Order as if fully set forth herein.

This Opinion constitutes the Board's findings of fact and conclusions of law in this matter.

#### ORDER

It is the Order of the Board that the parties to this action, pursuant to the stipulation signed by said parties June 16, 1975, shall effect such agreed stipulation conditions as follows:

- 1. Illinois Brick Division, Old Fort Industries, Inc., shall permanently discontinue the present brick manufacturing facility operated by Illinois Brick in Blue Island, Illinois, within 90 days of the date of the signing of the stipulation;
- 2. Illinois Erick, during the final 90 days of operation, shall not commence a scove-kiln burn earlier in the week than Monday at 6 a.m. nor later in the week than Tuesday at 5 p.m.;
- 3. Illinois Brick, during the final 90 days of operation, shall not increase production beyond the present weekly rate of 1,500,000 bricks per week;
- 4. Illinois Brick, during the final 90 days of operation, shall produce no more than one scove-kiln burn in any calendar week;
- 5. Illinois Brick shall pay a penalty of \$5,000 per burn for each and every burn that occurs after 90 days from the date of the signing of the stipulation;
- 6. If Illinois Brick decides to resume brick manufacturing at the Elue Island, Illinois, brick manufacturing facility, it will not do so prior to the obtaining of all permits required by the Act;
- 7. Illinois Brick shall withdraw its Petition for Review of Refusal to Issue Permit, Pollution Control Board Case No. 74-221;
- 8. Illinois Brick shall pay a penalty of \$5,000 for violation of Rules 103(b)(2) and 202(b) of the Regulations and Sections 9(a) and 9(b) of the Act, payment to be made by certified check or money order within 35 days of the date of this Order to:

State of Illinois Environmental Protection Agency Fiscal Services Division 2200 Churchill Road Springfield, Illinois 62706

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the  $31^{s+}$  day of  $31^{s+}$ , 1975 by a vote of  $31^{s+}$ .

Christan L. Moffett, Olerk
Illinois Pollution Control Board