ILLINOIS POLLUTION CONTROL BOARD
March 25, 1976

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| ENVIRONMENTAL PROTECTION AGENCY, Complainant, | ) | |
| v. | ) | PCB 75-232 |
| CITY OF SPRINGFIELD, Respondent. | ) | |
| - and - | | |
| CITY OF SPRINGFIELD, Complainant, | ) | |
| v. | ) | PCB 75-275 |
| ENVIRONMENTAL PROTECTION AGENCY, Respondent. | ) | |

Larry Eaton and Anthony Cameron appeared on behalf of the Environmental Protection Agency.
George Gillmor, Eugene Bernstein and Charles Bane, of Isham, Lincoln & Beale appeared on behalf of the City of Springfield.

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

On June 3, 1975, the Environmental Protection Agency (Agency) filed a Complaint against the City of Springfield (City). This Complaint, PCB 75-232, alleged construction of a new coal-fired electric generating unit, known as Dallman Unit 3, without a construction permit, in violation of Rule 103(a)(1) of the Air Pollution Regulations (Chapter 2). On July 16, 1975, the City filed a Permit Appeal, PCB 75-275, alleging that the Agency improperly denied its application for a construction permit for Dallman Unit 3. These two proceedings, as well as another proceeding, PCB 75-242, were consolidated for hearing. At public hearing on November 17, 1975, however, PCB 75-242 was severed from these proceedings by order of the hearing officer. PCB 75-242 is now an entirely separate matter and will not be considered herein.

Hearings on PCB 75-232 and PCB 75-275, consolidated, were held on November 4, 5, 6, 7, 8, and 17, 1975, in Springfield, Illinois,

and produced a voluminous record of some 1350 pages. No citizen witnesses testified during the hearings. The City filed a waiver of its right to a decision on the Permit Appeal within 90 days from the filing of said Appeal.

Springfield operates an electric power generating supply system servicing 48,000 ratepaying customers in the Springfield area (R. 384). Power production is administered by a department of the City government known as City Water, Light & Power (CWLP). The City built and began operating its first power station at its premises abutting Lake Springfield (Lakeside I) in 1935 (R. 223). Lakeside II was built in the 1940's, but was added to until 1963 (R. 224). The units of Springfield's V.Y. Dallman power plant complex were begun in the early 1960's on the same general premises where the Lakeside stations were located. Dallman Unit 1 went on-line in 1968 and Dallman Unit 2 went on-line in 1972 (R. 224). Dallman Unit 3, the subject of these proceedings, is currently projected to become operational in the spring of 1977 (R. 353). Mr. Edward Campbell, Regional Supervisor in the Field Operations Section of the Agency's Air Pollution Control Division, testified that in April, 1975, he and another member of the Agency inspected the Dallman Unit 3 site (R. 46). They estimated that, at that time, construction was approximately 10 percent complete (R. 50). The site had been excavated, concrete had been poured, and steel was being erected (R. 50).

Dallman Unit 3 is to be a 192 megawatt unit, representing 72% of the capacity of the City's existing electrical system (R. 396). The capital cost for the Dallman Unit 3 construction program in its present form is slightly under $56 million (R. 340).

The City applied for a construction permit for Dallman 3 on June 10, 1974. The Agency denied the application due to failure to show compliance with several of the Chapter 2 regulations: particulates, Rule 203(g)(1)(d), sulfur dioxide, Rule 204(a)(1), and nitrogen oxides, Rule 207(a). A second application was received by the Agency on August 10, 1974. On October 5, 1974, the second application was denied due to failure to show compliance with Rules 204(e)(stack height) and 204(a)(1)(sulfur dioxide).

The principal issue presented in this case is whether Dallman Unit 3 is a new or existing emission source. Resolution of that issue resolves two related questions: whether a permit is required for Dallman Unit 3 under Rule 103(a)(1) and whether Dallman Unit 3 must comply with the sulfur dioxide limitation for new sources under Rule 204(a)(1), in force at the time of the City's application, or for existing sources under Rule 204(c)(1)(B). According to the Agency's calculations, Dallman Unit 3 will emit 5.97 pounds of $SO_2$

per million btu's of actual heat input (R. 143). This figure indicates that Dallman Unit 3, if found to be an existing source, would comply with Rule 204(c)(1)(B). If found to be a new emission source, however, Dallman Unit 3 would not comply with the limitation of 1.2 pounds per million btu's, required by Rule 204(a)(1).

Whether an emission source is considered new or existing depends upon whether construction or modification of the source "commenced" after or prior to the effective date of Chapter 2, April 14, 1972. Rule 101 defines "commence" as

> the act of entering into a binding agreement or contractural obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification.

The Pollution Control Board (Board) in its Interim Order of July 31, 1975, interpreted this definition as applied in the present case in order to account for the possibility of the City being its own general contractor, as follows:

> Whether Springfield had bound itself to a course of conduct to undertake and complete, within a reasonable time, a continuous program of construction.

In adopting the definition of a new source the Board, on April 13, 1972, commented that the definition

> ...recognizes that once binding contracts have been entered for construction of a facility, there is a significant reliance interest in treating the source as an existing one.

Reliance, then, is the key to the distinction between new and existing sources.

The date for determining whether Dallman Unit 3 is a new or existing emission source is April 14, 1972. Therefore, it is important to examine what occurred prior to that date. As mentioned previously, Dallman Units 1 and 2 went on-line in 1968 and 1972, respectively. In 1970 Springfield requested the engineering firm Burns & McDonnell to make a study of the City's generation needs and financing ability (R. 251). That report was submitted in May, 1970, and a supplemental report was submitted in July, 1970 (R. 252-3). Burns & McDonnell recommended that the City proceed immediately with Dallman Unit 3. At that time, however, Dallman 3 was still in the planning stages and had not yet been designed (R. 253). The first

contract for the construction of Dallman 3 was awarded on September 29, 1970 to General Electric for a steam turbine generator (R. 256). Burns & McDonnell submitted specifications for coal-handling facilities, specifically, for foundations and construction of 2 underground coal hoppers, on July 2, 1971. The contract was awarded on September 7, 1971, to Franklin Cress Company (R. 267). A related contract for an underground conveyor and drive mechanism was awarded to Fertilizer Engineering Company on February 1, 1972 (R. 283-4). The City anticipates awarding a total of 45 contracts for Dallman 3 (R. 304). However, these 3 contracts - for the steam turbine generator and coal-handling facilities - were the only contracts for the construction of Dallman 3 awarded prior to April 14, 1972. Four other contracts related to Dallman 3 were also entered into prior to April 14, 1972: two contracts for oil circuit breakers, one for steel towers, and one for a volt tie transformer (R. 493-5).

The steam generator itself is to house the boiler and, therefore, the furnace. Specifications for the steam generator were submitted by Burns & McDonnell on May 21, 1971. These specifications called for a bid on a scrubber for $SO_2$, which was an alternate to the base bid (R. 312). Bids were received on August 17, 1971. Two scrubber bids were submitted (R. 313). The ordinance to award the contract was filed in September, 1971. At that time an ordinance for a new rate structure was also on file. However, due to the President's economic freeze on wages and prices, the contract and rate increase were tabled by the City Council and bid bonds were returned (R. 276).

The 1971 rate increase proposal included $10 million for air pollution control equipment. City, Water, Light & Power (CWLP), urged the City Council to adopt the rate structure in 1971 with the money included for $SO_2$ control equipment so that CWLP could issue bonds if necessary (R. 316). The City Council approved the rate structure in January, 1972. However, even though the approved rate structure included the original $10 million, the City Council required CWLP not to include in the increase money needed to finance gas cleaning equipment (R 314).

Specifications for the steam generator were submitted again in 1973. These specifications differed from those submitted in 1971 in that they included a 2400 pound rather than 1800 pound boiler and did not include specifications for a scrubber for $SO_2$ (R. 313). The steam generator contract was awarded on August 8, 1973.

The Agency argues that, because $SO_2$ will be created within the furnace, which is within the steam generator, the contract for the steam generator is the critical contract. Because this contract was awarded in August, 1973, Dallman Unit 3 is, according to the

Agency, a new source. We must reject this argument. To single out one piece of equipment in an entire unit as the "emission source" is to deny the interdependence of most of the individual pieces of equipment which comprise an electric generating unit such as Dallman Unit 3. Contracts for the turbine generator and coal handling facilities were entered into prior to April 14, 1972. However, these facilities would be unable to serve their intended purpose in the absence of the steam generator producing the steam necessary to drive the turbine-generator while utilizing the coal-handling facilities. Similarly, the steam generator depends on these facilities to accomplish its purpose. We, therefore, find that Dallman Unit 3 as a whole, rather than any individual element thereof, constitutes the "emission source," for the purposes of this case.

Although we find that prior to April 14, 1972, the City had entered into certain binding contracts for the construction of its emission source, we nevertheless must agree with the ultimate conclusion that Dallman Unit 3 is a new emission source. Our finding is based upon the policy behind Rule 101's distinction between new and existing sources: that a source is to be considered existing if the owner or operator of that source binds itself to a course of construction relying upon the state of the law as it existed prior to April 14, 1972. Based upon the facts presented at the hearing on this matter, we are unable to find any reliance on the part of the City of Springfield on its status as an existing source. In 1971, specifications for the steam generator submitted for bids included a specification for $SO_2$ control equipment. In fact, two bids for scrubbers were received by the City. Although the 1971 bid bonds were returned and the 1973 specifications did not include $SO_2$ control equipment, the 1971 specifications indicate that the City foresaw the possibility of being required to reduce $SO_2$ emissions from Dallman Unit 3. Furthermore, Mr. James Henneberry, Commissioner of Public Property for the City, testified as to why the City excluded $SO_2$ removal equipment from its construction permit application. He testified that inquiry hearings being conducted by the Board on $SO_2$ control technology, various pending appeals on the subject, hearings being conducted on a national level, and a permit granted to the Central Illinois Light Company (CILCO) left an aura of uncertainty which caused the City to be hesitant before committing itself to the expense of $SO_2$ control equipment (R. 1202). Commissioner Henneberry, however, did not indicate, nor did any other witness, that the City failed to plan for $SO_2$ control equipment because it considered itself to be an existing source and was relying upon that status. All the testimony reveals quite the opposite - i.e., that the City considered Dallman Unit 3 to be governed by Rule 204(a)(1) but was hesitant to invest in $SO_2$ control equipment due to its uncertainty as to the status of that regulation.

Furthermore, the definition of commence that the Board has

adopted requires Springfield to have "bound" itself to a "continuous" course of construction prior to April 14, 1972. Yet facts presented indicate that the City's course of conduct was intermittent rather than continuous. Although bids on the steam generator were received in 1971, these were returned, and new specifications were not issued until February of 1973 (R. 276). Springfield initiated the project, tabled it, and then resumed. Such conduct is not evidence of being bound to a continuous course of construction. During the period of delay, the Air Regulations in question became effective. The lack of a showing of reliance on the law prior to April 14, 1972, coupled with a significant interruption in the course of construction during the period of time in which the applicable Air Regulations became effective, lead to the conclusion that Dallman Unit 3 is a new emission source. It was, therefore, subject to Rules 103(a)(1) and 204(a)(1) at the time the City submitted its application.

During the hearing, the City presented much evidence about a construction permit granted by the Agency to CILCO. The Hearing Officer reserved to the Board a motion by the Agency attorney to exclude all such testimony as irrelevant. We hereby grant the Agency's motion. The CILCO situation differs significantly from the situation in the present case, and the Agency's treatment of another facility is irrelevant to its treatment of Dallman Unit 3.

Finally, although we uphold the Agency's denial of the City's application based upon Rule 204(a)(1), we reject its finding that the construction permit application did not comply with Rule 204(e). Contrary to the Agency's position, we find that the application did include a specification, not merely speculation, of a minimum stack height of 450 feet to achieve compliance with Rule 204(e).

Having concluded that the Agency properly denied the City's application on the basis of Rule 204(a)(1), we find that the City has allowed construction work to be done toward erection of Dallman Unit 3 in the absence of a construction permit, in violation of Rule 103(a)(1). However, one more point remains for Board consideration. Section 33(c) of the Environmental Protection Act (Act) requires the Board in making its orders and determinations to consider: 1) the degree of injury to the public, 2) the social and economic value of the pollution source, 3) the suitability of the pollution source to its area of location, and 4) the technical practicability and economic reasonableness of reducing the emissions. As to the first factor, there has been no direct injury to the public as of yet because Dallman Unit 3 has not been completed. Injury to the public is inherent, however, when a violation of the permit requirements of the Act or Rules and Regulations occurs. The social and economic value of Dallman Unit 3 and its suitability to its area of location are unquestioned. As to the last factor, at the hearing, much evidence

was presented on the technical practicability and economic reasonableness of reducing the emissions. Testimony was presented on the various types of $SO_2$ control equipment currently available, including both the regenerable and throw-away type systems, the success of such equipment, and the cost.

We have considered the extensive testimony on technical practicability and economic reasonableness and find that reducing $SO_2$ emissions from Dallman Unit 3 is both technically practicable and economically reasonable. Various $SO_2$ removal systems have been installed in countries such as Japan and Germany and are currently commercially available and being installed on facilities in this country. Lead times on the various systems vary, but, according to testimony produced at the hearing, generally range from 2 - 3 years (R. 716). $SO_2$ control equipment has become an accepted form of technology. The City estimates that $SO_2$ control equipment will cost approximately $18.9 million. However, the high cost of installing such equipment is reasonable in order to protect the public from injury. Therefore, the Board finds that reducing emissions from Dallman Unit 3 is reasonable both technically and economically.

In Commonwealth Edison Company v. Pollution Control Board, decided in January of this year, the Illinois Supreme Court reversed the Board's adoption of, among others, Rule 204(a)(1) and remanded it for further consideration. However, because Rule 204(a)(1) was fully in force at the time of the Agency's denial of the City's application, the denial may be and is hereby upheld on the basis of that rule.

The Board finds that the City of Springfield has acted in good faith. The City has submitted two applications for a construction permit. It excluded $SO_2$ control equipment from those applications due to a sincere uncertainty as to the status of the $SO_2$ regulations. Furthermore, the City, prior to the filing of the complaint in this matter, began to research a plan for complying with Rule 204(a)(1) (R. 1252-4). Therefore, the Board finds that the City's good faith behavior mitigates against assessing a penalty in this case. Furthermore, the Board recognizes that scarce municipal funds should be preserved for corporate purposes. EPA v. City of Silvis, 5 PCB 205. The City of Springfield will not be assessed a penalty for the violation of Rule 103(a) found herein.

This Opinion represents the findings of fact and conclusions of law of the Board in this matter.

ORDER

It is the Order of the Pollution Control Board that:

1. The City of Springfield is found to have allowed construction toward erection of a coal-fired generating unit, known as Dallman Unit 3, since December 17, 1974, without an Agency issued construction permit, in violation of Rule 103(a)(1) of Chapter 2.

2. The City shall apply for and obtain a construction permit from the Illinois Environmental Protection Agency within 120 days of the date of this Order.

3. The City of Springfield's appeal from denial of its construction permit application is hereby dismissed.

IT IS SO ORDERED.

Mr. Young abstained.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the 25th day of March, 1976 by a vote of 3-0.

Christan L. Moffett, Clerk
Illinois Pollution Control Board