BEFORE THE ARKANSAS BOILER ADVISORY BOARD

IN RE: ARKANSAS STATE UNIVERSITY

ORDER

This matter came for hearing before the Boiler Safety Advisory Board on January 19, 2006. Arkansas State University (ASU) in Jonesboro, Arkansas has requested a variance from the regulations of the Arkansas Department of Labor, Boiler Inspection Division (ADL) with respect to the boilers on its campus and the attendance requirements for boiler operators. The ADL referred the matter to the Boiler Safety Board for advice and recommendation. Present on behalf of the ADL were Gary Myrick, Chief Boiler Inspector, and Denise Oxley, Chief Legal Counsel. Present on behalf of ASU were Mr. Dusty Stroud and Mr. Joe Phillips. Also present was Mr. Carroll Housdan of Hartford Steam Boiler.

FINDINGS OF FACT:

- 1. Ark. Code Ann. § 20-23-04 provides:
- (a) All boilers subject to the provisions of this chapter shall be continuously monitored by mechanical and electronic devices approved by the Director of the Department of Labor. When a plant is in operation or when any public building is occupied, the boilers shall be under regular attendance by a boiler operator unless otherwise exempt.
- (b) Boilers that are manually operated shall be under constant attendance whenever they are in use for any purpose.
- (c) All steam boilers fifty horsepower (50 hp.) and over, as rated by the manufacturer in any location, and steam boilers used in hospitals, hotels, schools, theatres, and office buildings, but not limited to these places, shall be under regular attendance by a licensed operator who holds a certificate of competency issued by the Boiler Inspection Division
- 2. The regulations of the ADL provide, in pertinent part:

(I) Operator Attendance

It should be noted that nothing will replace the need for one or more boiler operators being in attendance when the boilers are in operation.

- (1) High Pressure Steam Boilers
- (a) Manual boilers shall be maintained by **constant attendance** by a boiler operator. (See definition of constant attendance.)
- (b) High-pressure steam boilers, which meet CSD-1 recommendations for local alarms and safety devices, shall be maintained by **regular attendance** by a boiler operator. (See definition of regular attendance.)
- (c) High pressure steam boilers, which meet CSD-1 as in paragraph (b) above, plus have installed remotely actuated alarms to detect low water condition, high pressure, high water condition, and loss of operating boiler, etc., shall be maintained by **periodic attendance** by a boiler operator
- (d) High temperature, high-pressure water boilers fall under the same guidelines as those for high-pressure boilers in (a), (b), and (c) above.

Administrative Regulations of the Boiler Inspection Division, Chapter 4 (I)(1)(October 1, 1999).

- 3. The ADL's regulations define "periodic attendance" to mean that the "[b]oiler operator must inspect the boiler for proper operation every four hours to take and record any required readings. Boiler is equipped with the usual local operating and safety devices which include alarm lights and buzzers. In addition, there must be remotely actuated alarm devices to detect: (1) low water condition; (2) over pressure condition (set to operate before the safety valve operates); and (3) loss of operating boiler." Administrative Regulations of the Boiler Inspection Division, Chapter 1, Subchapter 3(October 1, 1999).
- 4. ASU requests a variance to check and log campus steam boilers operating in buildings with occupation once ever twelve (12) hours and hot water heating system boilers with building occupation once every twenty-four (24) hours. Hot water boilers will be checked and

logged once every twenty-four (24) hours in occupied buildings. Unoccupied buildings on weekends will be checked for proper operations by duty employees daily.

- 5. ASU proposes to meet the following conditions:
- a. All steam and hot water boilers shall have an electronic monitoring system (meeting CSD-1 recommendations) reporting low water, over pressure, and loss of operating boiler (set to operate before the safety valve operates), in place and operation twenty-four (24) hours a day, seven (7) days a week. Electronic monitoring shall be reported electronically to the campus police department, which is manned twenty-four (24) hours a day, seven (7) days a week.
- b. Licensed boiler operator(s) shall be on stand by in all after-hour situations and able to respond within fifteen (15) minutes of an alarm.
- c. All steam boilers will have a remote shut-down switch located at each boiler room door.
- d. Daily checks of the alarm system will be conducted to ensure operational status.
- e. The monitory system will provide an audible alarm system wired to the boiler that notifies the campus dispatcher of an alarm.
- f. All boiler alarms must be manually reset at the boiler location. Remote reset of alarms will not be allowed.
- g. In addition to electronic monitoring, video monitoring will be maintained in the dormitories' equipment room so that visual monitoring can take place immediately in real time.

CONCLUSIONS OF LAW:

- 1. The ADL is authorized to establish regulations and standards for the installation and operation of boilers. Ark. Code Ann. § 20-23-30(a)(2).
- 2. At the time of this hearing, the ADL had adopted regulations regarding the operation of boilers with respect to monitoring and attendance by licensed boiler operators.

 Administrative Regulations of the Boiler Inspection Division, Chapter 4 (I)(1)(October 1, 1999).
- 3. At the time of this hearing, the ADL had not adopted a specific regulation regarding variances, but such authority is inherent in the authority to establish standards.
- 4. The board concludes that safety will not be compromised provided that ASU complies with the conditions listed in paragraph 5(a) through (g) in the above Findings of Fact and the Board specifically imposes those conditions upon approval of the requested variance.

RECOMMENDATIONS:

- 1. The board recommends that the variance be granted as provided in paragraph 4 of the above Findings of Fact, provided that ASU complies with the following conditions:
- a. ASU will meet all conditions contained in paragraph 5(a) through (g) of the above Findings of Fact;
- b. ASU will establish a formal written monitoring and response policy/procedure and all employees monitoring the remote station and all on-call personnel will receive formal training on the response procedure.
- c. The written policy shall specifically provide that if the electronic monitoring system fails or breaks down, all boilers will be monitored and attended by licensed boiler operators in the time frame established by ADL for regular attendance until such time as the electronic monitoring system is fully restored.

- d. ASU shall comply with all other rules and regulations of the ADL regarding the installation and operation of boilers.
- 7. The Chief Boiler Inspector shall review ASU's monitoring system and written procedures for compliance with this variance request.
- The Chief Boiler Inspector shall approve future installations of boilers on the ASU campus for monitoring in conformity with this variance.

BOILER ADVISORY BOARD STATE OF ARKANSAS

The recommendations of the Arkansas Boiler Advisory Board are hereby accepted. This decision being made on January 19, 2006 is issued now for that date.

IT IS SO ORDERED.

Jarhes L. Salkeld, Director Arkansas Department of Labor

Approved as to form:

Denise P. Oxley, 84-117 Chief Legal Counsel Arkansas Department of Labor 10421 West Markham Little Rock, AR 72205 (501) 682-4504 fax: (501) 682-4535