

Secretary of Labor,	:	
Complainant,	:	
	:	
v.	:	OSHRC Docket No. 00-0012
	:	
Titan Tire Corporation of Natchez,	:	EZ
Respondent,	:	
	:	
and	:	
	:	
United Steelworkers of America,	:	
AFL-CIO/CLC, Local No. 303L,	:	
Authorized Employee :	:	
Representative.	:	

Appearances:

Marsha Semon, Esquire
Office of the Solicitor
U. S. Department of Labor
Birmingham, Alabama
For Complainant

Peyton S. Irby, Esquire
Watkins, Ludlam, Winter & Stennis, P.A.
Jackson, Mississippi
For Respondent

Before: Administrative Law Judge Stephen J. Simko, Jr.

DECISION AND ORDER

Titan Tire Corporation of Natchez (Titan) is engaged in the manufacture of tires in Natchez, Mississippi. The Occupational Safety and Health Administration (OSHA) conducted an inspection and investigation of respondent’s facility which began on October 5, 1999, as a result of a flash fire or explosion that occurred on October 4, 1999. As a result of this inspection and investigation, respondent was issued a citation. Titan filed a timely notice contesting the citation and proposed penalty. A hearing was held pursuant to EZ trial proceedings in Jackson, Mississippi, on April 7, 2000. In her posthearing brief, the Secretary withdrew all allegations relating to the light fixture above the #2 Banbury. For the reasons that follow, Citation No. 1, item 1, is affirmed and a penalty of \$2,125 is assessed.

Background

On October 4, 1999, respondent’s employees were mixing rubber stock for tires in large enclosed mixers. While running a batch of stock, a mixer ejected a large cloud of carbon black dust into the work area and up to the ceiling of the building. The dust ignited, causing a large flash fire that seriously burned two employees. As a result of this incident,

OSHA began its inspection and investigation on October 5, 1999.

Stipulation of Facts

At the hearing, the parties submitted Joint Exhibit J-1, a Stipulation of Undisputed Facts, as follows:

1. Respondent, Titan Tire Corporation of Natchez, is owned by Titan Tire Corporation.
2. The Respondent has operated a tire manufacturing facility (“the plant”) located at 89 Kelly Avenue, in Natchez, Mississippi, since September 1998.
3. At all times relevant to this proceeding, the Respondent has been engaged in a business affecting commerce within the meaning of the Occupational Safety and Health Act of 1970 (“the Act”).
4. The plant has been in operation since the 1940's, manufacturing tires under the name of several different tire companies, including Armstrong Tire and Condere Corporation, d/b/a Fidelity Tire Manufacturing Co.
5. The mixing of rubber stock in large mixers, known as Banbury mixers, is integral to Respondent’s tire manufacturing process.
6. A Banbury mixer is a large enclosed internal mixer, similar to a dough mixer, with two rotors revolving in opposite directions and at different speeds in a water-cooled chamber.

7. As part of the tire manufacturing process, rubber and carbon black are added to the Banbury mixer through a conveyor at the top of the machine, along with various compounding chemicals and oil, to mix a “batch” of stock.

8. In mixing a batch of stock in a Banbury mixer, the rubber is forced between the rotors, and also between the walls of the Banbury and the rotors, by a lid operated by a hydraulic ram.

9. The ram must be raised and lower [*sic*] at designated periods during the mixing cycle in order for the lid to raise and allow the rubber to turn and the excess carbon black which may accumulate on the lid to be incorporated into the stock.

10. Once a batch of stock is mixed in a Banbury, a door at the bottom of the mixer opens, and the batch drops out for further processing elsewhere in the plant.

11. It is common knowledge in the tire manufacturing industry that Banbury mixers may, on occasion, expel or “belch” carbon black dust into the air.

12. At all times relevant to this proceeding, there were (6) Banbury mixers at the plant, only three (3) of which were normally in use at any given time.

13. On October 4, 1999, the #1 Banbury at the plant, which can be identified as a model 110 Intensive Mixer, manufactured by Skinner Engine Company, was being operated by Respondent’s employee Marsalla Robinson and Paul Baxter, an employee of M. E. Mason Contracting, Inc., a contract personnel agency, who was being trained to operate the #1 Banbury by Mr. Robinson.

14. The #1 Banbury has a capacity to mix approximately 400 lbs. of stock per batch.

15. The #1 Banbury had been out of service for at least three months prior to October 4, 1999.

16. At approximately 7:00 a.m. on October 4, 1999, Mr. Robinson and Mr. Baxter started the #1 Banbury, and loaded it with the ingredients used to run “MO8” stock, which is a normal stock to run on the #1 Banbury.

17. Exhibit "A", which is attached to and made a part of this Stipulation, describes the various ingredients, and amounts of each ingredient, added to the #1 Banbury on October 4, 1999, in order to run the MO8 stock, and includes Material Safety Data Sheets for these ingredients.

18. The rubber used to run MO8 stock on the #1 Banbury is natural (also called "raw" or "green") rubber, in block form, with each block weighing approximately 75 lbs.

19. While running the first batch on the #1 Banbury on October 4, 1999, it was discovered that the dust collector at the #1 Banbury was not working, which allowed carbon black to billow out of the mixer into the work area.

20. Respondent's employee, Mr. Sam Woods, who is the Lead Supervisor of the Materials Preparation Department, was advised that the dust collector on the #1 Banbury was not working, and determined that there was no alternative but to allow the first batch of stock to drop out of the mixer before attempting to correct the problem with the dust collector.

21. After the first batch of stock dropped out of the #1 Banbury, Mr. Woods asked Respondent's Electrician, Mr. Emmitt Kenney, Jr., to fix the dust collector.

22. Mr. Kenney saw that the main switch on the dust collector for the #1 Banbury was off, turned the switch on, and informed Mr. Woods of the same.

23. After Mr. Kenney turned the dust collector on, at Mr. Woods' direction, Mr. Robinson and Mr. Baxter loaded a second batch of stock into the #1 Banbury, using the same ingredients as were used in the first batch.

24. In running either the second or a subsequent batch of stock, Mr. Robinson and Mr. Woods became aware that the ram on the #1 Banbury was not operating properly in that it would not lower into the mixer.

25. Mr. Woods asked Electrician Emmitt Kenney, Jr., to determine what was wrong with the ram and fix it.

26. Shortly thereafter, Mr. Robinson advised Mr. Woods that the bottom door of the #1 Banbury would not open to allow stock to drop down.

27. Mr. Woods asked Electrician Emmitt Kenney, Jr., to correct this problem also.
28. Subsequently, at approximately 8:00 a.m., while running a batch of MO8 stock, the #1 Banbury “belched”, forcefully ejecting a large cloud of black dust into the work area.
29. Mr. Woods was not present at the #1 Banbury at the time of the belch, but was notified of the same, observed the area after the belch, and directed that the area be cleaned up and the #1 Banbury restarted.
30. At approximately 9:00 a.m. on October 4, 1999, while running MO8 stock, the #1 Banbury “belched” again, forcefully ejecting a larger cloud of black dust into the work area and up to the ceiling of the building.
31. Within seconds after the second “belch,” the black dust ignited, causing a large flash fire.
32. The #1 Banbury operator, Mr. Robinson, and his trainee, Mr. Baxter, were both seriously burned by the flash fire.
33. The actual ignition source for the dust cloud has not been determined.
34. The Citation at issue relates to a fluorescent light fixture above the #1 Banbury conveyor and a shop light above the #2 Banbury conveyor, neither of which had a dust cover.
35. The Citation at issue also relates to a 110 volt electrical outlet, into which the aforementioned fluorescent light at the #1 Banbury was plugged, which did not have a cover over its unused receptacle.

Discussion

The Secretary has the burden of proving the violation:

In order to establish a violation of an occupational safety or health standard, the Secretary has the burden of proving: (a) the applicability of the cited standard, (b) the employer’s noncompliance with the standard’s terms, (c) employee access to the violative conditions, and (d) the employer’s actual or constructive knowledge of the violation (*i.e.*, the employer either knew or, with the exercise of reasonable diligence could have known, of the violative conditions).

Atlantic Battery Co., 16 BNA OSHC 2131, 2138 (No. 90-1747, 1994).

Citation No. 1, Item 1

Alleged Serious Violation of 29 C.F.R. § 1910.307(b)

The Secretary in Citation No. 1, item 1, alleges that:

Equipment, wiring methods, and installations of equipment in hazardous (classified) locations were not intrinsically safe, or approved for the hazardous (classified) location, or safe for the hazardous (classified) location:

Banburies - Electrical receptacles and lighting fixtures were not approved for a Class II, Division 2 locations.

Section 1910.307(b) provides in part:

(B) *Electrical installations.* Equipment, wiring methods, and installations of equipment in hazardous (classified) locations shall be intrinsically safe, approved for the hazardous (classified) location, or safe for the hazardous (classified) location.

Class II locations are defined in 29 C.F.R. § 1910.399 as “those that are hazardous because of the presence of combustible dust.” It further defines a Class II, Division 2 location as follows:

(ii) *Class II, Division 2.* Class II, Division 2 location is a location in which (a) combustible dust will not normally be in suspension in the air in quantities sufficient to produce explosive or ignitable mixtures, and dust accumulations are normally insufficient to interfere with the normal operation of electrical equipment or other apparatus; or (b) dust may be in suspension in the air as a result of infrequent malfunctioning of handling or processing equipment, and dust accumulations resulting therefrom may be ignitable by abnormal operation or failure of electrical equipment or other apparatus.

It is undisputed that the electrical receptacles and lighting fixtures in the area of the #1 Banbury mixer were not designed to meet the requirements of a Class II, Division 2 location. It is further undisputed that respondent’s employees worked in the vicinity of the #1 Banbury mixer. Remaining at issue are whether the #1 Banbury mixer area is a Class II, Division 2 location and, if so, whether respondent had the requisite knowledge of the violative condition.

The parties stipulated regarding the characteristics and quantities of the ingredients added to the #1 Banbury mixer on October 4, 1999. A review of the stipulated documents, including the Material Safety Data Sheets for those materials, shows that five of the seven raw materials were ignitable. There was a high concentration of carbon black in the MO8 mixture, and the carbon black was contaminated with oil. In its posthearing brief, respondent admits that no tests were conducted concerning the unconsumed oil content of the mixture; no tests were run to determine the amount of dust at the plant; and no determination was made of the dust accumulation at the time of the fire. The explosive potential of the carbon black dust mixture belched from the mixer is clearly shown by the large flash fire that occurred when the dust cloud ignited on October 4, 1999. Witnesses consistently testified that belches occur in this area at least once or twice each month. These belches release the carbon black dust mixture into the air in the area of the Banbury mixture. It is common knowledge in this industry that Banbury mixers may, on occasion, expel or belch carbon black dust into the air. Prior to October 4, 1999, these monthly releases of dust rose only 3 to 6 feet above the floor. On October 4, 1999, however, two belches were of a greater magnitude. The intensity of these belches was greater, but there was no evidence to suggest that the flammability or explosive characteristics of the dust was greater than that of the dust in the lower level releases.

Sam Woods, respondent's supervisor with over thirty-seven years' experience with Banbury mixers, admitted that he had seen belches of carbon black up to 15 feet from the unit. The light fixture was located only 9 feet above the floor and 6 feet above the charge conveyor next to the #1 Banbury mixer. This fixture is well within the hazardous area of what respondent admits are routine belches up to 6 feet above the floor once or twice a month, and the maximum observed distance of 15 feet. On October 4, 1999, the #1 Banbury unit expelled carbon black dust several times at these lower levels. One hour before the flash fire, a large belch expelled black dust to the extent that one employee 40 to 50 feet from the unit was covered with carbon black, unable to see the ceiling a few feet overhead.

Mr. Woods observed the area after this belch and told employees to clean up the dust and restart the mixer. The #1 Banbury then belched another large carbon black dust cloud into the work area and up to the ceiling. This dust ignited within seconds, causing a large flash fire that seriously burned the #1 Banbury operator and his trainee.

In this work area, combustible carbon black dust is not normally in suspension in the air in explosive quantities. While not normally in suspension, this dust is expelled from the mixer once or twice a month due to malfunctioning of the mixer. Dust from this mixer may be ignitable when it contacts electrical equipment, such as outlets and light fixtures which are not adequately protected. The ignitability of this dust was demonstrated by the October 4, 1999 flash fire. Neither the fluorescent light nor the receptacle had dust covers. Mr. Frank Fines, respondent's operations manager, testified that none of the equipment in the #1 Banbury mixer area was Class II, Division 2 equipment.

The work area around the #1 Banbury mixer, including the fluorescent light fixture and 110-volt electrical outlet at issue, is clearly a Class II, Division 2 location within the meaning of the standard. Section 1910.307(b) is, therefore, applicable.

Respondent knew, or with the exercise of reasonable diligence, could have known, of the presence of the violation. As discussed above, it is well known to respondent and the tire industry that Banbury mixers belch the carbon black dust mixture into the immediate work area on a recurring basis. Respondent knew its electrical equipment in this area was not approved as a Class II, Division 2 location. It knew the contents of the batch mixture and that five of the seven ingredients were ignitable. Titan, however, conducted no tests to determine flammability, volatility or explosive characteristics of this dust mixture.

Respondent relies on a publication by the Canadian Centre for Occupational Health and Safety (Exh. R-1). This is a document apparently taken from the internet that indicates that dust explosions may occur if oil content exceeds 13 percent and that carbon blacks with over 8 percent volatiles may be an explosion hazard. Respondent's employees testified that the oil content was less than 6 percent by weight, but did not address the other ignitable chemicals. It presented no evidence about the four other ignitable or volatile substances in the carbon black. Knowing it had 6 percent oil content in the mixture, along with other ignitable substances, respondent should have taken reasonably diligent steps to assure that total volatiles did not exceed 8 percent or, alternatively, that its electrical equipment, fixtures and outlets in the #1 Banbury mixer area were approved for a Class II, Division 2 location.

Employer knowledge is established by a showing of employer awareness of the physical conditions constituting the violation. It need not be shown that the employer understood or acknowledged that the physical conditions were actually hazardous. *Phoenix Roofing, Inc.*, 17 BNA OSHC 1079-1080 (No. 90-2148, 1995); *East Texas Motor Freight v. OSHRC*, 671 F.2d 845, 849 (5th Cir. 1982). As discussed above, Titan was clearly aware of the

physical conditions that constituted the violation. It failed to make a reasonable inquiry or test to determine whether these conditions were actually hazardous. When an employer knows that potentially ignitable dust is expelled into the air of a work area, it cannot ignore the potential hazard. It must take steps to determine whether a fire or explosion hazard exists and the extent of such hazard.

I conclude that respondent's #1 Banbury work area was a Class II, Division 2 location and that respondent failed to assure that electrical equipment, fixtures and outlets in the area were intrinsically safe, approved for this location, or safe for this location. Further, respondent had knowledge of this condition.

Respondent violated 29 C.F.R. § 1910.307(b). The violation is serious.

Penalty

Under § 17(j) of the Act, in determining the appropriate penalty, the Commission must give due consideration to the size of the employer's business, the gravity of the violation, the good faith of the employer, and the history of previous violations.

At the time of the inspection, approximately four employees were working in the #1 Banbury work area. Respondent is a large employer. The compliance officer determined that the company had serious violations at other locations, but not at this plant. Upon due consideration of these factors, a penalty of \$2,125 for Citation No. 1, item 1, is appropriate.

FINDINGS OF FACT AND
AND CONCLUSIONS OF LAW

The foregoing decision constitutes the findings of fact and conclusions of law in accordance with Federal Rule of Civil Procedure 52(a).

ORDER

Based upon the foregoing decision, it is ORDERED:

1. The Secretary withdrew all allegations relating to the light fixture above the #2 Banbury mixer. These allegations are vacated.
2. Citation No. 1, item 1, is affirmed, as amended, and a penalty of \$2,125 is assessed.

/s/

STEPHEN J. SIMKO, JR.
Judge

Date: May 22, 2000