BEFORE THE SAFETY AND HEALTH REVIEW BOARD OF NORTH CAROLINA RALEIGH, NORTH CAROLINA

COMMISSIONER OF LABOR FOR THE STATE OF NORTH CAROLINA,

DOCKET NO. OSHANC 2004-4366 OSHA INSPECTION NO. 306506759 CSHO ID NO. D3820

WEATHERGARD, INC. and its successors,

<u>ORDER</u>

RESPONDENT.

v.

APPEARANCES:

For Complainant: Daniel D. Addison, Assistant Attorney General

For Respondent: J. Anthony Penry of the firm Taylor, Penry, Rash & Riemann, PLLC

Administrative Law Judge: Ellen R. Gelbin

THIS MATTER came on for hearing before the undersigned Administrative Law Judge on September 29, 2004 in Winston-Salem, North Carolina;

Also present for the Attorney General was Linda Kimbell, Assistant Attorney General. Also present for Complainant, the North Carolina Department of Labor, Division of Occupational Safety and Health, were Dean Lassiter, Safety Compliance Officer II; Doug Jones, Supervisor; and James Henderson, Health Compliance Officer. Other counsel present for respondent were: Cynthia A. O'Neal of the law firm Taylor, Penry, Rash & Reimann, PLLC and John M. Sperati of the law firm Safran Law Offices. Also present for respondent were: Larry B. Parker, President; Richard Mills, Safety Director; Donald Gaddy, Foreman; Curtis Niver, Foreman; and Tim Hiltbrunner, consultant for Safran/Weathergard, Inc.

After reviewing the record file, hearing the evidence and arguments of counsel and after considering the applicable legal authorities, the undersigned makes the following:

FINDINGS OF FACT

1. Complainant is charged by law with responsibility for compliance with and enforcement of the provisions of N.C. Gen. Stat. §§ 95-126 et. seq., the Occupational and Safety and Health Act of North Carolina (the Act).

2. Respondent is a corporation engaged in the roofing business which conducts business in, and under the laws, of the State of North Carolina.

3. On January 15, 2004, respondent reported to the Occupational Safety and Health Division of the North Carolina Department of Labor that a fatality had occurred at Boiler Unit #2 at the Belews Creek, North Carolina (the job site). The fatality occurred after one of respondent's supervisors, Marcus Bellinger, fell 62.5 feet to his death when some roofing materials upon which he was standing collapsed beneath him.

4. Supervisor Doug Jones assigned safety compliance officer (SCO), Dean Lassiter, to investigate the report. The SCO properly presented himself to respondent and explained his purpose for being there. With the permission of and cooperation of respondent's President, Larry Parker and its Safety Director, Richard Mills, the SCO conducted his investigation from January 15, 2004 through March 15, 2004.

5. The SCO inspected the premises, interviewed witnesses, obtained documents and took photographs.

6. Respondent employed 8 employees at the job site and about 50 employees overall.

7. At the closing conference on March 15, 2004, the SCO advised Safety Director Mills and respondent's consultant, Tim Hiltbrunner, that he was citing them for a serious violation of 29 C.F.R. § 1926.501(a)(2), which provides as follows:

The employer shall determine if the walking/working surfaces on which its employees are to work have the strength and structural integrity to support employees shall be allowed to work on those surfaces only when the surfaces have the requisite strength and structural integrity.

structural integrity.

In the alternative, the SCO cited respondent for a serious violation of 29 C.F.R. § 1926.850(a), which provides as follows:

Prior to permitting employees to start demolishing operations, an engineering survey shall be made, by a competent person, of the structure to determine the condition of the framing, floors, and walls, and possibility of unplanned collapse of any portion of the structure. Any adjacent structure where employees may be exposed shall also be similarly checked. The employer shall have in writing evidence that such a survey has been performed.

8. Duke/Fluor Daniel contracted with respondent, Weathergard, Inc., to perform some roofing work on two buildings containing boiler equipment used for generating energy. Essentially, Duke/Fluor Daniel was cutting through the roofs of Boiler Buildings #1 and #2 in order to install environmental control devices required by the EPA. The roof involved in the instant case (Boiler Unit #2) covered 5700 square feet.

9. Duke/Fluor Daniel (DFD) initially contracted with respondent to remove and replace roofing materials in the areas in which the pollution control devices were penetrating the roofs.

10. The roofs consists of many layers. Forming the bottom layer of the roof are rectangular metal deck panels measuring 32 inches wide and 56 inches long. Each of the metal deck panels are corrugated so that the alternating ridges are fitted together end-to-end and side-to-side and joined together by metal threaded screws called "lag" screws. The lag screws prevent the metal panels from slipping or being displaced and provide some support for the roof. The metal decking is then spanned between steel girders (I-beams) which run horizontally under and act as a main support for the roof. The metal panels are topped with blankets of insulation measuring 4 feet by 4 feet. The insulation is then covered by roofing material called a "membrane," each roll measuring 30 feet long and 3 feet wide. The membrane consists of asphalt-type material like roofing shingles. The combination of the insulation and membrane is called "built-up roofing." The insulation and the membrane give the roof even greater support. (P#1,2,4,5,6,7 and 8)⁽¹⁾.

11. Prior to January 15, 2004, DFD had caused a hole to be cut in the roof of the west end of Boiler Unit #2. DFD then caused a vertical steel column (designated by DFD as column W-31) to be installed through the hole as part of the support for the pollution control devices. (P#3 and 4) Because respondent did not have a welder available for the purpose, DFD agreed that respondent would not be responsible for removing and replacing the metal deck panels immediately adjacent to column W-31. Instead, DFD caused the metal deck panels to be replaced adjacent to column W-31 and respondent was responsible only for removing and replacing the built-up roofing materials (insulation and membrane) from the metal deck panels surrounding the new column and metal decking.

12. On January 15, 2004, respondent's supervisor, Marcus Bellinger, was working with two of respondent's employees, Jose Marino and Felipe Guardado Esparza, to remove the built-up roofing material in the area of column W-31. All of the built-up roof material had been detached from a small area near column W-31, but the debris from the built-up roof was still resting on the metal roof decking. Mr. Bellinger stepped on one of these metal deck panels when it gave way, causing him to fall to his death 62.5 feet to the concrete floor below. (P#4 and 5)

13. Inspection of the metal panel on which Mr. Bellinger was standing and the area adjacent to the fallen panel evidenced the following: a) one end of the metal deck panel had never been joined with the adjacent metal deck panel by lag screws and there was a question of whether the overlapping ends had been welded to the I-beam on which they rested, and b) the other end of the metal deck panel had been joined by lag screws to the metal deck panel immediately adjacent to column W-31's metal deck panel, but the overlapping panels were not resting upon or welded to a girder or I-beam. (P#1,2,4,5,6,7 and 8)

14. Further inspection of the accident revealed that DFD had caused the I-beam under the metal deck panel to be removed or cut so that the hole could be cut for the installation of column W-31. DFD never caused the I-beam to be replaced, nor did it cause to be provided any alternative structural support to the metal deck panel similar or equal in strength to that of the original steel girder.

15. Neither Mr. Marino nor Mr. Esparza testified at the hearing. It is not possible to determine from the evidence presented whether Mr. Bellinger or any of respondent's employees inspected the metal deck panels after removing the built-up roofing material to determine whether the panels were properly screwed together. However, based upon his past behavior, if Mr. Bellinger had observed any defects in the metal deck roofing, he would have taken action to have it repaired. Because the metal roof decking overlapped from end to end and side to side, neither Mr. Bellinger nor his laborers that day could have seen from the walking surface whether the overlapping ends of the metal roof decking were resting upon horizontal steel-beams or supports beneath the panels.

16. However, prior to Mr. Bellinger falling to his death on January 15, 2004, respondent's Safety Director, Richard Mills, was performing a moisture test on the opposite or north east end of Boiler Unit #2, due to problems with the roof leaking. His inspection caused him to notice that some metal deck panels immediately adjacent to two other newly installed columns (located on P#3 at the intersections of X-21 and Y-21) were sagging. Mr. Mills asked a welder why the metal deck panels were sagging metal deck paneling and showed him where there were no steel I-beams or support structures. Mills ensured that DFD welded additional steel support under the sagging metal deck paneling immediately adjacent to columns X-21 and Y-21.

17. Despite the fact that DFD had installed other new columns in Boiler Unit #2 after having cut holes for the same in the metal deck panels, Mr. Mills: a) did not ask the welder or DFD representatives whether any other steel supporting beams had been removed from under the panels; b) did not make any attempt to personally inspect the roof below the other newly installed columns to determine if the walking/working surfaces on which respondent's employees were removing built-up roofing materials were supported properly at the seams; and c) in violation of 29 C.F.R. § 1926.850(a), did not have an engineering survey conducted, by a competent person, of the structure to determine condition of the floors, walls, and possibility of unplanned collapse of any portion of the structure, prior to allowing employees to start demolition operations by removing the built-up roofing materials in the area in which they were working.

18. In addition, prior to Mr. Bellinger's fall, respondent's foreman, Mr. Donald Gaddy, was removing built-up roofing material on the east side of Boiler Unit #2, when he noticed that some of the metal deck panels were loose. Those he observed, he secured with lag screws. When he was fixing the panels, he wore fall protection in the form of a lanyard tied off to a steal beam. Despite the fact that Mr. Gaddy noticed loose metal deck panels on the east side of the unit, he did not take any action to ensure that the metal deck panels on the west side of the unit where respondent's employees were also working were checked for structural integrity.

19. The failure of respondent to determine whether the walking/working surfaces on which its employees were to work had the strength and structural integrity to support employees safely constituted a hazard.

20. The violation was serious in that there existed the possibility of an accident: to wit, the absence of structural support for the metal decking to collapse under the weight of an employee, causing him to fall from a height of 62.5 feet to a concrete floor.

21. The likelihood of collapse of the metal deck paneling was substantially increased when respondent's employees removed the built-up roofing materials overlaying the metal

22. The substantial probable result of such an accident would be death.

23. Respondent's employees, Mr. Bellinger, Mr. Marino and Mr. Esparza were exposed to the hazard during the period in which they removed the built-up roofing material from the metal deck panels.

24. The \$1,400 penalty imposed for the violation cited in Citation 1, Item 1 was properly calculated in accordance with the North Carolina Operations Manual as follows:

a. the severity of the violations was properly determined to be high due to the potential for death if the roof panels should give way;

b. the probability assessment was properly deemed to be medium in that the unsupported area was limited to the area over the absent I-beam and the metal deck paneling over that absent I-beam was not likely to collapse except during the limited period during which the built-up roof material had been removed;

c. the gravity based penalty was properly calculated to be \$3,500;

d. the adjustment factor for size was properly calculated to be 50%;

e. the adjustment factor of 10% for respondent's cooperation was properly applied;

f. the adjustment factor of 0% for history of prior violations was properly applied because the hazard involved a fatality; and

g. the total reduction of 60% to the \$3,500.00 gravity based penalty to reduce the penalty to \$1,400 was properly applied.

25. Respondent could have avoided or abated this violation by questioning the welder or DFD as to whether there were other areas of the metal deck paneling which were not supported by I-beams or other steel structures as a result of the installation of the new columns or by having its own engineering survey done in accordance with 29 C.F.R. § 1926.850(a) and by prohibiting its employees from walking/working in those areas until DFD could cause proper support to be installed under the walking/working surface where they were removing the built-up roofing materials.

26. After the fatal fall, respondent abated the hazard by prohibiting its employees from returning to the work site until DFD could cause proper support to be installed. DFD refused to do so and respondent lost its contract for the work.

CONCLUSIONS OF LAW

1. The foregoing findings of fact are incorporated by reference as Conclusions of Law to the extent necessary to give effect to the provisions of this Order.

2. Respondent is subject to the provisions and jurisdiction of the Act.

3. The Complainant proved by a preponderance of the evidence that respondent violated the sections of the Act as set forth in the Findings of Fact above, that the violations were serious as designated in Citation 1, Item I and that the proposed penalty assessed for Citation 1, Item I was figured appropriately.

DISCUSSION

Respondent presented evidence at the hearing that, prior to Mr. Bellinger's fall, respondent had no reason to suspect that the metal deck panels were not properly supported by I-beams or other steel structures because hundreds of men and heavy materials and equipment weighing in the tons were piled upon the roof without causing a collapse. This argument is not persuasive for four reasons.

First, Mr. Mills personally observed the sagging of metal deck panels surrounding two newly installed columns for which holes had been cut in the roof. His knowledge that the reason the panels were sagging was because the I-beam supports had been removed to allow for the installation of the columns put him on notice that it was possible the same condition could exist at each and every other newly installed column, including W-31, where respondent's employees were working.

Second, Mr. Gaddy personally observed the loose metal deck panels on the east side of Boiler Unit #2 and tied himself off while he repaired the breach in the integrity of the panel junctions. His knowledge that the panels were loose on the east side of the unit put him on notice that it was possible the same condition could exist in other areas in which respondent's employees were removing built-up roofing materials.

Third, the heavy materials and equipment piled on the roof were sitting upon the built-up roofing material consisting of 4 foot by 4 foot blankets of insulation and rolls of asphalt-type membrane extending 30 feet long and 3 feet wide. The very presence of the built-up roofing material provided extra layers of support for the metal deck panels below.

Fourth, the heavy materials and equipment were stacked in such a way that the weight of their load was spread over a wider area than the area on which one man would stand on an uncovered metal deck panel. Since the I-beams were less than 56 inches apart, (less than the length of a metal deck panel), it is more likely then not that the metarials and equipment rooted upon more than an exponenting stack I have

deck panel), it is more likely than not that the materials and equipment rested upon more than one supporting steel I-beam.

Respondent also argued that it was DFD's responsibility to ensure that there were I-beams sufficient to support the metal deck panels in Boiler Unit #2. Respondent rests its argument on the fact that DFD contracted to do so and did ensure that there were I-beams sufficient to support the metal deck panels in their first project involving Boiler Unit #1. This argument must fail for two reasons.

First, Mr. Mills had notice that DFD had not provided sufficient I-beam support for the metal deck panels in the vicinity of the newly installed columns in Boiler Unit #2.

Second, the fact that the general contractor is responsible for providing safety measures on a work site, does not obviate the need for each subcontractor to determine whether those measures were taken in accordance with the Act.

Additionally, respondent argue that it could not have known that the steel I-beams in the area beneath the newly installed columns on the west side of Boiler Unit #2 were absent because the underneath area was in the dark and so far above the ground level that it could not be seen by the naked eye. Having prior notice that DFD had caused steel support structures to be removed in the vicinity of other newly installed columns, respondent has no reasonable excuse for not at least: a) inquiring of DFD whether it had caused the steel supporting structures to be removed from the area in which respondent's employees were working, or b) prohibiting its employees from walking/working in areas where DFD had not expressly certified were safe.

Respondent argued that it was reasonable for it to assume the walking/working area around column W-31 was safe because DFD requested that respondent's employees remove the built-up roofing materials from that area. In support of its argument, it points to the fact that before metal deck panels were re-installed immediately adjacent to the newly installed columns, DFD had strung "rat lines" or rope-like barriers around the open holes to warn respondent's employees that the area was not safe. Respondent argued that once DFD removed the ropes, it was reasonable to assume the area was safe. Once again, the fact that the general contractor is responsible for providing safety measures on a work site, does not obviate the need for each subcontractor to determine whether those measures were taken in accordance with the Act.

Finally, Mills testified that the panels which sagged around the newly installed columns on the east side of the building were so close to the columns that no man could have fallen through. However, once he realized that the reason the panels on the northeast side of the unit were sagging was that DFD caused the steel support structures to be removed for the installation of the new columns, Mr. Mills should have seen to it that similar support structures removed near other new columns were not creating a hazard for respondent's employees walking/working near those new installations.

Based upon the foregoing Findings of Fact and Conclusions of Law, IT IS ORDERED as follows:

- 1. Citation 1, Items 1 is hereby **AFFIRMED** and the penalty is hereby imposed in the amount of \$1,400;
- 2. The penalty shall be paid within ten (10) days of the filing date of this Order; and

This the 21st day of October, 2004.

Ellen R. Gelbin Administrative Law Judge

^{1. /} Complainant's exhibits are designated with a "P#___" and respondent's exhibits are designated with a "WG#__."