

BEFORE THE SAFETY AND HEALTH REVIEW BOARD

OF NORTH CAROLINA

COMMISSIONER OF LABOR OF
THE STATE OF NORTH CAROLINA,

COMPLAINANT,

v.

CITY OF MT. AIRY,

RESPONDENT.

DOCKET NO. OSHANC 91-2077
OSHA INSPECTION NO. 18479048
CSHO ID NO. P0009

ORDER

DECISION OF THE REVIEW BOARD

This appeal was heard at or about 10:00 A.M. on the 18th day of February, 1994 in the Wake Count Courthouse, Room 700, 7th floor, 316 Fayetteville Street Mall, Raleigh, North Carolina and reheard on the 10th day of March, 1995 at the same location. Sitting for the first appeal were J. B. Kelly, Chairman, Kenneth K. Kiser, and Hugh M. Wilson, Members of the North Carolina Safety and Health Review Board. Sitting for a rehearing of the Appeal was Robin E. Hudson, Chair, Kenneth K. Kiser, and Hugh M. Wilson, Members of the North Carolina Safety and Health Review Board.

APPEARANCES

Ranee S. Sandy, Assistant Attorney General, North Carolina Department of Justice, Raleigh, North Carolina for the Complainant, at the first hearing before the Board.

Gaither S. Walser, of Brinkley, Walser, McGirt, Miller, Smith & Coles, Lexington, North Carolina for Respondent at the first hearing before the Board.

Both Ranee S. Sandy for Complainant and Gaither S. Walser for Respondent waived oral argument and appearances at the rehearing before the Board.

ISSUE PRESENTED

1. Do the evidence, the findings of fact and the conclusions of law support a finding that Respondent committed a willful violation of N.C.G.S. § 95-129(1), the general duty clause?

SAFETY STANDARDS AND/OR STATUTES AT ISSUE

1. N.C.G.S. § 95-129(1), the general duty clause which states:

Each employer shall furnish to each of his employees conditions of employment and a place of employment free from recognized hazards that are causing or are likely to cause death or serious injury or serious physical harm to his employees[.]

2. N.C.G.S. § 95-138(a) which states the following with respect to a willful violation:

Any employer who willfully or repeatedly violates the requirements of this Article, any standard, rule or order promulgated pursuant to this Article, or regulations prescribed pursuant to this Article, may upon the recommendation of the Director to the Commissioner be assessed by the Commissioner a civil penalty of not more than seventy thousand dollars (\$70,000) and not less than five thousand dollars (\$5,000) for each willful violation.

(emphasis added)

Having reviewed and considered the record and the briefs and the arguments of the parties, the Safety and Health Review Board of North Carolina hereby makes the following Findings of Fact, Conclusions of Law, and Order:

FINDINGS OF FACT

1. This case was initiated by a notice of contest which followed citations issued to the Respondent to enforce the Occupational Safety and Health Act of North Carolina (OSHANC or Act), N.C. Gen. Stat. §§ 95-126 et seq.
2. The Commissioner of Labor (Complainant) is responsible for enforcing OSHANC (N.C. Gen. Stat § 95-133).
3. The Respondent is a North Carolina municipal corporation and is subject to the Occupational Safety and Health Act of North Carolina.
4. On June 9, 1991 an accident occurred at the Mount Airy Waste Water Treatment Plant and two workers were overcome by toxic gases while attempting to unstop a clogged 12 inch diameter pipe at the bottom of a sludge well pit containing raw sewage. One worker died from the exposure to the toxic gases and the other worker survived.
5. Beginning on June 10, 1991 and ending on July 25, 1991, as a result of the accident and subsequent fatality, compliance safety officer David Poole conducted an inspection of the Respondent's Waste Water Treatment Plant in the city of Mount Airy, North Carolina.
6. As a result of that inspection, Complainant on August 20, 1991 issued Citation One for a Willful Serious violation of N.C.G.S. § 95-129(1), the general duty clause, and Citation Two for 13 serious violations. These citations were initially issued to the Mt. Airy Wastewater Treatment Plant but were later amended to be issued to the City of Mount Airy. No penalties were assessed against the Municipal Corporation as was required by N.C.G.S. § 95-148 in effect at the date the violations occurred. The abatement date for all of the violations was September 23, 1991.
7. The Respondent timely exercised its right to contest the violations and penalties (N.C. Gen. Stat §§95-129, 95-137). The notice of contest was timely filed with the Safety and Health Review Board of North Carolina on September 23, 1991.
8. The Safety and Health Review Board of North Carolina (Review Board) assumed jurisdiction over the issues in contest. (N.C. Gen. Stat § 95-135).
9. The Respondent's Statement of Employer's/Respondent's Position was filed on October 11, 1991 contesting Citation One, Item 1 specifically and generally all citations designated as "willful" or "serious" which means they contested all of the citations.
10. A hearing was scheduled and held beginning on November 17, 1992 and concluding on November 19, 1992 before the Honorable Charles R. Brewer. At the beginning of the Hearing the Respondent admitted the violations of the standards contained in the citations but denied their respective designations as either "willful/serious" or "serious". Also, during the Hearing Complainant amended Citation No. 2, Items 1-7 to add as additional language to each item that "This item relates solely to the respirator or respirators provided for repair of chlorine leaks only and had no application to the sludge well pit as of June 7, 1991." Respondent then withdrew its notice of contest to Citation No. 2, Items 1-7.
11. On July 28, 1993, Hearing Officer Brewer filed an Order in this matter finding Respondent to be in willful/serious violation of Citation Number 1 and serious violation of Citation Number 2 and all of the items contained therein. Officer Brewer affirmed the assessment of no penalties.

12. The Respondent timely filed an appeal with the Review Board on August 12, 1993 requesting review of the Order dated July 24, 1993, by Charles R. Brewer, Administrative Law Judge which Order was filed with the Review Board on July 28, 1993.

13. On February 18, 1994 the issues on appeal were heard by the full Review Board.

14. On March 10, 1995, after the vacancy in the Board chairmanship was filled, the issues on appeal were reheard by the full Review Board with oral argument and appearance being waived by both the Complainant and the Respondent.

15. Bill Joe Woodruff (hereafter "Woodruff") was fire chief and safety director for the city of Mt. Airy from at least 1975 until June 7, 1991, the date of the accident. (T p 13-14).

16. The city of Mt. Airy joined the League of Municipalities in 1982 and shortly thereafter started using the League's Safety and Loss Control Consultant, Hewitt, Coleman and Associates. (T p 21).

17. Woodruff received a document titled "Standard Operating Procedure for Manhole and Confined Space Entry" (hereinafter SOP) from Hewitt, Coleman and Associates in the early 1980's and was told that procedures contained in the documents were required by OSHA. (T p 27, 28, 21, Complainant's Exhibit #2).

18. Woodruff gave a copy of the SOP to some of the workers who were working out in the city manholes and filed it away without following up to see that the required procedures were being followed. (T p 27, 30-34).

19. The first line of the SOP states "All employees of the wastewater collection Division who may or are required to enter manholes or other confined space sewer structures shall be instructed as to the nature of the hazards involved, the necessary safety practices to be followed, and in the use of protective equipment." (emphasis added). (T. p 32-33, Complainant's Exhibit # 2).

20. The second and third paragraphs of the SOP states:

The S.O.P. for manhole entry, in effect in this division, shall conform with the provisions of Article 1926.956(3), Subpart V, Title 29, Department of Labor Safety and Health Regulations for Construction.

Said Article states:

(3) When work is to be performed in a manhole or unvented vault:

1. No entry shall be permitted unless forced ventilation is provided or the atmosphere is found to be safe by testing for oxygen deficiency and the presence of explosive or toxic gases or fumes.

2. Where unsafe conditions are detected the work area shall be ventilated before entry.

3. Provisions shall be made for an adequate continuous supply of air.

The above regulation gives affected agencies the option of providing forced ventilation or establishing, through testing, that the atmosphere is safe.

(Complainant's Exhibit # 2)

21. The SOP in the last paragraph on page 1 states "The following procedure incorporates this best protection feature along with rigid compliance with O.S.H.A. rules and regulations [:]" (second emphasis added) and then lists nine procedures that are necessary to follow for the best protection of employees entering manholes and confined spaces and sets up a rescue procedure in the event a worker becomes unconscious, of which one of the procedures is that a "Safety harness must be worn if manhole is deeper than 5 feet." (Complainant's Exhibit # 2).

22. The last paragraph of the SOP states "The above S.O.P. will be effective immediately. Failure to comply may subject an [sic and] employee to disciplinary action up to and including termination."

23. Woodruff read the SOP when he received it and had knowledge that the SOP applied to manholes and other confined space sewer structures, that it was required by OSHA standards and had knowledge of the OSHA standards. (T p 27-29, 40-42, Complainant's Exhibit #2).

24. Entry into the sludge well pit was available only through a manhole. (T p 76-78, 108-109, 286-288, Complainant's Exhibits # 9-#12).

25. Woodruff accompanied the Hewitt Coleman consultant on each of his twice yearly visits from 1982 through 1990 and entered the building that housed the sludge well pit with the consultant on each visit and was familiar with the building. (T p 21, 23, 45).

26. Woodruff knew that the sludge well pit was a confined space, and knew that the SOP applied to the sludge well pit. He knew that the SOP applied to manholes and access to the sludge well pit was only through manholes and he therefore knew that the SOP applied to the sludge well pit. (T p 32-33, 27-29, 40-42, 45, 108-109, 286-288, Complainant's Exhibit #2, #9-#12).

27. The city of Mt. Airy through its safety director, Bill Joe Woodruff, knew that the sludge well pit was a confined space and knew that in order to provide a workplace free from recognized hazards that are likely to cause death or serious injury, it had to comply with the provisions of Article 1926.956(3), Subpart V, Title 29, Department of Labor Safety and Health Regulations for Construction and with the procedures that were outlined in the SOP given to Woodruff by Hewitt Coleman. (T p 32-33, 27-29, 40-42, 45, 108-109, 286-288, Complainant's Exhibit #2, #9-#12).

28. For the years 1982 through 1989 the city's safety consultant, Hewitt Coleman provided Woodruff either in his capacity as fire chief or city safety manager with a Departmental Safety and Loss Control Report which had a page dedicated to Water/Sewer/Waste Treatment and which had the following recommendations numbered 42:

Does management have a standard procedure for **entering underground areas**?

Is appropriate **equipment** provided to detect **flammable or toxic gases** and the amount of oxygen in confined underground areas?

Do supervisors follow-up to ensure that this equipment and procedures are **used**?

Are employees **trained** in the use of testing equipment?

The safety consultants discussed these items with Woodruff as safety director for the city. (T p 206, Complainant's Exhibit # 6).

29. Woodruff and the City were reminded yearly and therefore knew that a confined space entry program was required for entering underground areas, which is what the sludge pit and sewer lines were, in that he accompanied the Loss Control Consultant from Hewitt Coleman on each of the yearly visits from 1982 through 1989 and the consultant indicated and Bill Joe Woodruff verified by his signature for the years 1982, 1983, 1985, 1986 and 1988 that management had a standard procedure for entering underground areas, that the city had the appropriate equipment to test for flammable or toxic gases and the amount of oxygen, that supervisors followed-up to make sure that the standard procedure was used and that the employees were trained in the use of the testing equipment. In fact the city only had a written standard procedure which was filed away but they did not have the appropriate testing equipment, the employees were not trained in the use of the testing equipment and the superintendent of the Water and Sewer Department and the Supervisor of the Waste Water Treatment Plant did not know of the standard procedure and did not follow up to make sure that the procedure was followed and the equipment was used. (T p 45, 71, 85-86, 90-98, 127-129, 134-136, 206, 415, Complainant's Exhibit # 6).

30. On April 2, 1981, Harry A. Kelly of the North Carolina Department of Labor's Bureau of Consultative Services visited the city and discussed with Woodruff, the confined space entry program including the need for monitoring equipment, harness and lifeline, a written program and the "buddy" system. (T p 63, See, Respondent's exhibit "C", item # 13 and signature by Bill Joe Woodruff).

31. In 1974, the Department of Labor in concert with the League of Municipalities and the County Association produced, published and mailed to all of the cities and counties in North Carolina the document "Occupational Safety and Health Program for Municipal and County Governments" which referenced 29 CFR 1926.21(b)(6) for safety precautions to be taken when entering a confined space. (T p 319, Complainant's Exhibit # 17).

32. In 1977, the Department of Labor prepared a document "Confined Spaces, an Overview of the Hazards and Recommended Controls" and mailed it to all of the cities and towns in North Carolina. This document sets out the safe procedures to follow when entering a confined space and in an appendix "B" cites the OSHA standards that apply to confined space and vessel work. On page 4 of this documents in a section titled "Exposure to Toxic Substances" the dangers of hydrogen sulfide are given:

Very short Exposures to high concentrations of a material such as hydrogen sulfide (sewer gas), a substance which paralyzes the respiratory system, may be fatal.

(T p 321-322, Complainant's Exhibit # 1).

33. Respondent's own exhibit No. I, a booklet titled "The Unseen Menace, A Pocket Guide to the Atmospheric Hazards of Confined Spaces" includes on page 2 under the heading **SOME CONFINED SPACES ARE EASY TO RECOGNIZE** among others "Manholes, sewers, . . . vessels, vats, storage tanks . . . and underground vaults." (Respondent's Exhibit # I).

34. In the years prior to the accident, Woodruff attended safety seminars given by the North Carolina Department of Labor which covered manholes and confined spaces. (T p 18).

35. Woodruff and therefore the city of Mt. Airy knew that the OSHA regulations required a confined space entry program with monitoring equipment, harness and lifeline, a written program and the "Buddy" system. (T p 18, 63; See, Respondent's exhibit "C").

36. A confined space entry program was never implemented for the city of Mt. Airy for any of its departments. (T p 30-34, 71, 97, 142).

37. The city of Mt. Airy did not purchase monitoring equipment other than for the pretreatment program, and never purchased any safety harnesses or lifelines but did employ the "Buddy" system. (T p 85-86, 97, 142, 149, Respondent's Exhibit "C").

38. The Department of Environment, Health and Natural Resources (hereinafter DEHNR) which certifies Grade IV waste water treatment operators uses the Sacramento Manual which is an industry guide in the training of the Grade IV waste water treatment operators. (T pp 337, 339, 418)

39. John Martin, Jr. (hereinafter "Martin") was the superintendent of the Water and Sewer Department for the city of Mt. Airy at the time of the accident. Prior to this position he was the supervisor of the Waste Water Treatment Plant for the city of Mt. Airy. He holds a grade IV certification from the state as an operator of a Grade IV waste water treatment plant facility. The city of Mt. Airy's waste water treatment plant is a grade IV facility. (T p 72, 101).

40. The training that John Martin, Jr. received for certification as a Grade IV operator was based on the Sacramento training manual of which three or four volumes have been kept at the waste water treatment plant for the city of Mr. Airy since at least 1986. (T p 102).

41. Chapter 14 of Volume II of the Sacramento Manual deals with plant safety and gives information about pumping stations as confined spaces and the safety precautions that must be taken when working in wet wells and dry wells and further comments on the possibility of toxic explosive, or flammable gases that could either be discharged or generated in the sewers. It covers that in underground pumping stations heavier than air gases may collect and that before entering a confined space in an unattended lift station the air must be tested for oxygen deficiency, explosive or flammable conditions and toxic gases (Hydrogen sulfide). It covers the dangers of Hydrogen sulfide as a gas that in small concentrations has a rotten egg odor with the sense of smell being rapidly impaired and that at high concentrations it is odorless, flammable, explosive and poisonous with paralysis of the respiratory system and death occurring in a few minutes at 2000 parts per million concentration. (T p 335-337).
42. A confined space is defined in the Sacramento Manual and that definition is an industry recognized standard. (T p 419).
44. The sludge well pit where the accident occurred is a wet well in the pumping station or lift station at the city of Mt. Airy Waste Water Treatment Plant and the precautions listed above for pumping stations and lift stations apply to it. (T p 76, Complainant's exhibit # 3).
45. In 1986, Martin took a three-month extended training course at the Elledge waste treatment plant in Winston Salem taught by Cheryl and Lee Byerly who gave two tours of the plant as part of the course. (T p 103).
46. Lee Byerly was the superintendent of the Winston-Salem Elledge Waste Water Treatment Plant for ten years prior to the hearing and he taught courses training waste water treatment plant operators for their Grade I , II, III and IV certification starting in the mid 1970's. Starting in the mid 1970's, the problems of confined spaces as potential hazards were covered in those courses, specifically that the natural decomposition of waste water could produce atmospheric conditions that were hazardous with hydrogen sulfide being the gas that was of main concern. (T p 404, 416-418)
47. Martin as superintendent of the Mt. Airy Water and Sewer Department was responsible for the overall safety of the water and sewer plants but did not dwell on safety in his training for a Grade IV certification. He did not receive the SOP from Bill Joe Woodruff or anyone else in the city until after the accident which gave rise to this citation. Although Martin used the Sacramento Manual in his training and was responsible for safety of the water and sewer plants, he did not know whether there was a chapter on safety in the Sacramento Manual. (T p 32, 34, 71,103-104).
48. Martin knew that decomposing sewage under anaerobic conditions gives off methane, carbon monoxide, and hydrogen sulfide. (T p 113-114).
49. Martin knew that hydrogen sulfide gas was heavier than air, that it burned the eyes and that at heavier concentrations it paralyzes the central nervous system and can cause death (T p 83, 85).
50. Kent Scott (hereinafter "Scott") was supervisor of the Mt. Airy Waste Water Treatment Plant, and was responsible for the safety of the entire plant and for training his workers on the dangers of working in manholes and sewer lines and other confined spaces. He did not know, nor was he trained about hydrogen sulfide gas other than that it smelled like rotten eggs and was produced by decomposing sewage. (T p 33-34, 127, 132, 135, 140).
51. Scott failed to read the chapter on safety in the Sacramento Manual which was at his disposal and which covered the dangers of hydrogen sulfide and methane gas as by products of decomposing sludge and the dangers of confined spaces, and which defined confined spaces. (T p 132, 335-338).
52. Kent Scott did not train his employees in the dangers of confined spaces or in the dangers of hydrogen sulfide. (T p 122, 149, 164).
53. Mark King, a maintenance mechanic helper employed by the Respondent, worked on the Mt. Airy city sewer line in 1988; he did not receive any training about the gases that could be given off by raw sewage or in the standard operation procedures for entering manholes or other confined spaces in that there was no oxygen tester

available, the manholes were not ventilated, and no life line or safety harness was made available but he did have a "buddy" system. (T p 146-149).

54. The organic matter which consists of human waste decomposes throughout the whole process of treatment at the city of Mt. Airy waste water treatment plant and gives off methane and carbon dioxide gas and under anaerobic conditions gives off hydrogen sulfide, carbon monoxide and methane. (T p 113-114, 223, 226, 309, 407, 417-418).

55. The textile mills contribute chlorine bleach and peroxide, which acts as oxidizers, to the waste stream that comes into the Mr. Airy waste water treatment plant. Before the sludge is pumped to the sludge well pit it is stirred with compressed air introducing oxygen to the mixture. (T p 378-379).

56. The introduction of oxidizers into the Mt. Airy waste stream from textile mills and the stirring of the sludge by compressed air somewhat curtailed the anerobic decomposition of the human waste but did not totally prevent anerobic decomposition because employees of the plant smelled the rotten egg smell of hydrogen sulfide and the burning eyes sensation characteristic of exposure to hydrogen sulfide in the sludge well pit building many times in the months and days before the accident and in increasing intensity toward the date of the accident. (T p 378-379, 171-172, 183, 195).

57. On June 6, 1991, the day before the accident, Dale Beemer (hereinafter "Beemer") was the third shift operator (eleven p.m. to seven a.m.) and the inlet pipe to the sludge well pit became clogged on his shift. During the night before the accident he climbed down into the sludge well pit by himself to attempt to unstop it but was unsuccessful. When he climbed down to unstop the pipe the sludge well pit was dry but over the night it filled with waste water to a depth of two feet and the sludge backed up and was stored in two concrete boxes in each of the clarifiers. (T p 162, 166, 173-174).

58. Beemer entered the sludge well pit by himself without using the "buddy system", without testing with a gas meter and without wearing a life line and safety harness (T p 172-174, 177, 97, 142).

59. Beemer told Kent Scott, that the sludge well pit building smelled bad, that it would take your breath away and made his eyes water. (T p 171).

60. A clogged pipe which causes sludge to back up and sit stationary overnight creates conditions in which oxygen is not being added to the sludge with the compressed air stirrer so that anerobic decomposition occurs and produces hydrogen sulfide. (T p. 334, 379, Complainant's exhibit # 18, p 4).

61. During the morning of June 7, 1991, Mark King entered the same sludge well pit that Dale Beemer had attempted to unclog on the third shift the night before, to unstop the same twelve inch inlet pipe. The sludge well pit is a ten foot by ten foot below grade enclosure which was twenty one foot, eleven inches deep at one end sloping to twenty-six foot, six inches at the other end with access limited to one twenty four inch manhole opening covered by a manhole cover. (T pp 116, 145, 225, Complainant's exhibit # 3).

62. Hydrogen sulfide is a colorless gas that is heavier than air with a strong odor of rotten eggs. (Complainant exhibit # 15).

63. The smell of rotten eggs and therefore the concentration of hydrogen sulfide was extremely strong in the sludge pumping station on the day of the accident. (T p. 195).

64. Very short exposures to high concentrations of hydrogen sulfide also known as sewer gas, may paralyze the respiratory system and may be fatal. Inhalation of high concentrations of hydrogen sulfide vapor may cause loss of consciousness and death. Inhalation of lower concentrations may cause headache, dizziness, and upset stomach. Exposure to hydrogen sulfide can cause temporary loss of the sense of smell, and irritation of the eyes, nose or throat. (T p 324, 300, Complainant's exhibits #s 1, 15)

65. Mr. King descended the ladder on the side of the sludge pit and got almost to the bottom and then climbed up the ladder steps until he was almost out of the manhole when he fell back in to the bottom and lay unconscious on the floor of the well pit. (T pp 116-118).
66. Sufficient sludge or foam was on the bottom of the sludge well pit so that Mr. King was partially submerged. (T pp 117-118)
67. James Reece, wastewater treatment plant mechanic for the city of Mt. Airy climbed down to help Mr. King and became unconscious. (T pp 118).
68. Mr. Reece entered the sludge well pit without wearing a safety line and safety harness, and without wearing a self contained breathing apparatus and without sufficient personnel to assist him in the removal of Mr. King. (T p 118-120).
69. James Reece and Mark King were both overcome by hydrogen sulfide, methane and carbon monoxide gases which were present in the sludge well pit. (T p 226, 282, 227-234, 303-308, 319, Complainant's exhibit # 14 and # 19).
70. Mark King survived his injuries but James Reece died and his cause of death was anoxic encephalopathy as a result of methane and hydrogen sulfide gas exposure. (T p 282, 231, Complainant's exhibit #14 and 19)
71. Delmas Overby, a lab technician for the plant, knew there was a hazardous atmosphere in the sludge well pit after both Mark King and James Reece became unconscious at the bottom of the sludge well pit and attempted to obtain an airpack in preparation to enter. (T p 119).
- 72 . James Reece and Mark King were removed from the sludge well pit with a water hose wrapped securely around their bodies, because the city of Mount Airy did not possess any lifeline, safety harness or hoist for any capacity on or before the date of the accident. (T pp 97, 142, Complainant's exhibit # 19, unnumbered page 18).
73. On June 13, 1990, the city of Mt. Airy tried to recreate the conditions that were present at the day of the accident by rolling air through the sludge and lowering the gas meter to the bottom of the sludge well pit to take measurements of the concentration of hydrogen sulfide, carbon monoxide and oxygen. (T p 392).
74. On June 13, 1990, six days after the accident, the hydrogen sulfide gas level at the bottom of the sludge well pit was 246 parts per million, carbon monoxide level was 606 parts per million and oxygen level was 19.8 percent. (T p 229).
75. The levels of hydrogen sulfide, carbon monoxide and oxygen on June 13, 1990 were indicative of the levels on June 7, 1990, the day of the accident because the city attempted to recreate the conditions on the day of the accident when they made the tests on June 13, 1990. (T p 392, 232).
76. The acceptable limit for hydrogen sulfide for an eight hour time, weight average is 10 parts per million, and the acceptable limit for short term (15 minute) exposure to hydrogen sulfide is 15 parts per million. (T p 233).
77. Exposure to hydrogen sulfide at 300 parts per million is immediately dangerous to life and health (IDLH), in that it will result in immediate effects which will either be irreversible with some debilitating effect on life, or potentially fatal. (T p 306)
78. The level of 246 parts per million for hydrogen sulfide gas is so close to 300 parts per million that it would likely produce paralysis of the respiratory system, and other effects similar to those which 300 parts per million would produce. (T p 301, 303).
79. Exposure to hydrogen sulfide at a concentration of 246 parts per million would be dangerous to life or health. (T p 306).

80. Hydrogen sulfide, methane and carbon monoxide are recognized hazards in the waste treatment industry. (T pp 234-5, 308-9, 319).
81. Hydrogen sulfide, methane gas and carbon monoxide are recognized by the waste treatment industry as a byproducts of decomposing sludge. Exposure to carbon monoxide and methane gas can cause toxic effects and death (T pp 309, 343-4, 373, 407).
82. OSHA has established an eight hour time weighted average permissible exposure limit of 50 parts per million and a ceiling limit of 200 parts per million for carbon monoxide. (T p 341-342).
83. Carbon monoxide substitutes for oxygen in the blood stream depriving the body of oxygen so that the person exposed to it become lightheaded and faints and eventually suffocates. (T p 343-344).
84. A carbon monoxide level of 606 parts per million would be over the ceiling limit of 200 parts per million and would cause the person exposed to it to be deprived of oxygen sufficiently to pass out. (T p 344).
85. A sludge pumping station of which the sludge well pit is part of is recognized as a confined space in the waste water treatment industry. Any one of the following four characteristics are sufficient to define an area as a confined space: 1. limited openings for entering and exiting; 2. unfavorable natural ventilation; 3. the potential for explosive, toxic or oxygen deficient atmospheres to exist; 4. not designed for human occupancy. (T p 218, 312).
86. The sludge well pit in the city of Mt. Airy was a confined space, in that it was below grade, approximately ten foot by ten foot and twenty to twenty-two feet deep, that had access only through a manhole 24 inches wide and did not have natural ventilation. (T p 415, 225-226, 337).
87. Entering into a confined space is a recognized hazard within the waste water treatment industry. (T p 235)
88. The city of Mt. Airy possessed a state of mind that constitutes an intentional disregard of and/or plain indifference to the safety requirements of the general duty clause and to the safety and health of its employees in that they failed to provide a city safety director, superintendent of the water and sewer department, and supervisor of the waste water treatment plant to implement the SOP that was given to them by their Loss Control consultant, to learn the waste water industry recognized hazards of the toxic gases, hydrogen sulfide and methane, the waste water industry recognized definition of a confined space and the safe methods of entry into a confined space which were recognized by the waste water treatment industry and they failed to train their employees in the hazards of hydrogen sulfide and methane gas associated with working in a confined space and in the safe procedure for entering a confined space. (T p 21, 27, 28, 30-34, 51, 103-104, 122, 127, 131-132, 140, 149, 164, 232-235, 308, 419, Complainant's Exhibit #2).
89. The city of Mr. Airy possessed a state of mind that constitutes an intentional disregard of and/or plain indifference to the safety requirements of the general duty clause and to the safety and health of its employees in that it's safety director, Bill Joe Woodruff filed away the SOP in the early 1980's and did not follow up to ensure that the SOP was being implemented for the confined spaces in the city sewer system and in the sludge well pit. (T p 21, 27, 28, 30-34, Complainant's Exhibit #2).
90. The city of Mr. Airy possessed a state of mind that constitutes an intentional disregard of and/or plain indifference to the safety requirements of the general duty clause and to the safety and health of its employees in that its superintendent of the water and sewer department, John Martin, Jr., who was responsible for the safety of its entire department, failed to read, study and learn the safety information in Chapter 14 of the Sacramento Manual, which he possessed and which was an industry guide, on the dangers of hydrogen sulfide and methane and on the definition of a confined space and on the proper procedures to use when entering a confined space and on the proper entry and rescue procedures, and failed to train Kent Scott, the supervisor of the Waste Water Treatment Plant, on these safety issues that were associated with confined spaces. (T p 32, 34, 51, 103-104).

91. The city of Mr. Airy possessed a state of mind that constitutes an intentional disregard of and/or plain indifference to the safety requirements of the general duty clause and to the safety and health of its employees in that the supervisor of the Waste Water Treatment Plant, Kent Scott, who was responsible for the safety of the waste treatment plant and for training his employees, failed to learn the safe confined space entry procedures and failed to read the safety information in Chapter 14 of the Sacramento Manual, which he possessed, and failed to train his employees, James Reece and Mark King on these safety issues which were associated with confined spaces. (T p 33-34, 122, 127, 131-132, 140, 149, 164, 232-235, 308)

CONCLUSIONS OF LAW

Based upon the foregoing Findings of Fact, the Board concludes as a matter of law as follows:

1. The foregoing findings of fact are incorporated as conclusions of Law to the extent necessary to give effect to the provisions of this Order.
2. The Board has jurisdiction of this cause and the parties are properly before this Board.
3. The Commissioner has proved by the greater weight of the evidence that the Respondent committed a willful/serious violation, as stated in Citation One, Item One, of the general duty clause, N.C.G.S. § 95-129(1), by willfully and repeatedly failing to furnish to each of his employees conditions of employment and a place of employment free from recognized hazards that are causing or are likely to cause death or serious injury or serious physical harm.

DISCUSSION

The scope of review for errors of fact is the whole record test. Brooks v. Snow Hill Metalcraft Corporation, 2 NCOSHD 377 (RB 1983). N.C. Gen. Stat § 95-135(i) states that upon appeal to the Review Board "the Board shall schedule the matter for hearing, on the record, (emphasis added) except that the Board may allow the introduction of newly discovered evidence, or in its discretion the taking of further evidence upon any question or issue." The Board is "entitled, if not obligated, to review the entire record to discern whether the hearing officer's findings and conclusions are adequately supported." Brooks v. Schloss Outdoor Advertising, Co., 2 NCOSHD 552, at 560, 561 (RB 1985). "De novo review is applied for errors of law. Commissioner v. Tuttle Enterprises dba Jim Fleming Tank Company, 5 NCOSHD 115, at 117 (RB 1993), citing, Brooks v. Maxton Hardwood Corporation, 2 NCOSHD 277 (RB 1981). The Board is not bound by the findings of fact of the Hearing Examiner and is required by N.C.G.S. § 95-135(i) to make its own findings of fact.

The Occupational Safety and Health Act of North Carolina, Article 16, N.C.G.S. § 95-126 et seq. (hereinafter OSHANC) does not define a willful violation but states in N.C.G.S. § 95-138(a) the following with respect to a willful violation:

Any employer who willfully or repeatedly violates the requirements of this Article, any standard, rule or order promulgated pursuant to this Article, or regulations prescribed pursuant to this Article, may upon the recommendation of the Director to the Commissioner be assessed by the Commissioner a civil penalty of not more than seventy thousand dollars (\$70,000) and not less than five thousand dollars (\$5,000) for each willful violation.

(emphasis added). The term "Article" refers to Article 16 which is titled "Occupational Safety and Health Act of North Carolina". It is clear from the above quoted statute that a willful violation can be found for violating the requirements of the overall Act, an individual standard, rule, order or regulation prescribed pursuant to the Act.

The Respondent in this case is charged with a willful violation of the general duty clause N.C.G.S. § 95-129(1) which states:

Each employer shall furnish to each of his employees conditions of employment and a place of employment free from recognized hazards that are causing or are likely to cause death or serious

injury or serious physical harm to his employees[.]

A violation of the general duty clause would by its definition be a failure to provide for the general, serious safety and health concerns of employees. Employer knowledge of a particular standard or regulation cannot be a prerequisite for finding a willful violation of the general duty clause since the violation of the general duty clause involves a disregard for recognized serious safety and health hazards and does not involve the violation of a particular standard. Clearly, N.C.G.S. § 95-138(a) provides for a violation of the general duty clause in that it provides for the willful violation of the requirement of this Article (the OSHANC Act) and the general duty clause is one of the requirements of the Article.

The federal OSHA general duty clause, 29 U. S. C. § 654(a)(1) is almost identical to the North Carolina OSHA general duty clause, N.C.G.S. § 95-129(1) and Section 17(a) of the federal act which sets out penalties for willful violations is almost identical to its North Carolina counterpart, N.C.G.S. § 95-138(a) and are set out below. The corresponding federal general duty clause 29 U. S. C. § 654(a)(1) (section 5 of the Act) is as follows:

(a) Each employer--

(1) shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees [.]

The federal willful penalty provision, Section 17(a) provides:

Any employer who wilfully or repeatedly violates the requirements of section 5 of this Act, any standard, rule, or order promulgated pursuant to section 6 of this Act, or regulations prescribed pursuant to this Act, may be assessed a civil penalty of not more than \$70,000 for each violation, but not less than \$5,000 for each wilful violation.

It is clear that Section 17(a) authorizes a willful violation of the general duty clause in that it refers to violations of the requirements of section 5 of the Act wherein is set out the general duty clause as Section 5(a)(1).

The Board, though not required to, will look to federal case law interpreting like provisions of the federal OSH Act as guidance in interpreting similar North Carolina provisions. Brooks v. Southern Bell Telephone and Telegraph Co., 2 NCOSHD 283, at 286-287 (RB 1981). A leading case from the Fourth Circuit on the definition of a willful violation which is the subject of an annotation in ALR Fed. is Intercounty Construction Co. v. OSHRC. 1974-1975 OSHD 23,638, 522 F. 2d 777 (4th Cir. 1975), certiorari denied, 423 U.S. 1072, 96 S.Ct. 854, 47 L.Ed. 2d 82 (1976)). See, 31 ALR Fed. 544 and the annotation which follows, "What Constitutes 'Willful' Violation for Purposes of §§ 17(a) and (e) of Occupational Safety and Health Act of 1970 (29 USCS §§ 666(a) and 666(e))", 31 ALR Fed 551. In Intercounty, the Fourth Circuit concluded that by enacting the penalty provisions for willful violations:

. . . Congress intended to punish the conduct of one who "intentionally disregards the statute or is plainly indifferent to its requirements" or, to punish the conduct of one who knew that his action might violate the law. (Citations omitted). (emphasis added for the disjunctives "or").

Intercounty Construction Co. v. OSHRC, 1974-1975 OSHD 23,638, 522 F. 2d 777 (4th Cir. 1975), certiorari denied, 423 U.S. 1072, 96 S.Ct. 854, 47 L.Ed. 2d 82 (1976)). It is clear that Intercounty allows a willful violation when the employer knew what the statute or standard required and deliberately ignored the requirements or knew of the statute's requirements and thought that his actions might violate the law or when the employer shows such plain indifference to the OSH Act and/or employee safety that he does not inquire as to the requirements of the Act.

Several authorities have compiled and summarized the federal case law interpreting willful violations. A hornbook by Mark A. Rothstein, Occupational Safety and Health Law (hereinafter Rothstein) quotes from

Intercounty, as a leading case and sets out the current status of the OSHA federal law as to willful violations as follows:

In Intercounty Construction Co. v. OSHRC, the Fourth Circuit . . . defined "willful" as

action being taken knowledgeably by one subject to the statutory provisions in disregard of the action's legality. No showing of malicious intent is necessary. A conscious, intentional, deliberate voluntary decision is properly described as willful, "regardless of venial motive." (Intercounty Construction Co. v. OSHRC, 1974-1975 OSHD 23,638, 23,640, 522 F. 2d 777 (4th Cir. 1975), certiorari denied, 423 U.S. 1072, 96 S.Ct. 854, 47 L.Ed. 2d 82 (1976)).

The court pointed out that "[t]o require bad intent would place a severe restriction on the statutory authority of OSHA to apply the stronger sanctions in enforcing the law, a result we do not feel was intended by Congress." (Id.).

Mark A. Rothstein, Occupational Safety and Health Law § 315, at 342 (3d ed. 1990).

Willful violations require the employer to have a particular state of mind. In C.N. Flagg & Co., the Commission held that " 'willful' means intentional, knowing, or voluntary as distinguished from accidental conduct and may be characterized as conduct marked by careless disregard." (C.N. Flagg & Co., 1974-1975 OSHD ¶ 18,686 (1974), petition for review denied, 538 F. 2d 308 (2nd Cir. 1976).)

Rothstein, supra, § 315, at 342.

Decisions of the First, Second, Fifth, Sixth Eighth, Ninth and Tenth Circuits have adopted the Commission--Intercounty definition of willful as an Act done voluntarily with either an intentional disregard of or plain indifference to the Act's requirements.

. . . One of the best indications of a lack of plain indifference is if the employer made any attempt at compliance.

Rothstein, supra, § 315, at 343. Conversely, if the employer did not make any attempt at compliance, plain indifference to the Act or a standard can be shown.

With respect to whether the employer's prior knowledge of the standard or Act is required before a willful violation can be found Rothstein stated the following:

A number of early decisions of the Commission held that a willful violation required that the employer had knowledge that it was violating the Act. In John W. Eshelman & Sons, the Commission held for the first time that the Secretary need not prove that the employer knew it was violating a specific standard or the Act in general.

The Commission has found a violation to be willful when it is marked by careless disregard of a standard or (emphasis added) of employee safety Therefore, once careless disregard of employee safety has been established, the Secretary need not prove additionally that an employer knew that it was violating the Act. (quoting, John W. Eshelman & Sons, 9 OSHC 1396, 1981 OSHD ¶ 25,231 (1981)).

Although Eshelman, is an important case, proof of employer knowledge of the Act or a specific standard will probably continue to be one of the most effective ways of proving that the employer's conduct was marked by "careless disregard of" or "plain indifference to" employee safety and health. Employer knowledge of a standard and a subsequent violation of that standard, however, does not necessarily establish a willful violation.

Rothstein, supra, § 315, at 341, 342.

When there is a willful violation of the general duty clause, there is no violation of a specific standard involved (other than the general safety requirements of the general duty clause) and employer knowledge of the specific standard cannot and need not be proven. In The Ensign-Bickford Co. v. OSHRC, a Court of Appeals decision for the District of Columbia Circuit, the court in finding a willful violation of the general duty clause stated the following:

Willful violation of the general duty clause of the Act is legally cognizable. (Citations omitted). If an employer demonstrates "plain indifference" towards the safety requirements of the general duty clause, no further showing is required to establish willfulness. An employer need not harbor malicious motives or possess a "specific intent" to violate a provision of the Act in order to commit a willful violation. (Citations omitted).

The absence of a specific aggravating factor, such as prior OSHA violations, does not preclude finding willful violation of the general duty clause if the finding is based upon conduct constituting "plain indifference" towards the Act's requirements. (Citations omitted).

The Ensign-Bickford Co. v. OSHRC, 1983-1984 OSHD 34,092 at 34,095, 717 F.2d 1419 (Ct. of Appls., DC Cir. 1983), cert. den., 104 S. Ct. 1909, 80 L.Ed. 2d 458.

Previous decisions of the Safety and Health Review Board of North Carolina and the North Carolina Court of Appeals offer somewhat contradictory guidance as to what constitutes a willful violation. However, a review of the evolution of the case law is helpful. In an early Review Board case just as in the early Review Commission cases, the Board held that employer knowledge of the standard or statute was required before a willful violation could be found. In O. S. Steel Erectors, 2 NCOSHD 237 the Board stated the following:

Proof of a willful violation requires not only proof of the employer knowing of both the violative condition and the requirements of the standard prior to the violative condition, but also proof that the violation was committed voluntarily or with intentional disregard of the standard or with demonstrated plain indifference to the Act. Malice on the part of the employer is not necessary. See, generally Intercounty Construction Company, 522 F. 2d 776 (4th Cir. 1975); . . .

O. S. Steel Erectors, 2 NCOSHD 237, affirmed on appeal, 4 NCOSHD 529, 84 N.C. App. 630. On appeal the Court of Appeals did not adopt the Board's definition of willful but presented its own common law definition:

. . . A violation is deemed to be willful when there is shown " 'a deliberate purpose not to discharge some duty necessary to the safety of the person or property of another.' " Brewer v. Harris, 279 N.C. 288, 297, 182 S.E. 2d 345, 350 (1971), quoting Foster v. Hyman, 197 N.C. 189, 191, 148 S.E. 36,37 (1929).

. . . the violation was "willful." That is, it was a deliberate disregard of duty imposed by statute, regulation or contract, necessary to the safety of a person or property. See Brewer v. Harris, supra.

O. S. Steel Erectors, 4 NCOSHD 529 at 531, 534, 84 N.C. App. 630. The Court of Appeals however cited the proof of those four elements of the Boards definition as proof that the violation was willful.

The Court of Appeals of North Carolina in a later case expanded on the definition of a willful violation:

This Court has previously held that a violation of an OSHA standard is willful if the employer deliberately violates the standard. O.S. Steel Erectors, 84 N.C. App. at 632, 353 S.E.2d at 871. A deliberate violation is one "done voluntarily with either an intentional disregard of or plain indifference" to the requirements of the standard. Mark A. Rothstein, Occupational Safety and Health Law § 315, at 343 (3d ed. 1990) (hereinafter Rothstein); see, Intercounty Constr. Co. v. Occupational Safety and Health Review Com'n, 522 F. 2d 777, 779-80 (4th Cir. 1975), cert. denied,

423 U.S. 1072, 47 L. Ed. 2d 82 (1976); Stephen A. Bokat & Horace A. Thompson III, Occupational Safety & Health Law 270-73 (1988) (hereinafter Bokat). An employer's knowledge of the standard and its violation, although not alone sufficient to establish willfulness, is one (emphasis added) of the most effective methods of showing the employers intentional disregard of or plain indifference to the standards. Rothstein, § 315, at 341.

Brooks v. AnSCO & Associates, 5 NCOSH ____, OSHANC No. 90-1724, 114 N.C. App. 711 at 717 (1994).

More recently, in Payne v. Associated Mechanical Contractors, Inc., 5 NCOSH ____, OSHANC No. 90-1794, ____ N.C. App. ____, at ____ (1995), the Court of Appeals quotes AnSCO and the authors Rothstein and Bokat as authority that employer prior knowledge of the standard is required before a willful violation can be found:

"An employer's knowledge of the standard and its violation," although necessary to establish willfulness, is not conclusive evidence on this issue. Id.; Bokat at 271; Rothstein § 315, at 341-44.

A review of the quote above in AnSCO, reveals that employer knowledge of the standard and its violation was one of the method of showing intentional disregard of or plain indifference to the standards, implying that there were other methods.

A review of Rothstein at page 341, one of the pages to which the Court of Appeals cites in Associated Mechanical as authority that employer knowledge of the standard is required to prove a willful violation and which was discussed above reveals that the early decisions of the Commission required that the employer have knowledge that he was violating the Act but that later decisions allowed a finding of willful if the employer exhibited conduct that showed "careless disregard of employee safety". Once careless disregard of employee safety was shown there was no need to prove that the employer knew that it was violating the Act. Rothstein, supra, at 341, quoting John W. Eshelman & Sons, 9 OSHC 1396, 1981 OSHD ¶ 25,231 at 31,187 (1981).

A review of Bokat at p 271-272 which was also cited by the Court of Appeals in Associated Mechanical reveals that the Secretary can establish the employer's knowledge of the standard by several methods, one of which was stated as follows:

. . . Third, the Secretary can satisfy his knowledge evidentiary burden by showing that the employer's knowledge of a violative condition constituted a knowing, voluntary disregard of employee safety.

Stephen A. Bokat & Horace A. Thompson III, Occupational Safety & Health Law 271-72 (1988). In the supplement to Bokat a cite is made to a First Circuit Court of Appeals decision, Morello Brothers Construction, for the proposition that "there could be instances in which unsafe conduct was 'so egregious, so life-threatening, that the agency might apply an 'objective' standard of willfulness . . .' ". Morello Brothers Construction, 809 F.2d 161 at 164, 13 OSHC 1033 at 1035 (1st Cir. 1987).

The authorities cited by the Court of Appeals in Associated Mechanical, supra, do not require employer knowledge of the standards to prove a willful violation and allow intentional disregard of or plain indifference to employee safety, as methods of proving a willful violation.

The Board adopts the view that a willful violation can be proven by conduct marked by intentional disregard of or plain indifference to employee safety and health, and whether the burden has been sustained depends on the evidence in the particular case. See, Eschelman, supra, and Ensign-Bickford, supra. This interpretation of willful is in keeping with the evolution of the federal OSHA law and conforms our state program to the federal mandate that the state program be "at least as effective as" the federal program.

The Board also follows the current view of the majority of the federal Circuit Courts of Appeals and adopts the Commission-Intercounty definition of willful as an Act done voluntarily with either an intentional disregard of or plain indifference to the Act's requirements, which was cited with approval by our Court of Appeals in AnSCO, supra. See, Mark A. Rothstein, Occupational Safety and Health Law § 315, (3d ed. 1990); Intercounty.

Construction Co. v. OSHRC. 1974-1975 OSHD 23,638, 522 F. 2d 777 (4th Cir. 1975), certiorari denied, 423 U.S. 1072, 96 S.Ct. 854, 47 L.Ed. 2d 82 (1976)); "What Constitutes 'Willful' Violation for Purposes of §§ 17(a) and (e) of Occupational Safety and Health Act of 1970 (29 USCS §§ 666(a) and 666(e))", 31 ALR Fed 551. A willful violation may be proven by showing employer knowledge of the standard, rule, regulation or Act, knowledge of the violative condition and a state of mind that evokes either "intentional disregard of" or "plain indifference to" the requirements of the Act and a subsequent violation of that standard. Proof of a bad intent or venial motive is not required. Prior citations for the same or similar standards may be used to prove employer knowledge, although employer knowledge of a standard may be proven by other methods. Although a willful violation may be proven by careless disregard of or plain indifference to employee safety and health, the Commission--Intercounty definition of willful set out here will probably continue to be the preferred method of proving a willful violation. See, Rothstein, supra, § 315, at 341, 342.

"One of the best indications of a lack of plain indifference is if the employer made any attempt at compliance." Rothstein, supra at 343. Therefore, if the employer made no attempt to comply with the Act when given an opportunity to do so, "plain indifference to" or "careless disregard of" the Act and/or employee safety can be shown as proof that a violation was willful.

We find that the Commissioner has proven that the conduct of the Respondent, the City of Mt. Airy, constitutes a willful violation of the general duty clause in that the Respondent knew of the violative condition, knew what the recognized industry standards were for entering confined spaces, violated those standards and demonstrated such "intentional disregard of" and/or "plain indifference" to the safety requirements of the general duty clause and/or such "plain indifference to" or "careless disregard for employee safety and health" in failing to follow recognized industry safety precautions when entering confined spaces.

The City of Mt. Airy was charged in Citation One, Item 1 with a willful violation of N.C.G.S. § 95-129(1) as follows:

The employer did not furnish to each of his employees conditions of employment and a place of employment which were free from recognized hazards that were causing or likely to cause death or serious physical harm to employees in that employees were exposed to:

(a) working in the sludge well pit in a confined space without a permit system being in effect, atmospheric testing not being conducted prior to employees entering the confined space, a safety belt and lifeline not being worn by employees working in the confined space, entry and rescue procedures not developed for employees working in the confined space, and employees not trained specifically in the hazards associated with working in a confined space at the Mt. Airy Wastewater Treatment Plant. . .

The city of Mt. Airy through its safety director and other officials had at least five opportunities to avail itself of the safety requirements needed for entry into confined spaces. After 1982 and prior to the accident, the loss control consultation firm of Hewitt Coleman & Associates hired by the League of Municipalities informed the City of the need to have and to implement a manhole and confined space entry program which was required by OSHA. (T pp 23-30, Complainant Exhibit # 2). The program was in writing and was entitled "Standard Operating Procedure for Manhole and Confined Space Entry" and was given to Bill Joe Woodruff, the City's safety director and fire chief. This document was given to city employees working in the sewers (T pp 27-28) but not to those working in the wastewater treatment plant and was filed away in the early 1980's. (T pp 31-32).

All of the instances, except for the permit system, in Item 1(a) of Citation One for which the city was cited are spelled out in the document as requirements that are necessary before entering a confined space. It covers the need for and sets forth an entry and rescue procedure that is in "rigid compliance with O.S.H.A. rules and regulations". (Complainant's Exhibit # 2, p 1). It requires that all employees of the Wastewater Collection Division who may or are required to enter manholes or other confined space sewer structures shall be instructed as to the nature of the hazards involved, requires atmospheric testing before entry, and requires the wearing of a safety harness if the manhole is deeper than 5 feet.

The evidence points unerringly to the conclusion that the city safety director, the superintendent of the water and sewer department and the supervisor of the waste water treatment plant collectively knew what a confined space was, collectively knew what the OSHA requirements were for a confined space entry program, collectively knew of the violative condition, that the manholes in the city streets and the sludge well pit were confined spaces, decided that the requirements did not apply to the city of Mt. Airy and adopted only the "buddy system". (T p 28, 88, 113-115, 136-138, 375-376). This knowledge of the OSHA requirements and the violative conditions and actions of the safety director, superintendent and supervisor is imputed to the employer, the city of Mt. Airy. Brooks v. Ansco & Associates, 5 NCOSH ____, OSHANC No. 90-1724, 114 N.C. App. 711 at 717 (1994). When an employer knows the applicable OSHA requirements, knows of the violative condition but makes "a conscious disregard for OSHA requirements" and substitutes "other measures believed to be as safe as OSHA standards" a willful violation is shown. Payne v. Associated Mechanical Contractors, Inc., 5 NCOSH ____, OSHANC No. 90-1794, ____ N.C. App. ____, at ____ (1995), quoting Rothstein § 315, at 344.

In summary, there is ample evidence in the record that the city of Mt. Airy knew of the violative condition, that the sludge well pit was a confined space, knew that entry into the sludge well pit was a recognized industry hazard and that a confined space entry program was required by OSHA regulations to abate the hazard. Further, there is overwhelming evidence in the record that the city of Mt. Airy repeatedly allowed employees to enter confined spaces without following a confined space entry program. There is also overwhelming evidence that the city of Mt. Airy possessed a state of mind that shows a conscious disregard or plain indifference to the Act and to employee safety and health by the failure of the city safety director to implement the "Standard Operating Procedure for Manhole and Confined Space Entry and by the failure of the superintendent of the Water and Sewer Department and the supervisor of the Waste Water Treatment Plant to learn the recognized industry hazards associated with confined spaces from an industry guide which they had at their disposal and to train their employees about those hazards.

This complete breakdown in the chain of safety responsibility was an accident waiting to happen and led to the death of one employee and to the serious injury of another. The Commissioner has proven that the city has committed a willful violation of the general duty clause, in accordance with the principles set forth in Ansco and Associated Mechanical, *supra*. In addition, the complete breakdown in the chain of safety responsibility shows a plain indifference to the safety requirements of the general duty clause and to employee safety and health and meets the requirements for finding a willful that were set out in The Ensign-Bickford Co. v. OSHRC, *supra*, and John W. Eshelman & Sons, *supra*.

ORDER

For the reason stated herein, the Review Board hereby **ORDERS** that the Hearing Examiner's July 24, 1993 Order finding the City of Mt. Airy in willful violation of Citation No. One in this cause be, and hereby is, **AFFIRMED** with no penalty. The finding that Citation No. One was serious was not appealed and became final pursuant to the Hearing Examiner's order. The finding that the Respondent was in serious violation of Citation No. Two and all of the items contained therein was likewise not appealed and also became final pursuant to the Hearing Examiner's order.

This the 22nd day of March, 1996.

ROBIN E. HUDSON, CHAIR

KENNETH K. KISER, MEMBER

HENRY M. WHITESIDES, MEMBER
DID NOT PARTICIPATE IN THE DECISION OF THIS CASE