FILE NAME: Avondale (AVD)

DATE: 19cy ₩l·y˜

DOC#: AVDᴍCᴍ

DOCUMENT DESCRIPTION: 5₦Jl·₮ű π ¢₦Jl·ŘŜ ₩2dz₦JyЛ·f ! ₦JűλŐfŜ π { l·₮Ŝűè Øă℗ I dzϒ l·y˜ Cl·λfdz₦JŜ ɔ ! ₮₮λŘl·Øλű 2₮ a l·₦JƎl·₦JŜű . l·dzϒƎl·₦JŘyŜ₦J π нлмп

January 1968

The Shipbuilder
— Addendum

PLAINTIFF'S EXHIBIT
SBCA 5190
exhibitsticker.com

SAFETY VS. HUMAN FAILURE

Earnest in their desire to increase safety at work, many management safety men proclaim the theory that "Industrial accidents occur mostly not because of technical defects, but because of human failings."

European labor safety experts have denounced the equation: Accident = human failing. To a growing extent the accident is recognized as an indication of faulty operation in the system (man-machine-environment) on the job.

If the proper conclusions are to be drawn, numerous people who are devoting their energies to accident prevention must change their methods.

Fortunately, in some plants it has been acknowledged that technical organization in the shop is at least as important a source of accidents as are human acts.

Behaviour contrary to safety is provoked or even forcibly caused by given circumstances of organization and technique in the plant. Safety measures, aimed at changing the workers' behaviour, can prove successful only if the whole plan of plant organization is so altered that safety consciousness is made effective, not merely by being deliberately provoked or forcibly induced. Job safety measures, leaving the potential danger of any job intact and merely influencing the man on the job so to behave that he bears the constant danger in mind as much as possible, are to be rejected for this reason. There are limits to the human being's ability to avoid dangers. Here given conditions on the job create further limits.

Medical and psychological investigations of aptitudes to take particularly dangerous jobs in no way alter the hazards involved. They serve simply to rouse hopes that the workers found to be apt would less frequently be victims of those hazards.

Drives to spread knowledge and provide training about hazards on the job in no way reduce the dangers. This is simply an expression of the hope, for which there is no justification, that the enlightened worker is better equipped to operate in his dangerous environment.

The issue of personal protection equipment to those employed on dangerous workplaces means no alteration in the hazard. Besides, it is a familiar fact that the most consistent program of safety gear affects only a fraction of the cause of accidents.

Also to be countered with resolute refusal are attempts to achieve "adjustment" to hazards and their avoidance by means of bonuses offered to individual workers or the labor force as a whole, as a reward for periods free of accidents. Such attempts should be resisted above all if their sole objective is to keep injured workers on the job, so as to evade the consequences emanating from insurance law.

All these measures become meaningful only when they are component parts of a program designed to ensure that dangers are realized and consistent action is taken to eliminate those hazards.

With an understanding for these facts, Western European union have drawn the following conclusions. Their efforts to achieve greater safety on the job are directed primarily to:

- A comprehensive investigation into the reasons for accidents.
- Safety analyses of jobs recognized as being dangerous.
- Detailed statistics of the causes of accidents, and,
- Establishment of comprehensive safety programs, adapted to the peculiarities of each plant.

The battle against accidents in the future lies as in many other spheres, in education and training, and in providing regular inspections and maintenance of equipment, testing new processes and substances before they are put into use, and above all ensuing that every employee contributes to the promotion of safety, knows his responsibilities and is thoroughly trained to perform his work in the right and safe way.

All employees have a part to play in the promotion of safety and one of the most effective ways of achieving this is through the machinery of a properly functioning union safety committee.

In some plants, the most obvious dangers continue to be ignored.

In many cases, the diseases now causing concern are those which show themselves many years after the first exposure to risk and perhaps only after minimal exposure to those materials which were the causes.

The first essential of healthy working environment is that the workplace should be kept clean and well ventilated. Industrial dust still remains a bane of industry. It is a problem of

CRMC-ShipbuildersCouncil-Files-000270

industry rather than of medicine and can be satisfactorily solved only by those in control and whose decisions in the long run are responsible for creating it. All dust is physiologically harmful, although some dusts are more deadly than others. While it is difficult to maintain good health in dirty surroundings, the problem is made much more acute because the biologically harmful dust which has to be controlled to ensure safe conditions is in itself normally invisible as a dust cloud. Workers in plants can, therefore, be at risk in conditions which appear to the naked eye clean and satisfactory.

The problems of dust control are difficult, but the best control of dust is not to make it. The best method of preventing harmful dust entering the atmosphere is to use harmless materials in preference to harmful ones.

Asbestos is recognized as one of the most dangerous of all industrial poisons and inhalation of asbestos dust can cause asbestosis. Asbestosis is known as a progressive disease. Any silicosis in an ex-miner may fall away and not affect him after he leaves the industry. But asbestosis can linger, and kill workers many years after they have been exposed to asbestos dust.

One source states that 50% of asbestosis cases between 1961 and 1964 developed lung cancer. But asbestos dust can cause another malignancy - mesothelioma, a tumor known to attack not just asbestos workers, but relatives in contact with them, and people living near asbestos factories.

Low-level exposure to asbestos is thought to increase the possibility of pulmonary disease. Not only can someone totally unconnected with asbestos work become diseased; but it can strike many years after work with asbestos has been totally abandoned.

Medical opinion is pushing for study of working population that handles asbestos to discover exposure and the real dangers. In shipbuilding, it is used for bulkheads, which in accordance with the requirements of the International Convention for the Safety of Life at Sea, must be fire resistant. Those bulkheads are machined in joiners' shops, similarly to wood and generate a fine dust.

As fire-consciousness increases, builders may make wider use of asbestos for homes and other construction. This factor, plus the present weight of medical evidence and opinion, may hurry new asbestos regulations through, to give a greater proportion of Britain's working population protection from this deadly substance.

CRMC-ShipbuildersCouncil-Files-000271

The most common noxious substance inhaled by everybody is dust. In large quantities it can be dangerous. Lungs will be harmed even when exposed to only small amounts of certain dusts such as ground silica or asbestos. Beryllium and radioactive dusts are also very poisonous.

Whilst the lungs have a tremendous capacity for mopping up foreign material, there comes a point when breathing becomes difficult and in middle age this is frequently followed by a bronchitic condition.

The suppression of dust is largely a matter of good housekeeping and this demands keeping the workshop clean and keeping the air fresh and clean.

Dust is produced by hundreds of industrial processes. Even the simple pedestal grinder produces great volumes of it.

As well as being breathed in, dust can also be swallowed with food and saliva and enter the system through the skin. However, most damage is done by inhalation.

There are many ways apart from exhaust ventilation to control dust. In most cases they are also simpler and more economic. For instance, a less harmful material may be used. This might also improve and speed up the process by doing away with the necessity of protective clothing.

Perhaps the process can be isolated, either by completely enclosing and changing from a dry process to a wet one may prevent air contamination.

Respirators are generally suitable only for intermittent or emergency use. They should be regarded as a last line of defense.

Where these steps are impracticable, local exhaust systems will have to be used. The most important part is the hood. If all the dangerous dusts, gases and vapours are not trapped, the system is not effective.

One of the most common specific diseases attributable to welding is metal fume fever, often caused through working on galvanized metal in poorly ventilated conditions. The symptoms are shivering, pains in the limbs, headaches, tightness in the chest and pyrexia, then a fall in temperature accompanied by sweating. The worker is only comparataively rarely absent from work the next day, although he may experience nausea, chest pains and lassitude on the day following the attack.

CRMC-ShipbuildersCouncil-Files-000272

Serious complications are unusual, although the irritation to the respiratory system may sometimes be severe enough to be followed by pulmonary oedema and pneumonia.

Metal fume fever has been known to occur in other industries, especially where zinc fume may be inhaled, such as brass founding.

While zinc fume from welding galvanized metal, brass, etc. is the most common cause of the condition in welders, fume from other metals can produce the same symptoms, for example antimony, cadmium, chrome, cobalt, copper, magnesium, manganese, mercury, nickel, silver, tin, etc. Welders working with any of these metals or their alloys might conceivably, under certain conditions, suffer from metal fume fever.

Apart from the hazards of metal fume fever, other dangers of intoxication may arise in welding, chiefly from breathing fumes containing poisons derived from the metal or electrodes or their coverings.

Lead poisoning is probably the best known. The burning and welding of lead painted metal carry probably the highest risk of lead poisoning to any trade.

Manganese poisoning, although rare in welders, has occurred when alloy steel containing manganese was welded in confined spaces.

Cadmium fume exposure results in the typical symptons of industrial cadmium poisoning, consisting of severe irritation of the respiratory tracts tending to be followed by pneumonia, pulmonary oedema and bronchitis. The symptoms are similar to those of metal fume fever but tend to be more marked and prolonged, with a greater tendency for serious complications to arise.

CRMC-ShipbuildersCouncil-Files-000273

AFFIDAVIT

STATE OF COLORADO)
) ss.
COUNTY OF ADAMS)

I, Margaret J. Baumgardner, being of full age and first duly sworn do hereby state:

1. I am not a party to this action. I have personal knowledge of the facts set forth in this affidavit, and if called as a witness, I could and would competently testify as to the truth of the matters set forth herein.

2. I am the Research Coordinator for the Claims Resolution Management Corporation ("CRMC"), a wholly owned subsidiary of the Manville Personal Injury Settlement Trust ("Trust"). The CRMC was created in December 1998 and is staffed by former Trust employees. On January 1, 1999, CRMC began providing claims resolution facility services to the Trust.

3. In this position, I manage the Asbestos Claims Research Facility ("Facility"), a document and records repository located at 3390 Peoria Street, Suite 304, Aurora, Colorado. The Facility contains the business records including but not limited to correspondence, memoranda, reports, records and data compilations ("record") of Manville Corporation or related entities ("Manville"), generally, as well as Manville records relevant to litigation of asbestos liability. The records found at the Facility were transferred from Manville to the Trust beginning in November 28, 1988, the date on which the Manville bankruptcy plan was consummated. Additional records have been and continue to be transferred directly to the Facility. The Facility's records have been in the custody and control of counsel for the Trust or Trust personnel since the date of consummation.

4. My experience and familiarity with the documents at the Facility began in 1983 while working for Manville. In my work as a paralegal for Manville, I assisted in locating, indexing and packing many of the records which became the foundation documents for the Facility. I continued to work for Manville until September 1987. From March 1988 to September 1988, I was hired to supervise and assist in the indexing of the first 20,000 boxes which were turned over to the Trust in November 1988. From September 1988 to January 1989, I assisted in the privilege review of documents to be given to the Trust. From November 1988 to April 1994, I worked for Freeborn &

Peters and was put in charge of the Facility, managing all productions and "new" acquisitions. In September 1995, I was hired by the Trust to manage the Facility. In December 1998, I was hired by the CRMC to manage the Facility for the Trust. Accordingly, I am personally familiar with many of the records stored at the Facility, as well as how the records have been gathered.

5. To the best of my knowledge, information and belief, I certify that these records were made at or near the time by, or from information transmitted by, a person with knowledge, were kept in the course of the regularly conducted business activity of Manville, and it was the regular practice and the business activity of Manville to make the records.

6. Attached are documents found among the file collections at the Facility. These documents, bates labeled CRMC-ShipbuildersCouncil-Files-000001 through CRMC-ShipbuildersCouncil-Files-000884, are true and correct copies of documents found at the Facility.

Margaret J. Baumgardner

Subscribed and sworn to before
me this 23rd day of October, 2014.

AMY W BENHAM
NOTARY PUBLIC
STATE OF COLORADO
MY COMMISSION EXPIRES 05-23-2016

Notary Public