

1986

**ANNUAL
ENVIRONMENT,
HEALTH & SAFETY
REPORT**



SL 103567

FOREWORD

This report is in three parts; the 1986 Report, 1986 Accomplishments, and a statistical review with charts.

Reporting are:

All the Corporation's U.S. and Canadian Manufacturing Facilities	55 Units
All the Corporation's U.S. Research and Development Centers	5 Units
All the Corporation's U.S. Canadian, and CP&D Sales and Distribution Outlets, and Administrative Offices	35 Units
	<hr/>
Total	95 Units

The company's Instrument and Systems Group acquired in 1986, is not included in this report. It will be consolidated into the 1987 report.

Units outside the United States and Canada whose reports are included in the appendices include: manufacturing, 18; research, 1; administrative, 2; total, 21.

Your comments concerning the format or content of this report are welcome. Send these to Ralph L. Miller, Director-Safety & Loss Control, 12 South, One PPG Place.

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PART I - 1986 REPORT

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OVERVIEW

Environment

1986 was an active year in the environmental area. Extensive activity was undertaken throughout the year in each Group with regard to air, water, and solid waste permitting activities both with respect to ongoing facility operations as well as modified and newly acquired facilities. Regulatory changes also required additional permitting work where new functions were added to the regulated arena.

Federal and state legislative and regulatory activities focused upon many areas of PPG's businesses including the federal Superfund Reauthorization (including the new Emergency Planning and Community Right to Know Act) and the reauthorization of the Safe Drinking Water Act as well as many state legislative proposals. The federal Superfund Amendments were accomplished on a financial basis which was largely consistent with the company's position; however, the impact of the programmatic changes will have to be evaluated as they are implemented by EPA.

PPG's Superfund involvement in approximately thirty sites affects all three operating Groups and has been managed under the direction of the Group technical experts in conjunction with the Environmental Section of the Law Department.

Each of the Groups has groundwater programs underway at various locations where considered appropriate for evaluation or remediation of potential contamination.

Each Group was actively involved in the evaluation of acquisition or divestiture candidates to assure that the Company's interests were protected in the transactions relating to these businesses.

Throughout the year, the focus of environmental affairs activity was principally to be in the North American area; however, there has been an increase in activity regarding support to European and other locations by the Group environmental professionals.

In the environmental compliance assurance area, fifteen audits were conducted during the year in the United States, Canada, and Europe.

Health and Toxicology

The health and medical auditing activity increased 25% in 1986 compared with 1985. Audits of non-U.S. facilities were initiated in 1985 and continued through 1986. The audit procedures have been altered and the scope increased to maintain the state-of-the-art approach. During 1986, a general improvement was noted in the number of non-compliance items as well as a reduction in the time to abate the non-compliance findings.

With reference to toxicology, there are pressures on PPG products from regulatory agencies such as EPA and TSCA regarding section 4 (testing).

These substances include 1,3-dioxolane, vinylidene chloride and paradichlorobenzene. Work continues to resolve these issues with the agencies involved.

Safety and Loss Prevention

The reduction of occupational injuries and illnesses is not an exact science and, as a result, our experience can vary from one year to the next. However, an examination of the record over a number of years does reveal trends.

PPG's recorded experience extends back 67 years to 1919 when we were experiencing 20 disabling injuries per 100 employees each year. Although sawtoothed in nature, the rate chart of this experience has shown a gradual reduction to our current rate of 0.37. (See Statistical Review)

A closer examination of our experience for the last ten years shows an upturn from 1977 through 1982. Since 1982, however, the National Safety Council (NSC) rate has decreased from a peak of 0.66 to the 1986 rate of 0.37. This trend in the last four years has reduced our disabling injury rate by 44%. The 1986 rate of 0.37 is the second best on record. (It should be noted that the best year included only U.S. statistics and did not include U.S. CP&D.)

The performance of the manufacturing segment of the business has shown three consecutive years of improving performance

Year	Corporate NSC Incidence Rate	Manufacturing Segment NSC Incidence Rate
1982	0.66	0.34
1983	0.54	0.41
1984	0.46	0.31
1985	0.40	0.24
1986	0.37	0.14

Goals for safety performance were established in 1969. The record shows that the corporate goal was not achieved in any year until 1984. Unfortunately, our 1985 and 1986 goals -- which were real stretch goals -- were not achieved. However, we did improve 8% in 1986 over the previous year.

Security

The level of security activity increased again during the year. Requests for assistance in all areas of industrial security, protection of proprietary information, communications, access control, intrusion detection, electronic surveillance, physical protection of assets, overseas travel and personal protection were significantly higher and, for the most part, were requests from Group field units. This was

attributable to managers taking a harder look at all aspects of their operations, the reduction of personnel in the supervisory ranks and the need for more effective communication capabilities with operating personnel both within and outside facilities. Some manufacturing facilities, both in the United States and overseas, initiated their own crisis response drills with notification to the Corporate Crisis Responses Unit.

ANALYSIS OF 1986 DEATHS AND DISABLING INJURIES

The Corporation experienced one fatality. An employee was killed when a stack of glass fell off a truck and crushed him.

During 1986, 109 other employees suffered disabling injuries which results in 4,019 work days lost (see Statistical Review). This averaged almost 37 days lost per injury which was up from 31 days per injury in 1985.

"Strains & Sprains", now called overexertion, once again accounted for the largest number of disabling injuries -- 40% -- up one quarter over 1985. Of these cases, more than 60% were back injuries. "Falls" accounted for 26% and "Struck By" 16% -- the former up slightly and the latter well down from 1985. These three categories accounted for 82% of the corporation's disabling injuries, a minor increase over the previous year.

Three-hundred-and-ninety-three other injuries required some restriction in the employee's activities to the extent that he or she could not perform all the duties of the job he or she was doing at the time of the injury. These cases were up over 1985 by more than 50%.

Noting that disabling injuries declined and restricted activity cases were up substantially over 1985 and that total recordable cases were up only 5%, the conclusion can be drawn that only the most serious injuries have declined.

Rates are established for each of the three types of injuries: AW's (disabling injuries), RA's (restricted activity); and NF's (non-fatal or medical treatment cases). These rates, contained in the Statistical Review, show the total corporation and each of the three Groups' performance.

The Corporation experienced a total of 1,254 recordable cases made up of AW's, RA's and NF's. Of these recordable cases, Glass sustained 915, C&R 199, and Chemicals 131. Eight others were sustained by General Office employees. Only C&R recorded a drop in the RC category during 1986.

Many of these cases result in lost workdays. By adding the days lost away from work due to disabling injuries to the restricted activity work days lost, the Corporation experienced 10,196 days of lost productivity where the employee was unable to do his or her regularly scheduled job.

This amounts to roughly 41 man years where the jobs had to be filled with substituted, retrained or overtime employees. This is up 37% over 1985. A plot of the breakdown of these days appears in the Statistical Review.

LOSS PREVENTION COSTS AND ANALYSIS

In 1986, PPG experienced \$10,507,539 in direct costs associated with occupational injuries and illnesses. This is up 43% over 1985. (See Statistical Review) During 1986, it took about \$8.33 in sales to generate the profit to cover every dollar in injury costs (pre-tax, pre-minority interest earnings divided by net sales). This means that more than \$89 million of sales were needed to cover our occupational injury and illness costs. This is without consideration for the indirect costs such as replacement personnel, overtime pay, cost for training or operating dispensaries. The National Safety Council estimates these indirect costs at four times the direct costs.

Conversely, the latest statistics from the National Safety Council (1985) show that the average disabling injury rate for all injuries was 1.98. However, the Council also reports that the chemical industry rate was 0.52 and for the stone, clay and glass industry, it was 2.69. A weighted average of these two based on PPG's work hours would result in a national rate of 1.35.

If we would have experienced this weighted average in 1986, we would have had 397 disabling injuries. Translating this into PPG costs on the same basis used above, PPG would have spent about \$38 million on direct injury and illness costs. Thus, our safety and health programs "saved" the company at least \$28 million and the need to generate an additional \$233 million in sales by performing better than the average of our industrial counterparts.

Under the Corporate Asset Protection Program (CAPP), losses to assets and paid insurance premiums totaled \$12,172,143. Vehicle accidents and insurance premiums totaled \$1,287,024 and third party claims were \$13,115,970. Adding these to the injury and illness costs, PPG spent \$37,082,676 on "losses". Using the same sales basis as above, \$308 million in sales were produced in 1986 to cover all these losses.

PPG is not "perfect"; it is recognized that all these costs cannot be saved. But the potential exists to save a large portion with improved safety and loss prevention programs. For injury and illness costs, 80% of the costs were controllable (see Statistical Review). The potential also exists for increased costs if our programs slip.

SAFETY PERFORMANCE AWARDS

PPG recognizes outstanding safety performance in several ways: long periods of time that reporting units operate without a death or disabling injury; operating a calendar year without a death or disabling injury or

making a significant improvement in their safety records; and the "President's Challenge" recognizes units that meet or exceed their safety goals that are aimed at injury reduction. The Corporation also recognizes any employee that saves a person's life while on the job. (Note summaries in the Statistical Review.)

Fifteen reporting units received awards for operating extended periods of time without a death or disabling injury -- topped by four locations winning the President's Award. Fifty-two operated the entire year without a death or disabling injury. The Ditzler warehouses accomplished their 14th consecutive year. The President's Safety Challenge recognized 60 reporting units for meeting or exceeding their safety goals to reduce injuries. Two employees were honored for saving another person's life.

Thirty-one PPG locations were honored by the National Safety Council for their outstanding performance when compared to their industrial counterparts and their own record for improved safety performance.

OSHA INSPECTION EXPERIENCE

During 1986, OSHA compliance officers conducted 30 inspections at PPG locations. (See Statistical Review) We have been experiencing an average of 44 inspections a year since 1971. Thirty inspections is less than average and down 29% from the 42 of 1985. The CP&D portion of the Glass Group received 25 of the 30 inspections.

The most often cited reason for an inspection was the fact that we were a subcontractor on a construction site.

The Corporation has incurred a total of \$64,349 in penalties since 1971 with \$1,500 of that experienced in 1986.

PART II - 1986 ACCOMPLISHMENTS
ENVIRONMENT, HEALTH & SAFETY
PPG INDUSTRIES

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CORPORATE ENVIRONMENT & COMPLIANCE ASSURANCE

Federal Legislation

One of the principal focuses of the Corporate Environmental Affairs function is the federal legislative activity. The continued congressional focus on the Superfund Reauthorization in 1986 involved extensive activity culminating in the approval of the Superfund Reauthorization Amendments in October by President Reagan. The potential financial impact of the Superfund taxes on PPG was mitigated and the final program is consistent with our legislative goals to broaden the base of the tax. The programmatic changes must be evaluated as they are applied by EPA with regard to the individual sites of concern. The legislation has the potential to significantly increase the cost of cleanup at these sites.

Toxics Policy

In 1986, PPG adopted the CMA Air Toxics Control Policy and developed a corporate implementation program which has been adopted as appropriate by each of the Groups. In addition, leadership was provided for the Chemical Manufacturers Association Air Toxics Committee charged with implementing the policy throughout the chemical industry.

Water Legislation

The Safe Drinking Water Act was reauthorized in 1986 and the Clean Water Act received significant attention and has since been reauthorized in 1987. PPG's views on these programs were formulated and communicated to various legislators as well as PPG trade associations as appropriate.

Right to Know

A significant new legislative program was approved in the context of the Superfund Reauthorization -- The Emergency Planning and Community Right to Know Act will impose major information gathering and reporting obligations on all PPG locations in order to address the stated goal of involving emergency planning and community officials in the details of plant activities to assure coordination in these important areas.

Support for Group implementation of the Community Awareness and Emergency Response Policy continued as appropriate.

Superfund Site Management

The Group environmental specialists, in conjunction with the Law Department, continue the process of managing PPG's involvement in approximately thirty superfund sites throughout the country. Activities have focused on defining PPG's involvement, negotiating terms of remedial investigations and feasibility studies as well as consent agreements with governmental agencies.

Audit Program

During 1986, there were 15 environmental assurance audits, bringing the total to 58 in the four year history of the program. Various acquisition candidates have been audited as well.

Since the program began, the most frequent area of noncompliance found has been in solid waste handling. Many of the violations in this area are administrative in nature, e.g. recordkeeping, and do not represent health or environmental hazards.

The following table summarizes the audit findings of 1986 by issue and group.

	<u>Chemical</u>	<u>C&R</u>	<u>Glass</u>	<u>Total</u>
Air	11	19	9	39
Water	6	9	18	33
Waste	18	24	16	58
Underground Tanks	-	-	3	3
TSCA	11	4	2	17
Policy	7	26	10	43
Management	<u>16</u>	<u>33</u>	<u>24</u>	<u>73</u>
Totals	<u>69</u>	<u>115</u>	<u>82</u>	<u>266</u>

The number of audits and the average findings per audit were 4 and 17.25 for Chemicals, 6 and 19.2 for Coatings & Resins, and 5 and 16.4 for Glass.

There were two repeat audits in 1986, one at Lake Charles derivatives (previously plant B) and the other at Circleville. The results of these audits indicate an interesting trend.

From the initial audit, there is a decrease in regulatory findings and an increase in policy findings. This trend is one which would be expected in a corporation emerging from an environmentally reactive organization to a proactive one. It remains to be seen if this trend prevails in future repeat audits.

Seventeen facility audits are scheduled for 1987. These include four in Europe, four in Canada and four repeat audits.

CORPORATE HEALTH ADMINISTRATION AND TOXICOLOGY

Quality Assurance of Health Programs

Ten health and medical audits were performed in 1986. Those audited included LaPorte, TX; Wichita Falls, TX; Torrance, CA; Delaware, OH; Tipton, PA; Springdale, PA; Ford City, PA; Ladywood, Birmingham, UK; Beauharnois, Quebec and Beaumont, TX.

There were 166 health findings among the ten plant locations of which 87 items have been abated. There are only three health audits findings remaining to be resolved from the 1984 audit schedule (97.2% closed). Eighty-five percent of the 1985 health findings have been corrected for an 85% closure rate.

The 1987 health and medical audit schedule has been approved and includes four locations each for C&R and the Glass Group with Chemicals scheduled for three audits. There will be two non-United States locations included in the 1987 schedule (Ontario, Canada and Valladolid, Spain).

The health and medical audit procedures were enhanced to include the use of local law firms to assist in the review of laws and regulations for locations outside the United States. The audits were expanded to include the OSHA Hazard Communications Standard, OSHA Recordkeeping Practices, the new PPG Alcohol, Drugs, and Other Intoxicants Policy, PPG Interpretive Guidelines to the OSHA Respiratory Protection Standard and the Implementation Plans to the PPG Health Care Policy.

The opening and closing plant site conferences have been modified to include an explanation of the scope of the audits and to discuss noncompliance items with plant management at the closing conferences.

Quarterly updates of the audit program are prepared for top management.

Coordination

The Health Coordinating Committee (HCC) began work on drafting guidelines to establish minimum requirements for health programs on a global basis. Those specifically being addressed include respiratory protection, hearing conservation, air monitoring strategies, maintenance of control systems, health care, and good industrial hygiene practices. The Corporate IPELs were updated by the IPEL Working Group for 1986-87 and the IPEL guidelines are being revised to apply to PPG on a worldwide basis. The HCC has input into the SHARE program and also identified videotapes that would fit into the satellite modules addressing health topics.

Air toxic guidelines were prepared to outline the approach recommended to establish acceptable exposure levels that would not likely result in any harm or injury of consequences to residents adjacent to PPG operating facilities. Interpretative guidelines were prepared and approved by the HCC dealing with OSHA Respiratory Protection Standards. The C&R Group assisted in drafting an implementation plan containing minimum requirements to satisfy the Corporate Reproductive Hazards Policy Statement.

Work continued on the Chemical Group's Reproductive Hazards Review Committee covering females working with microorganisms, mercury and an alleged increased incidence of miscarriages, PPG 1013 and EPTC.

Guidelines were developed to determine whether the administrative portions of PPG Place are subject to the OSHA Hazard Communications regulations. A review was conducted at the Corporate computer center and Glass Engineering relative to compliance with these regulations.

Toxicology

Developments associated with the new toxicological information were monitored relative to methylene chloride, perchlorethylene and paint solvents. A workshop was conducted by the Chemicals Group and Corporate participated in the meeting on the reporting requirements under governmental agency regulations relative to adverse effects of chemicals.

A corporate toxicology review was conducted of the Chemicals Group's two-year chronic rat oncogenic study on EPTC (5-ethyldipropylthiocarbonate) at Hazelton Laboratories America, Inc. in Madison, WI.

During the Chemicals Group's meeting, Corporate participated in the review and evaluation of the toxicological predictive approach to outline viable candidates of analogues of PPG 1013 herbicides in the early testing stages.

Meetings were held to assure the provisions of EPA's TSCA 8(e) Substantial Risk were met and to review new toxicity information on chloropivolychloride (CPC), two surfactants of Jordan Chemical, and monochlorobenzene.

The toxicology testing results from three Chemicals Group biochemical compounds were reviewed and EPA was notified under FIFRA provisions of the regulations.

The Director of Health Administration and Toxicology continued leadership of the CMA Vinylidene Chloride Technical Panel and was successful in obtaining an extension of 90 days for commenting on the EPA's TSCA Section 4 proposed requirement for additional toxicity testing that will cost the industry approximately \$1.5 million over a five-year period.

Comments were prepared on the white paper dealing with carcinogenicity of parachlorobenzene.

Blueprint for the Decade

At the Second World Conference the Director served as secretary to one of the panels (Innovation and Risk Taking). A document was prepared on key health and toxicology issues with suggested implementation mechanisms to demonstrate how the Blueprint of the Decade statements can be achieved by 1994.

CORPORATE MEDICAL

Audits

Ten medical audits were completed at PPG facilities, including one European and one Canadian plant site. Reports on these audits were written and distributed.

Executive Examination

The computerization of the Executive Examination Program was completed following revision to methods of initial notification and follow-up notification. Time for reimbursing participants was reduced and the examination protocol was updated.

First Aid/Treatment Protocols

Medical programs and protocols for first aid and definitive treatment for exposure in the workplace were developed for all groups and distributed to group sites in the United States, Canada and Mexico.

New Acquisition Protocols

Physical examination protocols for pre-employment and specific exposure medical surveillance programs were developed for new acquisitions in the Chemicals and Coatings & Resins Groups.

Respiratory Protection

Specific, required physical examination procedures necessary to certify employees to wear respiratory protection in the workplace were developed for all Groups.

Evaluations

The Corporate Medical Director provided the evaluation of audited plant medical departments (work product of physicians and nurses).

Screening Program

The Corporate Medical Director participated with Group representatives and Corporate Human Relations in the development of a Corporate Alcohol, Drugs, and Other Intoxicants Screening Program. He prescribed the panel of drugs for testing and selected the laboratory that would provide all the testing for the corporation.

Emergency Transportation

Direction was provided to establish a procedure that will extend the benefits of S.O.S. (emergency transportation and, if needed, evacuation services) to include all PPG sites worldwide.

Cardiac Protocol

A protocol was developed for the reduction of cardiac risk factors for General Office employees, to be performed by St. Francis Executive Health Center. The program is not yet fully implemented.

CORPORATE SAFETY AND LOSS PREVENTION

Program Development

The primary area of program development was in safety training. A new program called SHARE (Safety and Health Awareness Reaches Everyone) was developed to revitalize and focus activity in the safety and health areas. This six-hour training program teaches PPG philosophy and culture on safety and health and then identifies each employee's role and accountability in the overall effort. The program will be implemented in 1987 and translated into several languages so that it can be utilized globally.

Vehicle safety and the use of seat belts continued in 1986 with the addition of a program using Toney Lineberry, a traffic safety consultant, who is confined to a wheelchair as the result of an auto accident. A 30-day tour in the Pittsburgh area for employees and local schools was so successful that an expanded program was developed to cover the United States and Canada. This undertaking was being planned at the end of 1986. During 1987 and 1988, Mr. Lineberry will bring his message to our employees in most of our North American facilities as well as to schools in which PPG employees' sons and daughters are enrolled.

Numerous other vehicle safety promotions were held at plant locations and at General Office. The results of these efforts are beginning to show. Prior to the vehicle safety effort an average of eight to ten PPG employees were killed each year in auto accidents, mostly off the job. In 1985, four were killed; in 1986 fatalities dropped to two. This translates directly into lives saved and reduction of countless other injuries which would require lost time and/or medical care and treatment.

All four Corporate safety award programs were continued.

Employee safety at PPG Place received increased emphasis bringing the safety culture to General Office.

Reporting

Regular reports were continued for the President, the Board of Directors and the Environmental Affairs Committee. External reports to the National Safety Council and others also were continued.

International safety statistics were collected throughout the year and included in the occupational injury and illness report.

Evaluations

Field unit safety evaluations by Group personnel were audited through review of written records and verbal discussions with the Monthly Safety Coordination Committee. One fatality investigation was conducted.

Coordination

The Corporate Director of Safety and Loss Prevention chaired the Safety Coordinating Committee and served as secretary to the Employee Health & Safety Subcommittee. Policies and procedures, along with other safety issues, were continually reviewed and updated through these intergroup committees.

Government Interaction

The Corporate Director of Safety continued membership with and attendance at the Organization Resources Counselors' meetings to remain up to date on government activity in the OSHA and NIOSH areas.

CORPORATE SECURITY

PPG Place Oversight

Oversight of the PPG Place security program and related matters was continued. Due to the card access system failure, joint steps between PPG and Oliver Realty were taken to prevent recurrence. Meetings were held with PPG and Oliver Realty Building Management Groups to determine access modes for PPG Place Buildings 3, 4, 5 & 6. Needs of CCS, Glass Commercial Development and Oliver Realty were coordinated to maximize utilization of an option purchased by CCS for use with the card access system. Programming for certain card readers, changes in status levels, was accomplished in conjunction with Group & staff reorganizations and CCS changes. Card and status level capacities/memories are reaching current limits. Capacities and memory levels can be increased, however.

Crisis Response Unit

Considerable time and effort was spent in setting up the Crisis Response Unit Program, as well as designing and equipping the CRU Communications Room. Requests were received and satisfied from Alcoa, Corning Glass, FMC Corporation, and H. J. Heinz Co. to discuss CRU Program to and view the CRU Communications Room. Similar requests from several other companies are pending. Recommendations made to enhance special security of the 30th Floor area were accepted and implemented.

Harassment

Communication harassment problems involving a small number of G.O. employees were resolved. Assistance was provided to a VP whose vehicle was stolen. A death threat made by a customer in Canada against several Canadian employees was handled without incident.

Natrium Emergency Response Center

Assistance was provided in resolving the failure of Natrium Emergency Response Center AT&T Computer and phone lines tied in with CHEMTREC and

PPG facilities. A problem involving the possible compromise of telephone communications at the Natrium plant and residences of certain Natrium principals in connection with the strike was handled.

Overseas Security

Assistance was provided regarding the security of overseas business trips by members of top management, the shareholders' meeting, and the Second World Conference. Security arrangements were provided for Crown Prince Henri of Luxembourg during his visit to PPG facilities.

Precious Metal Shipments

A number of emergency precious metal shipments were handled along with normal shipments of both precious and non-precious metals without loss or incident. Recommendations were made on handling certain shipments to Europe and the Far East.

Assistance

Counsel and assistance was provided to Group and Staff Department security efforts in the field and General Office covering protection of proprietary information, destruction of records and information media, access control, radio, CCTV, radio/telephone interconnect, alarm and special systems equipment. Information on political, terrorism, kidnapping and extortion considerations was provided to international groups. Travel advisory information was provided to all PPG Group/Staff Departments and overseas PPG offices.

Purchasing Review

At the request of the Purchasing Department, reviewed bids and purchase requisitions for certain equipment and systems providing observations and recommendations. Savings on one plant-wide CCTV system alone was \$40,000. Meetings were held with engineering and operating group personnel to coordinate design, agreement on security provisions and equipment for new facilities, and modifications to existing facilities. Radio equipment was obtained on an emergency loan basis for two group engineering units on three occasions for use in the field.

Investigations

A number of investigations were conducted involving stolen and forged imprest checks; a counterfeit PPG check; drug problems; disappearance of metal extrusions; property thefts; computer thefts in CP&D operations; damage to GIS equipment and loss of data; improper conduct of certain employees and other Law Department needs. A security audit of Barberton Research was conducted. Joint inspections of overseas glass shipments with Societe' General D'Securite were conducted.

Improvements

Security and safety improvements, including new lighting and an electrically heated gutter were completed at the PPG hangar. Assistance was extended to the Chief Pilot on administrative matters. Last feasible repair was made on the hangar heating boiler.

Human Resources

Considerable information was provided to Human Resources on security and safety to be included in the manual for expatriate use. Counsel also was provided on polygraph use in connection with proposed federal legislation.

Outside Requests

Outside requests were received and discussions were held on card access control with Duquesne University, USX, and Westinghouse. Upon request of Pennsylvania Western Penitentiary officials, provided counsel, information and contacts on x-ray and detection equipment to prevent entry of firearms, drugs, etc. into the penitentiary. At request of British Airways and American Express, performed a security audit of all aspects of airport security procedures, baggage handling, passenger screening, aircraft servicing, etc. at Greater Pittsburgh International, Kennedy, and London Heathrow airports. A request from Central Region Secret Service Director to become oriented on PPG Place Security provisions and security systems was satisfied. Upon request, provided Westinghouse with contacts for undercover operatives and drug training for top management personnel. USX was provided with information on executive protection.

Glass Group

Considerable information was provided to the Glass Group for a "Security Glazing Study". Requests for information on security glazing from security consultants and an Australian architect were satisfied. Some requests were referred to Huntsville.

Other

"Blueprint" objectives were coordinated with all functional efforts during the year. A development program for Group Managers, Safety and Loss Prevention was started. Security training and associated matters were covered upon request of the Chemicals Group and G.O. Glass Engineering.

GLASS GROUP ENVIRONMENT

PCB Removal

The Group's PCB removal program was active at fifteen sites throughout the United States and Canada with the project nearing the completion of the goal of total removal of PCB's throughout the system. Extensive

permitting activity was under way in the form of air permits at both the Chehalis and Mt. Zion new technology units and water permit renewals at several facilities throughout the system.

Crestline

A major clean-up was undertaken of the stream at Crestline as well as the plant dewatering lagoon to achieve environmental goals at that location.

Tank Program

The Group underground tank program resulted in the removal of twenty-three tanks throughout the United States.

Act Review

A formalized ACT review process was initiated through an on-line computer hookup with the plants to assure timely safety, health, and environmental reviews of authorizations. Various acquisition candidates were reviewed by the Group for safety, health, and environmental areas.

Crystal City/Creighton

An evaluation was conducted of the Crystal City landfill and, at Creighton, all process waters were removed from the river and directed to a public-owned treatment works.

Waste Minimization

Waste minimization activities continue in the Group.

GLASS GROUP HEALTH

Audit Participation

Industrial hygiene input was provided during the three health and medical audits conducted at Works 4, 5, and 27. As of December 31, 1986, greater than 90% of the findings were closed.

Mobile Testing

Mobile van testing continued for employees in the silica, asbestos, and respiratory protection programs. Facilities utilizing the mobile van in 1986 include Works 1, 5, 6, 7, 8, 26, 52, and 53 (a total of 654 chest x-rays and 1230 pulmonary function tests).

Bonding Booklet

A booklet discussing the health concerns and precautions of the automotive bonding process was developed by the Industrial Hygiene staff. The booklet was printed and distributed.

Canadian Response

The Industrial Hygiene staff responded to an Ontario Ministry of Labour order to conduct an air quality assessment at Works 81, Oshawa. The sampling was completed, and the Ministry was satisfied that there was no problem.

Slag Removal

Industrial hygiene assistance was provided to Works 6 during regenerator slag removal. As a result of a survey conducted at Fresno in 1985 and results of the silica brick inventory, a cold repair checklist was developed to provide industrial hygiene/occupational health guidance during the planning phases of a cold repair.

CP&D Health Issues

Industrial hygiene assistance was provided to CP&D branches and construction sites on health issues. Specific areas of concern include hearing conservation, hazard communication, asbestos identification and removal, and pre-employment physical examination requirements.

Asbestos Recommendations

In response to the revised Asbestos Standard, the Glass Group issued asbestos program recommendations to address changes in the Standard with implementation in accordance with PPG policy.

TSCA Review

A review of the TSCA inventory update requirements resulted in a review of all Glass Group chemical substances which might have qualified for the TSCA reporting. However, a response to the EPA was not required since the low volume threshold was not met on all "eligible" chemical substances.

Hazard Communications

The Glass Group Hazard Communication Program has been fully implemented and is now ongoing. Some program elements are:

1. 17,000 Material Safety Data Sheets (MSDS) were evaluated during 1986 and Safety and Health Index System (SHIS) codes assigned.
2. All Glass Group employees have received training via two videotapes produced by Corporate Communications and a verbal presentation prepared by the Human Resources Department.
3. SHIS labels are being applied to all purchased and/or in-house containers of chemicals. They are printed mechanically at 11 plants. All others are being hand-generated.

4. 15 MSDS's were prepared or revised for PPG Glass Group products. Approximately 50 MSDS's were prepared for experimental Fiber Glass products.
5. Approximately 700 MSDS mailings were made during 1986.
6. Glass Group facilities have developed written Hazard Communication Programs.
7. Three hazard communication "update" seminars were conducted to fine-tune Glass Group's Hazard Communication Program.

Shelby Dermatology

An evaluation of the Shelby plant's dermatology control program was made by Dr. Birmingham, an expert in industrial dermatology. Shelby's program was modified per Dr. Birmingham's recommendations.

Sunseal

Industrial hygiene input was provided to the Glass Research Center during the process development stage of the Sunseal Twindow. Health considerations are to be addressed by Lenhardt in the design of production equipment.

Right-to-Know

State Right-to-Know hazardous substances reporting requirements were met, using chemical lists generated from the Glass Group MSDS computer file, at Crystal City, Cumberland, and Hunt Valley.

GLASS GROUP SAFETY

Program Evaluations

The Glass Group conducted one Safety Program and twelve follow-up visits. The Mutual Aid program resulted in visits to 114 branches and 41 construction sites in North America. Special construction and branch safety training was conducted in Canada. Glass operations in Europe were introduced to PPG's safety program, and they are implementing proven glass safety programs designed to reduce their frequency of worker injuries.

New Programs

New programs included the development of computerized reports for the monthly Occupational Injury and Illness Report (9370), and the authorization for capital expenditures (ACT) reports. Most Glass Group plants can now input this information to be accessed in General Office.

Other videos included a new video entitled "To Be The Best", designed to showcase the CP&D's branch organization's safety program and how it can better service its customers. This video was produced and circulated

throughout the branch system. In addition, the video, "Supervising Safety - You Make The Difference", which depicts the correct methods of dealing with employees' safety, was distributed throughout the Glass Group.

Unit Support

The Glass Group continued its strong support to all units in the area of injury management, workers' compensation, engineering and training.

Awards

The President's Safety Award was presented to 41 CP&D units, and our Crestline, Ohio plant. In addition, nine units earned the Special Recognition Award, and 19 other units the Executive Award.

CHEMICALS GROUP ENVIRONMENT

Barberton

The consent decree relative to the Barberton air emissions from the shutdown powerhouses was resolved thus ending years of litigation over those units. The groundwater studies at the Lime Lakes have continued as well as at the North Dock area at Lake Charles and the mercury landfill at Beauharnois.

Reclamation continues on Lime Lake surface reclamation project. Successful application of increasing amounts of sludge to the surface area is improving the situation.

Beaumont

The closure of the Beaumont lead operations and the related environmental clean up continued with the closure of the lead pond with the wastes removed to a newly established monofill in Louisiana.

Lake Charles

The Lake Charles NPDES renewal was successfully negotiated with USEPA.

Policies and Procedures Review

Activities in the Safety Policies and Procedures review have been expanded by the addition of process and transportation hazard reviews to the ongoing chemical storage hazard review program. Extensive activity was undertaken in these program areas.

Acquisitions

With regard to acquisitions, substantial effort was extended in the analysis of the Mazer and Santek acquisitions as well as various other candidates.

Potash

Michigan granted the potash environmental impact statement on terms acceptable to PPG.

Waste Minimization

The Group has an ongoing waste minimization program oriented toward implementation of the Blueprint Goal #6.

CHEMICALS GROUP HEALTH

OSHA Hazard Communication

The Chemicals Group OSHA Hazard Communication Compliance program was completed and implemented at all plants during the year. This included the completion of the Hazard Communication storage, labeling and inventory system. Approximately 3300 MSDS's were entered into the system. In addition, Hazardous Identification Tables for plant vessels were derived using this system. Plant programs were written for the Stoney Point, Stockertown, LaPorte and Jordan Chemical plants.

Beaumont Lagoon

The project to dispose of the Beaumont lead waste lagoon and its contents was completed without lead related occupational illnesses.

CR-39 Marketing

Substantial support of the CR-39 marketing effort was provided the business group. This included visits to customer's facilities to aid in training, evaluate local industrial hygiene practices and meet with local governmental officials about CR-39 related health problems. In addition, the potential dust exposure at a CR-39 lens grinding operation was evaluated.

Chlorine Institute Pamphlet

Two sections of the Chlorine Institute's pamphlet on the safe use of asbestos were rewritten to incorporate current practices and the revised OSHA asbestos standard. A parallel effort was also undertaken to aid the Chlorine Institute in attempting to convince the EPA that a total ban on asbestos is not needed.

Lake Charles Training

Information was provided for the pre-production chloropivaloyl chloride training session at the Lake Charles plant.

Former Employee Search

Assistance was provided the New Jersey Department of Health in their efforts to locate former employees who worked at a facility in New Jersey once operated by PPG.

CAER Training

CAER training sessions were conducted for the Beaumont, Texas fire department.

LaPorte Support

Support was provided the LaPorte plant during and after the OSHA Special Emphasis Program inspection. This was a part of efforts by plant personnel, Group safety and industrial hygiene and the Law Department.

CHEMICALS GROUP SAFETY

Injuries

Injury experience did not meet 1986 goals, with frequency rates of 0.20 AWC and 3.01 RC, versus goals of .066 and 1.96, respectively. New approaches are planned for 1987 to reverse a trend which is creeping upward.

Training

Training efforts include the implementation of Commentary Drive, a video based driver training program, the development of a revised position paper on contact lens use in the workplace, and heavy effort to produce a replacement for the Supervisor's Safety and Health Training Program.

Seat Belts

A coordinating effort to promote seat belt use by employees in the Pittsburgh area was conducted, using consultant Toney Lineberry. Favorable reaction resulted in approval of plans to expand this effort to many other PPG locations in 1987.

The child seat program was continued for all newborn dependents.

OSHA Related Activity

One OSHA inspection was conducted at the LaPorte plant as a part of the Special Emphasis Program launched by OSHA after Bhopal. Citations were received, a notice of contest filed, and settlement reached before the hearing took place.

Considerable effort was expended after OSHA revised the injury classification guidelines, with each location going back 5 years to

review injury classification based on the new guidelines. This resulted in adding a number of cases to our historical record.

Intoxicant Testing Programs

A major effort was expended in participating in the formulation and implementation of this policy. This has developed into a continuing effort. All Chemicals units are using pre-employment screening and confirming suspected cases of being under the influence on the job. Current efforts are aimed at defining jobs whose inherent nature require this assurance.

Fire Protection

The Chemicals Fire School trained 56 students at Texas A&M University. A continuous dialogue was maintained between Industrial Risk Insurers, Johnson & Higgins and the plants in order to negotiate good understanding and appropriate fire protection improvements.

Other

The safety theme for the year was "Safety Starts With Me", based on the idea of personal responsibility.

Safety program reviews were conducted using safety personnel from different locations in a cross training fashion. This worked well.

President's Awards were received by Barberton Technical Center, Stockertown, General Office, and Kalium Manufacturing.

Special attention was given to the new acquisition, Jordan Chemical.

For 1987 and beyond, a stylized SQ logo was designed to focus on safety and quality, and signify their synergism.

COATINGS & RESINS GROUP ENVIRONMENT

Air Monitoring

The ambient air monitoring programs were under way at the Springdale plant and the energy recovery unit at Circleville to develop background information to effectively manage those sites.

Permitting

Extensive permitting activities were undertaken throughout the Group in air, water, and hazardous waste areas. Emission inventories were developed for air emissions from various facilities as well as waste water surveys to determine the nature of the discharges from various facilities. Expanded waste permits (Part B) were undertaken at several facilities.

Incinerators

The Group continues to utilize fume incinerators to control air emissions from its facilities. Work was under way in the scope definition or testing of units at Circleville, Delaware Resin, and Oak Creek as well as the modification of units at Toronto and Torrance.

Groundwater Studies

Groundwater studies are underway at Circleville, Oak Creek, and Delaware.

Hazardous Waste

In the hazardous waste area, various facilities were added to the regulatory program resulting in changes in registration and adjustments to various permits and applications. Waste minimization programs continue in the Group.

Acquisitions

Several acquisition candidates were review during the year and clean up activities at newly acquired sites was under way. The Group was involved in environmental support to the nine automotive service centers in the form of environmental sampling, permits, training, and the like.

Customer Service

Customer service was provided in the areas of air emissions, odor, waste water, and hazardous waste.

Underground Tanks

Underground tank evaluation programs were underway throughout the Group to inventory, assess, and correct appropriate tank activities.

COATINGS & RESINS GROUP HEALTH

Overview

In 1986, C&R occupational health efforts focused on Hazard Communication and extending the reach of industrial hygiene services in addition to maintaining and improving existing programs in North America.

Medical Program

The C&R Medical Monitoring Program progressed to include installation at one facility and upgrading at two facilities with existing programs. The groundwork for European operations has been completed and will permit a number of installations in 1987.

Some commercial interest in licensing the program has been expressed by individuals outside of PPG.

C&R Facility Evaluation

Industrial Hygiene Surveys and Evaluations were conducted at six C&R facilities including Mexico City and three European facilities.

Routine monitoring and documentation of facility work environmental quality increased significantly over 1985. The Industrial Hygiene Laboratory analyzed over 3,600 workroom air samples, an increase of 16% for nearly 39,000 discrete analytes, and increases of more than 35%. In addition, over 450 noise dosimetry samples were obtained. Results of monitoring indicate that employee exposure continue to be well controlled. Routine monitoring programs have been proposed for three European facilities.

Engineering

Participation in the design of new C&R processes and facilities was a major activity again in 1986. Technical assistance was provided in the design and engineering of over fifty capital projects. This included input to several European, Canadian, Mexican, and Far East ventures.

Communication Training

Extensive effort was put forth for C&R's ongoing Hazard Communication Program. Approximately 16,000 new Material Safety Data sheets were prepared with 188,000 MSDS's mailed. Over 2,000 raw materials and intermediates were assigned Safety and Health Index System classification. Labels were prepared for approximately 1,000 C&R products. A Hazard Communication Program was prepared and included a written program, four videotape training modules and individual written training modules for six classes of chemicals. All MSDS's were compiled on microfiche and distributed to seventeen North American facilities, as well as England, France, and Italy.

Two special industrial hygiene training sessions were conducted for the Automotive Refinish sales force.

Regulatory Compliance

The C&R Industrial Hygiene Department continued to administer programs for compliance with OSHA and Ontario health standards, including the comprehensive standards regulating lead, acrylonitrile, ethylene oxide, noise, vinyl chloride, silica, isocyanates, employee access to information, hazard communication and asbestos. Analysis of workroom air samples for France provided data necessary for compliance with the French benzene standard.

Customer Communications and Evaluation

Communication of potential health hazards were provided to customers with the development or assistance in the production of three videotapes and two informational brochures. Industrial Hygiene evaluations were performed at six customer locations.

Organizational Growth and Development

The Industrial Hygiene Laboratory continues as a recognized professionally accredited resource for analysis of Industrial Hygiene samples. Inquiries have been made by the French government to extend accreditation to this facility in behalf of PPG France operations. The feasibility of supporting many of the European activities from the Environmental Sciences Center was proven. An Industrial Hygiene Coordinator network is also well under way.

Litigation Support

Litigation support continues to be a growing area of consultation, particularly, in review of litigation activity, definition of interrogatory responses, participation in expert witness selection and recruiting as well as expert testimony.

COATINGS AND RESINS GROUP SAFETY

Safety Summit III

The Coatings and Resins Group continues its safety commitment with Safety Summit III held in June. This year's Summit included Drs. Thomas R. Krause and John H. Hidley, consultants, who spoke on behavior and consequences. The Summit meeting was attended by plant and safety managers from all of C&R's global operations.

Global Conference

This year's Global Safety and Health Conference was held to coincide with Safety Summit III. In addition, a joint conference day was conducted with C&R Environmental personnel which provided an overview of each Group's activities and the cooperation which is required between the two Groups.

Safety Evaluation

The C&R Safety Evaluation Program continued with evaluations completed at six locations.

Workers' Compensation

Workers' Compensation costs declined in 1986 indicating the Coatings and Resins Group efforts to control not only away-from-work cases, but total recordable cases. The percent of decline between 1985 and 1986 equalled approximately 14-1/2% or a savings of \$117,000.

Lineberry Presentation

The Group commitment to seat belt safety continued with consultant Toney Lineberry conducting presentations at various C&R Group locations in the Pittsburgh area. Mr. Lineberry's time was also utilized conducting presentations at local high schools.

Fire School

The Corporate Fire School continues to be administered by the C&R Group. In 1986, over 86 students were provided firefighting basics, techniques, and leadership training. The school located at the Armstrong County Firemen's Association has graduated over 1,400 PPG employees since 1967.

Program Monitoring

Safety programs in Ink operations, Trade Sales, and Distribution Warehouse operations were monitored to insure compliance with Group and Corporate Programs. Awareness campaigns and visits again proved to be most effective in communicating safety to these field locations. A Supervisor of Safety was selected to provide guidance for the Ink operations' Safety and Loss Prevention Program.

CAER Program

CAER Program was developed and distributed worldwide. All plants are committed to the program and have had various degrees of success in interacting within their local communities. All plants will have a completed plan and exercise within the community by year-end 1987.

Life Saving Award

Two Coatings and Resins employees from the Cleveland plant were awarded the Corporation's Life Saving Award for their quick action in saving the life of another employee who had stopped breathing.

PART III

1986 STATISTICAL REVIEW

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SL 103597

DEFINITION OF TERMS AND FORMULAS

Terms

1. AW, Away-From-Work-Case - is any occupational injury or illness which results in death, permanent impairment, or which renders the injured person unable to work for a full day on any job on any regularly scheduled work day after the injury.
2. Disabling Injury - same as an Away-From-Work-Case.
3. AWDL, Away-From-Work Days Lost - are all the days which an employee was scheduled to work, but could not perform any job due to the occupational injury or illness.
4. Fatality - is any occupational injury or illness resulting in death regardless of time between the injury or length of illness and the subsequent death.
5. First Aid Case - One time treatment and subsequent observation of minor scratches, cuts, burns, splinters which do not ordinarily require professional medical care even though the treatment was provided by a physician or registered professional personnel.
6. Lost Work Days - Those days which the employee would have worked but could not because of an occupational injury or illness. The number of lost work days does not include the day of injury, but does include all days (consecutive or not) on which, because of injury or illness: a) the employee would have worked but could not; or b) the employee was assigned to do a temporary job; or c) the employee worked at a permanent job less than full time; or d) the employee worked on a permanently assigned job but could not perform all duties normally assigned to it.
7. Doctor or Medical Treatment Case - Medical Treatment includes treatment administered by a physician or by registered professional personnel under the standing orders of a physician. Medical treatment does not include first aid treatment.
8. NF, Non-Fatal Case - is an occupational injury or illness which did not involve a fatality or lost work days but did result in: a) transfer to another job or termination of employment; or b) medical treatment other than first aid; or c) diagnosis of occupational illness; or d) loss of consciousness; or e) restriction of work or motion.
9. RC, Recordable Case - is any occupational injury or illness which results in a Fatality, Lost Work Day Case, or Non-Fatal Case Without Lost Work Days.
10. TDL, Total Days Lost - Total number of Lost Work Days.

11. LW, Lost Work Case - is any occupational injury or illness which renders an employee unable to perform his regularly scheduled job. A lost work case can be an AW or an RA. The total of all AW's and RA's equals the total LW's. (AW's + RA's = LW's)
12. RA, Restricted Activity Case - is any occupational injury or illness which renders an employee unable to perform all duties of his regularly scheduled job or the employee was assigned to do a temporary job on any regularly scheduled day after the injury or illness.

Formulas

1. (AW) Away-From-Work Incidence Rate

This rate reflects the number of occupational disabling injuries or illnesses experienced per 100 full-time employees working a full year (2,000 manhours each).

$$(AW) \text{ Incid. Rate} = \frac{\text{Total No. of Disabl. Inj. or Ill.} \times 200,000}{\text{Total Workhours}}$$

2. (AWDL) Away-From-Work Days Lost Incidence Rate

This rate reflects the number of regularly scheduled work days lost due to occupational injuries or illnesses per 100 full-time employees working a full year (2,000 manhours each).

$$(AWDL) \text{ Incidence Rate} = \frac{\text{Total Number of AW Days Lost} \times 200,000}{\text{Total Workhours}}$$

3. (LW) Lost Workday Incidence Rate

This rate reflects the number of lost workday cases per 100 full-time employees working a full year (2,000 manhours each).

$$(LW) \text{ Incidence Rate} = \frac{\text{Total Number Lost Workday Cases} \times 200,000}{\text{Total Workhours}}$$

4. (NF) Non-Fatal Without Lost Workday Incidence Rate

This rate reflects the number of Non-fatal Without Lost Workday cases per 100 full-time employees working a full year (2,000 manhours each).

$$(NF) \text{ Incidence Rate} = \frac{\text{Total Number of Non-fatal Cases Without Lost Workday} \times 200,000}{\text{Total Workhours}}$$

5. (NSC) National Safety Council Incidence Rate

This rate reflects the number of occupational disabling injuries or illnesses plus fatalities experienced per 100 full-time employees working a full year (2,000 manhours each).

$$\text{(NSC) Incidence Rate} = \frac{\text{Total Number of Disabling Injuries or Illnesses Plus Fatalities} \times 200,000}{\text{Total Workhours}}$$

6. (RC) Recordable Case Incidence Rate

This rate reflects the number of OSHA Recordable Cases per 100 full-time employees working a full year (2,000 manhours each).

$$\text{(RC) Incidence Rate} = \frac{\text{Total Number of OSHA Recordable Cases} \times 200,000}{\text{Total Workhours}}$$

7. (TDL) Total Days Lost Incidence Rate

This rate reflects the total days lost from regularly scheduled jobs due to occupational injuries or illnesses experienced per 100 full-time employees working a full year (2,000 manhours each).

(TDL) Total Days Lost = Days lost from injuries requiring time away from work plus the days lost from regularly scheduled jobs (Restricted activity cases).

$$\text{(TDL) Incidence Rate} = \frac{\text{Total Days Lost} \times 200,000}{\text{Total Workhours}}$$

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CORPORATE COMPLIANCE ASSURANCE UPDATE

<u>Group</u>	<u>Scheduled Activities</u> <u>Unit</u>	<u>Year 1986</u>		<u>Activity Completion Dates</u>	
		<u>On-Site Audit Date</u>	<u>Audit Report Issued</u>	<u>Unit Response Date</u>	<u>Plant Follow-up Dates</u>
Chemicals	tockertown, PA	01/20-22/86	01/30/86	03/07/86	12/11/86
C&R	Bowers Ink-Chicago	02/17-19/86	03/05/86		
Glass	Carlisle, PA	03/17-21/86	04/01/86	07/22/86	08/20/86
Glass	Tipton, PA	04/21-24/86	04/30/86	07/16/86	11/25/86
Glass	Greensburg, PA	05/12-15/86	05/21/86	10/06/86	
Glass	Kokomo, IN	05/27-30/86	06/04/86	08/18/86	09/11/86
Chemical	Eldorado, AR	06/16-19/86	07/17/86	10/07/86	12/08/86
Chemical	SPU-Chicago	07/14-16/86	07/29/86	09/08/86	10/22/86
C&R	Toronto, Ont.	08/11-14/86	09/13/86	11/10/86	
Glass	Boussois, Fr.	09/14-26/86	10/24/86		
C&R	Rubi (Barcelona, SP.)	09/29-10/03/86	10/24/86		
C&R	Ladywood (Birmingham, U.K.)	10/06-17/86	10/24/86		
C&R	Circleville, OH*	10/27-31/86	11/05/86		
Chemical	Lake Charles "B"*	11/10-14/86	12/02/86		
C&R	Springdale R&D	12/08-12/86	12/12/86		

*These are repeat Corporate Environmental Audits
 A line through a scheduled activity date = operation completed.

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STATUS OF CORPORATE ENVIRONMENTAL COMPLIANCE AUDITS NOT YET CLOSED

<u>PPG Group</u>	<u>Plant Site</u>	<u>Audit Report Date</u>	<u>No. of Findings</u>	<u>No. of Responses</u>	<u>Last Response Date</u>	<u>Findings Closed</u>	<u>Findings Pending</u>	<u>Findings Open</u>	
			<u>Class of 1986</u>						
C&R	Bowers Ink, Chi.	03/05/86	19	0		0	0	19	
C&R	Toronto, Ontario	09/03/86	8	1	11/10/86	2	3	3	
C&R	Rubi, Spain	10/24/86	4	0		0	0	4	
C&R	Ladywood, England	10/24/86	13	0		0	0	13	
C&R	Circleville, OH	11/05/86	5	0		1	0	4	
C&R	Springdale R&D	12/12/86	15	0		0	0	15	
Glass	Carlisle, PA	04/01/86	12	1	07/22/86	7	4	1	
Glass	Tipton, PA	04/30/86	10	3	11/25/86	8	2	0	
Glass	Greensburg, PA	05/21/86	5	1	10/06/86	1	1	3	
Glass	Kokomo, IN	06/06/86	1	2	09/11/86	1	0	0	
Glass	Boussois, France	10/24/86	21	0		0	0	21	
Chemicals	Arkansas Chem.	07/17/86	6	3	12/08/86	4	2	0	
Chemicals	Chicago, IL	07/29/86	14	1	10/22/86	7	4	3	
Chemicals	Lake Charles (Derivatives)	Pending	12	0		0	0	12	

NOTE: This report addresses regulatory compliance findings only.

12/18/86

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1987 AUDIT SCHEDULE

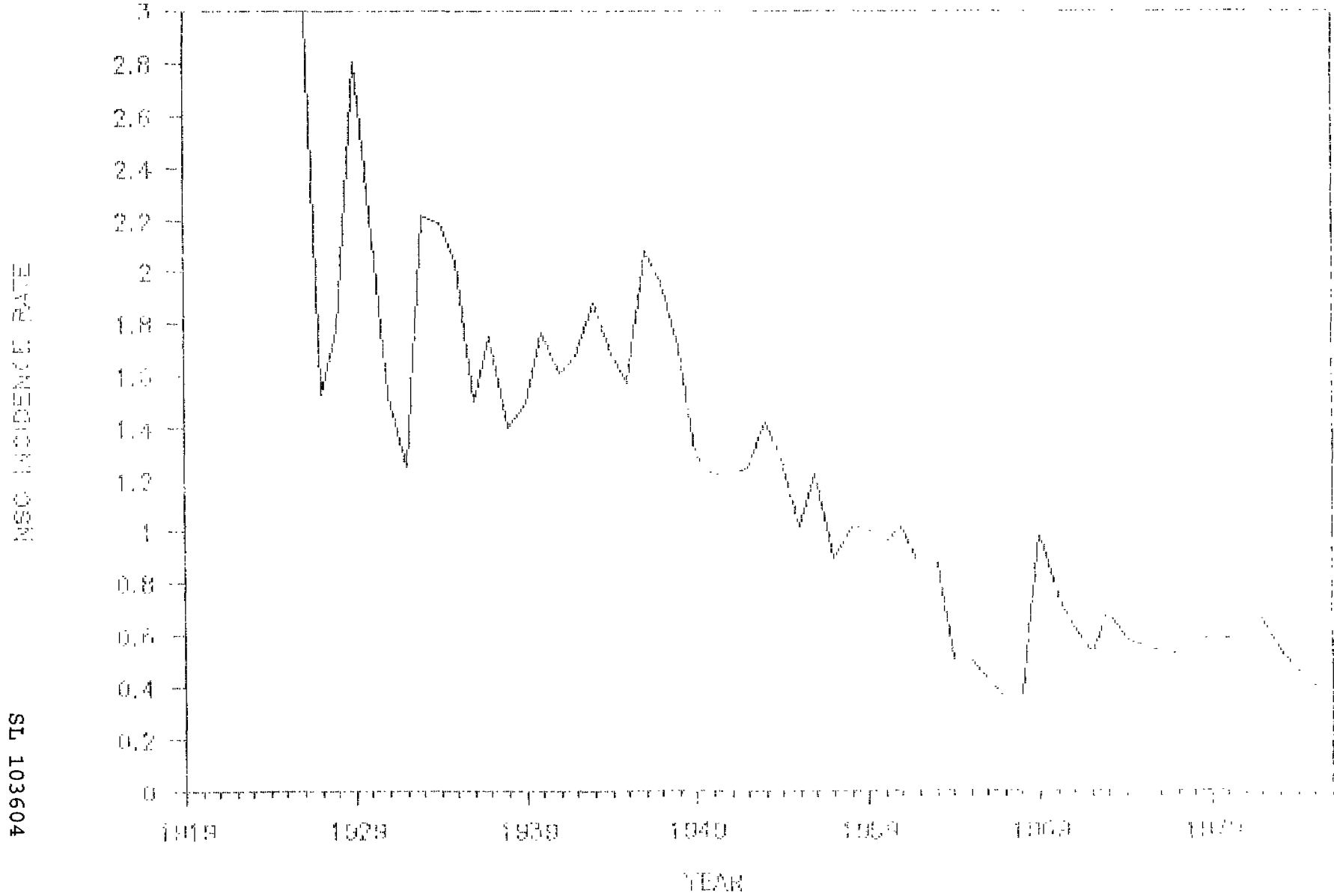
<u>Group</u>	<u>Facility</u>	<u>Audit Team Planning</u>	<u>Pre-Audit Information</u>	<u>Date of Audit</u>
Glass	Dallas Twindow	January 7	January 5	January 12, 13
Glass	Dallas Metal Fab	January 7	January 5	January 14, 15
C&R	Torrance	January 28	January 21	February 2-6
C&R	Vancouver-Ink	January 28	January 21	February 9, 10
C&R	Portland-Ink	January 28	January 21	February 11, 12
Chemical	LaPorte	February 25	February 20	March 2-5
C&R	PPG-Deutschland	March 11	February 25	March 23-27
Glass	Aniche, France	March 11	February 25	March 31-April 3
Glass	Meadville	May 6	May 1	May 11-15
Glass	Harmarville	June 1	May 27	June 8-12
Glass	Oshawa, Canada	June 1	May 27	June 15-19
C&R	Spartanburg	August 5	July 31	August 10-12
C&R	Valladolid, Spain	September 2	August 21	September 14-22
Glass	Cuneo, Italy	September 2	August 21	September 24- October 2
C&R	Toronto-Ink	October 12	October 7	October 19-20
C&R	Montreal-Ink	October 12	October 7	October 21-22
Chemical	Natrium	November 4	October 28	November 9-13
Chemical	Jordan	December 2	November 25	December 7-11

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TOTAL CORPORATION

(YEARLY DATA IS NOT GLOBAL)



NSC RATE HISTORY PLOTTED ON PAGE 23
FOR ALL THE CORPORATION'S REPORTING OPERATIONS

<u>YEAR</u>	<u>NSC RATE</u>	<u>YEAR</u>	<u>NSC RATE</u>
1919	20.11	1952	1.24
1920	21.59	1953	1.42
1921	15.16	1954	1.28
1922	20.27	1955	1.02
1923	12.38	1956	1.22
1924	5.84	1957	0.90
1925	3.71	1958	1.02
1926	3.15	1959	1.01
1927	1.53	1960	0.96
1928	1.78	1961	1.02
1929	2.81	1962	0.87
1930	2.22	1963	0.88
1931	1.52	1964	0.51
1932	1.25	1965	0.50
1933	2.22	1966	0.43
1934	2.19	1967	0.36
1935	2.04	1968	0.37
1936	1.50	1969	1.00
1937	1.75	1970	0.75
1938	1.40	1971	0.63
1939	1.49	1972	0.53
1940	1.77	1973	0.69
1941	1.61	1974	0.59
1942	1.67	1975	0.56
1943	1.88	1976	0.54
1944	1.69	1977	0.53
1945	1.57	1978	0.56
1946	2.08	1979	0.60
1947	1.96	1980	0.59
1948	1.71	1981	0.62
1949	1.29	1982	0.66
1950	1.22	1983	0.54
1951	1.23	1984	0.46
		1985	0.40
		1986	0.37

SL 103605

1986
 ANALYSIS OF DEATHS AND DISABLING INJURIES
TOTAL CORPORATION

	<u>Total Cases</u>	<u>Breakdown</u>	<u>% of Grand Total</u>
<u>STRUCK BY</u>	18		16
Objects.....		13	
Glass.....		5	
<u>STRUCK AGAINST</u>	2		2
Objects.....		2	
Glass.....		0	
<u>FALLS</u>	29		26
Lower Level.....		18	
Same Level.....		11	
<u>OVEREXERTION</u>	44		40
Back.....		27	
Ankle.....		4	
Hand/wrist.....		1	
Shoulder.....		1	
Knee.....		6	
Neck.....		0	
Other.....		5	
<u>BURNS</u>	4		4
Thermal.....		2	
Chemical.....		1	
Electrical.....		1	
<u>CAUGHT BETWEEN</u>	7		6
<u>GAS INHALATION</u>			
<u>VEHICLE INJURIES</u>	3		3
<u>OCCUPATIONAL DISEASE</u>			
<u>HERNIA</u>	2		2
<u>OTHER</u>			
<u>FATALITY</u>	<u>1</u>		<u>1</u>
GRAND TOTAL	110		100%

1986

ANALYSIS OF DEATHS AND DJSABLING INJURIES
MANUFACTURING

	Total Cases	Breakdown	<u>% of Grand Total</u>
<u>STRUCK BY</u>	6		14
Objects.....		4	
Glass.....		2	
<u>STRUCK AGAINST</u>	1		2
Objects.....		1	
Glass			
<u>FALLS</u>	15		34
Lower Level.....		11	
Same Level.....		4	
<u>OVEREXERTION</u>	12		27
Back.....		6	
Ankle.....		1	
Hand/Wrist.....		1	
Shoulder.....			
Knee.....		2	
Neck.....			
Other.....		2	
<u>BURNS</u>	4		9
Thermal.....		2	
Chemical.....		1	
Electrical.....		1	
<u>CAUGHT BETWEEN</u>	6		14
<u>GAS INHALATION</u>			
<u>VEHICLE INJURIES</u>			
<u>OCCUPATIONAL DISEASE</u>			
<u>HERNIA</u>			
<u>OTHER</u>			
<u>FATALITY (Fall)</u>	—		—
GRAND TOTAL	44		100%

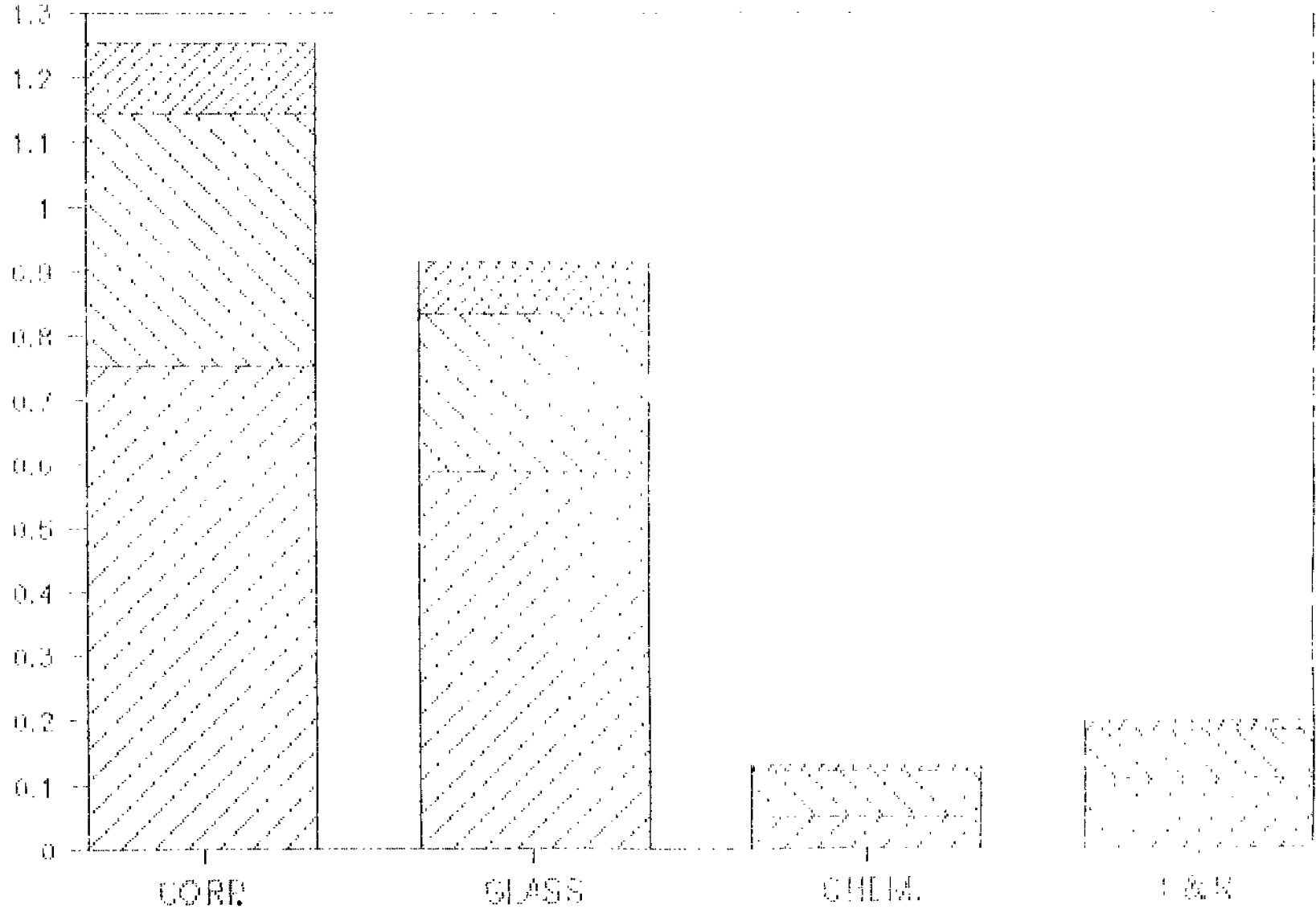
SL 103607

1986
ANALYSIS OF DEATHS AND DISABLING INJURIES
COMMERCIAL PRODUCTS & DISTRIBUTION DEPARTMENT

	<u>Total Cases</u>	<u>Breakdown</u>	<u>% of Grand Total</u>
<u>STRUCK BY</u>	12		21
Objects.....		9	
Glass.....		3	
<u>STRUCK AGAINST</u>	1		2
Objects.....		1	
Glass.....			
<u>FALLS</u>	9		16
Different Level.....		5	
Same Level.....		4	
<u>OVEREXERTION</u>	28		51
Back.....		18	
Ankle.....		3	
Hand/Wrist.....			
Shoulder.....		1	
Knee.....		3	
Neck.....			
Other.....		3	
<u>BURNS</u>			
Thermal.....			
Chemical.....			
Electrical.....			
<u>CAUGHT BETWEEN</u>			
<u>GAS INHALATION</u>			
<u>VEHICLE INJURIES</u>	2		4
<u>OCCUPATIONAL DISEASE</u>			
<u>HERNIA</u>	2		4
<u>OTHER</u>			
<u>FATALITY</u>	<u>1</u>		<u>2</u>
GRAND TOTAL	55		100%

TOTAL RECORDABLE CASES

(ONE DEATH INCLUDED IN THE AWP)

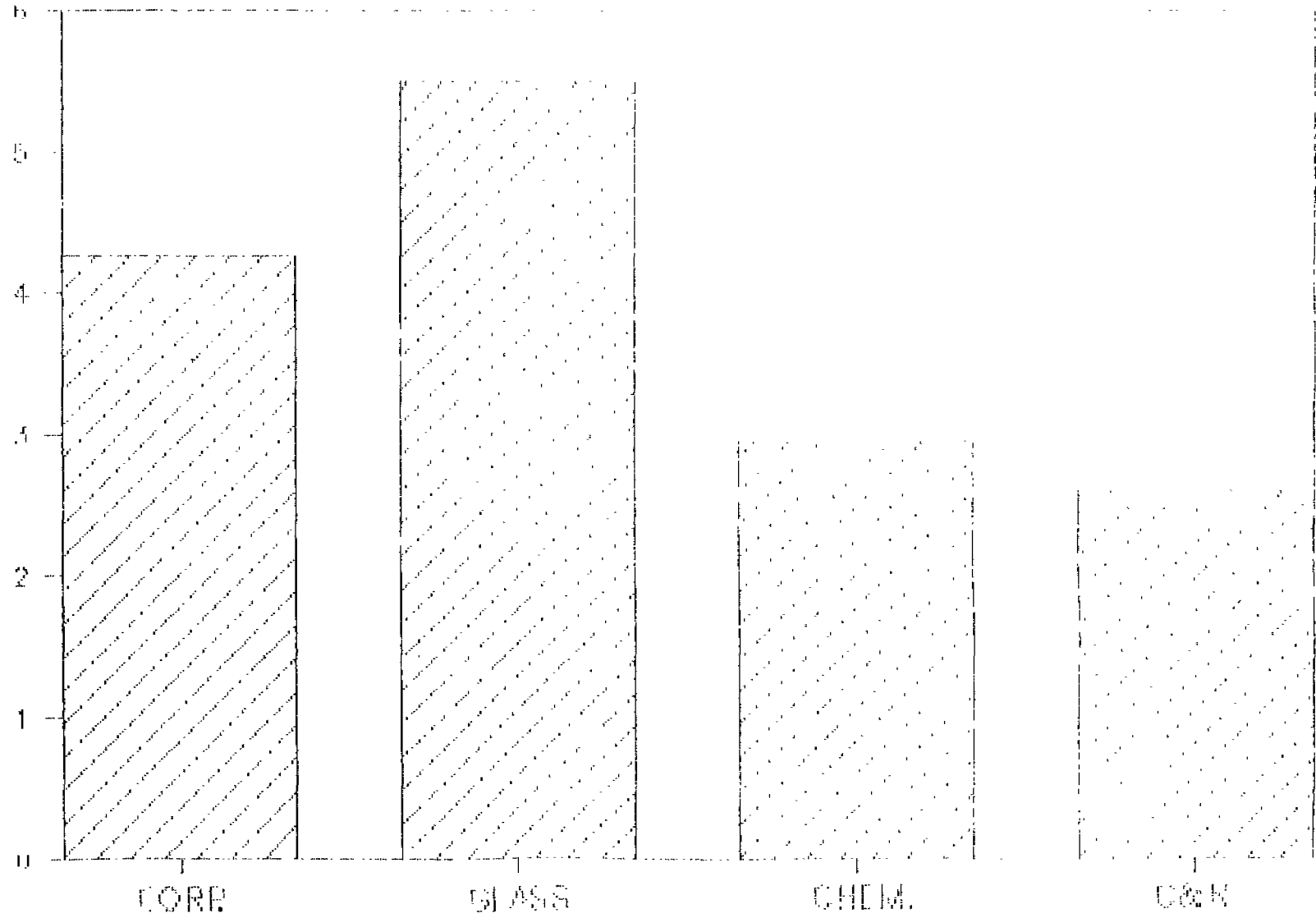


CORR
 GLASS
 CHEM.
 L&N

100-887271
 SECTION 504 RECORDS

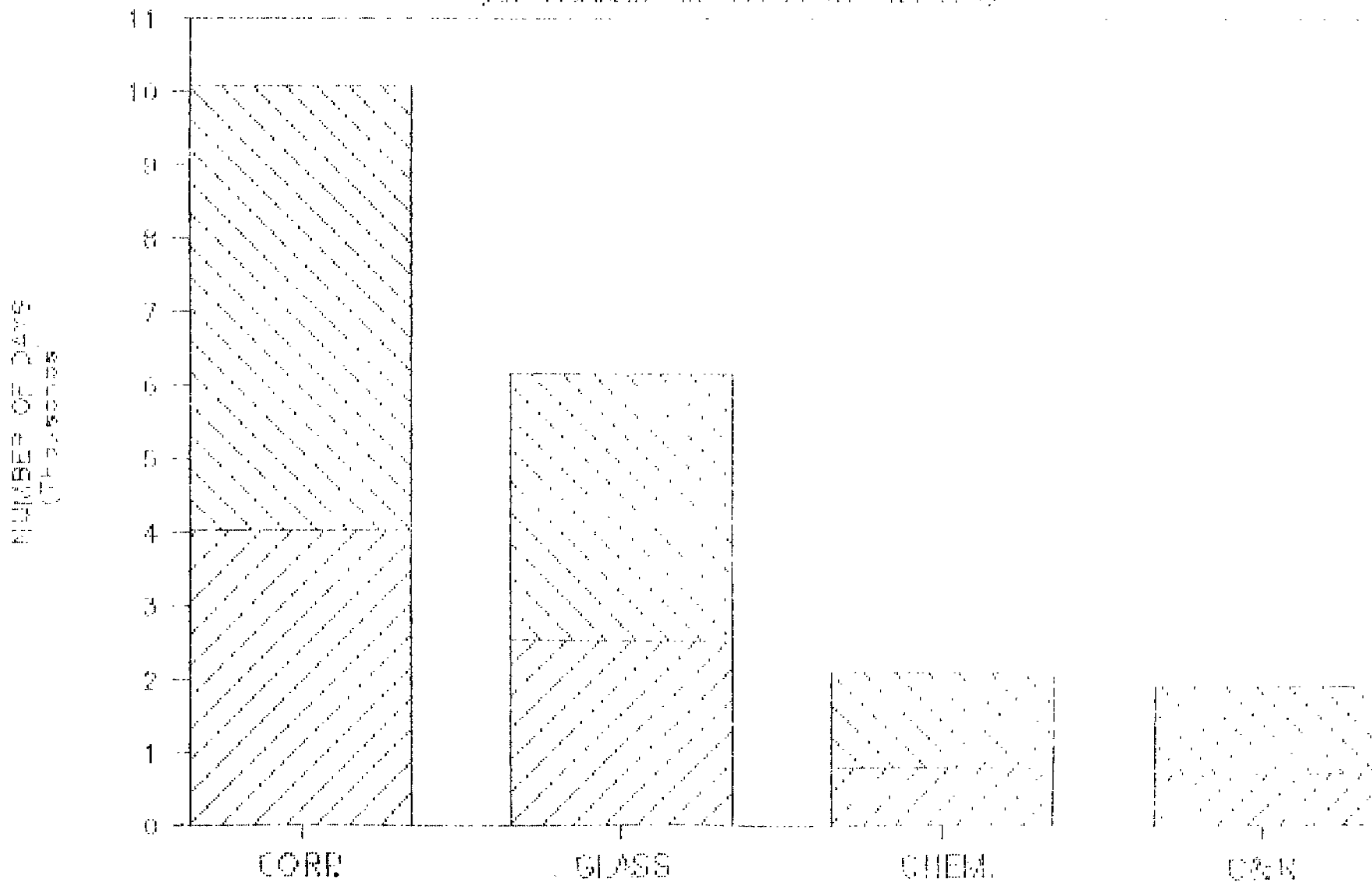
1986 TOTAL RECORDABLE CASE RATE

INJURIES/100 EMPLOYEES/YEAR

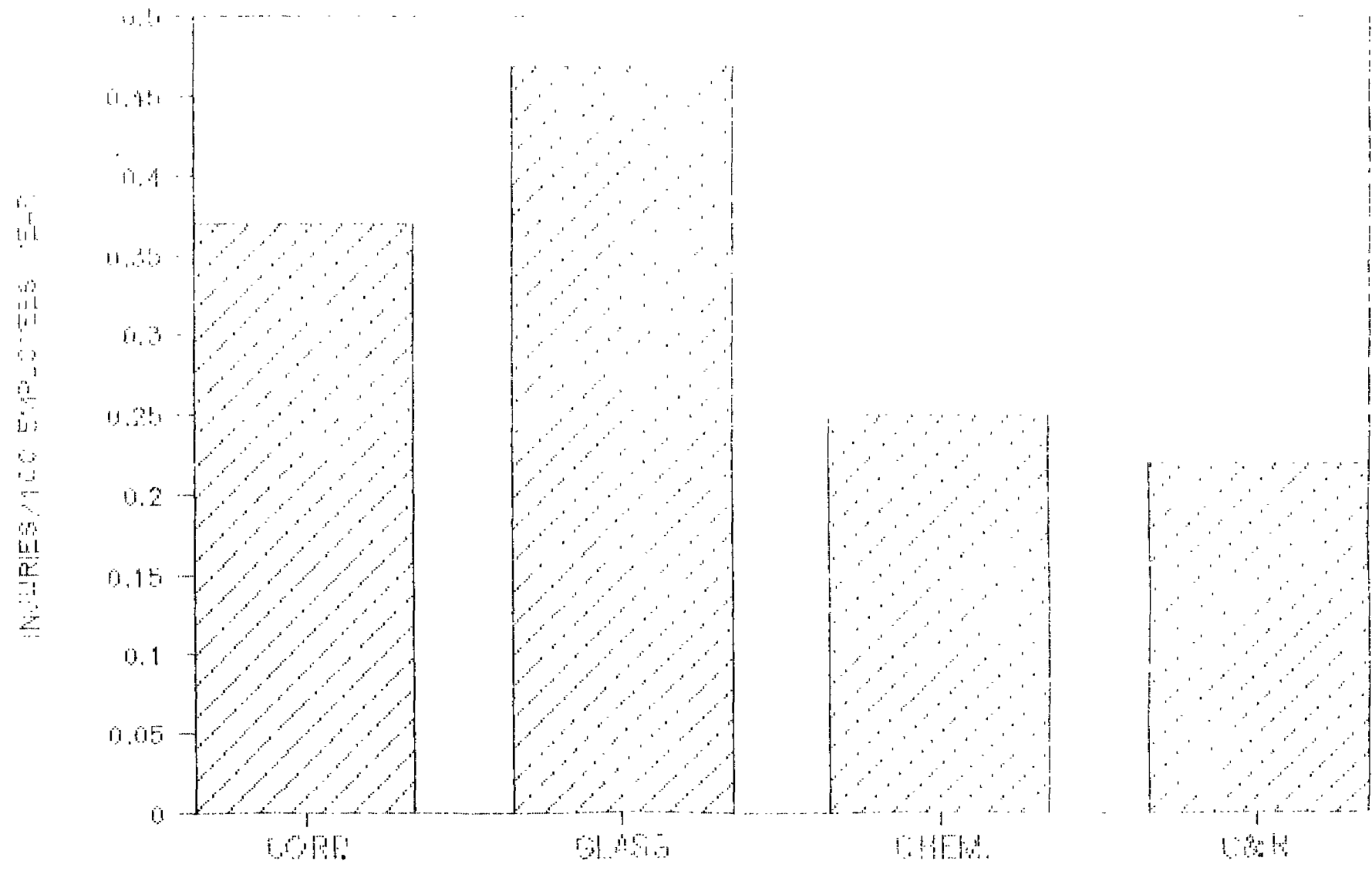


SL 103610 43

WINDING TIME (HOURS)
(AW-DEADLINE BEING MET BY ALL)



1986 AW (ESTIMATED) INJURY COSTS

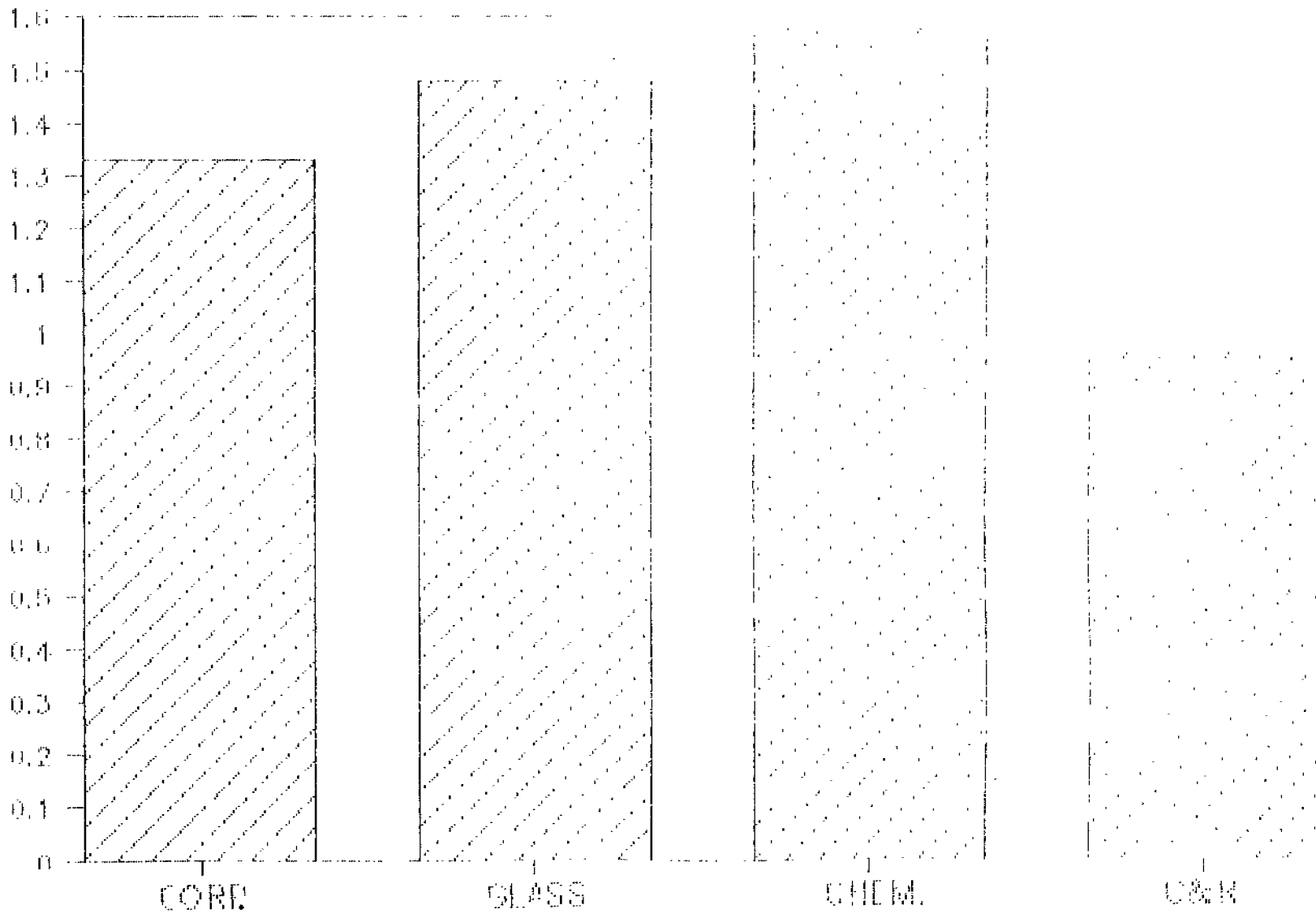


45

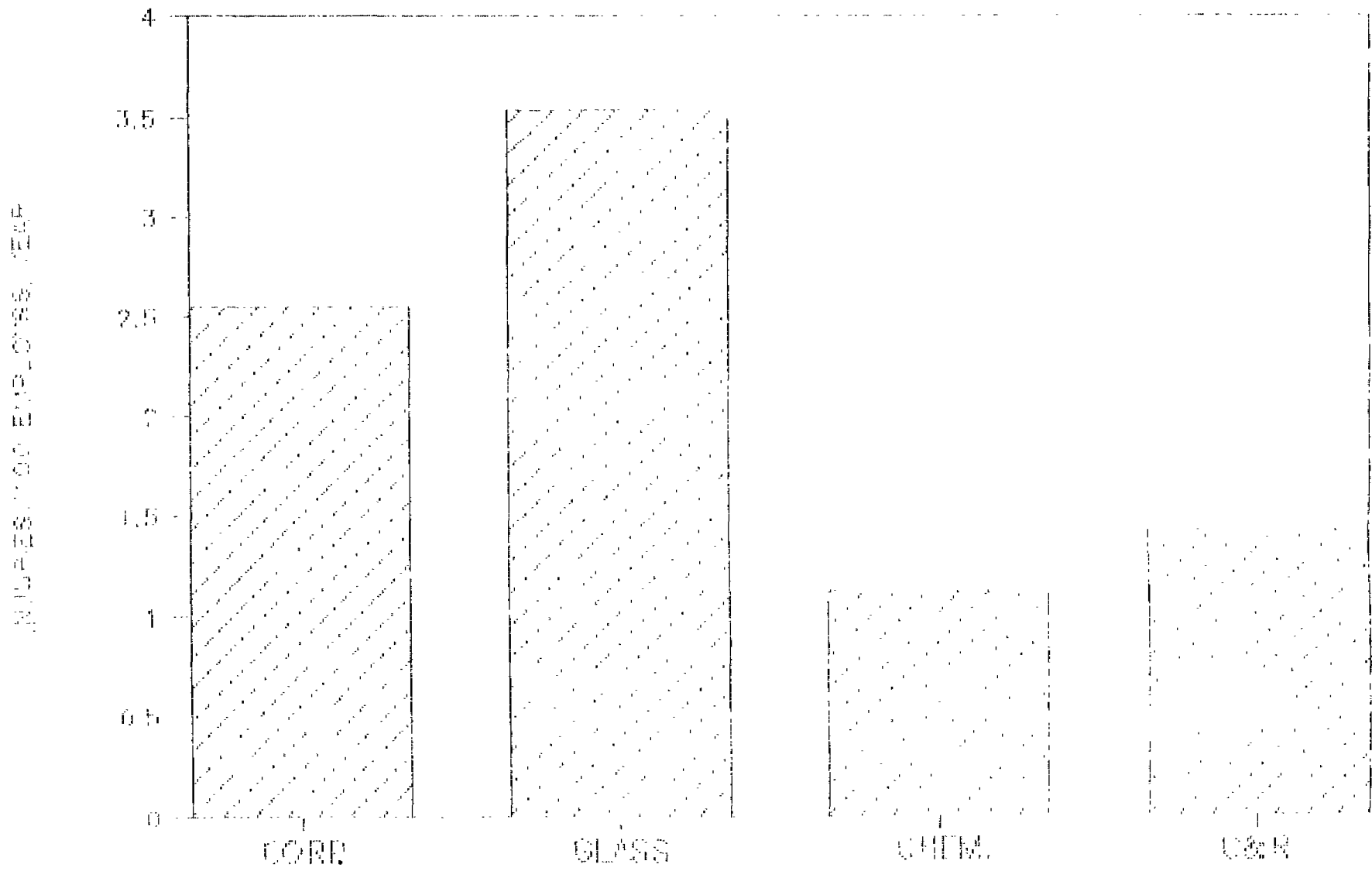
SI 103612

NUMBER OF EMPLOYEES WITH

1986 RESTRICTED ACTIVITY CASE DATA



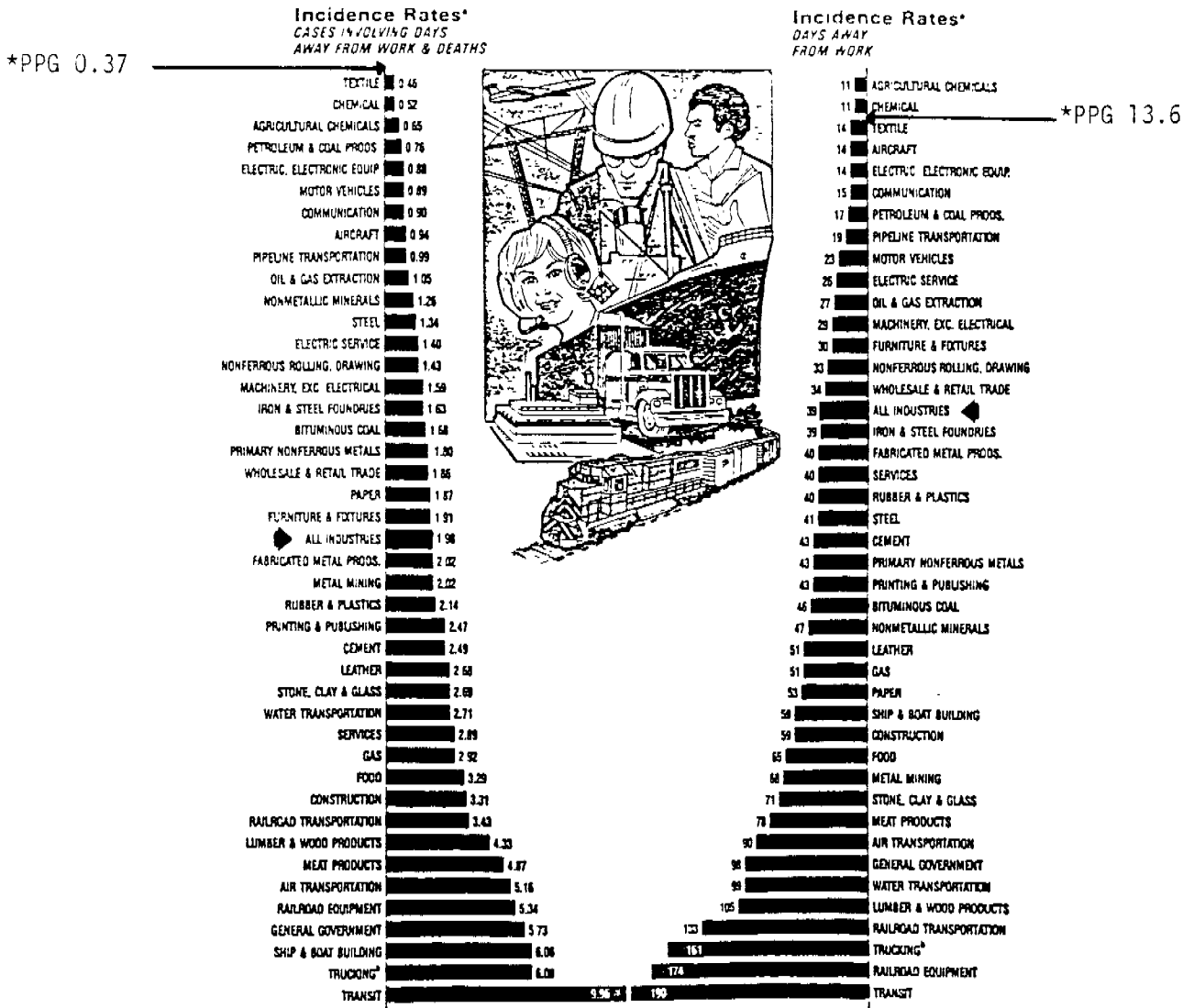
1986 NF (DOCTOR) CASE RATES



47
SL 103614

1985 incidence rates of principal industries

Reporters to the National Safety Council



Source: Based on reports of National Safety Council members participating in the Award Plan for Recognizing Good Occupational Safety Records. These rates should not be interpreted as representative of the industries listed or of Council member companies. Data compiled in accordance with OSHA recordkeeping definitions. See page 30.

*Incidence rates per 100 full-time employees, using 200,000 employee hours as the equivalent.
*Excludes SIC code 4215.

DOLLAR LOSS SUMMARY¹
Year-to Date as of December 31, 1986

	<u>Injury &² Illness Costs</u>	<u>Losses³ to Assets "CAPP"</u>	<u>Vehicle⁴ Losses</u>	<u>Third⁵ Party Claims</u>
Glass Group	\$7,000,415	\$ 2,273,603	\$ 515,702	\$4,968,406
Chemicals Groups	\$2,168,026	\$ 8,544,704	\$ 68,440	\$3,741,297
C&R	\$1,263,095	\$ 986,603	\$ 361,892	\$3,323,327
Corporate	\$ 76,003	\$ 367,233	\$ 8,333	\$1,082,940
Delaware Truck	--	--	\$ 332,657	--
Total	\$10,507,539	\$12,172,143	\$1,287,024	\$13,115,970

GRAND TOTAL CORPORATE - \$37,082,676

1. Insurance costs charged to operating groups. Prior year claims are included if paid during year. "Capp", Vehicle, and Third Party figures do not include insurance premiums until year-end.
2. Costs include: Worker's Compensation paid, Worker's Compensation awards, attending physicians fees, prosthetic devices, crutches and canes, etc., hospital expenses, ambulance charges, transportation charges other than ambulance, cost of rehabilitation, clinic and outpatient charges, attorney fees, professional services for claim defense, state filing fees, excess insurance premiums, and changes in reserves.
3. Dollar losses reported to the Corporate 7645 account
4. Dollar losses charged by the Risk Management Department to operating groups.
5. Dollar losses charged by the Risk Management Department to operating groups.

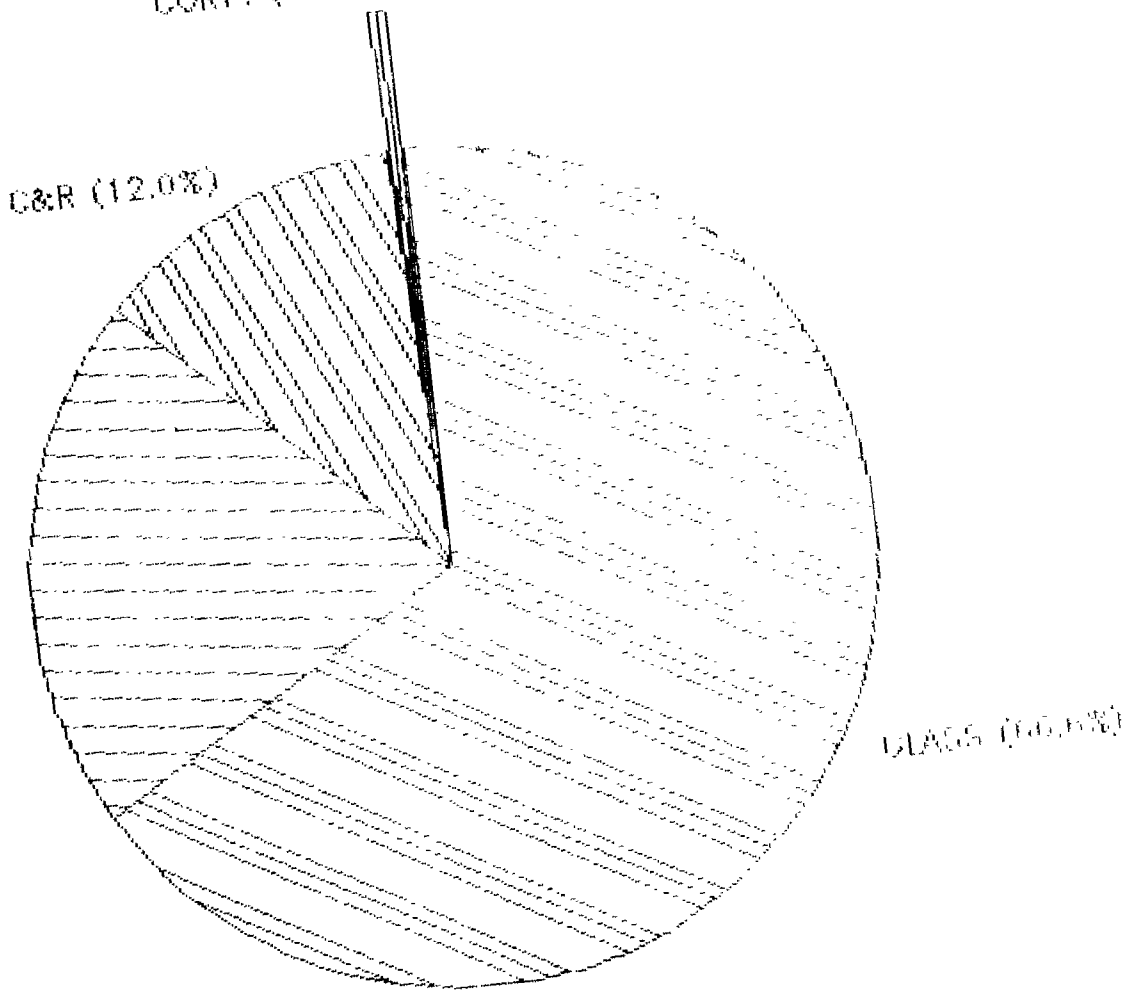
INJURY & ILLNESS COSTS FOR 1986

	<u>GLASS GROUP</u>	<u>CHEMICALS GROUP</u>	<u>C & R GROUP</u>	<u>G.O.</u>	<u>TOTAL</u>
<u>Controllable Costs</u>					
Manufacturing Injury & Illness Costs	\$2,698,615	\$1,892,869	\$ 625,866	\$ --	\$5,217,350
Non-manufacturing Injury & Illness Costs	<u>3,064,041</u>	<u>(71,829)</u>	<u>143,652</u>	<u>19,691</u>	<u>3,155,555</u>
TOTAL	\$5,762,656	\$1,821,040	\$ 769,518	\$19,691	\$8,372,905
<u>Non-Controllable Costs</u>					
State Filing Fees, Excess Insurance, etc.	<u>1,237,759</u>	<u>346,986</u>	<u>493,577</u>	<u>56,312</u>	<u>2,134,634</u>
TOTAL COSTS	<u>\$7,000,415</u>	<u>\$2,168,026</u>	<u>\$1,263,095</u>	<u>\$76,003</u>	<u>\$10,507,539</u>
PERCENT CONTROLLABLE	<u>82</u>	<u>84</u>	<u>61</u>	<u>26</u>	<u>80</u>

	<u>1985</u>	<u>1986</u>
TOTAL CORPORATION INJURY & ILLNESS COSTS	\$7,354,216	\$10,507,539
TOTAL CORPORATION CONTROLLABLE COSTS	\$6,065,772	\$8,372,905
PERCENT CONTROLLABLE	82	80

OCCUPATIONAL INJURY/ILLNESS COSTS

1986 TOTAL \$10,507,539
CORP. (0.7%)



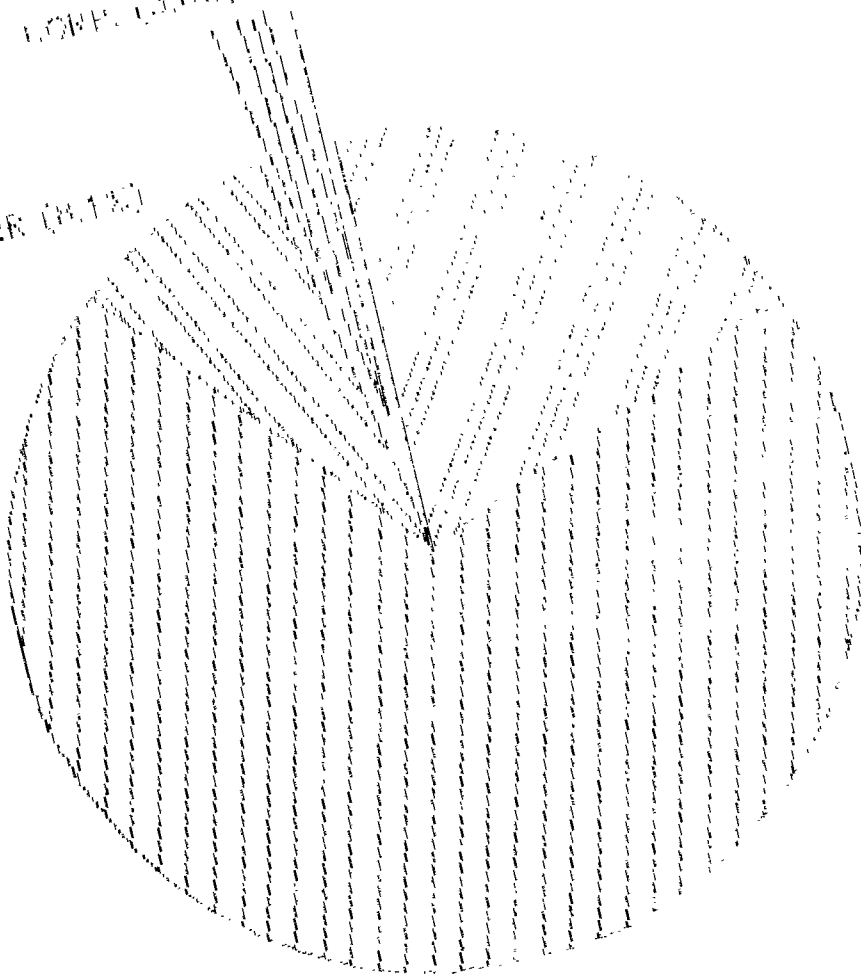
51

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LOSSES TO ASPHALT (CHLOROPHENOL) (1954-1955)

TOTAL TONNAGE 412,172,142
COPPER (0.02%)

C&R (0.13%)



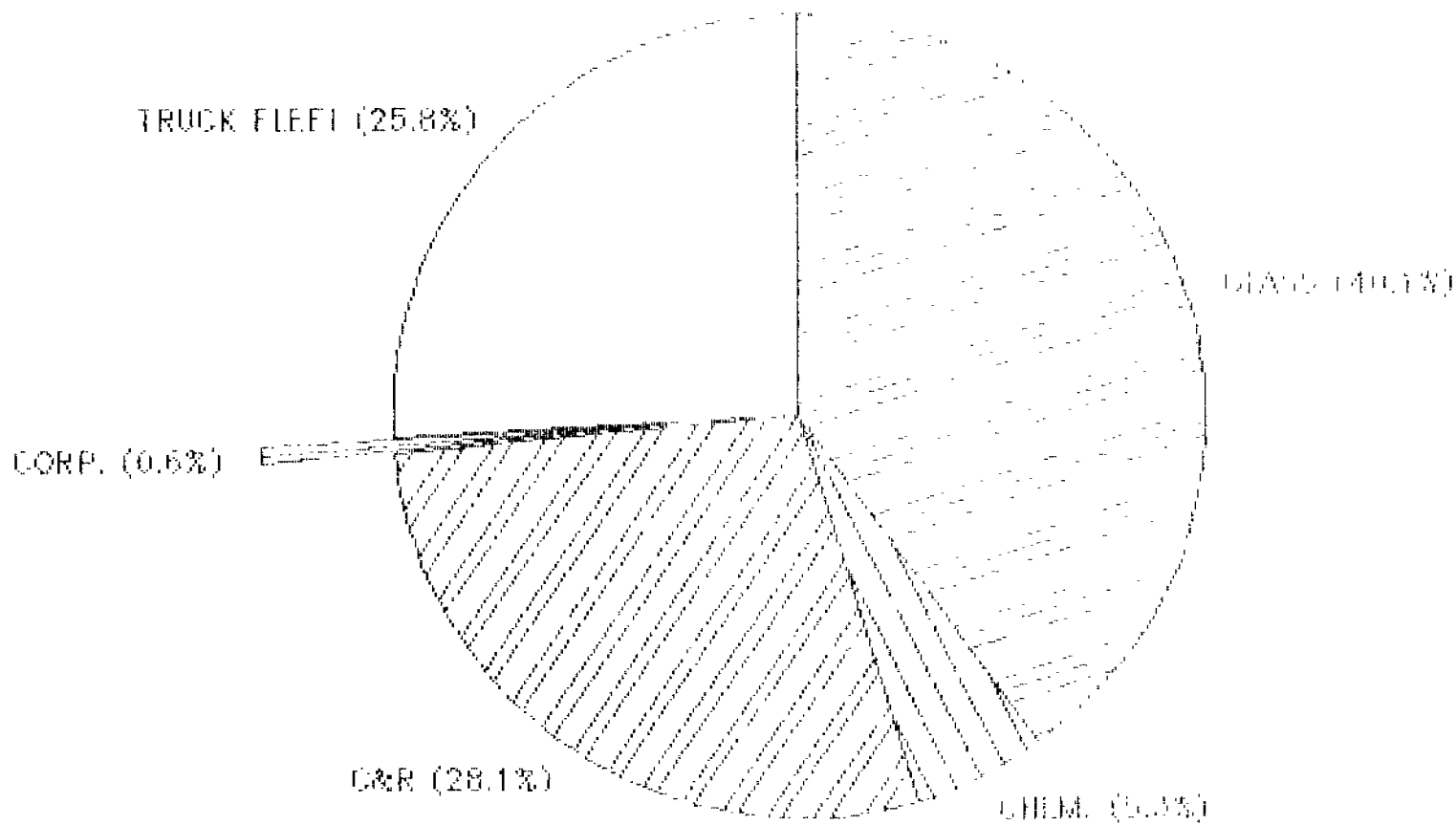
CHEM. (70.23%)

52

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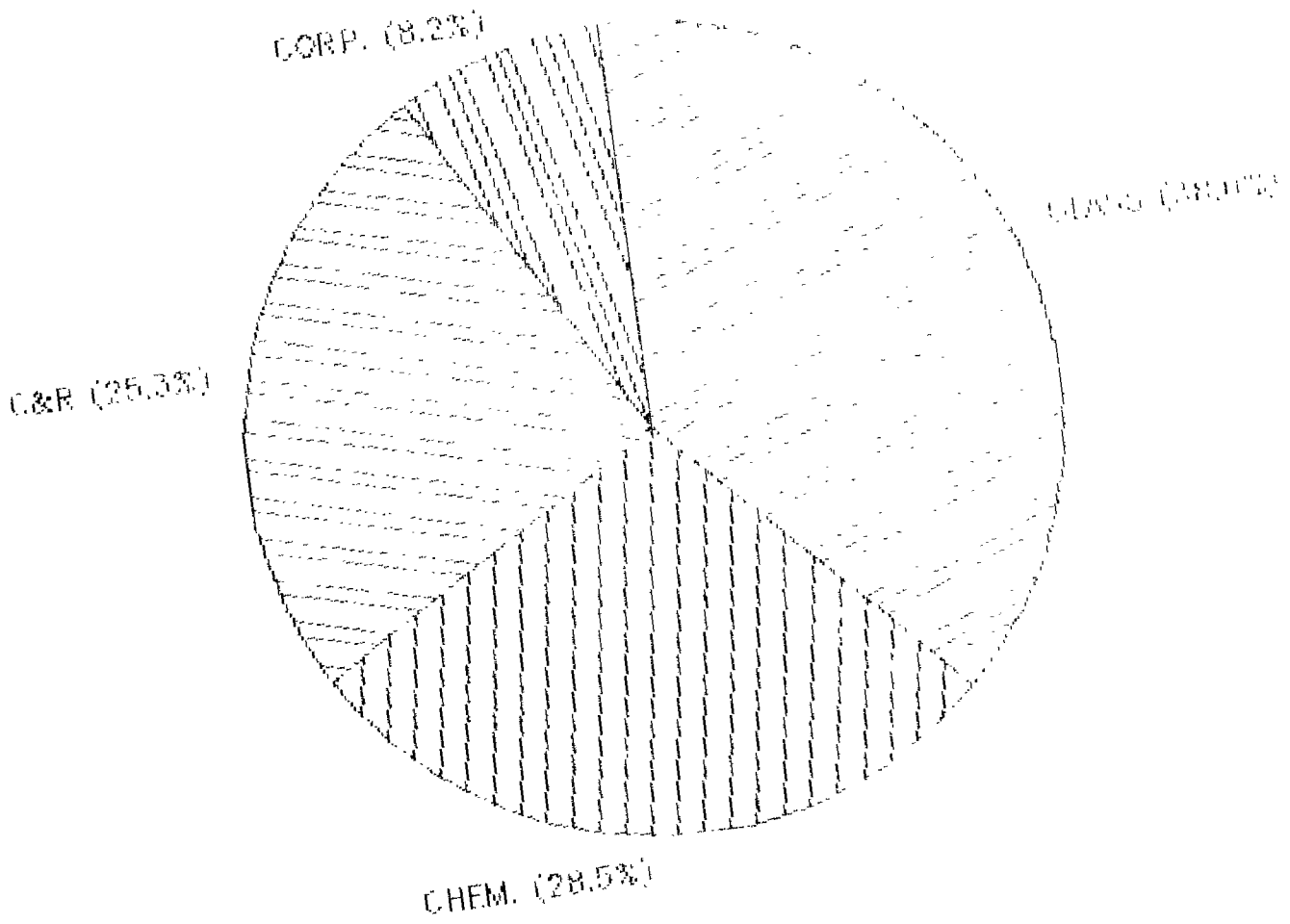
VEHICLE TAXES

1986 TOTAL \$1,287,024



THIRD PARTY CLAIMS

1986 TOTAL \$13,119,370



54

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SAFETY PERFORMANCE AWARDS

PPG Industries, Inc., has its own safety performance award program. The Executive Award Program recognizes a unit's long period of death or disabling injury-free operation. The second set recognizes a unit's good safety performance based on a calendar year. The third set of awards pertain to the "President's Challenge" and recognizes any unit that meets or exceeds their safety performance goal for the calendar year in keeping with the Challenge to continually reduce our occupational injury and illness case rates. A Life Saving Award Program is also included which recognizes any employee who saves a life while on the job.

PPG also participates in the awards program sponsored by the National Safety Council.

The following summary details the awards won by PPG Units during 1986.

PPG INDUSTRIES, INC. EXECUTIVE AWARDS PROGRAM 1986

<u>President's Safety Award</u>	<u>Disabling Injury-Free Operation</u>	
Barberton, OH Technical Center	1/18/82 - 1/17/86	1,460 days
Bowers Ink Chicago #1 Plant	2/3/82 - 2/1/86	1,460 days
Crestline, OH	8/9/83 - 6/23/86	1,049 days
Stockertown, PA, SPU	7/7/82 - 7/6/86	1,460 days
<u>Special Recognition Safety Award</u>	<u>Disabling Injury-Free Operation</u>	
Harmarville, PA	3/26/83 - 2/24/86	1,067 days
Kokomo, IN	2/16/83 - 2/14/86	1,095 days
Marshall, MN	3/5/83 - 3/6/86	1,095 days
<u>Executive's Safety Award</u>	<u>Disabling Injury-Free Operation</u>	
Cleveland, OH	5/8/86 - 11/5/86	182 days
Dover, DE	8/2/84 - 8/1/86	730 days
Houston, TX	4/17/84 - 4/16/86	730 days
Kalium Chemicals Sales	6/6/84 - 6/5/86	730 days
Meadville, PA	12/11/84 - 4/28/86	504 days
Oak Creek, WI	11/21/84 - 3/2/86	467 days
R&D Facilities	6/7/85 - 6/21/86	381 days
Wichita Falls, TX	3/14/85 - 5/6/86	418 days

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PPG INDUSTRIES, INC.
 CALENDAR YEAR
 AWARDS PROGRAM

1986 Awards of Honor

Twenty-eight manufacturing facilities, four research and development units, and twenty sales and distribution units completed 1986 without a death or an away-from-work case. Consequently, these units earned the Corporation's Award of Honor. They are:

Manufacturing

Cumberland, MD	Sixth Consecutive Year
Kalium Chemicals	Fourth Consecutive Year
Stockertown, PA	" " "
Baltimore, MD	Third Consecutive Year
Corpus Christi, TX	" " "
Kokomo, IN	" " "
Marshall, MN	" " "
Technical Development	" " "
Dover, DE	Second Consecutive Year
Houston, TX	" " "
Litho Inks Canada	" " "
Meadville, PA	" " "
Oak Creek, WI	" " "
U.S. Potash	" " "
Chehalis, WA	First Consecutive Year
Creighton, PA	" " "
Fresno, CA	" " "
Hawkesbury	" " "
Jordan Chemicals	" " "
LaPorte, TX	" " "
Lincoln, IL	" " "
Litho Inks U.S.	" " "
Oil & Gas	" " "
Owen Sound	" " "
Packaging Inks	" " "
PD Glycol (Beaumont, TX)	" " "
Springdale, PA	" " "
Taiwan Silicas	" " "

Research & Development Units

Barberton R&D	Fourth Consecutive Year
Chicago R&D	Third Consecutive Year
Harmarville, PA	" " "
R&D - All Locations	First Consecutive Year

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Sales & Distribution Units

Ditzler	Fourteenth Consecutive Year
Chemical Int'l Sales/Dist/Admin	Ninth Consecutive Year
AIR/ARG Depots	Seventh Consecutive Year
Auto/OEM Sales	Second Consecutive Year
C&R - G.O.	" " "
Chemical - G.O. Admin.	" " "
Delaware Corporate Truck Fleet	" " "
Fiber Glass Sales	" " "
Kalium Sales	" " "
Performance Products	" " "
AIR Sales	First Consecutive Year
ARG Sales	" " "
Biochemicals	" " "
Canada ARG	" " "
CP&D Sales	" " "
Environmental Science Center	" " "
HDM Sales	" " "
Industrial Chemical Sales	" " "
Primary Sales	" " "
Scripps - PPG	" " "

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COMMERCIAL PRODUCTS & DISTRIBUTION

PRESIDENT'S AWARD

PLANTS

<u>UNIT</u>	<u>AWARD</u>
Works #26	President's

CP&D - U.S.

<u>UNIT</u>	<u>AWARD</u>
#560, Miami ARG	President's
#486, S. Miami ARG	President's
#481, Atlanta, GA	President's
#656, Greensboro Metal Fab	President's
#629, Greenville, SC	President's
#517, Nashville, TN, ARG	President's
#568, Madison, TN	President's
#652, Memphis, TN	President's
#784, Washington, DC	President's
#595, Towson, MD	President's
#477, Mt. Laurel, NJ	President's
#438, Norwalk, CT	President's
#525, Manchester, NH	President's
#547, Tauton, MA	President's
#549, Boston, MA	President's
#565, Binghamton, NY	President's
#455, Springfield, MA	President's
#446, Rochester, NY	President's
#448, Saginaw, MI	President's
#505, Syracuse, NY	President's
#635, Flint, MI	President's
#419, Des Moines, IA	President's
#439, Chicago, IL	President's
#405, East Detroit, MI	President's
#457, Minneapolis, MN	President's
#518, N. Chicago, IL	President's
#532, Hammond, IN	President's
#403, Amarillo, TX	President's
#416, Dallas, TX	President's
#466, Lubbock, TX	President's
#409, Santa Fe Springs, CA	President's
#430, N. Hollywood, CA	President's
#630, Phoenix, AZ (ARG)	President's
#412, Houston, TX (ARG)	President's
#452, Austin, TX (ARG)	President's
#654, New Orleans, LA	President's
#658, Baton Rouge, LA	President's
#767, Birmingham, AL	President's
#497, Livonia, MI	President's
#463, Youngstown, OH	President's

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COMMERCIAL PRODUCTS & DISTRIBUTION (CONTINUED)

CANADA OPERATIONS

<u>UNIT</u>	<u>AWARD</u>
#23, Calgary, Alberta	President's
#35, Red Deer, Alberta	President's
#27, Thunder Bay, Ontario	President's

CCG

<u>UNIT</u>	<u>AWARD</u>
#414, Columbus, OH	President's
#593, Orlando, FL	President's
#601, Bethpage, NY	President's

CCG METAL FAB

<u>UNIT</u>	<u>AWARD</u>
(NONE)	

ARG DEPOTS

<u>UNIT</u>	<u>AWARD</u>
E. Rutherford	President's
N. Minneapolis, MN	President's
Oakland, CA	President's

SL 103626

COMMERCIAL PRODUCTS & DISTRIBUTION (CONTINUED)

SPECIAL RECOGNITION

PLANTS

<u>UNIT</u>	<u>AWARD</u>
Works #19	Special Recognition
Works #20	Special Recognition

CP&D - U.S.

<u>UNIT</u>	<u>AWARD</u>
#415, Corpus Christi, TX	Special Recognition
#458, Toledo, OH	Special Recognition
#655, Shreveport, LA	Special Recognition
#418, Denver, CO	Special Recognition

CANADA OPERATIONS

<u>UNIT</u>	<u>AWARD</u>
#21, Brandon, Manitoba	Special Recognition
#32, London Metals	Special Recognition

CCG

<u>UNIT</u>	<u>AWARD</u>
#666, Houston, TX	Special Recognition

CCG METAL FAB

<u>UNIT</u>	<u>AWARD</u>
(NONE)	

ARG DEPOTS

<u>UNIT</u>	<u>AWARD</u>
(NONE)	

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COMMERCIAL PRODUCTS & DISTRIBUTION (CONTINUED)

EXECUTIVE AWARD

PLANTS

<u>UNIT</u>	<u>AWARD</u>
Works #4	Executive
#52	Executive
#53	Executive

CP&D - U.S.

<u>UNIT</u>	<u>AWARD</u>
#650, Knoxville, TN	Executive
#450, San Antonio, TX	Executive
#440, Oklahoma City, OK	Executive
#459, Tulsa, OK	Executive
#624, Billings, MT	Executive
#432, Detroit, MI	Executive
#602, Richmond, VA	Executive
#485, Hunt Valley, MD	Executive
#404, Garden Grove, CA	Executive
#401, Albany, NY	Executive
#492, Lombard, IL	Executive
#651, Little Rock, AR	Executive
#484, Twinsburg, OH	Executive
#427, Houston, TX	Executive
#597, Dallas Metal Fab.	Executive
#617, Lansing, MI	Executive
#614, Phoenix, AZ	Executive

CANADA OPERATIONS

<u>UNIT</u>	<u>AWARD</u>
#47, St. Johns Newfoundland	Executive
#05, Montreal, Glass Fab.	Executive
#42, Regina, Saskatchewan	Executive

CCG

<u>UNIT</u>	<u>AWARD</u>
(NONE)	

SL 103628

COMMERCIAL PRODUCTS & DISTRIBUTION (CONTINUED)

CCG METAL FAB

UNIT

AWARD

#407, Atlanta, GA

Executive

ARG DEPOTS

UNIT

AWARD

(NONE)

SL 103629

PRESIDENT'S CHALLENGE AWARD WINNERS

Locations Meeting or Exceeding Their 1986 Safety Performance

* indicates that the Unit also won the Award in 1985

Glass

Manufacturing

Chehalis, WA
Crystal City, MO
Fresno, CA
Hawkesbury
Carlisle, PA*
Creighton, PA
Cumberland, MD*
Evansville, IN*
Kokomo, IN*
Lexington, NC
Lincoln, IL
Marshall, MN*
Meadville, PA*
Oshawa, Canada
Owen Sound*
Shelbv, NC
Technical Development*

Glass

R&D

Harmarville, PA *

Glass

Sales/Dist./Admin.

AIR Sales
Canadian ARG
Canadian CCG*
Primary Sales
AIR/ARG Depots*
ARG Sales*
CP&D Sales*
Fiber Glass Sales*
Auto/OEM Sales*

Corporate Truck Fleet*

Coatings & Resins

Sales/Dist./Admin.

Environmental Science Center
Technical Field Reps
Canadian Region*
Ditzler Warehouse*
G.O.*
HDM Sales*

Chemicals

Manufacturing

Jordan Chemicals
Oil & Gas
PPG - Scripps
Taiwan Silicas
Corpus Christi*
Kalium Chemicals*
LaPorte, TX
PD Glycol (Beaumont)
Stockertown, PA*
U.S. Potash*

Chemicals

R&D

Barberton Technical Center*
Chicago R&D*

Chemicals

Sales/Dist./Admin.

Chemical Sales/Dist/Admin
Biochemicals*
G.O. Administration*
Industrial Sales*
Kalium Sales*
Performance Products*

Coatings & Resins

Manufacturing

Caivano
Laguna
Litho Inks U.S.
Mexico City
Milano
Oak Creek*
Packaging Inks
Rubi
Saultain
Springdale
U.K.
Baltimore*
Dover*
Houston*
Litho Inks Canada*

Coatings & Resins

R&D

All Locations
LaCourneuve

SL 103630

PPG INDUSTRIES, INC.
LIFE SAVING AWARD PROGRAM

The PPG Life Saving Award is given to a PPG employee who saves another person's life while he or she is on the job. Two were given in 1985:

Mr. Stephen W. Higgins
Cleveland, OH
Coatings & Resins Plant

Ms. Marie Angela Holland
Cleveland, OH
Coatings & Resins Plant

SL 103631

1986
OSHA INSPECTION EXPERIENCE

By Reason for Inspection

	<u>Fatality</u>	<u>Employee Complaint</u>	<u>Routine</u>	<u>Sub- Contractor</u>	<u>Indus- trial Hygiene</u>	<u>Accident Investigation</u>	<u>Follow Up</u>	<u>Total</u>
Glass	1	1	1					3
CP&D	1	2	21	25			1	25
Chemical								0
C&R			1		1			2
Totals	2	3	23	25	1		1	30

By Inspection Results

	<u>Insp. with Citation</u>	<u>Insp. Without Citation</u>	<u>Citation(s) No Penalty</u>	<u>Citation(s) With Penalty</u>	<u>Amount of Penalties</u>	<u>Average Penalty Received</u>	<u>*Contested Violations</u>
Glass	2	1	2	1	\$ 500	\$500	
CP&D	12	13	22	3	1,000	333	
Chemical							
C&R		2	2				
Totals	14	16	26	4	\$1,500	\$375	

* Contest either through formal procedures or informal conference with area personnel

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1971 - 1987
OSHA INSPECTION EXPERIENCE

By Reason for Inspection

	<u>Fatality</u>	<u>Employee Complaint</u>	<u>Routine</u>	<u>Sub- Contractor</u>	<u>Indus- trial Hygiene</u>	<u>Accident Investigation</u>	<u>Follow Up</u>	<u>Total</u>
Glass	3	31	55	0	10	0	22	121
CP&D	6	28	121	269	0	2	8	409
Chemical	6	27	19	2	5	1	13	73
C&R	1	33	27	0	9	1	15	86
Other	0	2	6	0	1	0	2	11
Totals	16	121	228	271	25	4	60	700

By Inspection Results

	<u>Insp. with Citation</u>	<u>Insp. Without Citation</u>	<u>Citation(s) No Penalty</u>	<u>Citation(s) With Penalty</u>	<u>Amount of Penalties</u>	<u>Average Penalty Received</u>	<u>*Contested Violations</u>
Glass	53	66	206	77	\$ 8,465	\$110	10
CP&D	249	146	380	178	38,254	215	50
Chemical	25	49	40	31	4,020	130	21
C&R	27	54	73	35	10,980	439	11
Other	7	4	58	21	2,630	125	0
Totals	361	319	757	342	\$64,349	\$188	92

* Contest either through formal procedures or informal conference with
 appropriate personnel

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PPG INDUSTRIES, INC.
OCCUPATIONAL INJURY & ILLNESS REPORT
EXECUTIVE SUMMARY

NOVEMBER 1986

	AW CASES THIS MO	AW CASES THIS YEAR	AW DAYS LOST YTD	NSC RATE YTD	1986 NSC RATE GOAL	RC CASES THIS YEAR	RC RATE YTD	1986 RC RATE GOAL
MANUFACTURING								
CHEMICALS GROUP	2	11	781	0.33	0.00	128	3.88	2.19
C&R GROUP	1	12	566	0.23	0.28	153	2.88	2.54
GLASS GROUP	3	21	682	0.13	0.12	593	5.06	4.34
TOTAL ALL MFG	6	44	2029	0.22	0.14	874	4.30	3.46
RESEARCH & DEVEL.								
CHEMICALS GROUP	0	0	0	0.00	0.00	2	0.65	1.94
C&R GROUP	0	0	0	0.00	0.00	10	1.36	1.16
GLASS GROUP	0	1	22	0.19	0.00	11	2.05	0.67
TOTAL ALL R&D	0	1	22	0.06	0.00	23	1.46	1.17
SALES & DIST & ADM								
CHEMICALS GROUP	0	0	0	0.00	0.00	1	0.12	0.00
C&R GROUP	1	5	136	0.32	0.36	36	2.30	2.49
GLASS GROUP	6	57	1828	1.32	0.93	311	7.08	4.79
G.O. CORP STAFF	1	1	3	0.16	0.00	8	1.29	0.48
CORP. TRUCK FLEET	0	0	0	0.00	0.00	0	0.00	0.00
TOTAL ALL SLS-DIST	8	64	1968	0.86	0.64	357	4.74	3.48
TOTAL GROUPS & ADM								
CHEMICALS	2	11	781	0.25	0.07	131	2.96	1.98
COATINGS & RESINS	2	17	702	0.22	0.29	199	2.61	2.41
GLASS	9	79	2532	0.48	0.35	915	5.50	4.36
G.O. CORP STAFF	1	1	3	0.16	0.00	8	1.29	0.48
CORP. TRUCK FLEET	0	0	0	0.00	0.00	0	0.00	0.00
TOTAL ALL OPER.	14	109	4019	0.37	0.28	1254	4.26	3.37

AW CASES ARE THOSE INVOLVING INJURIES WHICH DISABLE AN EMPLOYEE TO THE EXTENT THAT ONE OR MORE DAYS ARE LOST "AWAY FROM WORK".

THE NSC RATE IS THE NUMBER OF AW CASES PLUS THE NUMBER OF DEATHS PER 100 EMPLOYEES IN ONE WORKING YEAR.

RC CASES ARE ALL THOSE INJURIES REQUIRING MEDICAL TREATMENT OR MORE UP TO AND INCLUDING DEATHS.

PAGE 3

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PPG INDUSTRIES, INC. RECORDABLE WORK INJURY AND ILLNESS REPORT
 DECEMBER 1986
 OPERATIONS SUMMARY

ALL TIME CORPORATE RECORDS
 DAYS: 3773 PORTLAND
 HOURS: 19,254,737 LEXINGTON

	1986		OSHA INCIDENTS											1986		AW		AW		WORK	
	NSC RATE YTD	NSC RATE GOAL	***** DTHS	***** AW	***** RA	***** LW	***** NF	***** RC	***** AW	***** RA	***** LW	***** NF	***** RC	RC RATE GOAL	DAYS LOST YTD	DAYS LOST YTD	CASES THIS MO.	WORK HOURS (000)			
MANUFACTURING																					
CHEMICALS GROUP	0.33	0.00	0	11	69	80	48	128	0.33	2.09	2.12	1.45	3.88	2.19	781	2091	2	6598			
C&R GROUP	0.23	0.28	0	12	65	77	76	153	0.23	1.22	1.45	1.43	2.88	2.54	566	1653	1	10624			
GLASS GROUP	0.18	0.12	0	21	201	222	371	593	0.18	1.71	1.89	3.17	5.06	4.34	682	3862	3	23443			
TOTAL ALL MFG	0.22	0.14	0	44	335	379	495	874	0.22	1.65	1.86	2.43	4.30	3.46	2029	7606	6	40665			
RESEARCH & DEVEL.																					
CHEMICALS GROUP	0.00	0.00	0	0	1	1	1	2	0.00	0.32	0.32	0.32	0.85	1.94	0	7	0	618			
C&R GROUP	0.00	0.00	0	0	1	1	9	10	0.00	0.14	0.14	1.22	1.36	1.16	0	3	0	1470			
GLASS GROUP	0.19	0.00	0	1	4	5	6	11	0.19	0.75	0.93	1.12	2.05	0.87	22	73	0	1072			
TOTAL ALL R&D	0.06	0.00	0	1	6	7	16	23	0.06	0.38	0.44	1.01	1.46	1.17	22	79	0	3160			
SALES & DIST & ADM																					
CHEMICALS GROUP	0.00	0.00	0	0	0	0	1	1	0.00	0.00	0.00	0.12	0.12	0.00	0	0	0	16.2			
C&R GROUP	0.32	0.36	0	5	7	12	24	36	0.32	0.45	0.77	1.53	2.30	2.40	156	162	1	3134			
GLASS GROUP	1.32	0.93	1	57	42	99	212	311	1.30	0.96	2.25	4.85	7.03	4.79	1828	2242	6	8783			
G.O. C.STAFF U.S.	0.16	0.00	0	1	3	4	4	8	0.16	0.49	0.65	0.65	1.29	0.48	3	16	1	1236			
G.O. C.STAFF CAN.	0.85	0.00	0	1	0	1	0	1	0.85	0.00	0.85	0.00	0.85	0.00	1	1	0	234			
CORP. TRUCK FLEET	0.00	0.00	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	59			
TOTAL ALL SLS-DIST	0.86	0.64	1	64	52	116	241	357	0.85	0.69	1.54	3.20	4.74	3.48	1968	2511	8	15068			
TOTAL GROUPS & ADM																					
CHEMICALS	0.25	0.07	0	11	70	81	50	131	0.25	1.58	1.83	1.13	2.96	1.98	781	2094	2	8838			
COATINGS & RESINS	0.22	0.29	0	17	73	90	109	199	0.22	0.96	1.18	1.43	2.61	2.41	702	1918	2	15228			
GLASS	0.48	0.35	1	79	247	326	589	915	0.47	1.48	1.96	3.54	5.50	4.36	2532	6167	9	33295			
G.O. C.STAFF U.S.	0.16	0.00	0	1	3	4	4	8	0.16	0.49	0.65	0.65	1.29	0.48	3	16	1	1236			
G.O. C.STAFF CAN.	0.85	0.00	0	1	0	1	0	1	0.85	0.00	0.85	0.00	0.85	0.48	1	1	0	234			
CORP. TRUCK FLEET	0.00	0.00	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	59			
TOTAL ALL OPER.	0.37	0.28	1	109	393	502	752	1254	0.37	1.33	1.70	2.55	4.26	3.37	4019	10196	14	58893			

PAGE 5

DTHS=DEATHS
 NF=NON FATAL

AW=AWAY FROM WORK
 RC=RECORDABLE CASE

RA=RESTRICTED ACTIVITY
 TDL=TOTAL DAYS LOST

LW=LOST WORK DAY
 NSC=NATIONAL SAFETY COUNCIL

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 SL 103635

INDUSTRIES, INC. RECORDABLE WORK INJURY AND ILLNESS REPORT
 DECEMBER 1986
 GLASS GROUP

ALL TIME FLAT GLASS RECORDS
 DAYS
 HOURS: 8,447,386 CUMBERLAND

	1986													1986				
	NSC RATE YTD	NSC RATE GOAL	DTHS	AW	RA	CASES YTD LW	TOT NF	TOT RC	OSHA RATE AW	OSHA INCIDENCE RA	OSHA YTD LW	OSHA YTD NF	OSHA YTD RC	RC RATE	AW DAYS YTD	AW+RA DAYS YTD	AW CASES THIS MO.	WORK HOURS YTD (000)
PRIMARY GLASS																		
MANUFACTURING																		
WKS 4 WICHITA	0.51	0.18	0	3	11	14	21	35	0.51	1.88	2.40	3.59	5.99	6.00	87	366	1	1169
WKS 6 CARLISLE	0.14	0.18	0	1	2	3	19	22	0.14	0.29	0.43	2.74	3.17	3.21	36	99	0	1386
WKS 7 CUMBERLAND	0.00	0.00	0	0	1	1	0	1	0.00	5.15	5.13	0.00	5.13	8.16	0	48	0	49
WKS 8 MEADVILLE	0.00	0.20	0	0	8	8	21	29	0.00	1.57	1.57	4.13	5.71	4.86	0	76	0	1016
WKS 9 CRYST. CITY	0.37	0.52	0	1	2	3	28	31	0.37	0.73	1.10	10.24	11.33	9.90	129	154	0	547
WKS 14 MT. ZION	0.31	0.18	0	2	3	5	24	29	0.31	0.46	0.77	3.72	4.49	2.71	63	242	0	1291
WKS 15 FRESNO	0.00	0.33	0	0	3	3	11	19	0.00	2.65	2.65	3.64	6.29	6.33	0	32	0	604
WKS 16 CHEHALIS	0.00	0.00	0	0	0	0	1	1	0.00	0.00	0.00	1.71	1.71	12.00	0	0	0	117
WKS 20 MARSHALL	0.00	0.00	0	0	1	1	5	6	0.00	0.58	0.58	2.91	3.49	1.71	0	64	0	344
WKS 21 LINCOLN	0.00	0.00	0	0	0	0	9	9	0.00	0.00	0.00	9.73	9.73	4.15	0	0	0	185
WKS 84 OWEN SND	0.00	0.25	0	0	1	1	28	29	0.00	0.23	0.23	6.57	6.81	5.51	0	5	0	852
TOTAL PRIM. MFG.	0.19	0.20	0	7	37	44	167	211	0.19	0.98	1.17	4.42	5.59	4.77	315	1086	1	7550
SALES & DIST.																		
PRIMARY SALES	0.00	0.00	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	168
TOTAL PRIMARY GLS	0.18	0.19	0	7	37	44	167	211	0.18	0.96	1.14	4.33	5.47	4.66	315	1086	1	7718
COMMERCIAL PRODUCTS & DISTRIBUTION																		
MANUFACTURING																		
WKS 5 FORD CITY	0.39	0.00	0	2	7	9	20	29	0.39	1.35	1.74	3.87	5.61	5.24	36	352	0	1034
WKS 19 KOKOMO	0.00	0.00	0	0	0	0	4	4	0.00	0.00	0.00	1.95	1.95	3.33	0	0	0	410
CAN. ARCH. MTLs	0.47	0.00	0	1	0	1	6	7	0.47	0.00	0.47	2.80	3.27	1.68	40	40	0	428
TOTAL C.P. MFG.	0.32	0.00	0	3	7	10	30	40	0.32	0.75	1.07	3.21	4.27	4.21	76	392	0	1872
SALES & DIST.																		
U.S. BRANCHES	1.03	1.00	1	17	20	37	106	144	0.97	1.14	2.11	6.05	8.22	6.50	537	752	2	3505
U.S. CCG	1.94	1.44	0	25	18	43	90	133	1.94	1.40	3.34	7.00	10.34	5.76	1006	1164	1	2572
CAN. BRANCHES	2.42	0.88	0	11	4	15	11	26	2.42	0.88	3.30	2.42	5.71	3.95	232	263	1	910
CAN. CCG	1.67	0.78	0	1	0	1	3	4	1.67	0.00	1.67	5.00	6.67	4.69	0	0	1	120
C.P. SALES	0.00	0.00	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	46
TOTAL CP SLS & DT	1.54	1.13	1	54	42	96	210	307	1.51	1.17	2.68	5.87	8.58	5.79	1775	2179	5	7153
TOTAL CP & DIST.	1.29	0.94	1	57	49	106	240	347	1.26	1.09	2.35	5.32	7.69	5.52	1851	2571	5	9025

SL 103636

DTHS=DEATHS AW=AWAY FROM WORK RA=RESTRICTED ACTIVITY LW=LOST WORK DAY
 NF=NON FATAL RC=RECORDABLE CASE TDL=TOTAL DAYS LOST NSC=NATIONAL SAFETY COUNCIL

PPG INDUSTRIES, INC. RECORDABLE WORK INJURY AND ILLNESS REPORT
 DECEMBER 1986
 GLASS GROUP

ALL TIME AUTO & AIRCRAFT RECORDS
 DAYS 796 CREIGHTON
 HOURS 2,244,288 HUNTSVILLE

	1986		DTHS	OSHA CASES YTD					OSHA INCIDENCE					1986 RC GOAL	AW DAYS LOST	AW+RA DAYS LOST	AW THIS MO.	WORK HOURS YTD (000)
	NSC RATE YTD	NSC RATE GOAL		TOT	AW	RA	LW	NF	RC	AW	RA	LW	NF					
ARG., AIRCRAFT & SPEC.																		
MANUFACTURING																		
WKS. 22 HUNTSV.	0.17	0.00	0	1	9	10	10	20	0.17	1.53	1.69	1.69	3.39	1.09	45	116	0	1180
WKS. 25 GREENSB	0.79	0.00	0	3	13	16	11	27	0.79	3.41	4.21	2.89	7.11	2.22	73	333	0	760
WKS. 40 PAC	0.00	0.00	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0	0	0	0	22
TECH. DEV	0.00	0.00	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0	0	0	0	56
TOTAL AA&S MFG.	0.40	0.00	0	4	22	26	21	47	0.40	2.18	2.58	2.08	4.66	1.72	118	449	0	2018
SALES & DIST.																		
WKS 29 CHILLOTHE	0.87	0.00	0	1	0	1	2	3	0.87	0.00	0.87	1.74	2.61	3.35	41	41	0	230
CAN ARG	0.00	0.00	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0	0	0	0	28
ARG SALES	0.00	0.00	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0	0	0	0	19
AIR SALES	0.00	0.00	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0	0	0	0	44
DEPOTS	0.00	0.00	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0	0	0	0	19
TOTAL AA&S SLS DT	0.59	0.00	0	1	0	1	2	3	0.59	0.00	0.59	1.18	1.76	0.00	41	41	0	340
TOTAL AA&S	0.42	0.00	0	5	22	27	23	50	0.42	1.87	2.29	1.95	4.24	1.72	159	490	0	2358
AUTOMOTIVE - OEM																		
MANUFACTURING																		
WKS. 1 CREIGHTON	0.00	0.00	0	0	14	14	23	37	0.00	2.89	2.89	4.75	7.64	6.47	0	559	0	969
WKS. 26 CRESTLINE	0.14	0.00	0	1	1	2	10	12	0.14	0.14	0.28	1.39	1.67	1.57	21	42	0	1437
WKS. 27 TIPTON	0.30	0.14	0	2	1	3	10	13	0.30	0.15	0.45	1.51	1.96	2.57	58	88	1	1328
WKS. 28 EVANSVLE	0.25	0.29	0	1	6	7	20	27	0.25	1.43	1.73	4.95	6.68	3.71	14	148	0	808
WKS. 81 OSHAWA	0.23	0.32	0	1	15	16	8	24	0.23	3.41	3.64	1.82	5.46	7.70	48	152	0	879
WKS. 80 HAWKSBURY	0.00	0.29	0	0	7	7	21	28	0.00	1.90	1.90	5.69	7.59	5.44	0	74	0	738
TOTAL AUTO MFG	0.16	0.15	0	5	44	49	92	141	0.16	1.43	1.59	2.99	4.58	3.87	142	1063	1	6159
SALES/DIST.																		
TOTAL SLS/DIST.	0.00	0.00	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0	0	0	0	30
TOTAL AUTO - OEM	0.16	0.14	0	5	44	49	92	141	0.16	1.42	1.58	2.97	4.56	3.87	142	1063	1	6189

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 SL 103637

AW=AWAY FROM WORK RA=RESTRICTED ACTIVITY LW=LOST WORK DAY
 RC=RECORDABLE CASE TDL=TOTAL DAYS LOST NSC=NATIONAL SAFETY COUNCIL

PPG INDUSTRIES, INC. RECORDABLE WORK INJURY AND ILLNESS REPORT
 DECEMBER 1986
 GLASS GROUP

ALL TIME FIBERGLASS RECORDS
 DAYS
 HOUR 19,254,735 LEXINGTON

	1986		NSC RATE YTD	NSC RATE GOAL	***** DTHS	OSHA AW	CASES RA	YTD LW	***** TOT	***** TOT	***** OSHA INCIDENCE *****					1986 RATE	AW DAYS LOST	AW+RA DAYS LOST	AW CASES THIS MO.	WORK HOURS YTD (000)
	OSHA AW	OSHA RA									OSHA LW	OSHA NF	OSHA RC	RATES YTD	RATES YTD					
FIBER GLASS																				
MANUFACTURING																				
WKS. 52 SHELBY	0.07	0.08	0	1	28	29	42	71	0.07	1.31	1.91	2.77	4.64	5.60	30	219	1	3030		
WKS. 53 LEXINGTN	0.07	0.08	0	1	63	64	19	83	0.07	4.48	4.55	1.35	5.90	5.26	1	653	0	2314		
TOTAL F/G MFG	0.07	0.08	0	2	91	93	61	154	0.07	3.11	3.18	2.09	5.17	5.44	31	872	1	5344		
SALES/DIST.																				
TOTAL SALES	0.00	0.00	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	80		
TOTAL FIBER GLASS	0.07	0.08	0	2	91	93	61	154	0.07	3.07	3.14	2.06	5.10	5.44	31	872	1	5924		
RESEARCH & DEVELOP																				
WKS 17 HARMARV.	0.00	0.00	0	0	3	3	4	7	0.00	0.76	0.76	1.02	1.73	0.86	0	49	0	788		
WKS 51 O'HARA TWP	0.70	0.00	0	1	1	2	2	4	0.70	0.70	1.41	1.41	2.82	0.00	22	24	0	284		
TOTAL R&D	0.19	0.00	0	1	4	5	6	11	0.19	0.75	0.93	1.12	2.05	0.67	22	73	0	1072		
GENERAL OFFICE																				
SLS/DIST/ADMIN																				
U.S.	0.26	0.00	0	1	0	1	0	1	0.26	0.00	0.26	0.00	0.26	0.00	11	11	1	778		
CANADA	.85	0.00	0	1	0	1	0	1	0.85	0.00	0.85	0.00	0.85	0.00	1	1	0	234		
TOTAL ADMIN.	0.40	0.00	0	2	0	2	0	1	0.40	0.00	0.40	0.00	0.20	0.00	12	12	1	1012		
TOTAL GROUP MFG	0.18	0.12	0	21	201	222	371	593	0.18	1.71	1.89	3.17	5.06	4.36	632	3862	3	23443		
TOTAL GROUP R&D	0.19	0.00	0	1	4	5	6	11	0.19	0.75	0.93	1.12	2.05	0.67	22	73	0	1072		
TOTAL GROUP SLS/DT	1.32	0.93	1	57	42	99	212	311	1.30	0.96	2.25	4.83	7.08	4.79	1828	2232	6	8783		
TOTAL GLASS GROUP	0.48	0.35	1	79	247	326	589	915	0.47	1.48	1.96	3.54	5.50	4.38	2532	6167	9	33298		

SL 103638

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PPG INDUSTRIES, INC. RECORDABLE WORK INJURY AND ILLNESS REPORT
 DECEMBER 1986
 CHEMICALS GROUP

ALL TIME TCU RECORDS
 DAYS 6,973 BARBERTON R&D
 HOURS 10,444,495 BARBERTON

	1986										1985					AW WORK HOURS (000)		
	NSC RATE YTD	NSC RATE GOAL	***** DTHS	OSHA AW	CASES RA	YTD LW	***** NF	***** RC	OSHA AW	INCIDENCE RA	***** LW	***** NF	***** RC	1985 RATE GOAL	AW DAYS LOST YTD		AW+RA DAYS LOST YTD	AW CASES THIS MO
MANUFACTURING																		
BARBERTON	0.70	0.00	0	1	2	3	8	11	0.70	1.40	2.11	5.63	7.72	2.14	144	215	0	285
CORPUS CHRISTI	0.00	0.00	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	8
JORDAN CHEMICALS	0.00	0.00	0	0	1	1	3	4	0.00	2.44	2.44	7.32	9.76	2.13	0	0	0	82
KALIUM	0.00	0.00	0	0	0	0	1	1	0.00	0.00	0.00	0.55	0.55	1.00	0	0	0	167
LAKE CHARLES	0.37	0.00	0	6	37	43	21	64	0.37	2.26	2.63	1.28	3.91	1.92	362	1153	2	3272
LAPORTE	0.00	0.00	0	0	4	4	0	4	0.00	3.67	3.67	0.00	3.67	3.56	0	154	0	218
NATRIUM	0.44	0.00	0	3	17	20	10	30	0.44	2.51	2.95	1.48	4.43	2.95	74	247	0	1355
OIL & GAS	0.00	0.00	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	96
PD GLYCOL	0.00	0.00	0	0	4	4	0	4	0.00	1.82	1.82	0.00	1.82	1.85	0	47	0	440
PPG CANADA	0.50	0.00	0	1	4	5	4	9	0.50	2.00	2.50	2.00	4.50	1.41	201	265	0	400
STOCKERTOWN	0.00	0.00	0	0	0	0	1	1	0.00	0.00	0.00	0.00	2.78	2.78	5.33	0	0	72
U.S. POTASH	0.00	0.00	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	8
TOTAL MFG.	0.33	0.00	0	11	69	80	48	128	0.33	2.09	2.42	1.45	3.88	2.19	781	2091	2	6538
RESEARCH & DEVEL.																		
BARBERTON	0.00	0.00	0	0	1	1	1	2	0.00	0.39	0.39	0.39	0.78	1.54	0	3	0	511
CHICAGO	0.00	0.00	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	4.08	0	0	0	107
TOTAL U.S. R&D	0.00	0.00	0	0	1	1	1	2	0.00	0.32	0.32	0.32	0.65	1.94	0	3	0	618
SALES/DST/ADMIN																		
BIOCHEMICALS	0.00	0.00	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	121
INDUSTRIAL SALES	0.00	0.00	0	0	0	0	1	1	0.00	0.00	0.00	1.50	1.50	0.00	0	0	0	133
KALIUM SALES	0.00	0.00	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	63
PERFORMANCE PROD.	0.00	0.00	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	45
G.O. ADMIN.	0.00	0.00	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	1200
TOTAL ALL SLS&DIST	0.00	0.00	0	0	0	0	1	1	0.00	0.00	0.00	0.12	0.12	0.00	0	0	0	1622
TOTAL ALL OPER.	0.25	0.07	0	11	70	81	50	131	0.25	1.58	1.83	1.13	2.96	1.98	781	2094	2	8838

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 SL 103639

DTHS=DEATHS AW=AWAY FROM WORK RA=RESTRICTED ACTIVITY LW=LOST WORK DAY
 NF=NON FATAL RC=RECORDABLE CASE TDL=TOTAL DAYS LOST NSC=NATIONAL SAFETY COUNCIL

PPG INDUSTRIES, INC. RECORDABLE WORK INJURY AND ILLNESS REPORT
 DECEMBER 1986
 COATINGS & RESINS GROUP

ALL TIME O&R GROUP RECORDS
 DAYS: 3773 PORTLAND
 HOURS: 7,487,257 CLEVELAND

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	1986								OSHA INCIDENTS					1986				AW WORK HOURS (000)
	NSC RATE YTD	NSC RATE GOAL	***** DTHS	OSHA AW	CASES RA	YTD TOT	***** NF	***** RC	***** AW	***** RA	***** LW	***** NF	***** RC	RATE GOAL	DAYS LOST YTD	AW+RA DAYS LOST YTD	AW THIS MO.	
MANUFACTURING																		
C&R MANUFACTURING																		
AUTO SERV. FACIL	1.68	0.00	0	1	2	3	7	10	1.68	3.36	5.04	11.76	16.81	5.36	5	15	0	119
BALTIMORE	0.00	0.00	0	0	0	0	8	8	0.00	0.00	0.00	5.16	5.16	5.21	0	0	0	310
CIRCLEVILLE	0.84	0.00	0	2	2	4	3	7	0.84	0.84	1.68	1.26	2.95	2.63	10	89	0	475
CLARKSON	0.78	0.00	0	3	5	8	9	17	0.78	1.29	2.07	2.39	4.39	0.79	223	324	0	774
CLEVELAND	0.06	0.00	0	1	17	18	12	30	0.06	1.04	1.10	0.73	1.89	2.22	161	295	0	3278
DELAWARE	0.18	0.00	0	1	7	8	3	11	0.18	1.23	1.40	0.53	1.93	1.67	28	148	0	1141
DOVER	0.00	0.00	0	0	4	4	2	6	0.00	3.74	3.74	1.87	5.61	0.00	0	150	0	214
EAST POINT	0.35	0.00	0	1	0	1	4	5	0.35	0.00	0.35	1.41	1.76	2.39	45	45	0	566
HOUSTON	0.00	0.00	0	0	0	0	3	3	0.00	0.00	0.00	2.45	2.45	0.00	0	0	0	245
OAK CREEK	0.00	0.00	0	0	12	12	5	17	0.00	1.92	1.92	0.86	2.71	2.00	0	198	0	1253
SPRINGDALE	0.00	0.00	0	0	1	1	6	7	0.00	0.35	0.33	1.36	2.28	1.47	0	12	0	613
TORONTO	0.78	0.00	0	1	1	2	5	7	0.78	0.78	1.56	3.89	5.15	1.54	17	47	0	257
TORRANCE	0.54	0.00	0	1	4	5	1	6	0.54	2.17	2.71	0.54	3.35	3.04	71	144	0	369
TOTAL ALL C&R MFG	0.23	0.22	0	11	55	66	68	134	0.23	1.14	1.37	1.41	2.73	2.27	356	1567	0	9616
I/A MANUFACTURING																		
LITHO INKS US	0.00	0.00	0	0	2	2	4	6	0.00	1.19	1.19	2.37	3.56	4.49	5	16	0	337
LITHO INKS CAN	0.00	0.00	0	0	1	1	0	1	0.00	1.16	1.16	0.00	1.16	2.41	0	5	0	172
HUGHES PRODUCTS	0.76	0.00	0	1	6	7	2	9	0.76	4.58	5.34	1.53	6.87	4.17	5	61	1	162
PACKAGING INKS	0.00	0.00	0	0	1	1	2	3	0.00	0.84	0.84	1.69	2.13	6.72	0	4	0	237
TOTAL ALL I/A MFG	0.20	0.76	0	1	10	11	8	19	0.20	1.98	2.18	1.59	3.77	5.91	10	86	1	1068
TOTAL ALL MFG	0.23	0.28	0	12	65	77	76	153	0.23	1.22	1.45	1.43	2.68	2.54	366	1653	1	10624
RESEARCH & DEVEL.																		
ALL LOCATIONS	0.00	0.00	0	0	1	1	9	10	0.00	0.14	0.14	1.22	1.36	1.16	0	0	0	1470

DTHS=DEATHS AW=AWAY FROM WORK RA=RESTRICTED ACTIVITY LW=LOST WORK DAY
 NF=NON FATAL RC=RECORDABLE CASE TDL=TOTAL DAYS LOST NSC=NATIONAL SAFETY COUNCIL

PPG INDUSTRIES, INC RECORDABLE WORK INJURY AND ILLNESS REPORT
 DECEMBER 1986
 COATINGS & RESINS GROUP

ALL TIME C&R GROUP RECORDS
 DAY: 577 (PORTLAND)
 HOURS: 7,072,501 (CLEVELAND)

	1986										1986							
	NSC RATE YTD	NSC RATE GOAL	OSHA DTGS	CASES AW	YTD RA	TOT LW	TOT NF	TOT RC	OSHA RATE AW	INCIDENCE RA	INCIDENCE LW	INCIDENCE NF	INCIDENCE RC	1986 RATE GOAL	AW DAYS LOST YTD	AW+RA DAYS LOST YTD	AW CASES THIS MO	WORK HOURS YTD (1000)
SALES/DIST/ADMIN																		
TRADE SALES																		
SERVICE CTRS E.	0.89		0	1	0	1	9	10	0.89	0.00	0.89	8.04	8.93		5	5	0	214
SERVICE CTRS W.	0.56		0	1	3	4	6	10	0.56	1.69	2.25	3.37	5.62		5	99	0	356
CANADIAN REGION	0.00		0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00		0	0	0	96
PROF. SALES E.	0.00		0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00		0	0	0	116
PROF. SALES W.	0.00		0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00		0	0	0	183
HDM SALES	0.00		0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00		0	0	0	12
DEALER SALES	0.97		0	1	1	2	0	2	0.97	0.97	1.93	0.00	1.93		83	83	0	207
TOTAL ALL TRADE	0.50	0.51	0	3	4	7	15	22	0.50	0.67	1.17	2.51	3.69	2.29	93	187	0	1194
DISTRIBUTION																		
DIST. CENTERS	0.00	0.00	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	2.05	0	0	0	150
DIST. CENT. CAN	0.00	0.00	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	4.76	0	0	0	12
DITZLER WHSE.	0.00	0.00	0	0	3	3	5	8	0.00	1.81	1.81	3.01	4.82	4.67	0	32	0	332
INDUSTRIAL SALES	0.74	0.00	0	2	0	2	2	4	0.74	0.00	0.74	0.74	1.48	0.67	8	8	1	542
TECH. FIELD REPS	0.00	0.00	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	4.05	0	0	0	312
REFINISH SALES	0.00	0.00	0	0	0	0	2	2	0.00	0.00	0.00	1.18	1.18	2.14	35	35	0	340
TOTAL DIST.	0.24	0.32	0	2	3	5	9	14	0.24	0.36	0.59	1.07	1.66	3.00	43	75	1	1688
ADMINISTRATION																		
ENV. SCIENCE CTR	0.00	0.00	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	3.85	0	0	0	130
GENERAL OFFICE	0.00	0.00	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	1.14	0	0	0	123
TOTAL ADMIN.	0.00	0.00	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	1.78	0	0	0	252
TOTAL SLS/DST/ADM	0.32	0.36	0	5	7	12	24	36	0.32	0.45	0.77	1.53	2.30	2.49	136	262	1	3134
TOTAL C&R GROUP	0.22	0.29	0	17	73	90	109	199	0.22	0.96	1.18	1.43	2.61	2.41	702	1918	2	15228

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DTGS=DEATHS
 NF=NON FATAL

AW=AWAY FROM WORK
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RA=RESTRICTED ACTIVITY
 TDL=TOTAL DAYS LOST

LW=LOST WORKDAY
 NSC=NATIONAL SAFETY COUNCIL

SL 103641

PPG INDUSTRIES, INC. RECORDABLE WORK INJURY & ILLNESS REPORT
 NOVEMBER 1986
 INTERNATIONAL SUMMARY

	1986		CASES			INCIDENCE		1986	WORK
	NSC RATE YTD	NSC RATE GOAL	DEATHS	AW	RC	AW	RC	RC RATE GOAL	HOURS YTD (000)
GLASS GROUP									
BOUSSOIS									
MANUFACTURING									
BOUSSOIS AUTO	8.79		0	20	34	8.79	14.95		455
BOUSSOIS PRIM	2.00		0	16	55	2.00	6.88		1600
ANICHE	4.51		0	8	22	4.51	12.39		355
DONCHERY	1.82		0	1	5	1.82	9.09		110
TOTAL MFG.	3.57		0	45	116	3.57	9.21		2520
SALES/DIST/ADMIN	6.11		0	56	116	6.11	12.66		1832
TOTAL BOUSSOIS	4.64		0	101	232	4.64	10.66		4352
VERNANTE PENNITALIA									
MANUFACTURING									
SALERNO	10.17		0	24	24	10.17	10.17		472
CUNEO	4.40		0	13	13	4.40	4.40		591
ROCCASECCA	9.31		0	19	19	9.31	9.31		408
TOTAL V-P	7.61		0	56	56	7.61	7.61		1471
TOTAL GLASS MFG	5.06		0	101	172	5.06	8.62		3991
TOTAL GLASS R&D	N/A								
TOTAL GLASS S/D/A	6.11		0	56	116	6.11	12.66		1832
TOTAL GLASS GROUP	5.39		0	157	288	5.39	9.89		5823

CHEMICALS GROUP									
MANUFACTURING									
TAIWAN	0.00	0.00	0	0	0	0.00	0.00	0.00	193
SALES/DIST/ADMIN									
SALES PERSONS	0.00	0.00	0	0	0	0.00	0.00	0.00	50
TOTAL CHEM MFG	0.00	0.00	0	0	0	0.00	0.00	0.00	193
TOTAL CHEM R&D	N/A								
TOTAL CHEM S/D/A	0.00	0.00	0	0	0	0.00	0.00	0.00	50
TOTAL CHEMICALS	0.00	0.00	0	0	0	0.00	0.00	0.00	243

NSC RATE = THE NUMBER OF DEATHS PLUS THE NUMBER OF AW'S PER 100
 EMPLOYEES WORKING FOR ONE YEAR.

AW'S = INJURIES THAT REQUIRE TIME AWAY FROM WORK EXCLUDING THE DAY OF
 INJURY.

RC'S = ALL INJURIES REQUIRING AT LEAST MEDICAL TREATMENT i.e. DEATHS +
 AW'S + RESTRICTED ACTIVITY + ALL OTHER INJURIES REQUIRING PROFESSIONAL
 MEDICAL TREATMENT BUT NOT INCLUDING FIRST AID CASES.

PPG INDUSTRIES, INC. RECORDABLE WORK INJURY & ILLNESS REPORT
 NOVEMBER 1986
 INTERNATIONAL SUMMARY

	1986		CASES			INCIDENCE		1986	WORK
	NSC RATE YTD	NSC RATE GOAL	***** DTHS	YTD AW	***** RC	***** AW	***** RC	RC RATE GOAL	HOURS YTD (000)
C&R GROUP									
MANUFACTURING									
U.K.	1.29	2.00	0	5	13	1.29	4.53	8.75	778
VALENCIENNES	1.47	1.18	0	8	15	1.47	3.68	2.84	816
SAULTAIN	2.15	3.11	0	11	45	2.15	8.81	5.39	1022
GERMANY	4.16	4.16	0	3	27	4.16	14.03	14.56	385
MEXICO CITY	1.99	1.85	0	8	16	1.99	3.97	2.31	806
RUBI	6.29	8.24	0	5	14	6.29	17.61	16.47	159
LAGUNA	7.41	14.94	0	7	15	7.41	15.87	16.09	189
VALENCIA	8.96	9.09	0	3	24	8.96	71.64	18.18	67
MILANO	4.63	5.26	0	22	45	4.63	9.47	5.26	950
QUATTORDIO	3.36	3.00	0	13	28	3.36	7.24	3.00	773
CAIVANO	1.98	5.20	0	5	10	1.98	3.96	5.20	505
TOTAL MFG	2.88	3.59	0	93	257	2.88	7.97	5.98	6450
RESEARCH & DEVEL.									
LaCOURNEVE	0.96	1.81	0	2	10	0.96	4.81	5.43	416
TOTAL R&D	0.96	1.81	0	2	10	0.96	4.81	5.43	416
TOTAL C&R MFG	2.88	3.59	0	93	257	2.88	7.97	5.98	6450
TOTAL C&R R&D	0.96	1.81	0	2	10	0.96	4.81	5.43	416
TOTAL C&R S/D/A	N/A								
TOTAL C&R GROUP	2.77	3.48	0	95	267	2.77	7.78	5.95	6866

TOTAL INT. MFG	3.65		0	194	429	3.65	8.07		10634
TOTAL INT. R&D	0.96		0	2	10	0.96	4.81		416
TOTAL INT. S/D/A	5.95		0	56	116	5.95	12.33		1882
TOTAL INTERNT.	3.90		0	252	555	3.90	8.58		12932

NSC RATE = THE NUMBER OF DEATHS PLUS THE NUMBER OF AW'S PER 100 EMPLOYEES WORKING FOR ONE YEAR.

AW'S = INJURIES THAT REQUIRE TIME AWAY FROM WORK EXCLUDING THE DAY OF INJURY.

RC'S = ALL INJURIES REQUIRING AT LEAST MEDICAL TREATMENT i.e. DEATHS + AW'S + RESTRICTED ACTIVITY + ALL OTHER INJURIES REQUIRING PROFESSIONAL MEDICAL TREATMENT BUT NOT INCLUDING FIRST AID CASES.

SL 103643

PPG INDUSTRIES, INC. RECORDABLE WORK INJURY AND ILLNESS REPORT
 DECEMBER 1986
 CANADIAN OPERATIONS ONLY

ALL TIME CANADIAN RECORDS
 DAYS:
 HOURS

	1986										1986							
	NSC RATE YTD	NSC RATE GOAL	DTHS	AW	RA	CASES YTD LW	TOT NF	TOT FC	***** AW	OCHA RA	INCIDENCE LW	***** NF	***** RC	1986 RATE GOAL	AW DAYS YTD	AW+RA DAYS YTD	AW CASES THIS MO.	WORK HOURS YTD (000)
GLASS GROUP																		
PRIMARY MFG.																		
WKS 84 OWEN SND	0.00	0.25	0	0	1	1	28	29	0.00	0.23	0.23	6.57	6.81	5.51	0	5	0	852
CP&D MFG.																		
CAN. ARCH. MTLs	0.47	0.00	0	1	0	1	6	7	0.47	0.00	0.47	2.80	3.27	1.68	40	40	0	428
AUTO OEM MFG.																		
WKS.80 OSHAWA	0.23	0.32	0	1	15	16	8	24	0.23	3.41	3.64	1.82	5.46	7.70	48	152	0	879
WKS.81 HAWKSBURY	0.00	0.29	0	0	7	7	21	28	0.00	1.90	1.90	5.69	7.59	5.44	0	74	0	738
TOTAL CAN. MFG.	0.14	0.25	0	2	23	25	63	88	0.14	1.59	1.73	4.35	6.08	5.68	88	271	0	2897
SALES/DIST/ADMIN.																		
CP&D																		
CAN. BRANCHES	2.42	0.88	0	11	4	15	11	26	2.42	0.88	3.30	2.42	5.71	3.95	232	263	1	910
CAN. CCG	1.67	0.78	0	1	0	1	3	4	1.67	0.00	1.67	5.00	6.67	4.69	0	0	1	120
ARG																		
CAN ARG	0.00	0.00	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	1.67	0	0	0	28
CAN. G.O.	0.85	0.00	0	1	0	1	0	1	0.85	0.00	0.85	0.00	0.85	0.00	1	1	0	234
TOTAL SLS/DST/ADM	2.01	0.70	0	13	4	17	14	31	2.01	0.62	2.63	2.17	4.80	3.65	253	264	2	1292
TOTAL CAN. GLASS	0.72	0.42	0	15	27	42	77	119	0.72	1.29	2.01	3.68	5.68	4.92	321	535	2	4189

CHEMICALS GROUP																		
MANUFACTURING																		
KALIUM	0.00	0.00	0	0	0	0	1	1	0.00	0.00	0.00	0.55	0.55	1.00	0	0	0	362
PPG CANADA	0.50	0.00	0	1	4	5	4	9	0.50	2.00	2.50	2.00	4.50	1.41	201	265	0	400
TOTAL MFG.	0.26	0.00	0	1	4	5	5	10	0.26	1.05	1.31	1.31	2.62	1.21	201	265	0	762
TOTAL CHEM. GROUP	0.26	0.00	0	1	4	5	5	10	0.26	1.05	1.31	1.31	2.62	1.21	201	265	0	762

DTHS=DEATHS AW=AWAY FROM WORK RA=RESTRICTED ACTIVITY LW=LOST WORK DAY
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SL 103644

PPG INDUSTRIES, INC. RECORDABLE WORK INJURY AND ILLNESS REPORT
 DECEMBER 1986
 CANADIAN OPERATIONS ONLY

ALL TIME CANADIAN RECORDS
 DAYS:
 HOURS:

	1986		OSHA CASES YTD						OSHA INCIDENCE						1986		AW	AW+RA	AW	WORK
	NSC	NSC	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	RC				
	RATE	RATE	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	RATE	LOST	LOST	THIS	YTD	
	YTD	GOAL	DTHS	AW	RA	LW	NF	RC	AW	RA	LW	NF	RC	GOAL	YTD	YTD	MO.	(000)		
C&R GROUP																				
C&R MANUF.																				
CLARKSON	0.78	0.00	0	3	5	8	9	17	0.78	1.29	2.07	2.33	4.39	0.79	223	324	0	774		
TORONTO	0.78	0.00	0	1	1	2	5	7	0.78	0.78	1.56	3.89	5.45	1.54	13	47	0	257		
TOTAL C&R MFG.	0.78	0.00	0	4	6	10	14	24	0.78	1.16	1.94	2.72	4.66	0.98	236	371	0	1031		
I/A MFG.																				
BOWERS (CAN)	0.00	0.00	0	0	1	1	0	1	0.00	1.16	1.16	0.00	1.16	2.41	0	5	0	172		
TOTAL MFG.	0.67	0.00	0	4	7	11	14	25	0.67	1.16	1.83	2.33	4.16	1.18	236	376	0	1203		
SALES/DIST/ADMIN.																				
TRADE																				
CANADIAN REGION	0.00	0.00	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	96		
DIST.																				
DIST. CENT. CAN	0.00	0.00	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	4.76	0	0	0	12		
TOTAL SLS/DST/ADM	0.00	0.00	0	0	0	0	0	0	0.00	0.00	0.00	0.00	0.00	1.20	0	0	0	108		
TOTAL C&R GROUP	0.61	0.00	0	4	7	11	14	25	0.61	1.07	1.63	2.14	3.81	1.19	236	376	0	1311		

TOTAL CAN. MFG.	0.29	0.14	0	7	34	41	82	123	0.29	1.40	1.69	3.37	5.06	1.62	525	912	0	4862		
TOTAL CAN. R&D	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
TOTAL CAN. SL/D/AD	1.86	1.11	0	13	4	17	14	31	1.86	0.57	2.43	2.00	4.43	5.78	233	264	2	1400		
TOTAL CAN. OPER.	0.64	0.71	0	20	38	58	96	154	0.64	1.21	1.85	3.07	4.92	4.82	758	1176	2	6262		

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SL 103645