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FROM: T. G. Grumbles
DATE: November 1, 1991

VISTA

Interoffice Communication

SUBJ: HEALTH AND SAFETY AUDIT PROCESS UPDATE

The final comments on the process have been received from Harry Garrison and we have completed revisions. I have attached the revised administrative section and a sample audit module.

Significant changes from the initial draft include:

1. Audit frequency - all plants will be done every 2 years with a limited self-audit in the off years.

2. Scoring - there will be "partial credit" awarded to most module questions if warranted. Those questions that are all or none are indicated.

3. Modules - the regulatory citations applicable to individual module questions have been added in the left hand column. The absence of citation does not necessarily indicate the question is non regulatory because some questions could not be linked to specific citation.

The next step in the process is to field test the process with an actual location audit. Tom Huffman will be scheduling an audit in the near future.

T. G. Grumbles

dlj
.357
Attachment
Distribution: SAFETY DIRECTORS

Bruce Trego-Aber, Brent White-Balt, George Williams-Blane, Matt Tonkovich-Hmd, K. L. Fogg-LCCP, R. V. Gantz-LCLAB, Mike Lunsford-LCVCM, Chris Markerson-Okc, Greg Lipps-Premiere, R. B. Martin-Austin, J. R. Drumwright, J. G. Farrier, L. L. Zimmerman

PLANT MANAGERS

R. W. Seymour-Aber, L. R. Bauer-Balt, G. D. Williams-Blane, J. Pavao-Hmd, J. Friend-LCCP, J. W. Ware-LCLAB, P. Carrico-LCVCM, H. D. Garrison-Okc, P. L. Foote-Prem, V. W. Weiss-Austin

T. H. Huffman, R. D. Gamblin

VISTA CHEMICAL COMPANY
MANUFACTURING DEPARTMENT

SAFETY AND HEALTH PROGRAM AUDIT SYSTEM

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PREFACE

The Safety and Health Program Audit System is a tool which allows management to measure the continued improvement of their Safety and Health programs in a way that is both quantifiable and repeatable. The system was designed to provide an objective assessment of the elements in a safety and health program. This Audit System utilizes teams composed of personnel from other company locations to review safety and health programs at other plants to achieve a third party perspective.

I. INTRODUCTION

A. Purpose

The purpose of the Safety and Health Program Audit System is to help identify areas of a plant's Safety and health programs and procedures which are in need of improvement. It is also the purpose of the System to assist plants in finding deficiencies in their efforts to comply with safety and health regulations. Another purpose of the system is to provide management with a quantitative tool to measure the improvement progress of their Safety and Health Programs. It is not the purpose of this system to provide recommendations of how to make the needed improvements. Although every attempt has been made to ensure the audit system is as comprehensive as possible, it should be understood that a "perfect score" does not guarantee absolute compliance with all aspects of governmental regulations. The results will provide a thorough assessment of overall compliance with the regulations covered in the audit process. This audit should supplement internal self-auditing efforts.

B. Scope

The Safety and Health Program Audit System Covers the safety and health programs, and associated procedures, of Vista Chemical Company's manufacturing and R&D locations. Although a strong emphasis is placed on it, regulatory compliance is not the only element covered by the Audit System. There are elements of safety and health programs which are important to all locations that are not covered by governmental regulations.

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There could be site specific programs, beneficial only to that location, which are not driven by regulation. Unless the program/procedure is applicable to more than one location, or it is covered by regulatory requirements, it will not be considered within the scope of this audit system.

C. Application

The Audit System applies to all Vista Chemical Company manufacturing locations. Except for administration of the Audit System, the Audit System does not apply to non-manufacturing sites such as the Houston office, ex-plant sites, and sales offices. In general the Audit System applies to the following locations:

- Aberdeen Polymers Plant
- Austin Research and Development
- Baltimore Chemical Plant
- Hammond Chemical Plant
- Lake Charles Chemical Plant
- Lake Charles LAB Plant
- Lake Charles VCM Plant
- Oklahoma City PVC Plant, and

Since Audit Modules cover specific safety and health subjects, some modules will not be applicable to all locations. A listing of the Audit Modules can be found in Appendix A. The applicability of the audit modules to the individual plants will be determined prior to the plant audit by the audit team leader.

II. PROGRAM ADMINISTRATION

A. Administrator

The General Manager of Manufacturing will be the Administrator of the Safety and Health Program Audit System. The administrator will ensure that all elements of the Audit System are conducted, and will track the progress of corrective actions resulting from the audits.

B. Responsibilities

1. Administrator

The Audit System Administrator will be responsible for overall Audit System administration.

2. Plant Managers

The Plant Managers will be responsible for selecting audit team participants from their plants that will participate on audit teams at other plants; ensuring that required materials are prepared prior to plant audits; and ensuring that a plan of action is developed for addressing audit results.

3. Safety Directors

The Safety Directors will be responsible for training auditors who are selected from their plants; coordinating and facilitating efforts of the audit team at their plant; and providing audit team safety orientation.

4. Auditors

The auditors are responsible for reviewing material prepared for them prior to the audit; participating in the audits; and communicating audit findings and audit system suggestions to the audit team leader.

C. Audit Modules

1. Description

Audit modules are the basic tools the auditor will use while conducting the audit. The modules consist of a brief descriptive paragraph that tells what the module covers; a list of the governmental regulations or other standards that are applicable to the module's subject; and a series of questions. Each question is assigned a point value and the type of verification that would be required (I.e. review of documentation, field verification, or employee

interview). A regulatory citation, where applicable, is given in the left hand column.

2. Module Development, Review and Update

To ensure that the audit system continues to properly serve its intended purpose, new audit modules will need to be developed and existing modules will need to be reviewed and updated. This section outlines the process of audit module development, review, and update.

a. On an annual basis an ad-hoc committee of safety and health professionals appointed by the Administrator will coordinate the review and update process. This committee will have the following functions:

- review audit modules and comments generated during the audit process;
- update modules as needed;
- determine the need for the development of new audit modules;
- set assignments for the review, update and development of audit modules;
- make recommendations, to the System Administrator, covering ways to improve the audit system.

b. Audit modules will be reviewed annually. Suggestions from past audits will be considered during the review process. The modules will be reviewed to ensure that they keep pace with standard industry practices as well as changing regulations.

c. New modules will be developed as needed to cover new governmental regulations and the company's efforts to continually improve the various plant safety and health programs.

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D. Audit Schedules and Audit Frequencies

1. Audit Schedule

Prior to the beginning of each fiscal year, the System Administrator will develop and distribute the audit schedule. The audit schedule will contain:

- the name of the locations to be audited;
- the number of auditors that will be needed to audit each location;
- the expected length of the audit (in calendar days); and
- the month in which the audit will occur (the exact dates of the audit will be determined jointly by the audit team leader and the management of the location to be audited).

2. Frequency of Audits

Each location shall receive a full audit at least every two years. This frequency may be modified as requested by a location and/or determined by the Audit Administrator.

In the non-audit year, the locations will perform a self-audit, utilizing the audit system modules, on specific modules of emphasis. These modules will be determined by the plant in the full audit action plan that is required to be sent to the Audit Administrator.

E. Audit Team Selection and Membership

Along with the annual audit schedule, the System Administrator will send out an auditor list. The list will contain the following:

- the name of the audit team leader for each location; and VVV 000008036
- the name of the locations that will furnish auditors to assist each team leader.

Audit team members will be selected by their Plant Manager. The selection will be communicated to the System Administrator within one month after the audit schedule is published.

F. Audit Report

1. **Once the audit is complete, the team leader will review the audit modules and check for errors in scoring. The team leader will then generate an audit report.**

2. **The format of the audit report will be as follows:**

   - **Cover Letter**

     The cover letter will be a brief summary of the audit that was conducted. It will not contain a discussion of the audit findings but will address items relative to audit administration and conduct at the site.

   - **Numerical Summary of Audit Findings**

     In this section of the report, the scores of the audit modules will be presented in the form of a table (see Appendix B for illustration).

   - **Graphical Representation of Audit Findings**

     The audit findings will also be displayed in the form of a bar graph (see Appendix C for illustration).

   - **Comments**

     This section of the report will be for comments about how the audit system worked at the location that was audited. It will cover ways to make future audits of the location more efficient.

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- Audit Modules

  A copy of the audit modules used during the audit will be attached to the audit report.

3. The audit team will be given the opportunity to review and comment on the audit report.

4. The finished audit report will be sent to the Plant Manager. Copies of the report will be sent to the System Administrator and Safety Director of the location that was audited.

5. The final audit report must be completed no later than one month after the completion of the audit.

G. Audit Findings and Corrective Actions

After receiving the audit report, the Plant Manager will ensure that a written plan of action to address audit results is developed. The Plant Manager will include in the plan of action a time table for implementation, and the specific modules that will be included in the self-audit the following year. This plan of action should be sent to the System Administrator and reported on quarterly until all items have been addressed.

H. Auditor Training

1. The Safety Directors will train the auditors who are employed at their location. This training will cover:

   - the purpose, scope, and application of the audit system;

   - the administration and process of the audit system;

   - how an audit is conducted (from opening conference to closing conference); and

- how to audit a program (including how to review documentation, perform field verification, interviewing employees, and scoring).

Overheads for this training are available through the System Administrator.

2. The auditors will receive refresher training after arriving at the audit location. The refresher training will be given by the audit team leader.

III. CONDUCTING THE AUDIT

A. Audit Preparation

1. The audit team leader will set on-site team assignments for the audit. The team leader will prepare an agenda for the audit and send it to each team member, and the Plant Manager and Safety Director of the location to be audited.

2. The team leader may request certain specific written programs or procedures to be sent for review prior to the audit. This request will be limited in scope to those programs deemed necessary by the team leader. These documents will be reviewed prior to the audit to save time during the on-site audit.

3. The plant should assemble the documentation needed for the audit, set up conference rooms, and as needed set up meeting times with plant personnel. Insofar as possible, these actions should be taken prior to the beginning of the audit.

4. Prior to the audit each team member will receive a copy of the audit manual. They should review the manual and any other documentation sent to them by the audit team leader. Any questions they have concerning the material should be directed to their team leader or the Safety Director at their location.

B. Opening Conference

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Prior to the start of the plant audit, there will be an opening conference. The purpose of this meeting will be to introduce the audit team members to plant personnel, review the scope of the audit, discuss employee interview "ground-

rules", and to discuss the agenda for the audit. This meeting should be attended by the audit team members, the Plant Manager, Safety Director, and other plant personnel as necessary.

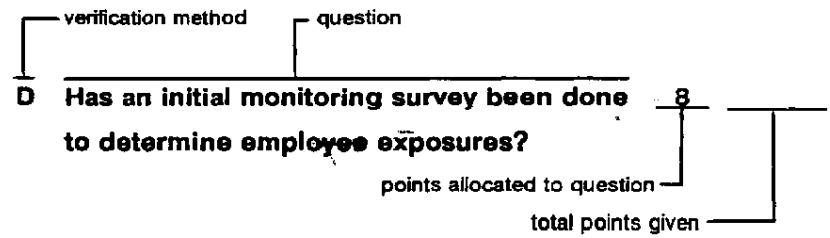
C. Program and Procedure Audit

1. Questioning

To conduct the questioning portion of the audit, the auditor simply needs to ask the questions from the audit module. If the answer is "No", the auditor will record the answer. If the answer is "Yes", the auditor will try to verify the answer using the verification method indicated to the left of the written question. The verification methods and their abbreviations are:

F - Field verification
I - Employee Interview
D - Review of documentation

Example: If the question and verification appear in the audit module as follows:



the auditor knows to verify a "Yes" answer by reviewing documentation (or records) which document that the survey was performed.

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2. Not Applicable Questions

If a question is determined to be not applicable, the auditor will mark the question with an "NA" in the points scored blank for the question. "NA" questions will be eliminated from the total points available.

3. **Written Program/Procedure Review**

Some questions which are verified by review of documentation cover the content of written programs. These questions can be answered by comparing the questions to the written program. If the written program contains the required element, the question can be answered "Yes". These questions should be answered ahead of time if the auditor is furnished with the written program prior to the audit.

4. **Documentation Review**

There are other audit questions which also require review of documentation. Employee exposure notification memos, monitoring survey reports, training records, etc. are examples of other documentation that may be used to verify "Yes" answers. In reviewing documentation it is important to realize that thorough reading of all documentation is a very time consuming activity. Therefore the auditor should remember a few basic time saving techniques for reviewing documentation:

a. reports which document specific events should be skimmed for general content and conclusions, and not necessarily read completely;

b. random selection of representative records is an appropriate way to review documentation such as employee exposure records, employee exposure notifications, and most training records;

c. on certifications, the auditor should look for the title of the certificate and any seals, equipment numbers, employee names, or other key items that can be used to determine acceptability of the "certificate of proof".

5. **Field Verifications**

Some audit questions require field verification. This means that if the question is answered "Yes", the auditor will need to verify the answer by observations made in the plant. For example, if the question appears in the audit module as follows:

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F Insofar as possible, are crane booms lowered (or the load line anchored to a substantial structure, such as a stanchion) when the operator is not at the controls? 2 _____

The auditor will note if crane booms are lowered when the operator is not at the controls during time spent in the plant areas.

If field verification is not possible, employee interviews may be needed to verify a "yes" answer. This may be the case for the above example question if cranes are not present during the audit.

When making field verifications it is not necessary to look at everything in the field that is covered by the question. Spot checking or random selection are acceptable methods of field verification.

6. Employee Interviews

The last form of verification is employee interviews. This means that the auditor will need to talk to plant employees to verify a "Yes" answer. As with review of documentation and field verification, employee interviews will be performed in a random or as-needed manner. In other words, it is possible, and preferable, to make the verification by talking to a few employees. Talking to all or a large group of employees is not necessary. The "ground-rules" and plans for employee interviews should be reviewed in detail during the opening conference.

When interviewing an employee, the auditor should not simply read off the question as it appears in the audit manual. For example, a "yes" answer given by an employee to the following question may not give the whole story.

I Are employees trained prior to assignment to a job that requires respirator use? 4 _____

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Instead, the auditor should either:

a. reword the question so that it forces the employee to tell what he or she knows about the subject;

   Example: Ask the employee "Have you been trained to use the breathing air masks at the plant, if so when were you first trained?

b. ask a series of questions about the subject matter to obtain an understanding of the employees knowledge;

   Example: Ask the employee "What do you have to do when you put on a breathing air mask?"; "When do you wear the mask?"; "Why should you always check the fit of the mask just after you put it on?"; and "What are the limitations on this mask?".

c. have the employee describe a safety procedure or job task and see if the employee gives the information needed to make the proper verification.

   Example: Ask the employee to describe how to use and care for a breathing air mask; how to put it on; and what its limitations are. Or, ask the employee to describe the precautions that should be taken when first opening a process line that has been in [chemical] service, and listen to see if the employee mentions respiratory protection.

7. Uncertainty and Interpretation

When uncertainty exists, the auditor may choose to turn to the regulation which covers the subject matter. The team leader should be consulted if there is no regulation or if the regulation does not address the uncertainty. If the auditors are in need of an interpretation, they should consult their team leader. In either case (uncertainty or need for interpretation), the auditors should make notes of what created the uncertainty and/or need for interpretation, and give the information to their team leaders. These items should then be passed on to the Audit System Administrator to be considered during the review and update process.

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8. Time Constraints and Difficulty Verifying Answers

Since each auditor is different, the time needed to perform a given procedure audit will very from auditor to auditor. Although it is preferable to verify as many "yes" answers as possible, it is not always practical. In situations where time is a constraining factor, the auditor should verify as many questions as time permits. Questions that are not verified should be marked as such by writing "not verified" beside the points blank. The auditor should use professional judgement during the answering of questions to determine which questions would be more important to verify. For example, if the auditor believes, based on information from the questioning process, that a program element is not in place, he/she would place a higher priority on verifying questions which cover that program element.

There will also be questions which cannot be verified for a variety of reasons (i.e. "There are no cranes on site now", "We don't have any jobs going on now that require respirators", etc.). If the verification method listed for the question is difficult, or cannot be used at the time of the audit, the auditor should try to verify using another method. For example, if field verification is required for a question over the operation of a crane and no crane is in the plant at the time of the audit, the auditor could verify the answer with employee interviews. If no verification can be made, the auditor should mark the question as "not verified" and continue with the audit.

D. Audit Scoring

One of the keys to the Safety and Health Program Audit System is that it provides a way to measure program improvement quantitatively. The quantification is provided through the scoring of audit questions and audit modules.

1. Yes-No Questions

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The simplest scoring is that of Yes-No questions. If the answer to one of these questions is verified as "yes", the total available points should be recorded in the points blank to the right of the question. If the answer to the question is "no", no points or a "0" should be recorded in the blank. Most of the questions in the audit are Yes-No questions. An example of a Yes-No question is:

D Does the plant have a written hazard communication program? 10 ___

Partial credit may be available for some questions. See No. 3 below.

2. Multiple Part Questions

Multiple part questions are questions for which there is more than one piece to the program element. There are two types of multiple part questions. The first type is where each part is assigned a point value. for example:

D Does the program contain: ___ ___

a. specific responsibilities for labeling 2

b. procedures for obtaining MSDS's 2

c. approval of purchased products by the Safety Department? 2

To score this type of multiple part question, the auditor should treat each part as a separate Yes-No question.

If only one point value is assigned, then all parts listed under the question must be in place to receive points for the question

3. Partial Credit Scoring

Many of the yes/no questions lend themselves to partial credit scoring. Unless the question is marked with an [A] designation after the question this is the case. If the [A] designation is present, this signifies that the scoring is "all or none".

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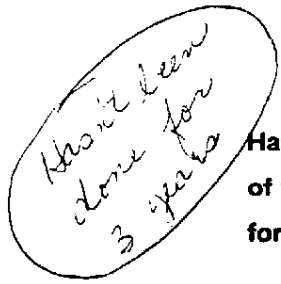
Partial credit scoring should be accompanied by notes on those elements to indicate the reason for the partial score. Although the partial score is a professional judgement these notes will assist in achieving consistency of

scoring from year to year. These notes will be made available as part of the audit report and will be available to the next audit team. Examples are below:

	Points Available	Points Received
Does the plant have a written hazard communication program? [A]	10	10

This question can only be scored with 10 points.



	Points Available	Points Received
Has there been a documented determination of the face/or capture velocities required for the local exhaust systems?	2	1

Partial credit is awarded with a note regarding the auditors judgement.

4. Audit Modules

To score an audit module, the auditor will need to first add the total number of points scored on each question in the module. Next, the auditor will need to take the total possible points for the module and subtract out points allocated to questions which were marked as not applicable. Both the points scored and possible points will be recorded on the front page of the audit module.

E. Closing Conference

1. Audit Team

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Once the audit is complete, the team members will assemble to have a final team meeting. The purpose of the meeting will be for team members to give their completed audit modules to the team leader and pass on any other information which the team leader may need during the write up the audit report. The team members will also give their impressions of the programs

in the plant. These impressions will not be put in the audit report, but could be of benefit to the plant when determining corrective actions.

2. Audit Team and Plant Staff

The last thing to take place during the actual audit will be the closing conference. This conference should be attended by the audit team members, the Plant Manager, the Safety Director, and other plant personnel as desired. During the closing conference the team leader will give the preliminary scores of the audit modules, inform the plant personnel of the impressions the team developed about various programs and procedures, and let the plant know what may help future audits of the location progress more efficiently. Feedback regarding the audit process should also be solicited from the audit site at this time.

F. Team Recommendations for Improving the System

After the audit, audit team members will write up a list of suggestions they have for the audit system and individual audit modules. This should be completed prior to the team leaving the location to assure items are not forgotten. The audit team leader will forward the lists to the Audit System Administrator.

IV. APPENDICES

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APPENDIX A

LIST OF MODULES

ACCESS TO EMPLOYEE EXPOSURE AND MEDICAL RECORDS
ACCIDENT INVESTIGATION
ASBESTOS SAFETY
CONTRACTOR SAFETY
CONTROL OF HAZARDOUS ENERGY
CRANE AND LIFTING SAFETY
ELECTRICAL WORK PRACTICES
EMERGENCY RESPONSE
ETHYLENE OXIDE
FIRE PROTECTION
FIRST AID
GENERAL SAFETY PROMOTIONS
GENERAL SAFETY RULES
HAZARD COMMUNICATION
HAZWOPER
HEALTH HAZARD IDENTIFICATION AND CONTROL
LABORATORY SAFETY AND HEALTH MANUALS
LEADERSHIP AND ADMINISTRATION
MECHANICAL SAFETY
OCCUPATIONAL BENZENE EXPOSURE
OCCUPATIONAL LEAD EXPOSURE
OCCUPATIONAL NOISE EXPOSURE
RADIATION SAFETY
RECORDKEEPING
RESPIRATORY PROTECTION
SAFETY AND HEALTH TRAINING
SAFETY CONTROL PERMITS
VENTILATION
VINYL CHLORIDE
WALKING/WORKING SURFACES

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APPENDIX B

SAMPLE AUDIT FINDINGS SCORECARD

SAFETY AND HEALTH PROGRAM AUDIT
VISTA PROCESSING PLANT

Audit Findings

Program/Procedure	Points Scored	Points Possible
Safety Subjects		
Safety Control Permitting	121	300
Emergency Response	175	200
Hazwoper	32	100
Safety and Health Training	56	100
General Safety Promotions	50	50
Laboratory Safety and Health	10	50
Electrical Safety	45	100
Walking/Working Surfaces	57	100
Mechanical Safety	132	250
Material Handling	50	100
Accident Investigation	75	100
Fire Protection and Training	102	250
Contractor Safety	33	100
General Safety Rules	85	100
Process Safety	23	300
Crane Safety	112	150
First Aid	21	50
Leadership and Administration	50	50
Lockout/Tagout	53	100
Health Subjects		
Radiation	45	50
Hearing Conservation	40	50
Lighting and Ventilation	40	50
Lead Safety and Health	73	100
Asbestos Safety and Health	92	100
Medical and Exposure Records	48	50
Health Hazard Identification and Eval.	45	100
Hazard Communication	108	150
Respiratory Protection	78	100
Vinyl Chloride Safety and Health	Not applicable to this location. VVV 000008049	
Benzene Safety and Health		
Ethylene Oxide Safety and Health		

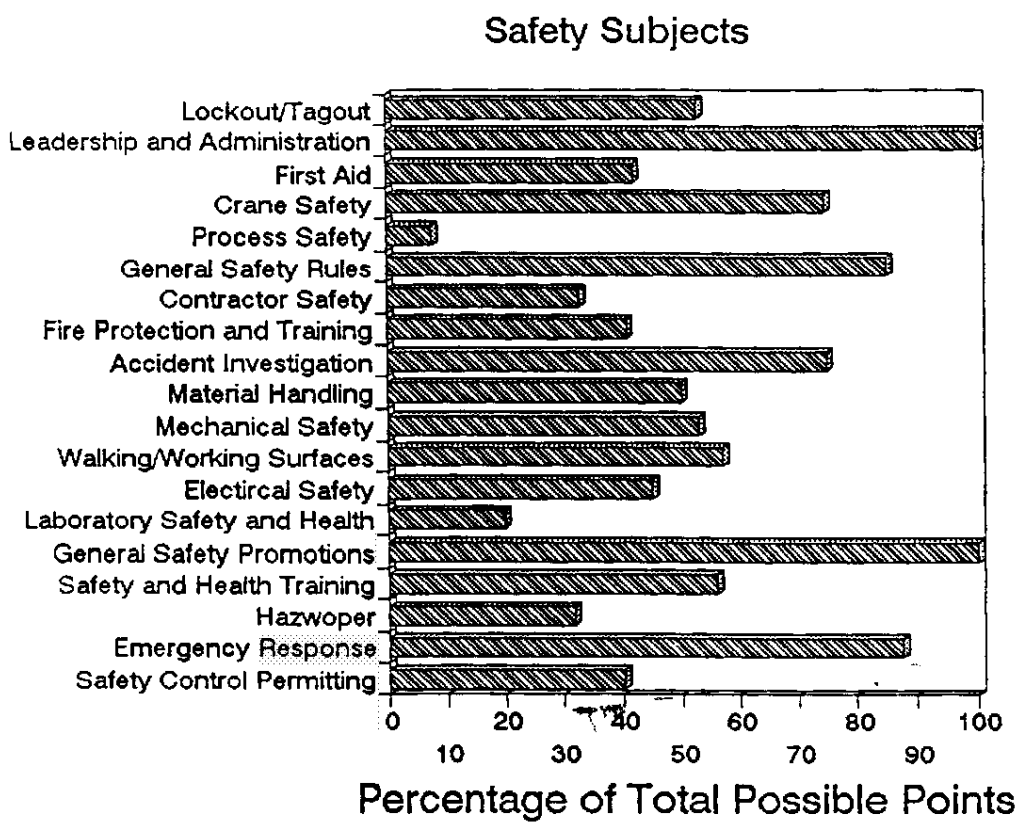
Summary Score _____ _____

APPENDIX C

SAMPLE AUDIT FINDINGS BAR GRAFT

SAFETY AND HEALTH PROGRAM AUDIT

Vista Processing Plant



OCCUPATIONAL BENZENE EXPOSURE

SCOPE

This audit module covers items necessary to assess compliance with the Federal OSHA Benzene Standard. It includes items specific to exposure monitoring, exposure controls, employee training, medical surveillance and recordkeeping.

APPLICABLE REGULATIONS/STANDARDS

OSHA 29 CFR 1910.1028

TOTAL MODULE POINTS	182
TOTAL APPLICABLE POINTS	____
TOTAL POINTS SCORED	____

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OCCUPATIONAL BENZENE EXPOSURE			
VERIFICATION		POINTS AVAILABLE	POINTS RECEIVED
	REGULATED AREAS		
D (d)(1)	1. Has a determination of the need for regulated areas been made?	4	
DI (d)(2)	2. If regulated areas exist, is access limited to authorized personnel.	2	
F (d)(3)	3. Are regulated areas clearly demarcated? (Note methods:_____)	4	
F (j)(1)(i)	4. Are regulated area entrances signposted: "Danger, benzene, cancer hazard. Flammable, no smoking, authorized personnel only, respirator required"?	4	
	MONITORING		
D (e)(2)(i)	5. Has an initial monitoring survey been done to determine employee exposures?	8	
DI (e)(1)(ii)	6. Were all job classifications potentially exposed evaluated?	4	
D (k)(1)(i)	7. Is the initial determination documented and readily available?	4	
D (e)(1)(iii)	8. Did the initial determination include short-term (15-minute TWA) monitoring?	4	
D (e)(3)(i) and (ii)	9. If the initial determination indicated the need for additional monitoring has it been done?	4	
D (e)(4)(ii)	10. If periodic monitoring was done and has been stopped, is the determination documented.	4	
DI (e)(5)	11. Is determination of employee exposure done whenever there has been changes in production, process control equipment, or work practices occurred since the initial determination?	1	
D (e)(5)(ii)	12. Does the benzene safety and health plan require monitoring be done after cleanup of leaks, spills, or other events resulting in unusual exposure conditions?	4	
D (e)(6)	13. Is monitoring and analysis accurate to a confidence level of 95 percent, to within plus or minus 25 percent for airborne concentrations of benzene?	4	
D (e)(7)	14. Are employees notified of the monitoring results?	4	

VERIFICATION		POINTS AVAILABLE	POINTS RECEIVED
D (e)(7)(i)	15. Are employee notifications done within 15 days of results?	2	
D	16. Does the notification include:		
(k)(1)(ii)(A)	a. Time and date of monitoring?	1	
(k)(1)(ii)(A)	b. Results?	1	
(e)(7)(ii)	c. Any corrective actions to be taken?	1	
	METHODS OF COMPLIANCE		
FI (f)(1)(i) and (ii)	17. Are engineering controls in place to control recognized exposure sources?	6	
D (f)(2)(i)	18. If exposures have exceeded 1.0 ppm 8-hour TWA or 5.0 ppm TWA STEL has a compliance program been developed?	8	
D	19. Does the program include:		
(f)(2)(ii)	a. Schedule of (or history of) development and implementation of engineering and work practice controls.	4	
(f)(2)(ii)	b. Has the plan been updated regularly?	4	
	COMMUNICATION		
D (j)(1)(ii)	20. Have all containers containing greater than 0.1% of benzene been identified?	4	
F ((j)(1)(ii)	21. Are all containers containing greater than 0.1% of benzene labeled: "Danger, Contains Benzene, Cancer Hazard"?	4	
FI (j)(2)	22. Are Material Safety Data Sheets for Benzene available to employees?	4	
	RESPIRATORY PROTECTION		
I (g)(1)	23. Are respirators provided, at no cost, to personnel who may be exposed to Benzene in excess of the PEL's, and is respirator use assured when required?	4	
D (g)(2)(ii)	24. Do the respirators meet the appropriate selection criteria for the concentrations encountered?	2	
NOTE: The following question is applicable only if air-purifying respirators are used.			
FI	25. Are air-purifying respirator cartridges replaced at the end of the service-life indicated or the beginning of each shift in which they will be used, whichever comes first?	2	

VERIFICATION		POINTS AVAILABLE	POINTS RECEIVED
	PROTECTIVE CLOTHING		
F (h)	26. Is protective clothing suitable for protection against benzene provided, at no cost to employees, for use in situations where eye or skin contact with benzene may be encountered and is it's use assured when required?	5	
D	27. Was the choice of clothing material documented for protection against benzene?	2	
	MEDICAL SURVEILLANCE		
DI (i)(1)	28. Has medical surveillance been made available to personnel exposed to benzene?	4	
(i)(3)(i)	29. Are physical examinations offered annually for those employees exposed at or above the action level for 30 or more days a year or above the PEL for 10 days a year?	2	
	30. Does the exam offered include:		
	a. Occupational history?	2	
(i)(3)(i)(B)	b. Complete blood count?	2	
(i)(3)(i)(c)	c. Additional medical tests determined to be necessary by the supervising physician?	2	
(i)(6)	31. Is information made available to the examining physician that includes:		
(i)(6)(i)	a. Copy of the regulation and it's appendices?	2	
(I)(6)(ii)	b. A description of the employees duties as they relate to exposure?	2	
(i)(6)(iii)	c. Employee's exposure level(s)?	2	
(i)(6)(iv)	d. A description of personal protective equipment used or to be used?	2	
(i)(6)(v)	e. Applicable medical information from previous employment?	2	
(i)(7)(i)	32. Are written physician opinions received within 15 days of the examination?	2	
(i)(7)(I)	33. Are these statements provided to the employees?	2	
(i)(4)(i-iv)	34. Is there a written program and protocol for offering emergency examinations?	2	

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VERIFICATION		POINTS AVAILABLE	POINTS RECEIVED
	INFORMATION AND TRAINING		
D (j)(3)	35. Is a benzene training program provided to all employees potentially exposed to benzene?	4	
I (j)(3)(i)	36. Is the training provided to new employees prior to their initial assignment?	2	
DI (j)(3)(i)	37. Is training provided annually to employees exposed at or above the action level?	2	
D	38. Are records kept of the training?	2	
D	39. Do the records include:		
	a. The date, time, and content of the training?	2	
	b. Identification of the trainer?	2	
	c. Record of employee attendance?	2	
D	40. Does the training include:		
(j)(3)(A)	a. An explanation of the standard and it's appendices?	2	
(j)(3)(B)	b. Description of the medical surveillance program?	2	
(j)(3)(ii)	c. Health and physical hazards of benzene?	2	
	RECORDKEEPING		
D (k)(1)(i-iii)	41. Are records of exposure measurements maintained for at least 30 years?	2	
D	42. Do the records contain:		
(k)(1)(ii)(A)	a. Date?	1	
(k)(1)(ii)(A)	b. Sample number?	1	
(k)(1)(ii)(A)	c. Duration?	1	
(k)(1)(ii)(A)	d. Results?	1	
(k)(1)(ii)(B)	e. Description of sampling and analytical method used?	1	
(k)(1)(ii)(C)	f. Description of respirators worn, if any?	1	
(k)(1)(ii)(D)	g. Name, SS#, and job classifications the exposure is meant to represent?	1	

VERIFICATION		POINTS AVAILABLE	POINTS RECEIVED
D	43. Are the analytical results from any in-house analytical work kept for one year?	2	
D (k)(2)(i)	44. Are records of medical surveillance maintained for 30 years?	2	
D	45. Does the record include:		
(k)(2)(ii)(A)	a. Name and SS# of the employee?	1	
(k)(2)(ii)(B)	b. Copy of the physician's written opinions and recommendations including results of all medical exams and test?	1	
(k)(2)(ii)(C)	c. Any employee medical complaints related to benzene exposure?	1	
(k)(2)(ii)(D)	d. A copy of information provided to the physician?	1	
(k)(2)(ii)(E)	e. A copy of the employees medical and work history related to benzene exposure and other hematologic toxins?	1	
D	46. Are employees notified of the availability of the exposure monitoring and medical records?	1	

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