COMPOSITE STRUCTURES
Division of ALCOA COMPOSITES
801 ROYAL OAKS DRIVE
MONROVIA, CALIFORNIA 91016-3630
(818) 358-3211

ALCOA
COMPOSITES

October 10, 1994

K.L. Waechter
Alcoa Audit Leader
1501 Alcoa Building
Pittsburgh, PA 15219

Subject: **ALCOA CORPORATE AUDIT RESPONSE (MAY 4-6, 1994)**
SPECIAL SITUATIONS ACTION PLANS

Enclosed you will find a copy of Composite Structures Division "Action Plan" and responses to the Special Situations identified in the Alcoa Corporate Audit (May 4-6, 1994)

This "Action Plan" prepared by Composite Structures Division will correct any deficiencies identified by the Alcoa Corporate Audit during their review of the documentation and facilities at CSD.

If you have any questions after reviewing this data, or require any further clarification, please contact Greg Emanuelson at (818) 305-3237.

JO Hendricks

John O. Hendricks
Plant Manager of Composite Structures Division

PLAINTIFF'S
EXHIBIT
AL-1337

JH/kh

** Confidential **

Environmental Review

COMPOSITE STRUCTURES DIVISION Monrovia, California

RECEIVED
JUL - 6 1994
ENVIRONMENTAL HEALTH AND SAFETY DEPARTMENT

May 4 - 6, 1994

C60699 0131

** CONFIDENTIAL **

ENVIRONMENTAL REVIEW

COMPOSITE STRUCTURES DIVISION
MONROVIA, CALIFORNIA
MAY 04 - 06, 1994

Table of Contents

I. EXECUTIVE SUMMARY

II. INTRODUCTION

III. SPECIAL SITUATIONS

Air:
- SCAQMD Rule 109 Recordkeeping Requirements 1
- Permitted VOC and Emissions Limits 2
- Current Alternative Emissions Control Plan (AECP) Status 3
- Rule 1124 Compliant Materials Management 4
- Preventative Maintenance Program 5
- Evaluation of Reporting Requirements 6
- Asbestos Management Plan 7
- Ozone Depleting Chemical Management 8

Chemical Release:
- SARA Reporting 9

Facility Environmental Management:
- Facility Environmental Management Systems 10
- Environmental Reviews 12
- Environmental Training Documentation 13

Wastes: RCRA Hazardous/Industrial:
- Waste Minimization 14
- Waste Analysis 15
- Waste Facility Audits 16

Water / Wastewater:
- POTW Discharge 17
- Stormwater 19

IV. AUDIT SCORING SYSTEM SUMMARY

V. AUDITEE RESPONSE and ACTION PLAN – PREPARATION INSTRUCTIONS

** CONFIDENTIAL **

I. EXECUTIVE SUMMARY

Composite Structures has begun the development and implementation of a number of environmental management systems and has incorporated some environmental requirements into the location's operating plan and performance expectations. The Environmental staff has been increased from one professional to three full-time technicians and an EHS Manager. Many of the existing programs have been newly developed over the past four to six months. The audit findings indicate environmental management systems, at the facility, require further refinement and more line management accountability. The following is a summary of issues identified during the audit:

Composite Structures Division operates spray paint booths. Since the booths are not equipped with air pollution control systems, VOC emissions need to be controlled by limiting the solvent content of coatings applied and production scheduling. Daily limits for gallons of coatings and solvents applied to aerospace components and total pounds of VOC emitted from the facility have been exceeded on a number of occasions. In addition, the combined emissions limit for spray booths 3001 and 3030 were exceeded by a factor of two or more on more than five days during the first quarter of 1994. Composite Structures Division is currently generating emissions credits through a car crushing program to offset emissions from spray booths 3001 and 3030. However, these emissions offsets cannot be used until the credits have been received by the Agency.

Composite Structures Division does not have a Preventative Maintenance Program to ensure air pollution control equipment is maintained and operating in good working order. CSD intends to replace scrubber units in two process lines by the end of 1994. A review of the scrubbers' adequacy on chrome anodizing operations needs to be completed to ensure South Coast Air Quality Management District's (SCAQMD) Rule 1169 is being met.

Other air issues identified include the need for improvements to documentation procedures for calculating the allowable solvent content of coatings and improvements to CSD's Asbestos Management Plan to meet Alcoa requirements. An evaluation of self-reporting requirements for occasions when permit limits were exceeded or control equipment breakdowns occurred needs to be performed to ensure regulatory reporting requirements have been met.

Issues identified in the Chemical Release area focus on development of a system to ensure SARA 311 report updates are filed within the required timeframes and the evaluation of the SARA reporting requirements for off-site warehouse storage of raw materials.

I. EXECUTIVE SUMMARY
(continued)

CSD has put together a very effective drum management system that includes features such as, the use of color-coded drums, written procedures for waste segregation, accumulation, labeling and transportation, and development and distribution of a site-specific hazardous materials and waste handling handbook. Special situations identified in the Solid and Hazardous waste area focus on development of a waste analysis plan to document waste stream classification determinations and auditing of waste disposal facilities used for fluorescent and sodium vapor lamp management and antifreeze and battery recycling. Waste reduction plans need to be enhanced to ensure that waste reduction commitments made in the State's Source Reduction Plan and the facility's waste minimization NFI (Non Financial Indicators) are met.

A number of issues were identified in the Water area that indicate a need for system improvement. Currently, CSD does not use the required Combined Wastestream Formula (CWF) for waters discharged to the local sanitary authority. Use of the CWF may impact CSD's ability to comply with its discharge requirements. Mechanisms and procedures need to be developed to ensure permit amendments are applied for and obtained prior to any modifications or additions to the approved discharge. Current operations and discharges should be reviewed against the recently obtained sewer ordinance to ensure its requirements are met. CSD has recently filled the position of a Wastewater Treatment Plant Operator and are making a number of modifications to the system to address 1994 exceedances of the chromium limit for wastewater to the sanitary authority.

Recommendations regarding stormwater management focus on elimination of minor non-stormwater discharges and complete implementation of the Stormwater Pollution Prevention Plan.

Several of the special situations cited in this report require increased line management involvement and commitment to achieve final resolution. While support for the environmental program is evidenced by the addition of environmental resources to the program, there is a need for environmental conformance responsibility and ownership to be integrated further into the line management organization. A more concentrated effort is required to establish environmental responsibilities and to manage production priorities/processes to maintain conformance with environmental requirements.

The audit found that the environmental program at Composite Structures Division was satisfactory. The scoring summary is as follows:

Exceeds Requirements	1 %
Meets Requirements	57 %
Generally Meets Requirements	33 %
Requires Substantial Improvement	9 %

A subsequent audit will be scheduled in 1997.

II. INTRODUCTION

This report presents the findings of the environmental audit conducted at Composite Structures Division, Monrovia, California from May 04 - 06, 1994. The Audit Team consisted of Ozzie Wilkinson (Northwest Alloys), Jim Apicella (Warrick Operations), Paul Flaherty (Arthur D. Little, Inc.), and Karen Waechter (Environmental Audit - Pittsburgh). The audit covered the areas of Air, Water/Wastewater, Hazardous and Industrial Wastes, Toxic Substances/Land Management, Chemical Release, and Facility Environmental Management.

The audit findings are presented as "Special Situations" in Section III of the report. Special Situations are considered significant and require attention and response from the facility manager. A summary of the audit scoring system, scores for individual areas (e.g., Chemical Release, Air, etc.) and the overall audit score are presented graphically in Section IV of the report. Section V contains instructions and forms for the Auditee Response and Action Plans.

Facility Description and Environmental Background Information:

Composite Structures Division (CSD) is part of the Alcoa Composite Structures Business Unit and is located on approximately 400,000 square feet of property in Monrovia, California. The facility consists of two manufacturing buildings (14,000 and 211,00 sq. ft.) and an office building. Principal products include helicopter rotor blades and various control surfaces (e.g.; spoilers, panels) for aircrafts. Metals (aluminum and other metals and metal laminates) are sized and deburred in the machine shop. Parts are further processed through one of two process lines for degreasing, etching, chromic acid etching, chromic acid anodizing, and rinsing. Emissions from process lines are controlled by wet scrubbers. Adhesives and primers are applied, parts are assembled in a lay-up room and then autoclaved for adhesion. The assembled product is solvent-wiped and then painted prior to final inspection, packaging, and shipping. Solvent emissions from paint booth operations are controlled by limiting the solvent content of coatings. A four-stage particulate filter controls chrome/particulate emissions from two paint booths where chrome coatings are applied.

Process Chemicals (including acids, caustics, and additives) are stored in process tanks, sumps, and containers located throughout the production area. 1,1,1 Trichloroethane is stored in a 1,000 gallon aboveground storage tank.

CSD operates a chrome precipitation/reduction unit as well as a neutralization system for treatment of industrial wastewater. Both industrial and sanitary wastes are discharged to the Los Angeles County Sanitation District under an indirect discharge permit. Stormwater is discharged through two outfalls to the saw-pit wash drainage system which eventually discharges through the Whiter Narrows Reservoir and into the Los Angeles River.

** CONFIDENTIAL **

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division

May 4 - 6, 1994

AIR
Special Situation

SCAQMD Rule 109 Recordkeeping Requirements

Situation:

Composite Structures is required to keep daily records regarding the usage of materials that contain Volatile Organic Compounds (VOCs) such as paint, solvent, adhesive, and clean-up solvents under South Coast Air Quality Management District's (SCAQMD) Rule 109. These records are required to be retained on-site for at least two years. The Audit Team noted the following exceptions to Rule 109 requirements:

- Solvent clean-up or wash-up quantities are not tracked or recorded.
- Monitoring of the degreaser tank for 1,1,1 trichloroethane make-up was not performed prior to September, 1993. Recordkeeping requirements took effect in 1991.
- The records that are retained do not track all the parameters that are specified in the air permit conditions (e.g., daily gallon usages are not recorded).

Recommendation:

Review the recordkeeping requirements that are specified in Rule 109, other SCAQMD rules, and permit conditions. Develop and implement a procedure to ensure that the required records are being kept and are reviewed to ensure compliance on a regular basis.

CONFIDENTIAL

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division

May 4 - 6, 1994

AIR
Special Situation

SCAQMD Rule 109 Recordkeeping Requirements

Current Date: 9-29-94

Auditee Response and Action Plan:

SPECIAL SITUATION: SCAQMD Rule 109 Record Keeping Requirements

ACTION PLANS:

1. Establish a written policy and procedure on plant wide solvent use, clean-up and recordkeeping.
2. Establish a written policy and procedure on 1,1,1 Trichloroethane usage, recordkeeping and replacement (Brulin).
3. Investigate, develop, document all required permit conditions/rules.
4. Develop a written policy on review of rules/regulations.
5. Progressively implement as policies and procedures are developed.

ESTIMATED COMPLETION DATE:

1. Solvent use, clean-up and record keeping policy is to be drafted by December 15, 1994 and implemented by February 15, 1995.
2. 1,1,1 Trichloroethane policy and procedure has been written and implemented on July 6, 1994. (See attachment #IA)
3. Investigate, develop, document all required permit conditions and rules as of January 30, 1995.
4. Develop a written policy on rules/regulations by February 15, 1995.
5. Final phase of progressive implementation to be completed by February 15, 1995.

MANUFACTURING OPERATIONS PROCEDURE		ALCOA COMPOSITES, CSD MANUFACTURING OPERATIONS MANUAL
No.: MFG-10	Title: Degreaser Tank 0237 ATTACHMENT # 1A	
Effective Date: June 7, 1994	Supersedes No.: Dated:	Page 1 of 2
Prepared By/Date: L. Kemple - Facilities Maint. Mgr. 7/6/94	Approved By/Date: R. Stewart - Director of Mfg. 7/6/94	Approved By/Date: D. Rittichier - General Manager 7/7/94

1.0 Purpose

To define the operation and responsibilities for maintaining the 1,1,1 Tricholorethane in the degreaser sump.

2.0 Statement

The following is to inform Maintenance and Production Personnel of the procedure to follow when monitoring and adding 1,1,1 Trichloroethane to Degreaser Tank 0237.

3.0 Responsibility

3.1 Every day of the year without exception, Maintenance personnel will pump a maximum of twenty (20) gallons of 1,1,1 Trichloroethane into the sump of the degreaser unless the sump is full.

3.2 Maintenance Personnel shall monitor and control the quantity of liquid to the degreaser sump through the automated totalizer located on the Northwest side of the tank.

3.3 Maintenance personnel will be responsible for starting the degreaser boiler and solvent still.

3.4 Production personnel will be responsible for stopping the degreaser.

4.0 Procedure

4.1 Maintenance personnel shall ensure the transfer pump located at the Trichlorethane tank is energized and the ball valve at the North wall of the main process line is open before commencing.

4.2 At the beginning of first shift and before the degreaser is turned on and liquid added for operation, Maintenance personnel will measure the height of liquid in the degreaser sump using the slight gauge located next to the sump pump. The employee's name, height of liquid and quantity added will be recorded on the form attached.

4.3 Five (5) minutes after the liquid is added the Maintenance employee will close the ball valve noted in paragraph 4.1.

4.4 The Maintenance employee will start the boiler and solvent still to the degreaser (see Maintenance operating procedure number TBD).

4.0 Procedure

4.5 The Maintenance employees will monitor the liquid temperature through the controller located next to the totalizer and ensure the set point temperature is reached.

4.6 The Maintenance employee will turn on the degreaser exhaust fan.

4.7 After processing parts through the degreaser Production personnel will de-energize the solvent still and notify the Maintenance department to de-energize the boiler.

ATTACHMENT #1A

1,1,1 TRICHLOROETHANE (TCA) DEGREASER LOG

SCAQMD PERMIT #P55049 FOR THE BARON BLAKESLEE DEGREASER MAIN PROCESS LINE

*Rule 1122

Permit Conditions as stated on permit = Whenever Solvents are used in this equipment the organic materials discharged into the atmosphere must not exceed 220 lbs. or 20 gallons in any one day, unless such discharge is controlled to comply with Rule 1122.

Date	Maint. Emp. Name (print)	Emp. Initials	Liquid Level (in inches)	TCA added for the day* (gallons	Comments
				ATTACHMENT #1A	

*20 gallons = 220 lbs. TCA is approximately 11 lbs. per gallon

C60699 0140

** CONFIDENTIAL **

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division

May 4 - 6, 1994

AIR - Special Situation

Permitted VOC and Emissions Limits

Situation:

CSD's most recent spray booth permit (SCAQMD Permit #D78462 -- effective date: 11/18/93) specifies a facility daily limit of 27 gallons of coatings and solvents applied to aerospace components. Several SCAQMD permits for other spray booths, issued prior to Permit D78462, specify a 54 gallon limit. The facility has been operating under the assumption that its facility limit is 54 gallons. In addition, SCAQMD Permit #D42605 specifies a facility VOC emissions limit of 26 pounds per day. Facility spray booth records indicate that this limit has been exceeded on numerous occasions within the last year.

CSD is also prohibited by Permit #D29544 from using methylene chloride and some other air toxics in several of its spray booth areas. However, the facility is utilizing solvents with methylene chloride and other air toxics in several of its spray booth areas.

Emissions of 1,1,1 trichloroethane from CSD's vapor degreaser are limited to 40 pounds per day and 8 pounds per hour. The facility has only recently (September, 1993) attempted to track the make-up volumes added to the tank. The information currently recorded does not demonstrate that CSD has or is complying with its degreaser emission limits.

Recommendation:

Review permit conditions on all permits against operational/production needs. Identify, develop, and implement operational scenarios and limits to schedule and manage the spray booth operation to ensure permit requirements are met and the facility's daily limit is not exceeded. This information should also be used to develop a permitting strategy and SCAQMD permit limits that the facility can meet. The phase-out of 1,1,1 trichloroethane usage in the degreasing operations should be implemented.

C60699 0141

CONFIDENTIAL

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division

May 4 - 6, 1994

~~ AIR ~~
Special Situation

Permitted VOC and Emissions Limits

Current Date: 9-29-94

Auditee Response and Action Plan:

SPECIAL SITUATION: SCAQMD Permit VOC Usage and Emission Limits

ACTION PLANS:

1. Review, develop and implement a written policy/procedure for the paint booths at CSD to insure compliance with SCAQMD regulations, and meet Facilities current work schedules.

2. Continue to phase out the use of 1,1,1 Trichloroethane as a vapor degreaser material including a written policy on the operation and permit limits, recordkeeping (refer to Action Plan No. 3 on Rule 109 Recordkeeping Requirements).

ESTIMATED COMPLETION DATE:

1. Policy and procedure is to be completed by April 1, 1995.

2. 1,1,1 Trichloroethane written policy has been completed on July 6, 1994 (See attachment #IA). The phase out of 1,1,1 Trichloroethane will continue through December 31, 1995. Detailed parts are being transferred from TCA to Brulin as suppliers are in agreement with the implementation. Degreaser permit revised as of June 23, 1994 to increase emission from 40#/day limit to 220#/day. (?)

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review
Composite Structures Division
May 4 - 6, 1994

AIR
Special Situation

Current Alternative Emission Control Plan (AECP) Status

Situation:

CSD is operating under an AECP that was developed under South Coast Air Quality Management District's (SCAQMD) Rule 108 to address the facility's inability to meet certain requirements in SCAQMD Rule 1124 for Aerospace Assembly and Component Manufacturing Operations. Under this approved AECP (March, 1992), the facility was limited to a combined VOC daily limit of 9.0 pounds for two of its spray booths (i.e., booths 3001 and 3030). A sample review of the booths' daily records shows that the two booths have exceeded the 9.0 pound/day limit by a factor of two or more on more than five days during the first quarter of 1994.

The facility is also allowed by SCAQMD to generate emission reduction credits under Rule 1690 through a car crushing program. These emission reduction credits can be used to offset future facility VOC emissions that are not in compliance with Rule 1124 requirements. However, since CSD has not yet received their offsets under the program, the facility's current compliance status with Rule 1124 is governed by the March, 1992 AECP requirements which limit the combined spray booth VOC emissions to 9.0 pounds/day. Emission credits cannot be applied until offset determinations have been made and credits received.

Recommendation:

Develop and implement a management plan for the use of these booths that will ensure the daily emission limit of 9.0 pounds/day are not exceeded and the facility is in compliance with Rule 1124. This plan needs to incorporate a strategy for complying with both the current facility emissions and future projections.

CONFIDENTIAL

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division

May 4 - 6, 1994

~~AIR~~
Special Situation

Current Alternate Emissions Control Plan (AECP) Status

Current Date: 9-29-94

Auditee Response and Action Plan:

SPECIAL SITUATION: Alternate Emissions Control Plan (AECP) Status

ACTION PLANS:

1. Develop a written policy/procedure to maintain AECP paint booths daily emissions to 9#/day in compliance with Rule 1124.

2. Develop a strategy plan for complying with both current facility emissions and future projections.

   The plan will consider current regulatory requirements and the following future impacts;

   A. AQMD Rule 1610 credits.
   B. ERC's acquired from Veron Works.
   C. Procedure to review new business quotes for environmental impacts.

ESTIMATED COMPLETION DATE:

1. The AECP paint booth policy/procedure plan will be completed on November 30, 1994.

2. Strategy plan available by April 30, 1995.

** CONFIDENTIAL **

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division

May 4 - 6, 1994

AIR
Special Situation

Rule 1124 Compliant Materials Management

Situation:

CSD is required to apply adhesives that are in compliance with the VOC content limits specified in Rule 1124 inside of "compliant" paint booths. The facility's management program to ensure that non-compliant materials are not used in these booths is not comprehensive or sufficiently formal. For example, no documentation was provided to the Audit Team to show how VOC content of coating mixtures and some "as received" coatings had been determined/calculated. Therefore, it was not possible to verify the VOC content of some paints and mixtures that were being applied in the facility's booths during the audit.

Recommendation:

Develop and maintain documentation that clearly shows how the VOC content of each coating and mixture was calculated to ensure compliance. This information should also be used to develop guidelines for the maximum amount of thinner that can be added to a mixture or to thin a coating without exceeding the VOC content limit.

CONFIDENTIAL

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division

May 4 - 6, 1994

AIR
Special Situation

Rule 1124 Compliant Materials Management

Current Date: 9-29-94

Auditee Response and Action Plan:

SPECIAL SITUATION: Rule 1124 Compliant Materials Management

ACTION PLANS:

Develop and maintain a VOC Compliance Calculation Manual including information for maximum thinner usage.

ESTIMATED COMPLETION DATE:

VOC Compliance Calculation Manual was completed on October 1, 1994. The VOC Compliance/Calculation Manual and maximum thinner usage calculations are both centrally located at the Mixing Crib where all paints/primers and adhesives are issued. Computer/AQC Program is located in Building "D".

** CONFIDENTIAL **

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division
May 4 - 6, 1994

AIR
Special Situation

Preventative Maintenance Program

Situation:

CSD does not have a Preventative Maintenance (PM) Program for its process or air pollution control equipment. This has resulted in several problems (most notably with the facility's anodizing line scrubbers). For example:

- Building U's scrubber had operated for some unknown time period without blades for its fan. This was discovered when the noises became excessive and the fan bearings wore down.

- During the audit, one of the main process lines scrubbers was observed to have caused a large green patch on the facility's roof. This patch appears to be due to chromium carryover that had been exhausted from the scrubber's stack.

CSD intends to replace scrubber units in Building U and B-1's process line by the end of 1994. However, lack of a PM Program could impact operation of the new control equipment.

All SCAQMD permits require that permitted equipment be maintained in sound/good working order and operated as presented in the permit applications. CSD does not have copies of the applications filed for more than half of its permits, and therefore, cannot be assured it is operating its equipment as identified in permit applications or when permit modifications may be required.

Recommendation:

Develop a formal PM Program for air pollution control equipment. A search of archived files should be made, or SCAQMD contacted in an attempt to locate and obtain copies of permit applications. If applications are not locatable, develop a baseline set of information for those permitted processes with unavailable applications. Continue the plans for evaluating and replacing deficient scrubbers by the end of 1994. Evaluate the condition of all other control equipment and, where necessary, develop plans to repair/upgrade the systems to the conditions described in permit applications.

C60699 0147

CONFIDENTIAL

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division

May 4 - 6, 1994

AIR
Special Situation

Preventative Maintenance Program

Current Date: 9-29-94

Auditee Response and Action Plan:

SPECIAL SITUATION: Other SCAQMD Permit Conditions
(Preventative Maintenance)

ACTION PLANS:

Develop a formal PM Program for all SCAQMD permitted equipment

Obtain "old' permit applications for all SCAQMD permitted equipment

ESTIMATED COMPLETION DATE:

1. Obtain old permit SCAQMD copies by January 15, 1995.
2. Evaluate permitted control equipment by March 15, 1995.
3. Upgrade and repair equipment to conform to permits shall be an on-going process or on an as needed basis.
4. Develop a baseline for limits/efficiencies by March 15, 1995.
5. Complete replacement of inefficient scrubbers by year end 1995.
6. With a new scrubber installed by year end 1995, a PM program, per the manufacturer's recommendation, will be established by December 31, 1995 for future prevention of such "Green Patches".
7. Implementation of a computerized Maintenance Management System, PM program, on all SCAQMD permitted equipment by May 26, 1995.

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division

May 4 - 6, 1994

AIR

Special Situation

Evaluation of Reporting Requirements

Situation:

CSD has exceeded several of its air permit limits and has experienced events which possibly should have been reported to SCAQMD relative to Rule 430 for Breakdowns. The facility's obligations for self-reporting are not currently well defined in SCAQMD rules or permits.

Recommendation:

Seek assistance from Corporate Legal and Environmental Affairs to help evaluate the need for self-reporting and to define a clear procedure and policy for self-reporting of emission limit exceedances and breakdowns. To assist in the evaluation of future incidents, seek clarification from the Agency regarding the types of incidents that may be considered reportable.

CONFIDENTIAL

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division

May 4 - 6, 1994

~~ AIR ~~
Special Situation

Evaluation of Reporting Requirements

Current Date: 9-29-94

Auditee Response and Action Plan:

SPECIAL SITUATION: Evaluation of Reporting Requirements
(Self reporting of exceeding SCAQMD, Sanitation, EPA, RWQCB permit limits)

ACTION PLANS:

Contact Alcoa legal Department and Environmental Control Department for review and assistance to define a clear written policy and procedure for self reporting of emission limit exceedances and breakdowns.

ESTIMATED COMPLETION DATE:

1. Discussed with Sandy Harvey (Alcoa) on 5/94. Where there is no clear regulatory requirement for self reporting of permit limit exceedances, CSD will report only those situations which result in significant impact to employees, the community or the environment, after consultation with Alcoa legal.

2. Alcoa contacts to meet at October 94' Alcoa Environmental Seminar to review this issue further.

   Air R.H. Carwile
   Land G.J. Crouth
   Water W.E. Snee

3. Environmental completion of regulatory reviews, and written policy and procedures are to be completed by December 31, 1994.

** CONFIDENTIAL **

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division

May 4 - 6, 1994

AIR

Special Situation

Asbestos Management Plan

Situation:

CSD's Asbestos Management Plan does not meet the requirements of the mandated Alcoa Asbestos Management Standard. Examples of Plan deficiencies include:

- Business Unit President has not formally reviewed and approved the Plan
- The Plan does not provide for a periodic inspection of Asbestos-Containing Materials (ACMs). In addition, the facility does not have records of Agency notification or renovations and removals as required under 40 CFR 61.

Recommendation:

The facility should update its Asbestos Management Plan in accordance with Alcoa's Asbestos Standard, and obtain copies and maintain records of required NESHAPS (National Emission Standard for Hazardous Air Pollutants) notifications and waste disposal manifests.

CONFIDENTIAL

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division

May 4 - 6, 1994

AIR
Special Situation

Asbestos Management Plan

Auditee Response and Action Plan:
Current Date: 9-29-94

SPECIAL SITUATION: Asbestos Management Plan

ACTION PLAN:

CSD has received an updated version of the Alcoa Asbestos Management Plan and will revise CSD's ACM plan to reflect the newly revised Alcoa (ACM) standards.

ESTIMATED COMPLETION DATE:

1. CSD will get copies of asbestos removal manifests and include in the "Asbestos Management Plan" by October 15, 1994.
2. CSD will get copies of past "Notification" records for removal of asbestos by November 15, 1994.
3. CSD will periodically (annually) review ACM materials as stated in the updated version of CSD's Asbestos Management Plan in December of each year.

** CONFIDENTIAL **

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division

May 4 - 6, 1994

AIR

Special Situation

Ozone Depleting Chemical Management

Situation:

EPA (40 CFR 82, Subpart B) and SCAQMD regulations mandate management, recycling, and recordkeeping requirements for those who service, dispose of, and own most types of air conditioning and refrigeration units containing Class I and Class II ozone depleting chemicals (ODCs). In general, the rules require:

- Technicians who repair or dispose of regulated refrigerators and air conditioners are certified and no appliances containing ODCs be opened for maintenance, repair, or disposal without the use of certified recovery equipment. Leaks must be repaired within regulation-specified timeframes.

- Owners of equipment keep records on the destruction of small appliances and on large unit repairs including technician working units, date and type of service, and amount of refrigerant added.

CSD utilizes contractors to service ODC equipment. However, no mechanism is in place to assure employees or contractors hired for maintenance and service of equipment meet the requirements. Recordkeeping requirements are not in place.

Recommendation:

Review regulatory requirements. Develop and implement an ODC management strategy using Alcoa and regulatory guidance documents. The program should develop standard terms and conditions for contractors, assure equipment and technicians used to service equipment are certified, and include a recordkeeping system to assure required documentation is maintained.

C60699 0153

CONFIDENTIAL

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division

May 4 - 6, 1994

AIR

Special Situation

Ozone Depleting Chemical Management

Current Date: 9-29-94

Auditee Response and Action Plan:

SPECIAL SITUATION: Ozone Depleting Chemicals Management

I. ACTION PLAN:

1. Audit CFC Contractors For Compliance with SCAQMD and EPA Regulation and obtain copies of equipment and employee training certification list from contractors.
2. Revise purchase orders to include CFC servicing to be in accordance with SCAQMD and EPA regulations.
3. Files to include documentation that previous work was in accordance with regulations.
4. Establish a written policy on Ozone Chemical Management.

ESTIMATED COMPLETION DATE:

1. Auditing of contractors will start on December 30, 1994 and be completed by February 30, 1994.
2. Revision of Purchase Orders will be started by December 30,1994 and be completed by February 30, 1994.
3. Existing and past contractor compliance and recordkeeping has been started on June 15, 1994 to verify past projects compliance and documentation and will be completed by November 30, 1994.
4. Completion of written policy on Ozone Depleting Chemicals Management by February 30, 1994.

AIR-TRO INC.
AIR CONDITIONING — HEATING
Lic. # 258228

1630 S. MYRTLE AVE. • MONROVIA, CA 91016
Phone: (818) 357-5311 • FAX: (818) 358-9580

June 21, 1994

Mr. Lee Kemble
Composite Structures (Alcoa)
801 Royal Oaks Drive
Monrovia CA 91016
(818) 358-3211 W
(818) 932-3300 F

Dear Mr. Kemble:

Re: Additional Information Requested On CFC Removal

Air-Tro has EPA certified recovery/recycling machines and these machines are registered with the EPA. The EPA does not certify Air-Tro Inc. Air-Tro Inc. certifies to the EPA that it uses recovery/recycling machines that have been test and the performance has been certified by ARI (Air-conditioning & Refrigeration Institute). Attached is a copy of the EPA Refrigerant Recovery or Recycling Device Acquisition Certification Form for our machines that was sent to the EPA by registered mail on June 7, 1993. The EPA does not acknowledge receipt of this form or issue any certification of its own.

Air-Tro service technicians are certified in the use of these machines and records kept on each customer where these machines are used. The EPA requires our servicemen that use recovery/recycling machines to pass an approved certification course given by a approved organization. Attached is a copy of the certificate for Donn Capps and a ARI listing of the recovery machine used. Donn reclaimed the refrigerant in the old air conditioning for building "C". He used a Robinair 17660A machine for reclaiming the refrigerant.

The recovered refrigerant for building "C" was bulk shipped to United Refrigeration Inc. 15809 E. Valley Blvd. City of Industry, CA. 91744-3929 for recycling. Attached is a copy of the credit for refrigerant received.

If you require more information please contact me.

Sincerely

Jim Hunter
Air-Tro Inc.

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division
May 4 - 6, 1994

CHEMICAL RELEASE
Special Situation

SARA Reporting

Situation:

CSD is subject to SARA 302 (Emergency Response Planning), 311 (MSDS Reporting), 312 (Chemical Inventory Reporting), and 313 (Toxic Chemical Release Reporting) reporting requirements. The following deficiencies were noted in CSD's SARA reporting:

1. Location personnel could not find any correspondence notifying either the State Emergency Response Commission (SERC) or the Local Emergency Planning Committee (LEPC) that quantities of extremely hazardous substances were on-site above threshold planning quantities.

2. CSD's Baldwin Avenue Warehouse stores quantities of chemicals that subject it to 311 and 312 reporting requirements and potentially to 302 emergency response notification and planning requirements. To date, no reports have been submitted for the facility.

3. Section 311 MSDS updates are required to be submitted within 90 days of determining if a material, not previously included, is present in quantities exceeding the TPQ and within 90 days of receipt of new significant information (new MSDS) on a previously-reported material. There are no procedures in place to determine the need for supplemental reporting or ensuring reports are issued within the 90-day timeframe.

Recommendation:

Locate the initial 302 notification or submit the notification if its submittal cannot be documented. Inventory all materials stored at the Baldwin Avenue Warehouse and submit 311 and 312 reports to LEPC, SERC, and the local fire department, and 302 notification (if EHS are present above the Threshold Planning Quantity). Implement procedures to ensure 311 reports are updated within the required timeframes when a new material is present in quantities exceeding the TPQ and within 90 days of receipt of new significant information (new MSDS) on a previously-reported material.

CONFIDENTIAL

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division

May 4 - 6, 1994

-- CHEMICAL RELEASE --
Special Situation

SARA Reporting

Current Date: 9-29-94

Auditee Response and Action Plan:

SPECIAL SITUATION: SARA Reporting

ACTION PLANS:

1. Update and submit Extremely Hazardous Substance List (SARA 302) for CSD and BP facilities.
2. Material Control/Procurement Departments to assemble listings tabulating the total quantities of materials bought and stored at the Monrovia and Baldwin Park Facilities during 1993 and to date for 1994. ESH Department will then evaluate and submit notification if necessary.
3. Baldwin Park Facility may require SARA 311 ands 312 reporting.
4. Evaluate the amount of materials stored at or used at Baldwin Park Facility for the year 1993 and file.
5. SARA 311 requirements for submitting a new MSDS within (90) days when it triggers a Threshold Planning Quantity (TPQ).
6. After the initial review step in above, new MSDS will have to be mailed if the TPQ trigger is met. A chemical listing by an outside consulting firm tabulated all chemicals from Baldwin Park.

ESTIMATED COMPLETION DATE:

1. Material update list started June 15, 1994 and was completed on October 5, 1994.
2. Material tabulation started June 15, 1994 and was completed on October 5, 1994.
3. "SARA 302 notification started mid August 1994 and complete by December 1, 1994.
4. Material Tabulation: started June 15 and completed on October 5, 1994. SARA 311 and 312 report submittal: Start November 21 and complete by December 1, 1994.

CONFIDENTIAL

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division

May 4 - 6, 1994

CHEMICAL RELEASE
Special Situation

SARA Reporting

Current Date: 9-29-94

Auditee Response and Action Plan:

(Continued)

5. SARA MSDS submittal: Start November 6, and submit by December 30, 1994.

6. MSDS up-dates will be submitted within 90 days of receipt of new significant (MSDS) on previously reported materials.

** CONFIDENTIAL **

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division

May 4 - 6, 1994

FACILITY ENVIRONMENTAL MANAGEMENT
Special Situation

Facility Environmental Management Systems

Situation:

Composite Structures has begun the development and implementation of a number of environmental management systems and has incorporated some of the environmental requirements into the location's operating plan and performance expectations. The Environmental staff has been increased from one professional to four by adding two full-time technicians and an EHS Manager. Many of the existing programs have been newly developed over the past four to six months. However, the audit findings (particularly the air issues) indicate that the environmental management systems at the facility require improvement to meet current regulatory and Alcoa Policy requirements.

A number of the special situations cited in this report require increased line management involvement and commitment to achieve final resolution. For example, VOC (Volatile Organic Compound) emissions limits were exceeded on a number of occasions and a preventative maintenance program needs to be established to ensure emissions control systems are operating efficiently. While support for the environmental program is evidenced by the addition of environmental resources to the program, there is a need for environmental conformance responsibility and ownership to be integrated further into the line management organization. A more concentrated effort is required in order to establish environmental responsibilities and manage production priorities and processes to maintain on-going conformance with environmental requirements.

C60699 0159

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review
Composite Structures Division
May 4 - 6, 1994

FACILITY ENVIRONMENTAL MANAGEMENT
Special Situation #2

Facility Environmental Management Systems (Continued)

Recommendation:

Integrate the environmental conformance responsibilities further into the line management organization. The Audit Team suggests the following to facilitate the integration:

1. Implement and document environmental training for line management personnel to increase their baseline knowledge of regulatory requirements.

2. CSD has established general line management environmental performance expectations. The Audit Team suggests that these responsibilities be more specifically and clearly detailed in job descriptions, performance expectations, and operating plans.

3. Consider having the EHS Manager report directly to the Location Manager instead of through Production to avoid potential conflicts of interest.

4. Develop internal verification systems to track and periodically review regulatory and policy requirements to ensure they are met.

CONFIDENTIAL

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division

May 4 - 6, 1994

FACILITY ENVIRONMENTAL MANAGEMENT
Special Situation

Facility Environmental Management Systems

Current Date: 9-29-94

Auditee Response and Action Plan:

SPECIAL SITUATION: FACILITY ENVIRONMENTAL MANAGEMENT SYSTEMS

ACTION PLANS:

1. Implement and document environmental training for line management personnel.
2. Establish line management environmental performance expectations specifically detailing job descriptions, performance expectations and operating plans.
3. ESH Manager to report to Plant Manager (completed).
4. Develop a tracking system and periodical review regulatory and policy requirements.

ESTIMATED COMPLETION DATES:

1. Pollution Prevention Training was conducted by Ken Martchak (Alcoa Pittsburgh) on August 26, 1994 for all line managers and supervisors. Further Environmental awareness training for line management will begin again on January 1995 and continue through the year.
2. Detailed job descriptions have been revised by ESH/HR departments as of August 1994. Performance Expectations started April 6, 1994 and will continue though January 11, 1995.
3. ESH Manger reports to the Plant Manager as of July 1994.
4. CSD is tied into Hazmin for all chemical/environmental tracking of hazardous materials. Pittsburgh sends CSD a monthly update disc.
   A VOC and toxic air quality program was purchased in June 1994 and installed and implemented out in manufacturing/production in September 1994. An update AQC disc to the Air Quality Tracking Program will be available and purchased in July, 1995.

ALCOA COMPOSITES, INC.
CLASSIFICATION DESCRIPTION

Date: 10/22/93
Supersedes:
Non Exempt
Grade Code: 14
Non-Supervisory

TITLE: ENVIRONMENTAL TECHNICIAN I **CODE:**

OCCUPATIONAL SUMMARY

Handles all areas which deals with the use and disposal of hazardous materials and hazardous waste, (liquids and solids) throughout the facility at CSD.and termination.

DUTIES AND RESPONSIBILITIES

1. Collects all Hazardous waste from the 55-gallon containers, located within the Hazardous Waste Satellite Accumulation areas. Removes the Hazardous Waste from the containers, by actually pulling out the waste from the drom and placing it into another drum for compaction.

2. Requires the labveling of all Hazardous Waste containers. Re-labels all drums and smaller waste containers. containers, prior to placement into the facility.

3. Participates in the decision-making process when purchasing Hazardous materials and waste supplies.

4. The pumping out of used oils from the drum containment areas, when deemed necessary.

5. Removes all out-of-date shelf-life products, by emptying the container into the proper waste stream.

6. Must be certified in the 40.0 hours of Hazwoper training, as a Hazardous waste-site operator. JOB FUNCTIONS MUST BE STATE CERTIFIED.

7. Crushes all of the Hazardous Waste containers, including the compaction of the containers.

8. Maintains the daily, and weekly Hazardous Waste Inspection Loags and Audits, for out-going waste, before the 90 day generator status is up.

9. Inspects and audits the Hazardous Waste and Hazardous Material Yard, for non-compliance. UNDER THE DIRECTION OF THE NON-UNION/TECHNICIAN

10. Is reqired to wear PPE and have the knowledge and understanding, when to wear PPE, while performing any Hazardous Waste job functions.

11. Makes notes and prepares reports on special safety and or environmental situations, as they relate to Hazardous Waste.

12. Performs other related tasks as assigned when necessary. MUST BE ABLE TO DO A VARIETY OF HAZARDOUS WASTE FUNCTIONS.

13. Reports to the Manager of Environmental and Safety. WILL ONLY REPORT TO THE MANAGER OF THE ESH DEPARTMENT.

14. Certified to operate a fork-lift on an as needed basis.

On An Exception Basis Only:
The Environmental Technician I (union) may perform the above job functions of the Environment Technician II (non-union), when there is an unforeseen exception that may occur. The following are some examples, which may not be all inclusive.

1. Employee becomes sick or is ill and can not

This description reflects in general terms the type and level(s) of work preferred. It is not intended to be all-inclusive, nor portray the specific duties of any one incumbent. In addition to the duties and responsibilities indicated herein, employees are expected to perform such other reasonable tasks as may be assigned by their immediate supervisor.

ALCOA COMPOSITES, INC.
CLASSIFICATION DESCRIPTION

Date: 02/02/94
Supersedes: 10/25/93
Non Exempt
Grade Code: 13
Non-Supervisory

TITLE: ENVIRONMENTAL TECHNICIAN II CODE:

OCCUPATIONAL SUMMARY

Handles all areas which deals with the use and disposal of hazardous materials and hazardous waste, (liquids and solids) throughout the facility at CSD.

DUTIES AND RESPONSIBILITIES

1. Is thoroughly familiar with all state, federal and local regulations, that deals with Hazardous Materials and Hazardous Waste., i.e. Title 22, 40CFR and 49CFR.

2. Collects samples of Hazardous Wastes (liquids and solids) to be analyzed by an outside contractor.

3. The operation of the wastewater treatment facility, (chrome unit)

NON-UNION/TECHNICAL AND STATE CERTIFICATION

4. Must be certified in the 40.0 hours of Hazwoper training, as a Hazardous waste-site operator.

JOB FUNCTIONS MUST BE STATE CERTIFIED

5. Prepares reports, fills out the state waste manifest, for all out-going waste materials.

6. Prepares the Hazardous Waste state tax return for the State Board of Equalization.

7. Reviews TSDF contracts to establish Hazardous Waste controls and necessary contract reviews.

8. Conducts periodic plant inspections (monthly/weekly) in preventing any NOV's and preventing future liabilities.

9. Is required to wear PPE and have the knowledge and understanding, when to wear PPE, while performing any Hazardous Waste job functions.

C60699 0164

10. Makes notes and prepares reports on special safety and/or environmental situations, as they relate to Hazardous Waste and Wastewater compliance.

11. Takes water samples as needed, to keep in compliance with our wastewater treatment unit.

12. Assists the L.A. County Department of Sanitation when taking water samples from the sewer.

13. Performs other related tasks as assigned when necessary.

MUST BE ABLE TO DO A VARIETY OF HAZARDOUS WASTE FUNCTIONS

14. Reports to the Manager of Environmental and Safety.

WILL ONLY REPORT TO THE MANAGER OF THE ESH DEPARTMENT

15. Certified to operate a fork-lift when the Environmental Technician I is unavailable.

QUALIFICATIONS

1. Knowledge of uses and limitations of wastewater monitoring equipment.

2. General computer knowledge on software.

3. Relate in memo form to management, when CSD is in non-compliance with an environmental issue.

4. Must have as a minimum - a four (4) year college degree in general education or possess at least a two (2) year education and or degree in the hazardous materials/waste field.

5. Must be self reliant, able to create and prepare appropriate reports.

ON AN EXCEPTION BASIS ONLY:

The Environmental Technician II (non-union) may perform the above job functions of the Environmental Technician I (union), when there is an unforeseen exception that may occur. The following are some examples, which may not be all inclusive.

1. Employee becomes sick or is ill and cannot perform his regular job duties.

2. Employee takes a vacation day.

3. Employee takes a personal day.

Greg Emanuelson-Environmental Engineer

Environmental Safety And Health Department

Job Description

August 29, 1994

1. Completes the Bi-Annual State Hazardous Waste Tax Returns From State Board of Equalization

2. Completes the SARA Form R, 311,312,and 313 Reports Annually For CSD/Baldwin Park

3. Submits All Air Quality Permit Applications For Permit-To- Construct, and Permit-To-Operate

4. Completes the Quarterly Surcharge Reports for LA County Dept. Of Sanitation District

5. Completes the Annual Stormwater Sampling Reports for Regional Water Quality Control Board

6. Updates the Release Prevention Countermeasure Control Plan (RPCC) every 3 years

7. Conducts Annual Training for Hazard Communication, TSCA, RPCC, and Emergency Evacuation

8. Organizes the Facility Emergency Drill/Evacuation Yearly Exercise

9. Develops and Tracks the VOC Data for all primers, paints, and adhesives used within the facilty

10. Orders the necessary maintenance items for the Chrome Wastewater Treatment Unit.

11. Completes the TSCA Forms Section 8a-8c

** CONFIDENTIAL **

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division

May 4 - 6, 1994

FACILITY ENVIRONMENTAL MANAGEMENT

Special Situation

Environmental Reviews

Situation:

CSD does not have a program to review process/equipment modifications or installations to ensure regulatory and permit requirements will be met prior to implementation or construction. Examples include:

- Movement of machining equipment onto the facility's property without notification of the Environmental Department or without an analysis of permit and regulatory requirements.

- A "Notice to Comply" received in April, 1994 from SCAQMD for tanks that did not have permits.

Request for Authorizations (RFAs) and engineering change requests are reviewed by Environmental personnel only if the writer believes there may be an environmental impact. Without detailed training on complexities of regulations and permits, RFA and engineering purchase change order originators cannot evaluate regulatory or environmental impacts.

Recommendation:

Develop and implement procedures for environmental review of proposed equipment, processes, and operating procedure modifications prior to their occurrence. Environmental review should be documented. Conduct environmental awareness training for engineering, maintenance, and process/operating personnel to improve their recognition of environmental and regulatory impacts.

CONFIDENTIAL

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division

May 4 - 6, 1994

FACILITY ENVIRONMENTAL MANAGEMENT
Special Situation

Environmental Reviews

Current Date: 9-29-94

Auditee Response and Action Plan:

SPECIAL SITUATION: ENVIRONMENTAL REVIEWS

ACTION PLANS:

Establish and implement policy and procedure to ensure that the Environmental Safety and Health Department signature sign off be included in multiple documents prior to purchase or installation.

This includes:

1. Facility modification being performed.
2. A new or old piece of equipment being purchased and installed.
3. New paints, primers, solvents, resins, oils or other materials being brought onto the facility.
4. Process modifications.
5. Production increases.
6. RFA approvals.

ESTIMATED COMPLETION DATE:

1. As of June 1994, ESH also now signs the "Maintenance Work Order" (MWO) form which functions as a liaison between Facilities and Maintenance of any equipment repairs, installations, or modifications to the facility (see attached forms and procedures, 3A, 3B)
2. Refer to item #1 above.
3. As of July, 1994 ESH reviews and signs off on all "purchase requisitions' which the Material Control Department generates (see attachment #4A).

CONFIDENTIAL

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division

May 4 - 6, 1994

FACILITY ENVIRONMENTAL MANAGEMENT
Special Situation

Environmental Reviews

Current Date: 9-29-94

Auditee Response and Action Plan:

(continued)

4. When the process modification changes materials refer to item #3. If the change is in equipment refer to item #1.

5. ESH department to be included in "Bid, No Bid" meetings for new work or increases in existing work. Completed by December 15, 1994.

6. RFA approval sign-off completed by November 15, 1994.

COMPOSITE STRUCTURES
Division of ALCOA COMPOSITES
301 Royal Oaks Drive
Monrovia, California 91016
Tel: (818) 305-3240 Maint.

ALCOA

MAINTENANCE WORK ORDER

MWO- 0274

Date Originated:	Originator - Name	Dept.	Extension	Date Equipment Available:

Equipment #:	Equipment Description & Location:	Date Equipment Required Back in Operation:

Work Order Type: (Check One) ☐ P.M. ☐ Safety (Route to ESH Dept.) ☐ Corrective ☐ Routine ☐ Capital Project

Work Requested:

ATTACHMENT # 3A

FOR MAINTENANCE AND ESH USE ONLY

Maintenance Code: (See Back for Instructions)	Priority:	ESH Reason for Priority Level:

MATERIAL & PARTS REQUIRED:	Qty.	Part No.	Cost
		Total Cost:	

SPECIAL TOOLS NEEDED OR USED ON JOB:

SAFETY CHECKS/PROCEDURES:

Craftsman Name (Assigned)	Craft:	Date/Time Start:	Date/Time Stop:	Total Time:
			Total Labor Hours:	

WORK COMPLETE & SATISFACTORY:

MAINTENANCE SUPERVISOR SIGNATURE: _____ DATE: _____

ENVIRONMENTAL SAFETY & HEALTH SIGNATURE: _____ DATE: _____
(Required only if safety related)

MAINTENANCE DEPT. FILES
ORIGINATOR AT COMPLETION

C60699 0170

MAINTENANCE DEPT SUPERVISOR

PLANT ENGINEERING SERVICE REQUEST

DEPARTMENT NAME	DEPT. NO.	PLANT	BLDG.	DATE SUBMITTED	REQUIRED COMPLETION DATE	LOG. NO.

ORIGINATOR:	DEPT. MGR. APPROVAL:	GENERAL MGR:

TYPE OF SERVICE REQUESTED: (CHECK AND EXPLAIN)
( ) MOVE ANALYSIS ( ) PRODUCTION EQUIP ( ) PLANT EQUIP ( ) LAYOUT
( ) COST ANALYSIS ( ) OFFICE EQUIPMENT ( ) FURNITURE ( ) OTHER

ATTACHMENT NO. 3B

REASON FOR REQUEST:

AREA BELOW THIS LINE FOR PLANT ENGINEERING USE ONLY

PRELIMINARY ENGINEERING ANALYSIS: DATE:

IF ACQUISITION, CHECK MEANS
( ) CAPITAL ( ) EXPENSE

COST ESTIMATE	CAPITAL	EXPENSE	TOTAL
EQUIPMENT			
LABOR			
MATERIALS			
TOTAL			

RFA IS REQUIRED IF ESTIMATED CAPITAL EXPENDITURE EXCEEDS $1,500.00 (MIN. 4 WEEKS APPROVAL PROCESS)

* APPROVAL REQUIRED PRIOR TO SUBMITTAL OF RFA *
(AS APPLICABLE)

	SIGNATURES	DATE
GENERAL MGR.		
SAFETY MGR.		
PLANT MGR.		
FAC./MAINT. MGR.		
MAINT. MGR.		

DISTRIBUTION BY:
PLANT ENGINEERING
CANARY ..... FAC./MAINT. MGR.
GOLDENROD ... MAINT. MGR.
BLUE ..... PLANT ENGINEER
WHITE ..... ORIGINATOR

C60699 0171

Purchase Requisition
(Computer Generated)

COMPOSITE STRUCTURES
Division of ALCOA COMPOSITES
[illegible] River Oaks Drive
Monrovia, California 91016
Tel (818) 358-3211 Fax (818) 303-[illegible]

ALCOA

Planner Code: JOBR JOBR
Requisition No: 005223 Requisition Page 1
Requisition Revision No 000 Requisition Date 09/30/94
Program
Government Contract
DPAS Rating
G/L Account No Commodity Code
CID No

Order Type: New [X] Change [ ]
Taxable: Yes [ ] No [ ]
CAS Applies: Yes [ ] No [ ]
Taxable Sales Tax Exempt Order Permit - SYEA 98-035905
Buyer Code:
Terms:
F.O.B.:
Ship Via:

Vendor Classification:
Large Business [ ]
Small Business [ ]
SB Disadvantaged [ ]
Woman Owned [ ]
Foreign Owned [ ]
Labor Surplus [ ]

Vendor Code: P.O. No:
Vendor:
Ship to Location:
Ship to:

ATTACHMENT # 4A

Confirmed with:
Phone No:

Item No	Part Number	Description	Text	U M	Quantity Required	Date Required	Unit Price	Extended Price
		BLANKET ORDER TO CALL-IN ON AS-REQUIRED BASIS. FOR 10/94 THRU 12/95.						
		G/L ACCOUNT 5060007100742000						
001	930010	NITRIC ACID		CB	15			
		NITRIC ACID; TECH GRADE; 42° BAUME; 7.8 GAL CARBOY (90 LBS)						
		APPLICABLE QUALITY ASSURANCE CLAUSE(S):						
		Q417						

C60699 0172

REVISIONS INCORPORATED INTO THE CINCOM SYSTEM on N/A
DATE

Total

Authorization Routing	Planner	Department Supervisor	Department Manager	Safety	Program Manager	Division Manager	Document Control	Quality	Purchasing Manager
By	J.DS			[signature]			RS	RT	
Date	9/30/94			10/3/94			9/30/94	10/1/94	

NO PURCHASE ORDER WILL BE PLACED FOR ITEMS LISTED ABOVE UNLESS INFORMATION SUPPLIED BY REQUISITIONE
COMPLETED AND REQUISITION HAS BEEN SIGNED BY THE APPROPRIATE REQUIRED AUTHORIZING PERSONNEL ABO

SBS OPS-03-AUG91-CSD

PURCHASING

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division

May 4 - 6, 1994

FACILITY ENVIRONMENTAL MANAGEMENT
Special Situation

Environmental Training Documentation

Situation:

Composite Structures Division currently has no mechanism to document or detail which employee(s) require environmental training, the frequency of training, or to document which employee(s) have been trained. For example, it does not appear that RPCC training was conducted in 1993. Two of the individuals listed as "call-out contacts" were unaware of this training.

Recommendation:

Review environmental training requirements and determine the types of training required, individuals requiring training, and training frequency. This review should include training needs requirements for all plant personnel as well as environmental professionals. Develop and implement a tracking system for scheduling and documenting training including provisions for make-up training.

CONFIDENTIAL

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review
Composite Structures Division
May 4 - 6, 1994

FACILITY ENVIRONMENTAL MANAGEMENT
Special Situation

Environmental Training Documentation

Current Date: 9-29-94
Auditee Response and Action Plan:

SPECIAL SITUATION: FACILITY TRAINING

ACTION PLANS:

1. Identify environmental training required by all CSD employees and classifications.
2. Develop and implement a tracking system for scheduling and documenting training, including provisions for make-up training!
3. Schedule training classes.
4. Train CSD employees.

ESTIMATED COMPLETION DATE:

1. Identify ESH Training Requirement Topics, (MATRIX)
   Start February, 15, 1995
   Complete May 15, 1995
2. Training Schedule and Documentation Procedures
   Start June 1, 1995
   Complete June 30, 1995
3. Master Training Schedule
   Complete July 30, 1995
4. Train Employees
   Start September 22, 1994
   Complete December 1995

Continuing Training:
HAZCOMM - October 1994 Begin (200+ employees) (see attached memo)
HAZWOPER - September 22, 1994 (16 ERT Members) (see attached memo)

801 ROYAL OAKS DRIVE
MONROVIA, CALIFORNIA, 91016

ENVIR. TRAINING MEMO

Inter-Office Communication

From: Richard Stewart
John Balicki

To: Greg Emanuelson

Date: September 27, 1994

Subject: ***ANNUAL HAZCOM TRAINING (Revision)***

			Dept. No.	Qty.
Class No. 1	Oct. 4, 1994	9:30am - 10:00am	503, 509, 513	29
Class No. 2	Oct. 4, 1994	1:00pm - 1:30pm	506, 512	19
Class No. 3	Oct. 6, 1994	9:30am - 10:00am	502, 504, 505, 514	35
Class No. 4	Oct. 6, 1994	1:00pm - 1:30pm	501, 507, 526	33
*Class No. 5	Oct. 10, 1994	3:30pm - 4:00pm	526, 507, 533 {second shift}	7
Class No. 6	Oct. 11, 1994	9:30am - 10:00am	515, 516	24
Class No. 7	Oct. 11, 1994	1:00pm - 1:30pm	510	20
Class No. 8	Oct. 13, 1994	9:30am - 10:00am	511, 517, 518, 519	28

* ETR has been scheduled for Monday, October 10, at 3:30 - 4:00pm with Kelly Horsley.

...ING MEMO

Inter-Office Communication

From: Adele Laikin **To:** All Employees

Date: September 27, 1994

Subject: *EMERGENCY RESPONSE TEAM (ERT)*

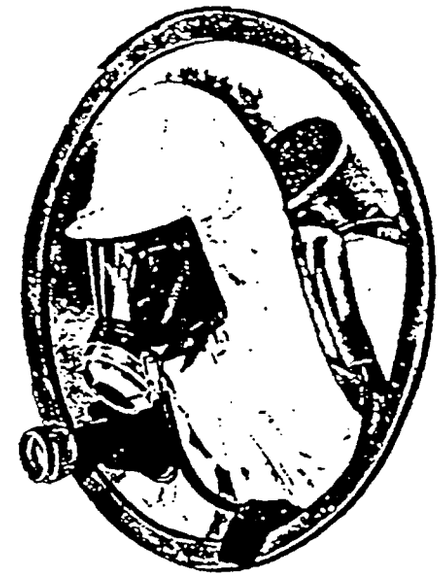
The following is a list of employees who are trained and certified as "Emergency Response Team" (ERT) members for CSD as of September 22, 1994.

Please be advised, that in the event of a hazardous material/hazardous waste spill, you should notify the ESH Department as well as one of the ERT members.

Adele Laikin	Mike Alvarez	Juan Rojo
Greg Emanuelson	Bob Lane	Terry Meyer
Perry Ward	Ralph Venegas	Kevin Zilvar
Robert Taliaferro	Danny Miranda	Dale Cortner
Mike Stanton	David Mark	Danny Molina
Brian Colombo		

Adele Laikin

cc: Baldwin Park
J. Hendricks
Supervisors (M & P)



C60699 0176

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division

May 4 - 6, 1994

WASTES: RCRA HAZARDOUS/INDUSTRIAL

Special Situation

Waste Minimization

Situation:

Opportunities for reducing costs and long-term liability(ies) through waste reduction, reuse, and/or recycling are well documented in written plans, and manifested waste is tracked as a non-financial indicator. Efforts to replace trichloroethane by 1995, reduce methylene chloride use, eliminate ammonia use, and use the State's waste exchange for reuse of out-of-date coatings are commendable. However, other numerous waste reduction opportunities (e.g., possible sale of ferric chloride solution as a water treatment chemical, reclamation of solvents from wastes, reducing quantities of shop rag wastes) are available to reduce costs and liability(ies) but seem to be progressing at a slow pace. Significant commitments to reduce waste quantities (made in the SB-14 Plan filed with the State and the 1994 NFI target of 500,000 lbs. of manifested waste) will not be met if the year-to-date waste generation trend continues.

Recommendation:

Develop and implement a plan including timelines to assure that commitments made in the State's Source Reduction Plan and the 1994 NFI target are met. The Audit Team recommends that the plan include strong sponsorship by line management as well as education and involvement of hourly employees.

CONFIDENTIAL

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division

May 4 - 6, 1994

~~WASTES: RCRA HAZARDOUS/INDUSTRIAL~~
Special Situation

Waste Minimization

Current Date: 9-29-94

Auditee Response and Action Plan:

SPECIAL SITUATION: WASTE MINIMIZATION

ACTION PLANS:

1. Develop and implement a facility wide departmental plan to reduce and/or eliminate specific waste streams from the CSD facilities. These should include schedules for reductions including departmental commitments by the supervisors and managers, as well as education and involvement of hourly employees.

2. Review SB-14 and NFI targets for management commitments.

ESTIMATED COMPLETION DATE:

1. Start dates will be as follows:

   ESH Reduction Memo October 15, 1994

   Departmental identification stage October 30, 1994

   Commitment Reviews and Corrections November 7, 1994

   Department Commitment memos November 10, 1994

   Have written plan of action with management commitments by November 15, 1994.

   Reduction Phase (estimated 6 months) May 15, 1995

2. Ken Martchak trained managers on P.P. on August 26, 1994.

3. Policy and procedures/commitments to be completed on November 30, 1994 for SB-14 and NFI commitments.

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division

May 4 - 6, 1994

WASTES: RCRA HAZARDOUS/INDUSTRIAL

Special Situation

Waste Analysis

Situation:

State and Federal regulations require that Composite Structures Division (CSD) have a Waste Analysis Plan listing each waste stream and how that stream will be periodically re-analyzed and re-designated. Records documenting how a particular waste's designation was determined must be on file and kept for a period of four (4) years. Complete analysis for four (4) major waste streams are on file but documentation of how waste codes were determined is not on file. In the recent changeover from Rollins to USPCI, some waste codes have changed but documentation of why USPCI modified them was not available. All waste codes were classified accurately.

Recommendation:

Prepare a Waste Analysis Plan for periodically characterizing each waste stream.

Develop a procedure to document the waste designations assigned to each waste stream. Waste classification determinations should include a review of the process generating the waste, laboratory analysis of the waste, and documentation of the methodology (i.e., analysis, generator knowledge) used to determine waste classification.

C60699 0179

CONFIDENTIAL

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division

May 4 - 6, 1994

-- WASTES: RCRA HAZARDOUS/INDUSTRIAL --
Special Situation

Waste Analysis

Current Date: 9-29-94

Auditee Response and Action Plan:

SPECIAL SITUATION: WASTE ANALYSIS

A. ACTION PLAN:

Review and document the waste streams manifested from the site.

1. Prepare an Analysis Plan for characterizing waste streams
2. Develop procedures to document determinations, classifications and review periodically.
3. Implement Waste Analysis Plan.
4. Provide additional waste training for responsible employees.

ESTIMATED COMPLETION DATE:

1. Waste Analysis Plan:

   Start January 1, 1995,
   Complete March 1, 1995

2. Waste Classification Documentation Procedure:

   Start March 1, 1995
   Complete May 1, 1995

3. Characterizing Waste:

   Start May 1, 1995
   Complete July 1, 1995

4. Additional waste training to be provided and completed by February 30, 1995.

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division

May 4 - 6, 1994

WASTES: RCRA HAZARDOUS/INDUSTRIAL

Special Situation

Waste Facility Audits

Situation:

Used fluorescent and sodium vapor lights are currently shipped to Mercury Recovery Services for recycling. Mobile equipment is serviced by an outside contractor and used oil, anti-freeze, and batteries are sent by the contractor to Asbury Waste Services for recycling. Neither Mercury Recovery Services or Asbury Waste Services have been audited as required by Alcoa's mandated standard.

Recommendation:

Conduct environmental audits of both recyclers. Review facility and/or contractor contracts to ensure that Alcoa's liability terms and conditions have been incorporated.

CONFIDENTIAL

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division

May 4 - 6, 1994

<= WASTES: RCRA HAZARDOUS/INDUSTRIAL =>
Special Situation

Waste Facility Audits

Current Date: 9-29-94

Auditee Response and Action Plan:

SPECIAL SITUATION: WASTE FACILITY AUDITS

ACTION PLANS:

Audit Mercury Recovery Services and Asbury Waste Services facilities for compliance to Alcoa Mandatory Audit Standard.

ESTIMATED COMPLETION DATE:

Audit paperwork to be mailed to contractors, January 1, 1995

Receive audit forms back & evaluate, February 1, 1995

Audit Mercury by March 15, and Asbury by April 15, 1995

Alcoa estimated approval/acceptance, June 30, 1995

** CONFIDENTIAL **

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division

May 4 - 6, 1994

WATER / WASTEWATER

Special Situation

POTW Discharge

Situation:

As a result of 1994 exceedances of the chromium limit for wastewater discharged to the POTW, CSD has received a warning letter from the Sanitation District of the potential penalties for continued non-compliance. Actions taken to address the situation include the reinstatement of a Wastewater Treatment Plant Operator and the planned installation of surge tanks to allow batch discharges. Although the chromium exceedance issue is being addressed, other non-conformance issues identified include:

- The use of a combined waste stream formula is required when categorical wastewaters are mixed with other industrial wastewaters. Currently this formula is not used. Correction of this situation may impact CSD's ability to comply with Categorical Discharge Limits.

- There is no mechanism in place to ensure permit applications are applied for and obtained prior to commencement of any new plant construction or operation of modified facilities by CSD as required by Section 401 of the Wastewater Ordinance of the Sanitation Districts of Los Angeles County. Permit modifications are not submitted until CSD believes they are significant to warrant a new application. In some instances, applications are not submitted until a number of modifications have occurred.

- There is no mechanism in place to ensure the timely submittal of discharge monitoring reports. Two of the six DMRs reviewed were submitted after the due date (3Q 1993 and 4Q 1993).

- Current operations and procedures have not been reviewed against the Sanitation Districts of Los Angeles County's Wastewater Ordinance. A copy of the Wastewater Ordinance of the Sanitation Districts of Los Angeles County was obtained within the past month.

- Laboratories conducting wastewater analyses are not audited per Alcoa guidance.

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review
Composite Structures Division
May 4 - 6, 1994

WATER / WASTEWATER
Special Situation

POTW Discharge (continued)

Situation (continued):

- Before discharge, the stormwater collected by the stormwater "first-flush" collection system is analyzed. Based upon the results of the analysis, the water is sometimes processed through the chromium treatment facility and discharged to the POTW. While this treatment protects the environment, the stormwater discharge to the POTW is expressly prohibited by the Wastewater Ordinance in Section 406(E) without prior approval (reference Section 305).

Recommendation:

Review existing operations against the permit, the local Wastewater Ordinance, and State and Federal pre-treatment requirements. Develop and implement procedures to ensure requirements are met. The Audit Team recommends Business Unit and Corporate resources be involved in this review and development. Work with Corporate resources to determine proper use of the combined waste stream formula. Work with the District on resolution of updating the permit application.

C60699 0184

CONFIDENTIAL

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division

May 4 - 6, 1994

WATER/WASTEWATER
Special Situation

POTW Discharge

Current Date: 9-29-94

Auditee Response and Action Plan:

SPECIAL SITUATION: POTW DISCHARGE

ACTION PLANS:

1. Contract an outside consultant to review and use the "Combined Waste Stream Formula" to account for CSDs mixing of industrial wastewater's.
2. Revise POTW permit to include Stormwater discharges.
3. Establish and implement policy and procedure to ensure that all permitted pieces of equipment are to be applied for and a copy of the wastewater permit discharge is to be received by CSD prior to the unit being used.
4. Submit revised POTW application for existing modifications to the facility.
5. To ensure timely submittal of discharge monitoring reports, CSD will move the time of the composite sampling of the outfall to the first part of the quarter to assure that there is enough time remaining to submit the appropriate surcharge documents to the Sanitation District.
6. Review CSD Operations Against Sanitation Districts County Wastewater Ordinance Regulations and implement necessary measures to ensure CSD's outfall is in compliance, including EPA Pretreatment Standards.
7. Audit laboratories contracted to analyze CSD's wastewater going to the POTW.
8. Provide a written policy and procedure to assure CSD meets local, state and federal pretreatment requirements and reviews these requirements annually.

CONFIDENTIAL

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review
Composite Structures Division
May 4 - 6, 1994

~~ WATER/WASTEWATER ~~
Special Situation

POTW Discharge

Current Date: 9-29-94
Auditee Response and Action Plan:

(Continued)

ESTIMATED COMPLETION DATE:

1. A purchase requisition to be written and submitted by October 15, 1994. Consultant completion of calculation by December 15, 1994.
2. Revise POTW permits and submit applications to the POTW by December 1, 1994 to include Stormwater discharges.
3. Policy memo has been started as of September 21, 1994 and will be issued by November 30, 1994
4. Submit application to POTW by December 1, 1994.
5. Complete by May 30, 1994 (Completed)
6. Characterization started by November 30, 1994 and completed by May 30, 1995.
7. Initial mailing of audit: September 30, 1994. Receipt of audits back from contractors, October 30, 1994. Estimated audit dates: November 15 and November 30 1994.
8. Company written policy to be completed by April 15, 1995.

** CONFIDENTIAL **

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division

May 4 - 6, 1994

WATER / WASTEWATER

Special Situation

Stormwater

Situation:

CSD discharges stormwater under a California General Permit and has certified that all non-stormwater discharges have been permitted or eliminated. CSD has also certified that a Stormwater Pollution Prevention Plan (SWP3) will be developed and implemented.

- During the audit, a number of discharge pipes were noted entering a stormwater conveyance along Maintenance Alley.
- The SWP3 is not being fully executed. The weekly inspection program has not been fully implemented.

Recommendation:

Eliminate, re-route, or permit non-stormwater discharges. Implement and document conformance with the SWP3 Plan.

CONFIDENTIAL

The following situation and recommendation is a brief description of a potentially complex set of conditions. Readers who are not aware of the total situation should refrain from drawing conclusions.

Environmental Review

Composite Structures Division

May 4 - 6, 1994

~~ WATER/WASTEWATER ~~
Special Situation

Stormwater

Current Date: 9-29-94

Auditee Response and Action Plan:

SPECIAL SITUATION: STORMWATER

ACTION PLANS:

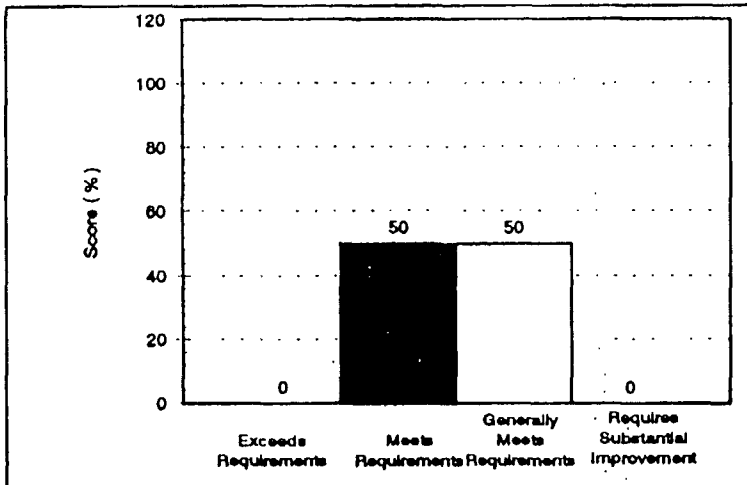
1. Identify all non-Stormwater discharges within the facility (Monrovia site and Baldwin Park) and eliminate them from the Stormwater effluent.
2. Implement Stormwater Pollution Prevention Plan
3. Implement Weekly Inspections per the Stormwater Pollution Prevention Plan.
4. Environmental technicians are to cross train on daily, weekly, monthly and annual facility audits.

ESTIMATED COMPLETION DATE:

1. Started project as of September 1, 1994 and complete project by May 31, 1995
2. Execution of Stormwater Pollution Prevention Plan by January 15, 1995.
3. Weekly inspections started September 29, 1994.
4. Environmental technicians have received cross training on daily, weekly, monthly and annual facility audits as of September 30, 1994.

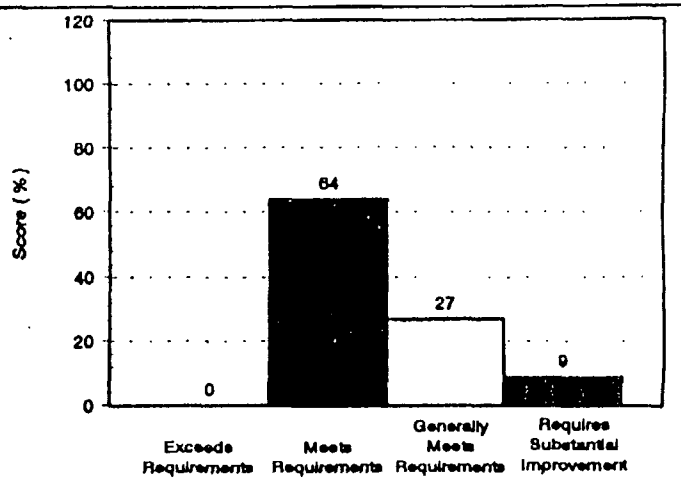
COMPOSITE STRUCTURES DIVISION -- MONROVIA, CA

** May 4 - 6, 1994 **



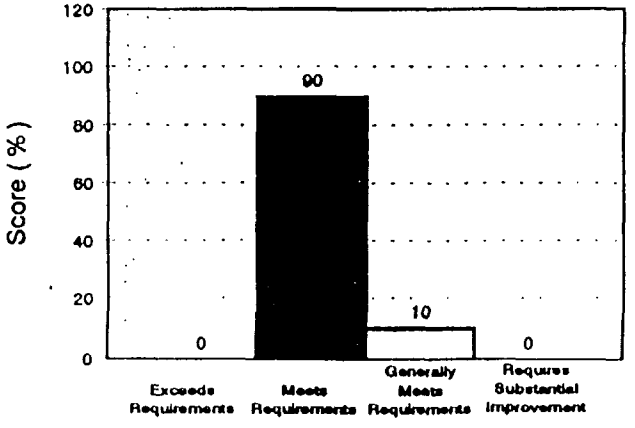
FACILITY ENVIRONMENTAL MANAGEMENT

2 of 10 = N/A



CHEMICAL RELEASE

6 of 17 = N/A



11 of 21 = N/A

TOXIC SUBSTANCES/LAND MANAGEMENT

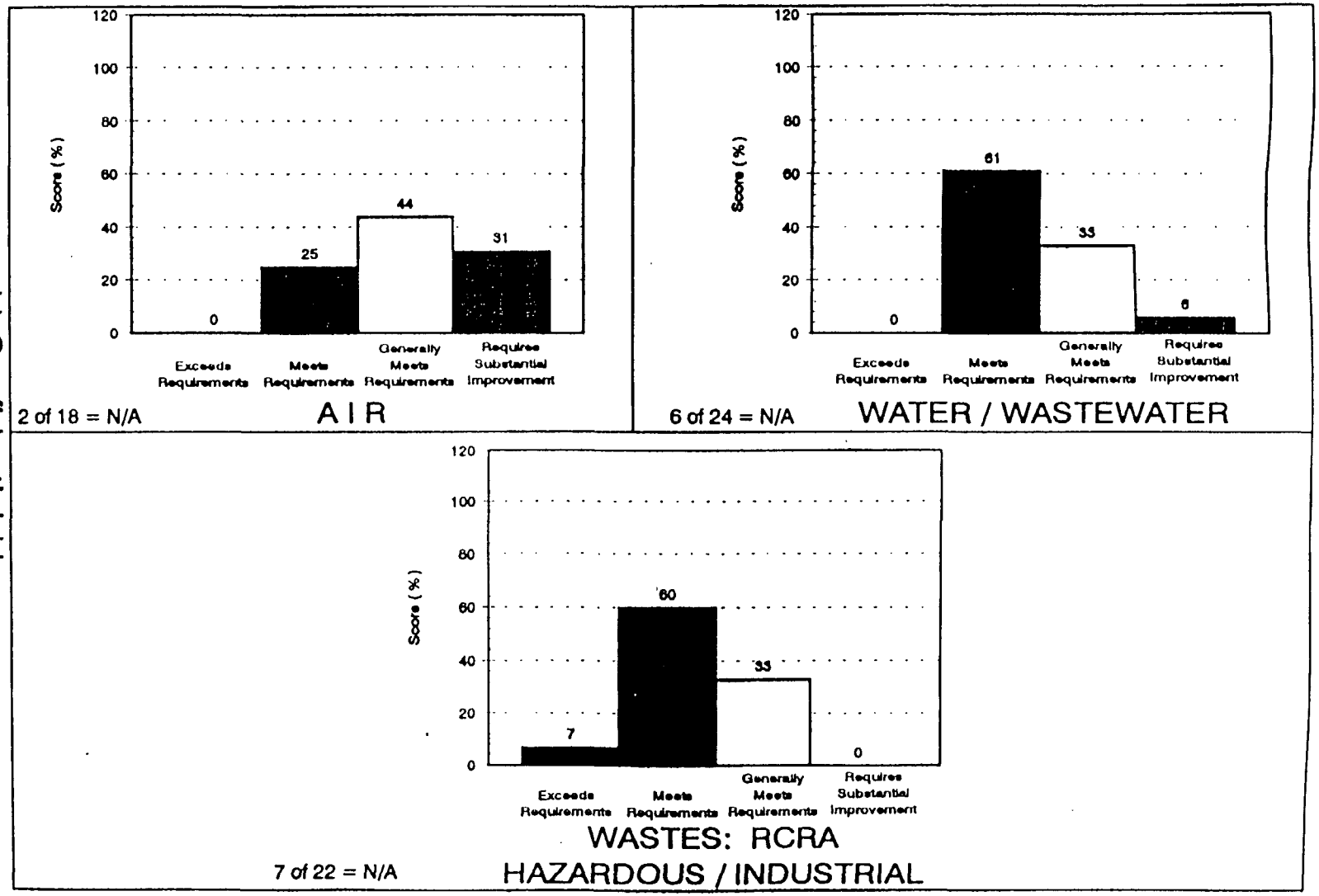
** Confidential **

C60699 0189

COMPOSITE STRUCTURES DIVISION -- MONROVIA, CA

** May 4 - 6, 1994 **

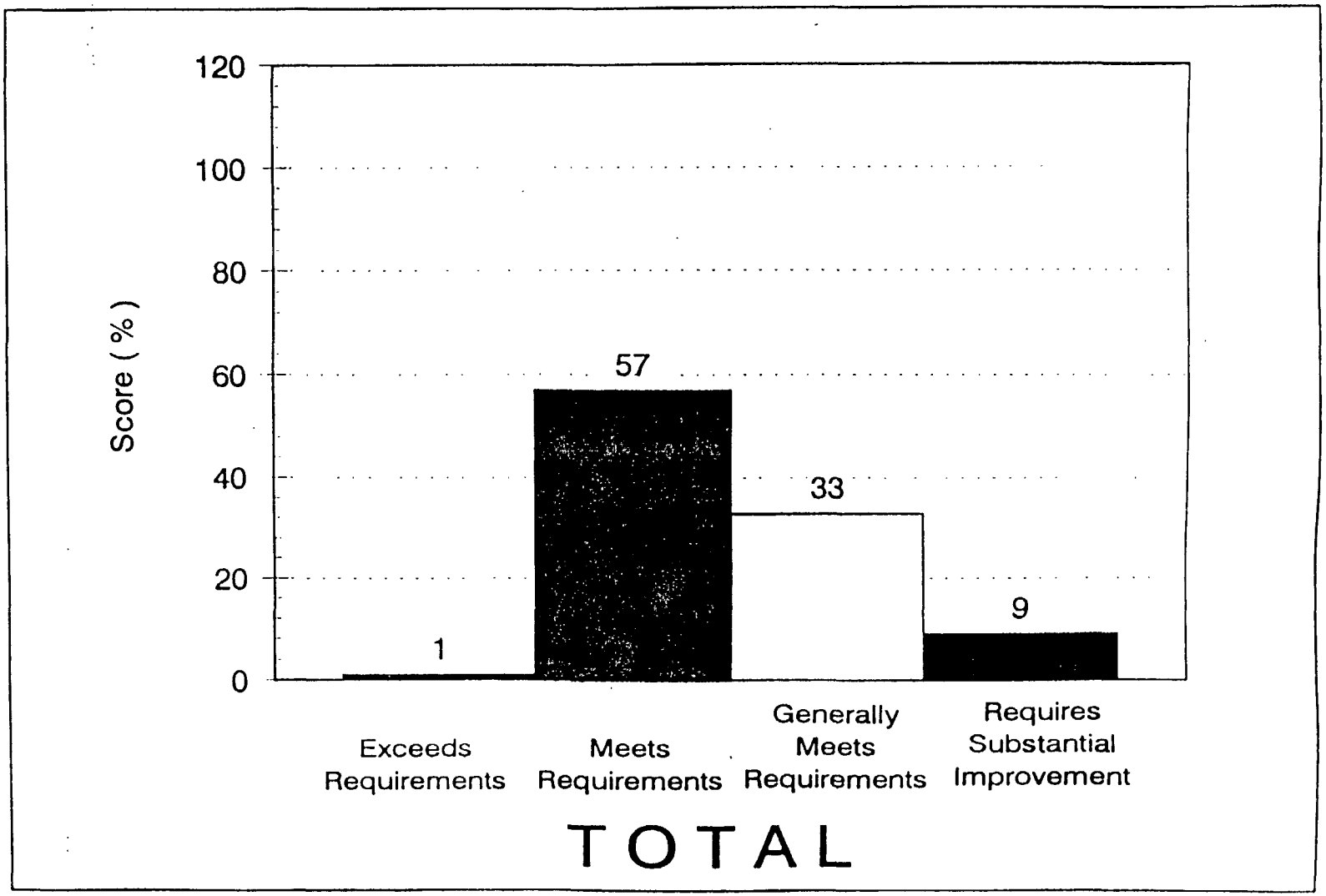
** Confidential **



C60699 0190

COMPOSITE STRUCTURES DIVISION -- MONROVIA, CA

** May 4 - 6, 1994 **



** Confidential **

C60699 0191