

EXCERPTS FROM THE 1989  
TIGER TEAM COMPLIANCE  
ASSESSMENT OF THE Y-12 PLANT:

EVIDENCE FILE FOR FINDING 3.5.8.2.3,  
RADIOACTIVE EFFLUENT/ON-SITE DISCHARGE

1989-1992

Distribution

J. E. Buddenbaum  
S. W. Wiley

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**Tiger Team Assessment  
of the  
Oak Ridge Y-12 Plant  
Oak Ridge, Tennessee**

Y-12 SITE  
DOCUMENT RESPONSE CENTER



February 1990

U.S. Department of Energy  
Washington, DC 20585

## PREFACE

This document contains findings identified during the Tiger Team Compliance Assessment of the Department of Energy's (DOE's) Y-12 Plant in Oak Ridge, Tennessee. The assessment was directed by the Department's Office of Environment, Safety and Health (ES&H) from September 25 to October 20, 1989.

The Y-12 Plant Tiger Team Compliance Assessment is comprehensive in scope. It covers the Environmental, Safety, and Health [including Occupational Safety and Health Administration (OSHA) compliance], and Management areas and determines the plant's compliance with applicable Federal (including DOE), state, and local regulations and requirements.

The preliminary assessment findings were submitted to the Office of Defense Programs, the Oak Ridge Operations Office, the site contractor [Martin Marietta Energy Systems, Inc. (Energy Systems)], and state and Federal regulatory agencies at the conclusion of the on-site assessment activities for review and comment on technical accuracy. Changes and any other appropriate modifications are incorporated herein.

The Y-12 Plant Tiger Team Compliance Assessment is one component of a larger, comprehensive DOE Tiger Team Compliance Assessment program planned for more than 100 of the Department's operating facilities. This assessment is part of a ten-point initiative announced on June 27, 1989, by the Secretary of Energy, Admiral James D. Watkins, Ret., to conduct independent oversight compliance and management assessments of the ES&H programs at DOE facilities. The objective of the initiative is to provide the Secretary with information on the current ES&H compliance status of DOE facilities, root causes for noncompliance, adequacy of DOE and site contractor ES&H management programs, response actions to address the identified problem areas, and DOE-wide ES&H compliance trends and root causes.

February 1990  
Washington, D.C.

(i.e., thumb screws had not been tightened). One stack monitor was found with the detector not properly installed. It was also noted that numerous stack monitor tygon sample lines were internally coated with oily material, which adversely affects the capability of the system to obtain a representative particulate sample. The Y-12 Plant has subsequently replaced the tygon sample lines and installed hose clamps. The apparent cause of these deficiencies is lack of maintenance, procedural direction and personnel awareness.

Effluent sampling procedures are not treated as controlled documents and are not updated in a timely manner to reflect changes in the effluent monitoring program. The Y-12 Plant has removed all outdated procedures from the stack monitor cabinets. Two outdated procedures were found in a stack monitor cabinet. Changes in sample filter handling and analysis have not been incorporated into the appropriate procedures to reflect current practice.

### 3.5.8.2.3 Radioactive Effluent/On-site Discharge/Unplanned Releases Report

Performance Objective: DOE Order 5484.1, Environmental Protection, Safety, and Health Protection Information Reporting Requirements specifies the requirements for the radioactive effluent/on-site discharge/unplanned releases report.

Finding: Annual radioactive effluent and on-site discharge data reports for the Y-12 Plant have not been properly prepared and submitted to the Waste Information Systems Branch, EG&G Idaho, Inc., as required by DOE Order 5484.1, Chapter IV, paragraph 4.c.(1).

The Y-12 Plant has routinely prepared the radioactive effluent report for submittal by DOE-ORO. Prior to calendar year (CY) 1986, these reports were submitted to the DOE-ORO Environmental Protection Division, currently these reports are submitted to the DOE Y-12 Site Manager. These reports are maintained by the DOE Y-12 Program Management Branch and made available to other DOE-ORO organizations. Interviews with DOE personnel indicated that the reports have not been submitted to the Waste Information System Branch, EG&G Idaho as required by the DOE order. The Y-12 Plant and DOE-ORO personnel indicated that the report was not submitted because of security classification. Documentation of an exemption from this reporting requirement could not be found during the performance of this assessment.

The Y-12 Plant Radioactive Effluent Reports for CY 1986 through 1988 were reviewed, and the following deficiencies were noted:

- None of the report data forms DOE F 5821.1, Radioactive Effluent/On-Site Discharges/Unplanned Releases had an approval signature next to the typed name of the individual designated to perform the approval.
- From apparent data anomalies (e.g., unclear data from double strike) on copies of DOE F 5821.1 forms, it was learned that white out had been used to correct data entries on the original forms. In the future, data revision should be appropriately indicated.

- Maps showing the location of new or deleted effluent streams and on-site discharge points from the previous year have not been included as required by DOE Orders 5484.1.
- A discussion of unplanned releases of radioactive materials in effluent (e.g., the Uranium Oxide Storage Vault Emissions Incident as reported in the Oak Ridge Reservation Environmental Report for 1988) was not included as required by DOE Orders 5484.1.
- The Y-12 Plant reports do not contain a summary of pertinent and interpretative information to adequately describe reported data as required by DOE Orders 5484.1.
- The Y-12 Plant reports do not report specific radionuclides released from each emission point as required by DOE Orders 5484.1. Currently, U-234 is the only airborne radionuclide reported with a comment that assay range depleted to enriched and U-234 and Th-232 are reported for liquid releases.

DOE-ORO has requested that the Y-12 Plant update the effluent information system to meet the requirements of Chapter 2 of the DOE Order 5400.1. This update was requested to be completed by October 13, 1989. DOE-ORO also stated in the memo that it was incorrect to report releases as U-234 only and requested correction.

It appears that the lack of DOE and Energy Systems procedures for this activity, lack of knowledge as to the order requirements, as well as organizational and responsibility changes within DOE-ORO divisions are the contributing factors resulting in this finding.

#### 3.5.8.2.4 Annual Site Environmental Report

Performance Objective: DOE Order 5484.1, Environmental Protection, Safety, and Health Protection Information Reporting Requirements, and DOE Order 5400.1, General Environmental Protection Program, specify the reporting requirements for the annual site environmental report.

Finding: The annual Oak Ridge Reservation Environmental Report for 1988 was not distributed in accordance with the requirements of DOE Order 5484.1, Chapter IV, paragraph 4.c.(2), and DOE Order 5400.1, Chapter II, paragraph 4.

An exemption for this reporting requirement was not obtained in accordance with the exemption procedures of DOE Order 5400.1, Chapter I. Partial distribution was made to internal DOE organizations. Based upon direction for DOE-HQ, complete distribution as required by the order was not performed (i.e., external agencies and organizations, and the public). The circumstances surrounding this finding were beyond the site's control. This finding should be presented to DOE-HQ for resolution.

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## Action Plan in Response to the Compliance Assessment Team Findings

Oak Ridge Y-12 Plant  
Oak Ridge, Tennessee

July 1990

Oak Ridge Operations Office  
U.S. Department of Energy

Prepared by the  
Oak Ridge Y-12 Plant  
Oak Ridge, Tennessee 37831-2009  
operated by  
MARTIN MARIETTA ENERGY SYSTEMS, INC.  
for the  
U.S. DEPARTMENT OF ENERGY  
under contract DE-AC05-84OR21400

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## Y-12 Technical Evaluation Program Corrective Action Report

Evaluation Title> Tiger Team Compliance Assessment  
TEP Number> 89-HQX-TTA01-EM50 Evaluation Date> 9/25/89-10/20/89  
Alternate Identifier> 3.5.8.2.3 Lead Evaluator>  
Division> HSEA Accountable Manager> K. L. Brady  
Location> V&R> Priority>  
Category>  
Finding/Observation> Environmental 3.5.8.2.3

Annual radioactive effluent and on-site discharge data reports for the Y-12 Plant have not been properly prepared and submitted to the Waste Information Systems Branch, EG&G Idaho, Inc., as required by DOE Order 5484.1, Chapter IV, paragraph 4.c.(1).

Response Date> November 1989  
Response>

The Radiological Effluent Report is a Confidential-Restricted Data document that lists individual emissions and effluents from the Y-12 Plant. These reports are submitted annually by the Y-12 Plant to DOE-ORO. Beginning with the 1983 report, DOE-ORO stopped forwarding these reports to EG&G Idaho due to their classification. The DOE site office has contacted DOE-HQ and EG&G Idaho personnel about the disposition of past reports, which are currently on file at DOE-ORO. These reports are being forwarded to EG&G as required in the DOE orders.

1. At the request of DOE-ORO, an unclassified report of information to update the data base maintained by EG&G will be prepared and submitted by Y-12.
2. Beginning with the 1989 Rad Effluent Report, complete information will be provided in accordance with DOE orders and the report preparation guide.

The update report will be transmitted to DOE-ORO by November 30, 1989. No additional costs have been identified.

### Status Update 2/1/90:

Information to update the database was prepared and submitted to DOE-ORO on January 5, 1990. Complete.

Person Assisting> I. V. Darling - Environmental Management  
Person Responsible> R. M. Keyser Telephone No.> 4-3647  
Scheduled Completion Date> 11/30/89 Revised Comp. Date>  
Actual Completion Date> 1/5/90

Signature> *[Handwritten Signature]* Date> 2/27/90  
(Typed and Signed)

Independent Validation by DOE, Reference DOE memorandum  
Signature> ES-90-013787 dated 8/21/91 Date> 1-2-92  
(Typed and Signed) *[Handwritten initials]*

Comments>

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MARTIN MARIETTA

MARTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX 2009  
OAK RIDGE, TENNESSEE 37831

January 12, 1990

Mr. R. J. Spence  
Department of Energy, Oak Ridge Operations  
Post Office Box 2001  
Oak Ridge, Tennessee 37831

Dear Mr. Spence:

Upgrading Effluent Information System (EIS)  
and On-Site Discharge Information System (ODIS)

As you requested in your letter, same subject, dated August 25, 1989, the enclosed documents contain the necessary information to update the "Narrative Summary Description" section of the EIS/ODIS data base maintained by EG&G in Idaho Falls for the Department of Energy (DOE).

The data base information on the printout accompanying your letter is considerably out of date. Since the 1970s, when most of the information for the data base was originally submitted, the emission and discharge monitoring programs at the Y-12 Plant have changed significantly. Sampling equipment has been upgraded, and sampling locations have been changed in order to obtain more accurate data.

The enclosed data sheets (DOE Form F-5821.1) include the effluent sources that should be deleted from the data base and complete information on sources that should be added to the data base.

If there are any questions regarding this information, please contact Iris V. Darling at 4-1593.

Very truly yours,



Gordon G. Fee  
Vice President and  
Y-12 Plant Manager

GGF:IVDarling:alr

Enclosures: As Stated

cc/enc: See Page 2



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Department of Energy

Oak Ridge Operations  
P.O. Box 2001  
Oak Ridge, Tennessee 37831-8555

Compliance Report M-CAA-21

Y-12 Site Office

June 14, 1990

Mr. Gordon G. Fee  
Vice President and  
Y-12 Plant Manager  
Martin Marietta Energy Systems, Inc.  
Post Office Box 2009  
Oak Ridge, Tennessee 37831

Dear Mr. Fee:

**DOE DIRECTIVE 5400.1 - RADIOACTIVE EFFLUENT AND ON-SITE  
DISCHARGE ANNUAL REPORTING REQUIREMENTS**

The Department of Energy Headquarters has issued for the Y-12 Plant an official waiver of the DOE Order 5400.1 requirement to submit the Radioactive Effluent and On-Site Discharge Annual Report (specifically the DOE F 5821.1 data forms) to EG&G because the Y-12 report has been classified as Confidential Restricted Data (CRD). As described in the June 5, 1990, memorandum (enclosure 1), the data forms shall be maintained at the Y-12 Site Office and made available for review to individuals with the appropriate clearance. The Y-12 Plant must submit unclassified data to EG&G that can be used in the information system. Total quantities and curies of enriched uranium and depleted uranium released must be reported as well as any other information that can be reported while the report remains unclassified. The unclassified data report must be prepared and submitted in accordance with the DOE Order 5400.1 requirements. Only the requirement to submit the DOE F 5821.1 data forms to EG&G have been waived. Also enclosed for your information is the November 15, 1989, memorandum requesting an official waiver (enclosure 2).

If there are any questions, please contact Becky Finch at 6-4119.

Sincerely,

Robert J. Spence  
Y-12 Site Manager

DP-813:Finch

Enclosures:

1. Ltr dtd 06/05/90, Brush to Spence, DOE Directive 5400.1
2. Ltr dtd 11/15/89, Spence to Brush/Tuck, DOE Directive 5400.1

Gordon G. Fee

-2-

June 14, 1990

cc w/enclosures:

Lisa Feldt, EH-232, DOE-HQ

T. Watanabe, EG&G Idaho

M. Theisen, DP-81

W. G. Gibson, DP-321

W. Dillow, SE-312

C. Kimbrough/I. Darling, Y-12, 9115, MS 8219

R. Keyser/C. C. Hill, Y-12, 9116, MS 8098

H. Harper/L. Cunningham, Y-12, 9116, MS 8098

B. G. Finch, DP-813

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United States Government

# memorandum

20 JUN 8 P 2:35

DATE: June 5, 1990

REPLY TO  
ATTN OF: EH-232

SUBJECT: DOE Directive 5400.1 - Radioactive Effluent and On-Site Discharge Annual Reporting Requirements

TO: Robert J. Spence  
Y-12 Site Manager

This is in response to your memorandum dated November 15, 1989 (attached) requesting assistance with submitting Confidential Restricted Data (C-RD) as part of the radioactive effluent and on-site discharge reporting requirements of DOE Orders 5484.1 and 5400.1. Your memorandum provided two options on how to handle C-RDs in your reporting requirements. The first option is to transmit the C-RD directly to the computer operations at EG&G. The second option is to maintain the C-RD data at the Y-12 site office and transmit summary data to EG&G.

We have had numerous discussions with DOE classification specialists and EG&G representatives. The classification specialists state that if the isotopic nature of the uranium is revealed, then the type of material becomes very obvious. Therefore, we recommend the second option be implemented. More specifically, DOE F 5821.1 data forms would be maintained at the Y-12 Site Office and made available for review to individuals with the appropriate clearance. The Y-12 Site Office would provide EG&G with unclassified data that can be used in its information systems. In our discussions with EG&G personnel, it was agreed that the Y-12 Plant could report the C-RD by reporting the quantities and curies of total enriched uranium and total depleted uranium released.

I apologize for the delay in responding. If you have any additional question, please contact Lisa Feldt at FTS 896-4985 or Andy Wallo at FTS 896-4996.



Peter N. Brush  
Acting Assistant Secretary  
Environment, Safety and Health

Attachment

cc: Tom Tyson, Y-12 Site Office  
Becky Finch, Y-12 Site Office  
Peter Gross, ORO-EPD

November 15, 1989

DP-812:Finch

**DOE DIRECTIVE 5400.1 - RADIOACTIVE EFFLUENT AND ON-SITE  
DISCHARGE ANNUAL REPORTING REQUIREMENTS**

John C. Tuck, Acting Assistant Secretary for Defense  
Programs, DP-1, Forrestal

Peter N. Brush, Acting Assistant Secretary for Environment,  
Safety and Health, EH-1, Forrestal

During the October DOE HQ Compliance Assessment of the Oak Ridge Y-12 Plant, noncompliance with the radioactive effluent and on-site discharge annual reporting requirements of DOE Order 5484.1 and 5400.1 was identified.

The Y-12 annual report has not been submitted to the Waste Reduction Operations Complex, EG&G Idaho; this was included as a noncompliance. The Y-12 data has not been submitted (since 1983) because the information is Confidential Restricted Data (CRD) and data entry into the information system as it exists now would be prohibited. DOE-ORO has considered masking or grouping data; however, ORO classification specialists have concluded that the data would remain classified due to the isotopic nature of the material alone. EG&G staff have indicated that they prefer not to receive the classified data as it is not useful in providing information for the system.

We have determined that the following options exist for ORO:

- 1) Submit the DOE F 5821.1 data forms as C-RD to the EG&G Waste Information System Branch via the Secure Automatic Communications Network (SACNET) or directly to the computer operations. It is our understanding that the information will be maintained in secure files and will not be used for information system input.
- 2) Maintain the DOE F 5821.1 data forms at the DOE Y-12 Site Office available for review by Q-cleared personnel and provide EG&G Waste Information System Branch with any unclassified data that would be of use in maintaining the information system (i.e. annual total enriched uranium discharged and total depleted uranium discharged for the Y-12 Site).

5400

November 15, 1989

Because Y-12 radioactive effluent discharge data are classified as C-RD and as we understand it can not be input into the information system, we propose that the Y-12 data be maintained at the Y-12 Site Office available for review by Q-cleared personnel.

However, in our efforts to plan the necessary corrective actions to achieve full compliance with DOE Orders 5484.1 and 5400.1, concurrence from EH-1 and DP-1 allowing this variance is requested.

Although reproduction of the classified information may not be of use to EG&G, the Annual Radioactive Effluent and On-Site Discharge data reports (including previous years reports) will be submitted to the Information System Branch, EG&G Idaho via the Secure Automatic Communications Network or directly to the computer operations in order to comply with the DOE Directive until otherwise notified.

Original Signed by  
R. J. Spence

Robert J. Spence  
Y-12 Site Manager

cc:

W. G. Gibson, DP-321  
T. Watanabe, EG&G Idaho  
T. G. Frangos, EH-231, DOE-HQ  
M. Theisen, DP-81

**RECORD COPY**

Assessment Title: Radiation

Finding/Observation Number: Finding 3.5.8.2.3, Radioactive Effluent/On-site Discharge/Unplanned Release Report.

Observations are noted below concerning the evidence file review (or field review) of the subject corrective action plan which was performed June 26, 1991.  
(Date of review)

Verification Actions	S/U	Comments
1. Provide report to DOE	S	Transmittal in file. Waiver from DOE pertaining to classified information in file.

Evaluator(s) recommend acceptance of the completion status for this plan.

John S. Phillips  
Evaluator

Date: June 26, 1991

Chris A. Rafferty  
Evaluator

Date: June 26, 1991



Y-12 Site Office

# Department of Energy

DOE Field Office, Oak Ridge  
P.O. Box 2001  
Oak Ridge, Tennessee 37831-8555  
October 22, 1991

Beck

DJBostock, 10/24/91

cy: Steve Hunt

# RECORD COPY

What is your suggestion regarding method to handle and communicate to plan. Give me a call.

JEFerguson, 10/30/91

Mr. D. J. Bostock, Vice President and  
Y-12 Plant Manager  
Martin Marietta Energy Systems, Inc.  
Post Office Box 2009  
Oak Ridge, Tennessee 37831-8009

Dear Mr. Bostock:

## DOE VERIFICATION OF CORRECTIVE ACTION COMPLETIONS FOR COMPLIANCE ASSESSMENT OF THE Y-12 PLANT "TIGER TEAM" FINDINGS

For your information, the corrective actions taken for the following "Tiger Team Findings have been verified by the DOE Y-12 Site Office and are considered closed.

<u>Finding No.</u>	<u>Subject</u>	<u>Date Verified</u>
1551 4.5.6.3.1	Planning	10/10/91
1286 3.5.1.2.1	Vehicular Fuel Dispensing Requirements	10/10/91
1325 3.5.6.2.2	Lack of an Updated Large Capacitor Inventory	10/10/91
1335 3.5.8.2.3 <i>initial</i>	Radioactive Effluent	10/10/91
1336 3.5.8.2.4	Annual Site Environmental Report	10/10/91
1307 3.5.4.3.2	Groundwater Level Measurement Procedures	10/10/91
1303 3.5.3.2.2	Discharge Monitoring Report	10/10/91
1308 3.5.4.3.1	Monitoring Well Conditions	10/10/91
1554 4.5.3.3.1	Safety and Health, Maintenance Priorities	10/18/91

The following findings were identified to have unsatisfactory conditions during the review process and require further action to justify closure by the DOE Y-12 Site Office.

<u>Finding No.</u>	<u>Subject</u>
3.5.10.3.1	Training and Information Available....
3.5.8.3.1	Protocol for Modifying The Environmental Monitoring Plan

The enclosed "DOE Y-12 Corrective Action Verification" forms are provided for your information and comprise the reasons of the unsatisfactory conditions identified during the review. Please take the necessary action to correct the deficiencies.

If you have any questions, please contact Jerry Robertson at 6-0223.

Sincerely,

*Daniel K Hoop*  
for Robert J. Spence  
Y-12 Site Manager

DP-813:Robertson

Enclosure:  
DOE Y-12 Corrective Action Verification

cc w/o Encl:  
Jerry Robertson, DP-813  
Dave Beck, Y-12, Bldg. 9723-11A, MS 8127

# DOE Y-12 CORRECTIVE ACTION VERIFICATION

Assessment Title: Tiger Team Assessment - 1989

Date of DOE Review: 10-10-91 Finding Number: 4.5.6.3.1

Subject: Planning

## - Verification Actions -

Milestone No.	Sat./ Unsat.	Comments
1-4.	Sat.	A Site Office review was performed which verified actions had been completed. The review consisted of research of documentation concerned with projects and with finding 4.5.6.3.1, and interviews with Martin Marietta Energy Systems personnel, combined with research of computer data base lessons learned.

Location of Objective Evidence: Ed St. Clair, Building 9739, Room 102  
Phone 574-6431

Corrective Action Completed and Verified (Y/N) Y

**\*\* ANY UNSATISFACTORY CONDITIONS NOTED IN VERIFICATION ACTIONS MUST BE RETURNED TO THE CONTRACTOR FOR FURTHER ACTION.**

Wayne Hankins  
 DOE Verification Signature

Date: 10/10/91

Thomas A. Jason  
 DOE Supervisor Signature

Date: 10/11/91

# DOE Y-12 ( ) RRECTIVE ACTION VERIFICATION

Assessment Title: TIGER TEAM ASSESSMENT - 1989

Date of DOE Review: 10-10-91 Finding Number: 3.5.1.2.1

Subject: VEHICULAR FUEL DISPENSING REQUIREMENTS

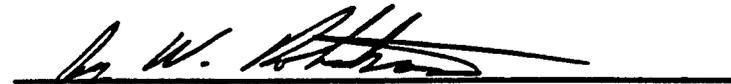
## - Verification Actions -

Milestone No.	Sat./ Unsat.	Comments
1.	SAT	AN AUDIT TEAM MEMBER FROM THE ORIGINAL TIGER TEAM VERIFIED THAT APPROPRIATE SIGNS HAD BEEN MADE. ON 10-10-91, THE APPROPRIATE SIGNS WERE STILL POSTED

Location of Objective Evidence: AT GASOLINE FILLING STATION

Corrective Action Completed and Verified (Y/N) Y

**\*\* ANY UNSATISFACTORY CONDITIONS NOTED IN VERIFICATION ACTIONS MUST BE RETURNED TO THE CONTRACTOR FOR FURTHER ACTION.**

 Date: 10-10-91  
DOE Verification Signature

William A. DuVelle Date: 10/10/91  
DOE Supervisor Signature

# DOE Y-12 CORRECTIVE ACTION VERIFICATION

Assessment Title: Tiger Team Assessment - 1989

Date of DOE Review: 10-10-91 Finding Number: 3.5.6.2.2

Subject: LACK OF AN UPDATED LOGS

## - Verification Actions -

Milestone No.	Sat./ Unsat.	Comments
1	5	Audit Report dated August 9, 1990 identified the PCB capacitors in-service at Stone for reuse.
2	5	PCB capacitor inventory has been certified as accurate; Based to Stone Level, <del>1990</del> 1991.
		Supporting documentation is on file.

Location of Objective Evidence: Bldg 9115 Room 104

Corrective Action Completed and Verified (Y/N) Y

\*\* ANY UNSATISFACTORY CONDITIONS NOTED IN VERIFICATION ACTIONS MUST BE RETURNED TO THE CONTRACTOR FOR FURTHER ACTION.

Brian Almon  
DOE Verification Signature

Date: 10-10-91

William H. Donnan  
DOE Supervisor Signature

Date: 10/10/91

# DOE Y-12 CORRECTIVE ACTION VERIFICATION

Assessment Title: TRIST TEAM ASSESSMENT - 1989

Date of DOE Review: 10-10-91 Finding Number: 3.5.B.2.3

Subject: RADIOACTIVE EFFLUENT ON-SITE DISCHARGE / UNPLANNED RELEASE

## - Verification Actions -

Milestone No.	Sat./ Unsat.	Comments
1	5	DOE HQETS ISSUED A WRITING TO Y-12 PERTAINING TO SUBMITTAL OF 4 CLASSIFIED REPORTS. AN UNCLASSIFIED REPORT HAS BEEN SENT. TRANSMITTAL IS ON FILE.

Location of Objective Evidence: Bldg. 9115 Room 104

Corrective Action Completed and Verified (Y/N) Y

**\*\* ANY UNSATISFACTORY CONDITIONS NOTED IN VERIFICATION ACTIONS MUST BE RETURNED TO THE CONTRACTOR FOR FURTHER ACTION.**

Brian W. Mena \_\_\_\_\_ Date: 10-10-91  
DOE Verification Signature

William H. McKie \_\_\_\_\_ Date: 10/10/91  
DOE Supervisor Signature

# DOE Y-12 ( )RECTIVE ACTION VERIFICATION

Assessment Title: TIGER TEAM ASSESSMENT - 1989

Date of DOE Review: 10-10-91 Finding Number: 3.5.B.2.4

Subject: ANNUAL SITE ENVIRONMENTAL REPORT

## - Verification Actions -

Milestone No.	Sat./ Unsat.	Comments
1	5	Supporting documentation indicates that the Y-12 plant submitted the subject plan in accordance with DOE orders. The findings clearly indicate that this deficiency was directed to DOE Holtec for inadequate distribution.

Location of Objective Evidence: Bldg 9115 Room 104

Corrective Action Completed and Verified (Y/N) Y

**\*\* ANY UNSATISFACTORY CONDITIONS NOTED IN VERIFICATION ACTIONS MUST BE RETURNED TO THE CONTRACTOR FOR FURTHER ACTION.**

Brian D. [Signature] Date: 10-10-91  
DOE Verification Signature

William H. [Signature] Date: 10/10/91  
DOE Supervisor Signature



# DOE Y-12 C CORRECTIVE ACTION VERIFICATION

Assessment Title: Tiger Team Assessment of 1989

Date of DOE Review: 10/10/91 Finding Number: 3.5.3.2.2

Subject: Discharge MONITORING REPORT PREPARATION

## - Verification Actions -

Milestone No.	Sat./ Unsat.	Comments
1	Sat	Viewed October DMR and subsequent DMRs.
		"No Flow" indicated on each page of DMR
		for outfalls which have no flow during the period.

Location of Objective Evidence: Bldg 9115, Rm 104, Laura Cunningham,

Corrective Action Completed and Verified (Y/N) Y

**\*\* ANY UNSATISFACTORY CONDITIONS NOTED IN VERIFICATION ACTIONS MUST BE RETURNED TO THE CONTRACTOR FOR FURTHER ACTION.**

William A. Medina  
DOE Verification Signature

Date: 10/10/91

William A. Medina for Don Hoag  
DOE Supervisor Signature

Date: 10/10/91

# DOE Y-12 CORRECTIVE ACTION VERIFICATION

Assessment Title: Tiger Team Assessment of 1989

Date of DOE Review: 10/10/91 Finding Number: 3.5.4.3.1

Subject: Monitoring Well Conditions

## - Verification Actions -

Milestone No.	Sat./ Unsat.	Comments
1	SAT	Viewed procedure which includes provisions for locking well caps. Also viewed quarterly inspection logs, which has provisions for checking hasps and locks.

Location of Objective Evidence: Bldg 915, Rm 104, Laura Cunningham

Corrective Action Completed and Verified (Y/N) Y

**\*\* ANY UNSATISFACTORY CONDITIONS NOTED IN VERIFICATION ACTIONS MUST BE RETURNED TO THE CONTRACTOR FOR FURTHER ACTION.**

William H. McWhorter Date: 10/10/91  
DOE Verification Signature

William H. McWhorter Date: 10/10/91  
DOE Supervisor Signature Don Hoag

# DOE Y-12 ( ) CORRECTIVE ACTION VERIFICATION

Assessment Title: Tiger Team Assessment of 1989

Date of DOE Review: 10/10/91 Finding Number: 3.5.10.3.1

Subject: TRAINING + Information Available to Energy Systems + ORO Y-12 Staff

## - Verification Actions -

Milestone No.	Sat./ Unsat.	Comments
1.	SAT	Viewed Training Certificates for EMD NEPA Staff. Training conducted by Duke Univ. No DOE offered Training available.
2.	UNSAT	E-MAIL message <del>stated</del> to Engineering/Capital Resources - No DOE Training Available - will let them know when available. Eng/Cap. Resources should receive notification of any available NEPA Training, not just DOE offered.
3	SAT	NEPA Procedure 70-915 Issued and Implemented.

Location of Objective Evidence: Bldg. 9115, Room 104, Laura Cunningham

Corrective Action Completed and Verified (Y/N) Y

**\*\* ANY UNSATISFACTORY CONDITIONS NOTED IN VERIFICATION ACTIONS MUST BE RETURNED TO THE CONTRACTOR FOR FURTHER ACTION.**

William H. Mevikila Date: 10/10/91  
DOE Verification Signature

William H. Mevikila for DuHoag Date: 10/10/91  
DOE Supervisor Signature

# DOE Y-12 CORRECTIVE ACTION VERIFICATION

Assessment Title: TIGER TEAM ASSESSMENT - 1989

Date of DOE Review: 10-10-91 Finding Number: 3.5.8.3.1

Subject: PROTOCOL FOR MODIFYING THE ENVIRONMENTAL MONITORING PLAN.

## - Verification Actions -

Milestone No.	Sat./ Unsat.	Comments
1	U	THERE IS NOT ADEQUATE DOCUMENTATION ON FILE TO INDICATE THAT A SATISFACTORY PROTOCOL HAS BEEN ESTABLISHED. THE FILES DO NOT CONTAIN A PROCEDURE, PLAN ETC. TO ESTABLISH A PROTOCOL AS SUGGESTED IN THE CORRECTIVE ACTION PLAN.

Location of Objective Evidence: Bldg. 9115 Room 104

Corrective Action Completed and Verified (Y/N) N

**\*\* ANY UNSATISFACTORY CONDITIONS NOTED IN VERIFICATION ACTIONS MUST BE RETURNED TO THE CONTRACTOR FOR FURTHER ACTION.**

Brian Klemm  
DOE Verification Signature

Date: 10-10-91

William A. Medina  
DOE Supervisor Signature

Date: 10/10/91

# DOE Y-12 CORRECTIVE ACTION VERIFICATION

Assessment Title: TEAM TEAM Assessment - 1993

Date of DOE Review: 11-17-91 Finding Number: 4.5.3.31

Subject: SAFETY AND HEALTH "Minimum of Findings"

## - Verification Actions -

Milestone No.	Sat./ Unsat.	Comments
1-3	Sat	Supporting documentation available
4	Unsat	THE TEAM CHARTER could not be located or identified during the review.
5-9	Sat	Supporting documentation available

Location of Objective Evidence: Rm. 4201-5 Room MIT "Ed Spitzer 40507"

Corrective Action Completed and Verified (Y/N): N <sup>Y 10/18/91</sup> Charter located [Signature]

**\*\* ANY UNSATISFACTORY CONDITIONS NOTED IN VERIFICATION ACTIONS MUST BE RETURNED TO THE CONTRACTOR FOR FURTHER ACTION.**

[Signature]  
DOE Verification Signature

Date: 10-17-91

[Signature]  
DOE Supervisor Signature

Date: 10/17/91

# DOE Y-12 CORRECTIVE ACTION VERIFICATION

Assessment Title: Topical Assessment

Date of DOE Review: 10/18/91 Finding Number: 4-1-1

Subject: Safety and Health "Performance Priorities"

## - Verification Actions -

Milestone No.	Sat./ Unsat.	Comments
4	SAT	Character provided on 10/18/91. Documentation includes E-mail dated 11-3-89 and character

Location of Objective Evidence: Bldg 9201-5 Room 1114 "Ed Spitzer 4-5507"

Corrective Action Completed and Verified (Y/N) Y

**\*\* ANY UNSATISFACTORY CONDITIONS NOTED IN VERIFICATION ACTIONS MUST BE RETURNED TO THE CONTRACTOR FOR FURTHER ACTION.**

[Signature]  
DOE Verification Signature

Date: 10/18/91

[Signature]  
DOE Supervisor Signature

Date: 10/21/91

21  
**RECORD COPY**

MARTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX 2009  
OAK RIDGE, TENNESSEE 37831

July 31, 1991

Mr. R. J. Spence  
DOE Field Office, Oak Ridge  
Post Office Box 2001  
Oak Ridge, Tennessee 37831

Dear Mr. Spence:

Verification of Tiger Team Findings

The Y-12 Plant is in the process of improving and strengthening its audit closure process. Due to the importance of the Tiger Team assessment, we are implementing these improvements first in our activities involving Tiger Team Corrective Action Plans. The attachment indicates those findings which have been completed and are ready for review by a Department of Energy (DOE) representative. You will be notified on a regular basis as additional findings are completed and are ready for review.

Should you have questions or need additional information, please contact J. E. Ferguson, 4-3853.

Very truly yours,



D. J. Bostock  
Vice President and  
Y-12 Plant Manager

DJB:JEFerguson:dls

Attachment: As Stated

cc/att: D. E. Beck/G. M. High/J. A. West  
D. J. Bostock  
L. L. Cunningham  
J. E. Ferguson - RC  
J. W. Robertson - DOE-OR  
G. H. Winebarger

ATTACHMENT 1

COMPLETED & QUALITY ASSURANCE VERIFIED

TIGER TEAM FINDINGS

<u>Finding No.</u>	<u>Contact Person</u>	<u>Phone</u>	<u>Evidence File Location (Building/Room Number)</u>
3.5.1.2.1	Laura L. Cunningham	4-2936	9115, Room 104
3.5.3.2.2	"	"	"
3.5.4.3.1	"	"	"
3.5.4.3.2	"	"	"
3.5.6.2.2	"	"	"
3.5.8.2.3	"	"	"
3.5.8.2.4	"	"	"
3.5.8.3.1	"	"	"
3.5.10.3.1	"	"	"
OSHA-123	George H. Winebarger	4-0463	9201-5, Room G-48
OSHA-124	"	"	"
OSHA-128	"	"	"
OSHA-157	"	"	"
OSHA-176	"	"	"
OSHA-177	"	"	"
OSHA-217	"	"	"
OSHA-222	"	"	"
OSHA-231	"	"	"
OSHA-251	"	"	"
OSHA-255	"	"	"
OSHA-331	"	"	"
OSHA-355	"	"	"

# RECORD COPY

## INTEROFFICE MEMORANDUM

Date: 07-Nov-1991 09:20am EST  
From: James E Ferguson  
FERGUSONJE  
Dept: 2658  
Tel No: 4-3853

TO: LEVERETHG

CC: BROWNB J PHILLIPSJS1 ROBERTSONJW  
Subject: Fwd: Tiger Team Findings (1989)  
File: READ 002237

Hazel,

John has given us a good heads up here. Please make sure that your system indicates the findings shared by Y-12 and DOE. It will require that both corrective action plans be completed and verified before the finding can be closed.

Please take the following immediate action...reopen the following findings since DOE has not had their plans verified to date....

✓ 3.5.8.2.3 1335 - RE, pd  
✓ 6.5.6 1425 - RE, pd  
✓ 6.5.12 1431 - RE, pd

Note that the followings findings are assigned to only DOE:

3.5.10.2.2 1344 - pd  
3.5.10.2.3 1345 - pd  
3.5.10.3.2 1343 - pd  
6.5.1 3040 -

the following findings are assigned to both DOE and Y-12:

3.5.5.2.6 1316 - C  
3.5.8.2.3 1335 - RE  
3.5.10.2.1 1340 - pd  
3.5.10.3.1 1346 - VC  
6.5.6 1425 - RE, pd  
6.5.10 1429 - pd  
6.5.12 1431 - RE, pd

If you have questions please call

Verification of OSHA Plant Safety Finding 373 (TEP #1420) was completed on November 5, 1991 and is recommended for acceptance.

PLEASE NOTE:

Today, I was informed that one of the corrective action verifications which I conducted and reported as complete was not complete due to corrective action which must be taken by the DOE. Upon review of the Action Plan in Response to the Compliance Assessment Team Findings dated July 1990, I found that Attachment 2 (DOE-ORO Action Plans) includes the following action plans with the same numbering scheme as those action plans developed by Energy Systems Y-12 Plant.

DOE Action/Report page	Y-12 Action/Report page
3.5.5.2.6/pg. 224	3.5.5.2.6/pg. 67
3.5.8.2.3/pg. 226	3.5.8.2.3/pg. 103
3.5.10.2.1/pg. 228	3.5.10.2.1/pg. 107
3.5.10.2.2/pg. 230	3.5.10.2.2/Ref. pg.3
3.5.10.3.1/pg. 231	3.5.10.3.1/pg. 112
3.5.10.3.2/pg. 232	3.5.10.3.2/Ref. pg.3
6.5.1/pg. 233	6.5.1/Ref. pg. 3
6.5.6/pg. 234	6.5.6/pg. 210
6.5.12/pg.236	6.5.12/pg. 214

I had previously reported findings numbered 3.5.8.2.3, 3.5.10.3.1 and 6.5.12 as recommended acceptance of the completion status. In that DOE-ORO action on findings with the same number is not known by me (the verification evaluator) the acceptance is only for Y-12 corrective actions. I have been informed these corrective actions should remain as incomplete status pending completion (verification?) of DOE corrective actions.

I assume DOE is to verify their corrective actions and will inform Y-12 as to their status. If not, how will these ever get closed?

PhillipsJS1

# DOE Y-12 CORRECTIVE ACTION VERIFICATION

Assessment Title: Verification of Progress in DOE Training Actions

Date of DOE Review: January 29, 1992 Finding Number: 3.5.8.2.3

Subject: Annual radioactive effluent and on-site discharge data reports for the Y-12 Plant have not been properly prepared and submitted to the Waste Information Systems Branch, EG&G Idaho, Inc., as required by DOE Order 5484.1, Chap.IV, Paragraph 4.c.(1)

## - Verification Actions - COMMENTS

This verification and these comments are related to the training deficiency portion of the above finding, and does not address the classified data variance portion of the finding. As a corrective action on the training deficiency, an OR Task Force was established in 1989 to review the level and types of training that were needed by specific DOE staff groups to fully qualify the staff for their assigned duties. Existing training courses that contributed to staff proficiency and any deficiencies were identified. Each OR division (and site office) with ES&H responsibility now has a training profile available and resources assigned to ensure that effective training programs are conducted for the individual employee classifications.

Attachment 1 is a listing of the Y-12 Site Office (YSO) Training that was developed in 1989-1990 time period. Attachment 2 contains early evidence of training provided for OR staff with ES&H and matrix ES&H responsibility. Attachment 3, YSO Program Plan for Training, is a copy of the current process used by YSO to assure that staff training will continue as a priority with the Site Office. In Attachment 3, item 8 under Technical Staff, lists DOE Order 5484.1 as an order requiring training for YSO Technical Staff. Attachment 4 contains YSO, Environmental, Safety and Health Branch (ES&HB) Employee Training Plans.

The Verifier has first hand knowledge of the quality and precise relevance of a sampling of the courses and an understanding of Y-12 Site Office staff requirements. In our opinion, there is currently adequate formal training to assure that DOE Order 5484.1 radioactive effluent and on-site discharge data reports are properly prepared and to qualify the Y-12 Site Office staff and other ES&H matrix staff for their assigned duties.

Location of Objective Evidence: Attached to this verification.

Corrective Action Completed and Verified (Y/N) Y

**\*\* Any unsatisfactory conditions noted in verification actions must be returned to the contractor for further action.**

Donna Dare Office of Self Assessment  
DOE Verification Signature

Date: 02-04-92

Daniel K Hone  
DOE Supervisor Signature

Date: 2/8/92



Y-12 Site Office

# Department of Energy

DOE Field Office, Oak Ridge  
P.O. Box 2001  
Oak Ridge, Tennessee 37831-8555  
April 30, 1992

For Your Information:

Beck  
Ferguson

DJBostock, 5/1/92

DOE Y-12  
SLH

Mr. D. J. Bostock, Vice President and  
Y-12 Plant Manager  
Martin Marietta Energy Systems, Inc.  
Post Office Box 2009  
Oak Ridge, Tennessee 37831-8009

Dear Mr. Bostock:

## DOE VERIFICATION OF CORRECTIVE ACTION COMPLETIONS FOR COMPLIANCE ASSESSMENT OF THE Y-12 PLANT "TIGER TEAM" FINDINGS

For your information, the corrective actions taken for the following "Tiger Team" Findings have been verified by the DOE Y-12 Site Office and are considered closed:

<u>Finding No.</u>	<u>Subject</u>	<u>Date Verified</u>
3.5.1.3.12	Industrial Hygiene Asbestos Audit Responsibilities	4/27/92
3.5.1.3.2	Fugitive Emissions From Paper Shredder	4/21/92
3.5.1.3.15	Coal Dust Emissions	4/17/92
6.5.12	Insufficient Training Programs (DOE Portion)	2/4/92
3.5.8.2.3	Radioactive Effluent/On-site Discharge (DOE Portion)	2/4/92
3.5.10.3.1	Training and Information... (DOE Portion)	2/4/92

The enclosed "DOE Y-12 Corrective Action Verification" forms are provided for your information.

VERIFICATION CHECKLIST (CONT.)

**Evidence Documents:**

- ✓ 1. Corrective Action Report, 3.5.8.2.3.
- ✓ 2. Tiger Team Compliance Assessment Report, pgs. 3-86 - 3-88, finding 3.5.8.2.3.
- ✓ 3. Letter dated January 12, 1990, G. G. Fee to R. J. Spence, Re: Upgrading Effluent Information System (EIS) and On-Site Discharge Information System (ODIS).
- ✓ 4. Letter dated June 14, 1990, R. J. Spence to G. G. Fee, Re: DOE Directive 5400.1 - Radioactive Effluent and On-Site Discharge Annual Reporting Requirements.
- ✓ 5. "Corrective Action Verification," dated June 26, 1991.