



Department of Energy

Washington, DC 20585

QA: QA

AUG 08 2002

J. H. Hayes
Bechtel SAIC Company, LLC
1180 Town Center Drive, M/S 763
Las Vegas, NV 89144

VERIFICATION OF CORRECTIVE ACTION AND CLOSURE OF DEFICIENCY REPORT (DR) BSC-02-D-067 RESULTING FROM THE OFFICE OF QUALITY ASSURANCE (OQA) SURVEILLANCE BSC-02-S-06

The OQA staff has evaluated the corrective action of DR BSC-02-D-067 and determined the result to be satisfactory. As a result, the DR is considered closed.

Tracers, fluids, and materials not included and approved for use were evaluated and found to be acceptable and had no impact to quality.

If you have any questions, please contact either James Blaylock at (702) 794-1420 or John R. Doyle at (702) 794-5021.



Ram B. Murthy, Acting Director
Office of Quality Assurance

OQA:JB-1461

Enclosure:
DR BSC-02-D-067



Printed with soy ink on recycled paper

NM5507
wm-11

AUG 08 2002

cc w/encl:

N. K. Stablein, NRC, Rockville, MD
Robert Latta, NRC, Las Vegas, NV
S. W. Lynch, State of Nevada, Carson City, NV
Engelbrecht von Tiesenhausen, Clark County, Las Vegas, NV
G. K. Beall, BSC, Las Vegas, NV
H. R. Cox, BSC, Mercury, NV, M/S 755
Leon Fossum, BSC, Mercury, NV, M/S 763
S. H. Horton, BSC, Las Vegas, NV
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D. T. Krisha, BSC, Las Vegas, NV
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J. R. Doyle, NQS, Las Vegas, NV
W. J. Glasser, NQS, Las Vegas, NV
D. G. Opielowski, NQS, Las Vegas, NV
J. R. Dyer, DOE/YMSCO, Las Vegas, NV
C. E. Hampton, DOE/YMSCO, Las Vegas, NV
D. G. Horton, DOE/YMSCO, Las Vegas, NV
J. M. Replogle, DOE/YMSCO, Las Vegas, NV
B. M. Terrell, DOE/YMSCO, Las Vegas, NV
S. A. Wade, DOE/YMSCO, Las Vegas, NV

NM5507
WM-11

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RADIOACTIVE WASTE MANAGEMENT
U.S. DEPARTMENT OF ENERGY
WASHINGTON, D.C.**

8. DEFICIENCY REPORT
 CORRECTIVE ACTION REPORT

ORIGINAL
THIS IS A REPRODUCTION

NO. BSC-02-D-067

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QA: QA

DEFICIENCY/CORRECTIVE ACTION REPORT

1. Controlling Document: NWI-ESF-037, Revision 0, ICN N/A, <i>Procedure for Freon/Refrigerant Control</i>	2. Related Report No.: BSC-02-S-06
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3. Responsible Organization: Bechtel SAIC Company, LLC	4. Discussed With: Steve Smith, Errol Gardiner, William Distil
---	---

5. Requirement:

1. NWI-ESF-037, paragraph 3.1.4 states: "Safety Assurance Department - Receive request for use of refrigerants to be used within the conceptual design area and process and approved use in accordance with YAP-2.8Q, *Tracers, Fluids, and Materials Data Reporting and Management.*"

In addition, paragraph 3.1.10 states: "Requestor - When the need for use of a refrigerant is recognized, a request must be submitted to the EPD for processing in accordance with PRO-TS-007; if use is within the conception design area, submit request to the safety Assurance Department."

(Continued on page 2)

6. Description of Condition:

Contrary to the above requirements, a review of the Hazardous Materials Inventory Document and conversations with the Safety Assurance Personnel, reveals that Hot Shot R 414B, a refrigerant, has not been evaluated and approved for use in the Conceptual Design area by the Safety Assurance Department.

7. Initiator: John R. Doyle <i>John R. Doyle</i> Date <u>1/25/02</u>	9. Does a stop work condition exist? (Not required for a DR) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Check One: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D
---	---

10. Recommended Actions:

Review the Hazard Materials Inventory List for any other tracer, fluids, and materials (TFMs) that may need Safety Assurance approval.

11. QA Review: John R. Doyle QAR <i>John R. Doyle</i> Date <u>1/25/02</u>	12. Response Due Date: 10 Working Days From Issuance
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13. DOQA Issuance Approval:

Printed Name: RAM MURPHY Signature James B. Murphy Date 2/5/02

22. Corrective Actions Verified: QAR <i>John R. Doyle</i> Date <u>07/09/02</u>	23. Closure Approved by: DOE/OQA <u>[Signature]</u> Date <u>4/8/02</u>
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8. DR/CAR
 Stop Work Order
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DEFICIENCY/CORRECTIVE ACTION REPORT/STOP WORK ORDER CONTINUATION PAGE

5. Requirement: (Continued)

2. AP-2.17Q, Revision 0, ICN O, *Tracers, Fluids, and Materials Dating Reporting and Management*, paragraph 2.0 states in part "... Evaluation and approval of the use of TFM within the YMP TWIEZ is outside the scope of this procedure. TFM are evaluated in accordance with Management and Operating Contractor procedure NLP-2.0, *Determination of Importance Evaluations*, or "After-the-Fact" Evaluations as described in this procedure, as appropriate."
3. Nevada Line Procedure (NLP) NLP-2-0, *Determination of Importance Evaluations*, Section 1.0, "Purpose," states: "This procedure establishes the process and responsibilities for evaluating proposed activities at the Yucca Mountain site for adverse impacts and establishing appropriate Quality Assurance (QA) controls to prevent or minimize such potential impacts."

Section 2.0, "Scope," states "The procedure applies to the evaluation of all Yucca Mountain site field activities, including testing, construction, operation/maintenance, and reclamation activities."

Section 7.0, "Attachments," Attachment 1, "Requirements for DIE Preparation," Subpart F, Item 10, Impact on Site Characterization Testing, ... DIEs will use the best available information, (e.g. natural and engineered barrier models) and as appropriate, contacts with affected principal investigators to determine TFM transport processes and testing that may be impacted by field activities.

- DIEs should consider the following activities during evaluation for test interference, as applicable:
 - Existing or planned boreholes, excavations or surface facilities.
 - Existing or planned underground excavations or facilities.
Construction methods/operations.
 - Existing or planned experiments.
 - TFM use and removal for construction/operations/experiments.

Determine if the activity can impact or bias required site characterization/performance configuration tests in an undetected or unpredictable way.

Determine whether the activity can impact or bias required site characterization/performance configuration tests that cannot be repeated with the expectation of collecting the required test results.

Give conclusions with respect to test interference.

Item 11, Impact to Waste Isolation Characteristics, Identify potential impacts to the waste isolation characteristics of the natural or engineered barriers using for DIEs best available information, (e.g. natural and engineered barrier models), considering:

...TFMs used during site construction, testing, and facility operation.

and Item 13, Establishment of Controls, ...Describe limits or prohibitions on the use and removal of TFM consistent with AP-2.17Q, *Tracers, Fluids, and Materials Data Reporting and Management*. Provide the information in sufficient detail so that it can be incorporated directly in the TFM database maintained by the TFM Database Administrator.

TYPE RESPONSE:

- Initial
- Complete
- Amended

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DR/CAR NO BSC-02-D-067
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QA: *LQA*
EFF 2.13.02

DEFICIENCY/CORRECTIVE ACTION REPORT (RESPONSE)

14a. Immediate Actions:

Submitted use of R-414B refrigerant to Safety Assurance (SA) for approval (1/31/2002). Determined that there has been no use of R-414B refrigerant to date. Notified the Field Superintendent that R-414B refrigerant is not approved for underground use.

Compliance Date: 2/13/2002

14. Remedial Actions:

SA has given approval for surface use and is evaluating underground use of R-414B refrigerant. The following procedures are being evaluated to determine required changes: AP-EM-007, NWI-ESF-037Q, and LP-OM-040Q.

15. Extent of Condition:

A cross-check is being made between the approved Tracers, Fluids, and Material (TFM) list and the Hazardous Materials Database.

16. Cause: (Attach results of root cause determination prepared in accordance with AP-16.4Q for a significant deficiency.)

This deficiency is symptomatic of a condition where two related, yet independent processes review and approve TFM usage within the Test and Waste Isolation Evaluation Zone (TWIEZ) to meet different requirements and are not linked to ensure each process is complete prior to final TFM approval.

17. Action to Preclude Recurrence:

18. Due Date: 2/28/2002

- For submittal of complete response
- For completion of corrective action

19. Response by:

Ralph Dresel

[Signature]
Date 2.13.02

BSC QA dt 2/13/02
MVP 14 Feb 02
Phone 295-7366 RF

20. Evaluation: Accept Partially Accept Reject

QAR *[Signature]*

Date 2/14/02

21. Concurrence:

DOQA *[Signature]*

Date 2/15/02

TYPE RESPONSE:

Initial

Complete

Amended

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QA: *XQA*
EFF 2.27.02

DEFICIENCY/CORRECTIVE ACTION REPORT (RESPONSE)

14a. Immediate Actions:

Submitted use of R-414B refrigerant to Safety Assurance (SA) for approval (1/31/2002). Determined that there has been no use of R-414B refrigerant to date. Notified the Field Superintendent that R-414B refrigerant is not approved for underground use.

Compliance Date: 2/13/2002

14. Remedial Actions:

- SA has given approval for surface use of R-414B refrigerant and is evaluating it for underground use.
- Additional materials discovered during actions in Block 15 below will be submitted to SA for approval.

15. Extent of Condition:

A cross-check was made between the approved Tracers, Fluids, and Material (TFM) list and the Hazardous Materials Database to determine the extent of condition. Some 30 materials in addition to the R-414B refrigerant have been identified and are being submitted to SA for evaluation (see Block 14 above). Impact to quality has not been determined at this time.

16. Cause: (Attach results of root cause determination prepared in accordance with AP-16.4Q for a significant deficiency.)

This deficiency is symptomatic of a condition where two related, yet independent processes review and approve TFM usage within the Test and Waste Isolation Evaluation Zone (TWIEZ) to meet different requirements and are not linked to ensure each process is complete prior to final TFM approval.

17. Action to Preclude Recurrence:

18. Due Date: 3/22/2002	19. Response by:	<i>BSC QA 2/27/02</i>
<input checked="" type="checkbox"/> For submittal of complete response	Ralph Dresel <i>R.D.</i>	<i>TRP 27 Feb. 02 RF</i>
<input type="checkbox"/> For completion of corrective action	Date 2/27/2002	Phone 295-7366
20. Evaluation: <input checked="" type="checkbox"/> Accept <input type="checkbox"/> Partially Accept <input type="checkbox"/> Reject	21. Concurrence:	
QAR <i>John Doyle</i> Date 3/1/02	DOQA <i>James Blyford</i>	Date 3/7/02

TYPE RESPONSE:

- Initial
- Complete
- Amended

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QA: *KQA*

*OFF
3.20.02*

DEFICIENCY/CORRECTIVE ACTION REPORT (RESPONSE)

14a. Immediate Actions:

Submitted use of R-414B refrigerant to Safety Assurance (SA) for approval (1/31/2002). Notified the Field Superintendent that R-414B refrigerant is not approved for underground use.

Compliance Date: 2/13/2002

14. Remedial Actions:

None required. SA has given R-414B refrigerant approval for surface use and found R-414B acceptable for underground use.

15. Extent of Condition:

A cross-check was made between the approved Tracers, Fluids, and Material (TFM) list and the Hazardous Materials Database. Some 34 items were found and submitted to Safety Assurance for approval. All of the items were evaluated, found acceptable for use, and are being approved under the D.I.E. process. The end result is, no impact to quality.

16. Cause: (Attach results of root cause determination prepared in accordance with AP-16.4Q for a significant deficiency.)

This deficiency results from of a condition where two related, yet independent processes review and approve TFM usage within the Test and Waste Isolation Evaluation Zone (TWIEZ) to meet different requirements and are not linked to ensure each process is complete prior to final TFM approval.

17. Action to Preclude Recurrence:

Actions to preclude recurrence require that the processes identified in Block 15 above be linked and process steps be provided to ensure materials are approved and approvals communicated to the end users. This is to be accomplished by revisions to: 1) The "Hazardous Material Inventory" database (HMI) to provide a field (for reference only) indicating whether or not a material is an approved TFM. When this revision is made, the new field will be populated indicating the material's TFM approval status. 2) AP-EM-007, "Hazardous Material Approval and Tracking", to provide updating of TFMs, as identified in the D.I.E.s, when the HMI database is reviewed and updated. 3) and LP-4.5Q-BSC, "Processing Purchase Requisitions", requiring the HMI database be searched for hazardous material and TFM approvals before the PR is processed. If approvals are not found in the data base, the AP-EM-007 and/or AP-2.17Q processes will be followed as required before proceeding to ensure material approval prior to procurement.

18. Due Date: 5/10/2002

- For submittal of complete response
- For completion of corrective action

19. Response by:

KD
Ralph Dresel

Date 3/20/2002

*BSC QA 11 3/20/02
TAD 20 MAR 02*

Phone 295-7366 *MF*

20. Evaluation:

- Accept
- Partially Accept
- Reject

QAR

Date *03/26/02*

21. Concurrence:

DOQA

Jane Blaylock for

Date

3/29/02

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1. DR/CARNO.BSC-02-D-067
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REQUEST FOR EXTENDED PROCESSING

3. Extended Actions: (Identify those corrective actions planned for completion beyond 100 days from issuance of the DR/CAR)

Revision of AP-EM-007, "Hazardous Material Approval and Tracking" is expected to exceed the 100 day normal processing period. This action is identified as Item 2 in Block 17 of the Completed Response dated 3/20/2002.

Expected Completion Date: 06/29/2002

4. Justification: (Provide an explanation as to why the required actions cannot be completed within 100 days)

Start of the AP-EM-007 revision was delayed due to the upstream actions required by ES&H Assessment 02-04, Hazardous Material Inventory and Tracking and as a result of an SRID review of DOE N 450.4. Time required for Extended Processing includes revision of AP-EM-007 under the AP-5.1Q process and time for QAR verification.

5. Impact: (Provide an impact statement to indicate what affect not completing within 100 days will have relative to waste isolation and safety, and impact to other work, if any)

Not completing this action committed to under this deficiency within the 100 day Normal Processing time frame will not have an impact to waste isolation and safety or impact other work. The actions already completed and the processes now in place provide sufficient control. This is achieved primarily by the revision of LP-4.5Q, "Processing Purchase Requisitions" which requires TFM and Hazardous Material Approval before purchase of materials.

Approvals *SSC QA 5/2/02*

6. Responsible Manager:			7. Senior Manager:		
<i>C.M. SPARKS</i>	<i>[Signature]</i>	<i>5/2/02</i>	<i>Russ Fry</i>	<i>[Signature]</i>	<i>5/2/02</i>
Printed Name	Signature	Date	Printed Name	Signature	Date
8. DOE Project Management:			9. DOQA:		
<i>J.R. Dyer</i>	<i>[Signature]</i>	<i>5/23/02</i>	<i>Ron B. Smith</i>	<i>[Signature]</i>	<i>5/23/02</i>
Printed Name	Signature	Date	Printed Name	Signature	Date
10. Director, OCRWM: (required for scheduled completion dates one year or more from initial issue)					
<i>N/A</i>	<i>N/A</i>		<i>N/A</i>		
Printed Name	Signature	Date	Printed Name	Signature	Date

Submittal Page _____ of _____

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CONDITION ADVERSE TO QUALITY CONTINUATION PAGE

Verification of Corrective Actions to Deficiency Report BSC-02-D-067

Block 14a. Immediate Actions:

Reviewed approval submittal from Field Engineering to the Safety Assurance (SA) Department for refrigerant R-414B. (See Attachment 1, 2nd Email). Also verified Lotus from R. Law to the line organization forbidding underground use of R-414B.

Block 14. Remedial Actions:

1. See Block 14a, -R-414B is acceptable and approved for surface use. Although, R-414B is considered an acceptable refrigerant for underground use, this material has yet to receive formal authorization for use and is in the process of evaluation. (See Attachment 1; 1st memo). Conversation with cognizant personnel reveals that since the identification of the adverse condition, R-414B has not been used underground and the ban on its use is still in affect. In addition to the initial memo referenced in Block 14a, Field Engineering has initiated an additional memo to staff re enforcing this ban to preclude R-414B use. (See Attachment 2)
2. See Extent of Condition for the additional materials found and submitted to the SA Department for evaluation.

Block 15. Extent of Condition:

Verified cross-check of the Tracers, Fluids, and the Materials and Hazardous Materials Inventory Databases which identified the 34 additional materials and the SA evaluation of same. (See Attachment 3).

Block 16. Cause :

None Required

Block 17. Action to Preclude Recurrence:

Verified the following:

1. Reviewed the Lotus Notes based Hazardous Material Inventory (HMI) Database to verify the addition of the field for approved TFMs. Verified approvals for items # 02-077 lithium ion battery and # 02-080 NiCad battery.
2. Verified by review of Administrative Procedure (AP) AP-EM-007 Rev. 0/ICN 1 Paras. 5.1.5 and 5.4.5 that provides for the updating of TFMs when the HMI database is reviewed and updated.
3. Reviewed Line Procedure (LP) LP-4.5Q Rev. 1/ICN 0, para. 5.1 n) and o) that requires the review of the HMI database for TFM approvals prior to any processing of Purchase Requisitions.

The Above Committed Corrective Actions have been satisfactorily verified.

This Deficiency Report is considered closed.

QAR: John R. Doyle

Date: 07/09/02.

John R. Doyle

ATTACHMENT 1
TO BSC-02-D-067 p1 of 2

 Stephen Goodin

07/08/2002 10:33 AM

To: John Doyle/YD/RWDOE@CRWMS
cc:
Subject: D-02, CS-05, Use of refrigeration gases R-134a, R-414B

User Filed as: Excl/AdminMgmt-14-4/QA:N/A

FYI

----- Forwarded by Stephen Goodin/YM/RWDOE on 07/08/2002 10:32 AM -----

 Stephen Goodin

02/07/2002 12:03 PM

To: Alan Mitchell/YM/RWDOE@CRWMS
cc:
Subject: D-02, CS-05, Use of refrigeration gases R-134a, R-414B

QA:QA Inclusionary

FYI

I forgot to initially cc you

----- Forwarded by Stephen Goodin/YM/RWDOE on 02/07/2002 12:01 PM -----

 Stephen Goodin

02/07/2002 11:16 AM

To: Rudy Johnson/YM/RWDOE@CRWMS
cc: Bill Distel/YM/RWDOE@CRWMS, Asha Kalia/YM/RWDOE@CRWMS, James Hollins/YM/RWDOE@CRWMS

Subject: D-02, CS-05, Use of refrigeration gases R-134a, R-414B

QA:QA Inclusionary

(D-02) The use of all refrigeration gases in sealed units or for recharging sealed units in both vehicles and facility equipment used **on the surface** has been determined not to require evaluation for waste isolation or test interference impact. The SA Department has determined based on the environment and form of material (i.e. gas) that no apparent path exists that could lead to test interference or impacts to waste isolation from the use of these materials, as described above. No controls are applied to the use of these TFM's contained in sealed refrigeration units or the recharging of these units on the surface.

(CS-05) Refrigerants R-12 and R-22 are currently included on the TFM list for use underground. An evaluation for use of the additional gases R-134a and R-414B will be initiated. The use of R-134a and R-414B is not permitted underground until evaluation is completed and approval and inclusion on the TFM list is given.

----- Forwarded by Stephen Goodin/YM/RWDOE on 02/06/2002 12:31 PM -----

 James Hollins

02/04/2002 10:43 AM

To: Bill Distel/YM/RWDOE@CRWMS, Stephen Goodin@CRWMS, Asha Kalia/YM/RWDOE@CRWMS
cc:

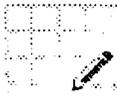
Subject: Request for TFM Approval

Not A Federal Record

When you evaluate this refrigerant, please discuss with Fred Homuth. He has a problem if they are going to replace existing refrigerant with R414B.

ATTACHMENT 1
BSC-02-D-067 P2-F2

----- Forwarded by James Hollins/YM/RWDOE on 02/04/2002 10:42 AM -----



Rudy Johnson
01/31/2002 03:06 PM

To: Bill Distel/YM/RWDOE@CRWMS, Stephen Goodin/YM/RWDOE@CRWMS
cc: James Hollins/YM/RWDOE@CRWMS, Asha Kalia/YM/RWDOE@CRWMS

Subject: Request for TFM Approval

QA:N/A Inclusionary

Site Operations requests TFM approval for the following material:

Name/identification = R414B "Hot Shot (tm)" (refrigerant Substitute), (Site ID# K-791)

Compositional information = see MSDS attached

Detailed description of planned use = nontoxic, nonflammable refrigerant for use as direct replacement in refrigeration systems previously charged with R12, R134a, and R500

Use locations = primarily on surface in equipment maintenance. However may be used in portable refrigeration units located at underground testing locations.

Anticipated quantities to be used = expected total inventory amount on site, 50 lbs. All amounts used underground will be removed from underground with charged cooling units. Number of cooling units underground varies by testing requirements, therefore exact amount unknown at this time.

Anticipated use date: As soon as weather conditions or test location temperature requires air conditioning.



R414B.p

Thanks,
Rudy

ATTACHMENT 2 TO

DR BSC-02-D-067 p1 of 1



Edward Fitch
07/09/2002 09:37 AM

To: Nelson O'Connor/YM/RWDOE@CRWMS
cc: James Hayes/YM/RWDOE@CRWMS, James Luhning/YM/RWDOE@CRWMS, Leon
Fossum/YM/RWDOE@CRWMS, Howard Cox/YM/RWDOE@CRWMS, John
Doyle/YD/RWDOE@CRWMS, Bill Distel/YM/RWDOE@CRWMS, Stephen Goodin/YM/RWDOE@CRWMS

Subject: BSC-02-D-067

User Filed as: Incl/QualityAssur-26-16/QA:QA

Nelson,

During verification activities it came to light that we have not yet received approval for underground use of refrigeration gases R-134a and R-414B from the Safety Assurance Department. To ensure we stay in compliance with the TFM program please notify your affected personnel that this restriction is still in place. Thanks, Ed

ATTACHMENT 3

TO DR BSC-02-D-067

pl of Y17

8/1/02

Stephen Goodin

03/21/2002 10:19 AM

To: Edward Fitch/YM/RWDOE@CRWMS
cc: John Doyle/YD/RWDOE@CRWMS, Bill Distel/YM/RWDOE@CRWMS, James Hollins/YM/RWDOE@CRWMS, Asha Kalia/YM/RWDOE@CRWMS

Subject: Evaluation results of TFM's related to DR 67

QA: N/A Inclusionary

The Safety Assurance Department has evaluated the list of TFM's provided in the extent of condition for DR 67. The TFM's are currently being processed in a ICN to the ECRB DIE, BABEAF000-01717-2200-00011, REV 3/ICN 1. The ICN will not be approved until the first week in April, however the TFM evaluation has already determined that the use of these TFM's has not caused any adverse impacts to quality. As soon as the ICN is approved the subject TFM's will be included in the DIE list.

ATTACHMENT 3

TO DR BSC-02-D-067

P 2 of 17

From: Bill Distel on 07/08/2002 10:34 AM

To: John Doyle/YD/RWDOE@CRWMS

cc: James Hollins/YM/RWDOE@CRWMS, Stephen Goodin/YM/RWDOE@CRWMS, Asha Kalia/YM/RWDOE@CRWMS

Subject: TFM Approval Request

User Filed as: Excl/AdminMgmt-14-4/QA:N/A

As requested by phone, this is the first email from Rudy Johnson requesting review of TFMs approved for use by Hazardous Materials but not DIE. [you requested this information as part of your checking on status of BSC DR-67]

----- Forwarded by Bill Distel/YM/RWDOE on 07/08/2002 10:30 AM -----



Rudy Johnson
03/04/2002 04:27 PM

To: James Hollins/YM/RWDOE@CRWMS

cc: Bill Distel/YM/RWDOE@CRWMS, Stephen Goodin/YM/RWDOE@CRWMS, Asha Kalia/YM/RWDOE@CRWMS

Subject: TFM Approval Request

QA:N/A Inclusionary

Pursuant to actions required for DR BSC-02-D-067 the following 10 materials or fluids have been identified as having been brought to the ESF North Portal Pad for use without first being submitted for TFM approval as required by AP-2.17Q. Each item is listed with the name, manufacturer, project identification information, type of material, manner of use, type and size of container, use location and quantity on site (where known.) The MSDS is attached at the end of the listing for each item. If further information is needed for evaluation of these items please contact me at ext. 5-5144.

1. PRODUCT	Plasti Dip (Red 765-2500)
MANUFACTURER	P.D.I.
SITE TRACKING #	K807
ESH RFA #	01-098
MATLIERAL TYPE	Coating
USE	Mechanics use this product for tool marking.
CONTAINER	14.5 oz aerosol can
QUANTITY PURCHASED	1
QUANTITY STORED	1
USE LOCATION	Surface shops



MSDS 01-098.p

ATTACHMENT 3

TO BSC-02-0-067 p3 of 17

2. PRODUCT Childers CP-09, AK-CRYL
MANUFACTURER Foster Products Corporation
SITE TRACKING # K825
ESH RFA # 01-121
MATLRIAL TYPE Sealant, thermal
USE Mechanical sealant for thermal insulations.
CONTAINER 1 gallon pail
QUANTITY PURCHASED 1
QUANTITY STORED 1
USE LOCATION Switchgear bldg



MSDS 01-121.p

3. PRODUCT Sealfas G-P-M Mastic White 35-00 Trowel
MANUFACTURER Foster Products Corporation
SITE TRACKING # K826
ESH RFA # 01-122
MATLRIAL TYPE Coating, non-skid
USE Coating used in Switchgear Building.
CONTAINER 2 gallon pail
QUANTITY PURCHASED 1
QUANTITY STORED 1
USE LOCATION Switchgear bldg



MSDS 01-122.p

4. PRODUCT CP-10 VI-CRYL (White)
MANUFACTURER Childers Products Co
SITE TRACKING # K827

ATTACHMENT 3

TO BSC-02-D-067 p 4 of 17

ESH RFA # 01-123
MATERIAL TYPE Caulk
USE To Be Used on the Switchgear Building
CONTAINER 5 gallon pail
QUANTITY PURCHASED 1
QUANTITY STORED 1
USE LOCATION Switchgear bldg



MSDS 01-123.p

5. PRODUCT Plasti Dip (Red 765-2526)
MANUFACTURER P.D.I.
SITE TRACKING # K828
ESH RFA # 01-124
MATERIAL TYPE Coating
USE Coating for tools
CONTAINER 11 ounce aerosol can
QUANTITY PURCHASED 1
QUANTITY STORED 1
USE LOCATION Surface shops



MSDS 01-124.p

6. PRODUCT STICK-EM Glue Trap
MANUFACTURER JT Eaton
SITE TRACKING # K833
ESH RFA # 01-132
MATERIAL TYPE Janitorial
USE For rodent control
CONTAINER 63 grams per unit

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QUANTITY PURCHASED 75
QUANTITY STORED 75
USE LOCATION Surface bldgs and UG tunnels



MSDS 01-132.p

7. PRODUCT Dynaflex 230 (Latex Sealant) *Verified on HMI*
MANUFACTURER DAP
SITE TRACKING # K836
ESH RFA # 01-127
MATLERIAL TYPE Sealant
USE Used to seal around doors, windows, molding, etc.
CONTAINER 10.1 ounce tube
QUANTITY PURCHASED 100
QUANTITY STORED 100
USE LOCATION Surface construction and maintenance



MSDS 01-127.p

8. PRODUCT Amerlock 400BF Cure
MANUFACTURER Amerlock
SITE TRACKING # K837
ESH RFA # 01-135
MATLERIAL TYPE Admixture
USE Used during Masonry and laying block
CONTAINER 1 gallon pail
QUANTITY PURCHASED 2
QUANTITY STORED 2
USE LOCATION Surface use



MSDS 01-135.p

ATTACHMENT 3

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9. PRODUCT FS-ONE Intumescent Firestop Sealant

MANUFACTURER Hilti

SITE TRACKING # K838

ESH RFA # 01-147

MATLIERAL TYPE Sealant

USE Seal penetrations in fire barrier walls

CONTAINER 5 gallon pail and 10.1 ounce tube

QUANTITY PURCHASED

QUANTITY STORED

USE LOCATION Surface construction and UG in bulkheads



MSDS 01-147.p

10. PRODUCT Stannic Chloride 5-Hydrate

MANUFACTURER J. T. Baker Inc

SITE TRACKING # K841

ESH RFA # 02-005

MATLIERAL TYPE Testing

USE Used during quantitative respirator fit-testing by Safety and Health

CONTAINER 2.6 ounce

QUANTITY PURCHASED

QUANTITY STORED

USE LOCATION Primarily in office; possibly UG



MSDS 02-005.ht

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Rudy Johnson
03/11/2002 03:43 PM

To: James Hollins/YM/RWDOE@CRWMS
cc: Bill Distel/YM/RWDOE@CRWMS, Stephen Goodin/YM/RWDOE@CRWMS, Asha Kalia/YM/RWDOE@CRWMS, Edward Fitch/YM/RWDOE@CRWMS
Subject: Second Group of TFM Approvals

QA:QA Inclusionary

The following items are the second group of TFMs that have been identified as not having been submitted for review by the Safety Assurance Group prior to being used on the YMP. These items are additional items for DR BSC-02-D-067 that has a due date of 3-22-02.

If you have any questions please contact me at 5-5144.

1. PRODUCT	Activated Carbon 8x10
MANUFACTURER	Pure Effect
SITE TRACKING #	K774
ESH RFA #	01-034
MATERIAL TYPE	Absorbent
USE	This activated carbon will be used in the Flow Sorb Filters for the Skimming and Tunnel Wastewater Operations
CONTAINER	bulk
QUANTITY PURCHASED	1000 lbs
QUANTITY STORED	1000 lbs
USE LOCATION	Surface at mine water recovery tanks



01-034.pdf

2. PRODUCT	Activated Carbon Pellets (Very similar to item # 1.)
MANUFACTURER	Pure Effect
SITE TRACKING #	K774A
ESH RFA #	01-035
MATERIAL TYPE	Absorbent
USE	This activated carbon will be used in the Flow Sorb Filters for the Skimming and Tunnel Wastewater Operations
CONTAINER	bulk

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QUANTITY PURCHASED 2000 lbs
QUANTITY STORED 2000 lbs
USE LOCATION Surface at mine water recovery tanks



01-035.pdf

3. PRODUCT Mig Welding Wire
MANUFACTURER Radnor
SITE TRACKING # K775
ESH RFA # 01-036
MATERIAL TYPE Welding
USE Used for galvanized welding, Surface use in fabrication,
CONTAINER 10 lb
QUANTITY PURCHASED 24
QUANTITY STORED 19
USE LOCATION Surface maintenance



01-036.pdf

4. PRODUCT Chlorine Test Kit Reagents 1, 2, and 3
MANUFACTURER LaMotte
SITE TRACKING # K777
ESH RFA # 01-038
MATERIAL TYPE Testing Reagent
USE This kit will be used for testing chlorine during Super Chlorination of Potable Water (John Devers)
CONTAINER Kit
QUANTITY PURCHASED 2
QUANTITY STORED 2
USE LOCATION ESF North Portal Pad



01-038.pdf

5. PRODUCT CCWI 181 Sealant Compound
MANUFACTURER Hardcast Products
SITE TRACKING # K786
ESH RFA # 01-067
MATERIAL TYPE Sealant
USE Sealant to be used during vent line connection on the Switchgear building
CONTAINER 1 gallon
QUANTITY PURCHASED 50
QUANTITY STORED 20
USE LOCATION Switchgear building



01-067.pdf

6. PRODUCT Super Slick - Cold Weather (Pulling Lubricant)
MANUFACTURER Gardner
SITE TRACKING # K788
ESH RFA # 01-072
MATERIAL TYPE Lubricant
USE Pulling lubricant used by the electricians to pull cable through conduit.
CONTAINER 5 gallon pail
QUANTITY PURCHASED 6
QUANTITY STORED 5
USE LOCATION Area 25 - surface and underground



01-072.pdf

7. PRODUCT Cooler Coating
MANUFACTURER Dial Manufacturing Inc
SITE TRACKING # K789
ESH RFA # 01-074
MATERIAL TYPE Sealant

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USE This product will be used at the CSA on evaporative coolers.
CONTAINER 1 gallon
QUANTITY PURCHASED 8
QUANTITY STORED 8
USE LOCATION Area 25, Central Support Area



01-074.pdf

8. PRODUCT Tuff Bond Hanger Adhesive
MANUFACTURER Gemco
SITE TRACKING # K796
ESH RFA # 01-084
MATERIAL TYPE Adhesive
USE Ductwork insulation installation.
CONTAINER 1 gallon
QUANTITY PURCHASED 1
QUANTITY STORED 1
USE LOCATION Switchgear Building



TuffBond-MSDS.htn

9. PRODUCT White Elastomeric Roof Coating
MANUFACTURER Kool Seal
SITE TRACKING # K803
ESH RFA # 01-094
MATERIAL TYPE Sealant, Roof
USE To be used by Painter for coating exterior surfaces of metal roof buildings
CONTAINER 5 gallon
QUANTITY PURCHASED 10
QUANTITY STORED 10
USE LOCATION Area 25

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01-094.pdf

10. PRODUCT	SheetRock, Joint Compound
MANUFACTURER	US Gypsum Company
SITE TRACKING #	K804
ESH RFA #	01-095
MATERIAL TYPE	Sealant, Joint
USE	Used to seal the joints between wall board installation (Eric Pearson)
CONTAINER	48 pound bag
QUANTITY PURCHASED	18
QUANTITY STORED	15
USE LOCATION	Switchgear Building



01-095.pdf

11. PRODUCT	SheetRock Texture
MANUFACTURER	US Gypsum
SITE TRACKING #	K809
ESH RFA #	01-100
MATERIAL TYPE	Coating, Texture
USE	Exterior Coating for Wallboard
CONTAINER	25 lbs
QUANTITY PURCHASED	20
QUANTITY STORED	20
USE LOCATION	Switchgear Building



01-100.pdf

12. PRODUCT	SafeVue Colored Smoke Candles
MANUFACTURER	E. Vernon Hill
SITE TRACKING #	K810

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ESH RFA # 01-101
MATERIAL TYPE Smoke Generator
USE Used in ventilation leak check
CONTAINER 1.2 and 1.5 ounce
QUANTITY PURCHASED 10
QUANTITY STORED 5
USE LOCATION Switchgear Building



01-101.pdf

13. PRODUCT Thermocol 50 w/DCA2
MANUFACTURER Thermoflow Corporation
SITE TRACKING # K814
ESH RFA # 01-106
MATERIAL TYPE Anitfreeze
USE Coolant for Heavy Equipment
CONTAINER 50 gallon drum
QUANTITY PURCHASED 2
QUANTITY STORED 2
USE LOCATION Maintenance shops



01-106.pdf

14. PRODUCT Levigated Aluminum Oxide
MANUFACTURER Buehler LTD
SITE TRACKING # K823
ESH RFA # 01-116
MATERIAL TYPE Safety related
USE Used in Cleaning Kit #812155 for instrument maintenance
CONTAINER 5 oz container
QUANTITY PURCHASED 1
QUANTITY STORED 1

ATTACHMENT 3 TO DR BSC-02-D-067
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From: Bill Distel on 03/12/2002 03:45 PM
To: Jeff Matties/YM/RWDOE@CRWMS, Alan Mitchell/YM/RWDOE@CRWMS
cc: James Hollins/YM/RWDOE@CRWMS, Stephen Goodin/YM/RWDOE@CRWMS, Asha Kalia/YM/RWDOE@CRWMS (bcc: Edward Fitch/YM/RWDOE)
Subject: Third Group of TFM Approvals - for review by Waste Isolation and Test Interference

QA:QA Inclusionary

Following a QA surveillance, Site Operations has been issued a DR due to several materials being submitted to Hazardous Materials for approval for use, and not also submitted to DIE for approved use. In response to Site Operations working to overcome this DR, these materials have been now submitted to DIE for review. Please review these materials for acceptance within your criteria for waste isolation, and for avoiding test interference. Please respond to me your findings by email. These materials will be addressed and included in an ICN to the appropriate global DIE. There will be a total of three lists of these materials for consideration sent to you. Please address all items on all of the lists.

----- Forwarded by Bill Distel/YM/RWDOE on 03/12/2002 03:34 PM -----



Rudy Johnson
03/12/2002 01:25 PM

To: James Hollins/YM/RWDOE@CRWMS
cc: Bill Distel/YM/RWDOE@CRWMS, Stephen Goodin/YM/RWDOE@CRWMS, Asha Kalia/YM/RWDOE@CRWMS, Edward Fitch/YM/RWDOE@CRWMS

Subject: Third Group of TFM Approvals

QA:N/A Inclusionary

The following items are the third (and final) group of TFMs that have been identified as not having been submitted for review by the Safety Assurance Group prior to being used on the YMP. These items are additional items for DR BSC-02-D-067 that has a due date of 3-22-02 as are the two previous groups for this DR.

If you have any questions please contact me at 5-5144.

PRODUCT	Stencil Ink
MANUFACTURER	C. H. Hanson Company
SITE TRACKING #	K726
ESH RFA #	00-010
MATERIAL TYPE	Paint, Aerosol
USE	Aerosol Stencil Paint for Property Marking
CONTAINER	10 fl oz
QUANTITY LIMIT	24
QUANTITY STORED	6
USE LOCATION	Area 25 - surface



00-010.pdf

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PRODUCT Therm-O-Flex
MANUFACTURER Lapolla Industries
SITE TRACKING # K735
ESH RFA # 00-018
MATERIAL TYPE Paint, Primer
USE Used on exterior structures
CONTAINER 5 Gallon
QUANTITY LIMIT 15
QUANTITY STORED 3
USE LOCATION Area 25 - surface



00-018.pdf

PRODUCT Therm-O-Flex II
MANUFACTURER Lapolla Industries
SITE TRACKING # K736
ESH RFA # 00-019
MATERIAL TYPE Paint
USE Used on exterior structures
CONTAINER 5 Gallon
QUANTITY LIMIT 30
QUANTITY STORED 4
USE LOCATION Area 25 - surface
(Same MSDS as for Thermo-O-Flex [00-018.pdf])

PRODUCT Blitz Waterborne Residual 1915
MANUFACTURER National Sanitary Supply Co.
SITE TRACKING # K739
ESH RFA # 00-022
MATERIAL TYPE Insect Spray
USE Insect Spray and Deoderant

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CONTAINER 1 gallon
QUANTITY LIMIT 9
QUANTITY STORED 3
USE LOCATION Area 25 - surface



00-022.pdf

PRODUCT Safety-Silv 45 Blazing Alloy
MANUFACTURER J W Harris
SITE TRACKING # K748
ESH RFA # 00-080
MATERIAL TYPE Welding
USE This Product will be used by the pipefitters for maintenance repair of refrigeration equipment

CONTAINER 5 oz.
QUANTITY LIMIT 6
QUANTITY STORED 2
USE LOCATION Area 25 - surface



00-080.pdf

PRODUCT Acid Test Kit TA-1
MANUFACTURER Sporlan Valve Co.
SITE TRACKING # K750
ESH RFA # 00-104
MATERIAL TYPE Testing
USE Used by the pipefitter to check acid in refrigeration oil.
CONTAINER kit
QUANTITY LIMIT 12
QUANTITY STORED 8
USE LOCATION Area 25 - surface

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00-104.pdf

PRODUCT	Woole 1217 Aerosol
MANUFACTURER	Arka Labs
SITE TRACKING #	K754
ESH RFA #	00-137
MATERIAL TYPE	Cleaner/Degreaser
USE	Cleaning solvent for use by the mechanics
CONTAINER	16 oz aerosol can
QUANTITY LIMIT	48
QUANTITY STORED	39
USE LOCATION	Surface and underground



00-137.pdf



00-137a.pdf

PRODUCT	Electrical Contact Cleaner
MANUFACTURER	Aerosol systems
SITE TRACKING #	K755
ESH RFA #	00-136
MATERIAL TYPE	Cleaner/Degreaser
USE	Used by electricians on electrical contacts.
CONTAINER	Aerosol can 13 oz
QUANTITY LIMIT	12
QUANTITY STORED	3
USE LOCATION	Surface and underground



00-136.pdf

PRODUCT	Cadweld Mold Sealer T-403
MANUFACTURER	Erico
SITE TRACKING #	K761

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ESH RFA # 01-014
MATERIAL TYPE
USE Electricians use this product in conjunction with Cadweld Electrical Welding Material
CONTAINER 2 pound can
QUANTITY LIMIT 6
QUANTITY STORED 2
USE LOCATION Area 25 - surface



01-014.pdf

PRODUCT New Hazemaker Fluid
MANUFACTURER Rosco Industries Inc
SITE TRACKING # K762
ESH RFA # 01-016
MATERIAL TYPE Safety related
USE This product is going to be used for simulated smoke for mine rescue training.
CONTAINER 1 gallon
QUANTITY LIMIT 6
QUANTITY STORED 6
USE LOCATION Central Support Area/Mine Rescue



01-016.pdf