

LICENSE NO: 37-03572-06

DOCKET NO. (s) 030-12704

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ATTACHED

- Appendix A
- Appendix B
- Appendix C
- Memo

INSPECTION REPORT NO. ~~83-01~~ 83-01

Hamilton Watch Company  
941 Sheppard Avenue  
Lancaster, Pa 17604

LICENSEE CONTACT: Mr. Paul Karpowicz, VP of Operations Telephone No: 717-394-7161

LICENSE NO: 37-03572-06 CATEGORY E PRIORITY: 3

CATEGORY \_\_\_\_\_ PRIORITY: \_\_\_\_\_

CATEGORY \_\_\_\_\_ PRIORITY: \_\_\_\_\_

INSPECTION DATE (s): December 8, 1983 TYPE OF INSPECTION:  SPECIAL  ANNOUNCED  
 ROUTINE  UNANNOUNCED  
 DAYSHIFT  
 OTHER

SUMMARY OF FINDINGS AND ACTION

- NO NONCOMPLIANCE, CLEAR 591 ISSUED
- NO NONCOMPLIANCE, LETTER
- NONCOMPLIANCE, APPENDIX A

- ACTION ON PREVIOUS NONCOMPLIANCE, APPENDIX B
- NONCOMPLIANCE, 591 ISSUED
- SUPPLEMENTAL INFO, APPENDIX C

RECOMMENDATIONS  
SEE BASIS IN APPENDIX C

- CHANGE CATEGORY TO: \_\_\_\_\_
- NEXT INSPECTION DATE: 12/86

CHANGE PRIORITY TO: \_\_\_\_\_

PERSONS CONTACTED

Daniel Jaworski, Service Dept. Supervisor \_\_\_\_\_

Charles Zink - Technician \_\_\_\_\_

Patric McKeay \_\_\_\_\_

Robert Amin, Engineer \_\_\_\_\_

Paul Karpowicz, VP of Operations \_\_\_\_\_

INSPECTOR: Harvey A. Dennis

APPROVED: [Signature]

1/4/84

H/39

INSPECTION PLAN AND REPORT NUMBER 83-01

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Plan Approved: \_\_\_\_\_

Date: \_\_\_\_\_

Licensee: \_\_\_\_\_

License No. \_\_\_\_\_

Inspection Items	Scheduled for Inspection	Post Inspection Status	Module No.
Management Meeting - Entrance and Exit Interviews (Required)		<i>1 hr</i>	30703B
Program Requirements, MC 2850 (Required)		<i>3 hr</i>	77710B
Followup on Noncompliance and Deviations			92702B
Independent Inspection Effort (Required)			92706B
Transportation			86740B

AREAS INSPECTED AND FINDINGS

Licensee: \_\_\_\_\_ License No: \_\_\_\_\_ Amendment No: \_\_\_\_\_

INSPECTION ITEMS	CRITERIA	FINDING
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1. Organization

Lic Cond \_\_\_\_\_

C

Management organization? *no change*  
 Radiation Protection Organization? *Paul Agnew - RSO - Dept of Nuclear Medicine*  
 Scope of Operation? *one operator to day shift and 5 in a day in H-3 room*

NOTES & REMARKS: *level of ops. in H-3 room is about 1000 dpm/hr. H-3 materials at that level are not a hazard. H-3 in app. 2 years will be gone. H-3 in app. 2 years will be gone.*

2. Licensee Internal Audits

Lic Cond \_\_\_\_\_

\_\_\_\_\_

Scope and frequency? -

Management controls? -

NOTES & REMARKS: - *none that I could tell.*

3. Training and Instructions to Employees

Lic Cond \_\_\_\_\_

N/C

Training program, scope and frequency, retraining?

Required tests administered; scores satisfactory? *no written tests*

Instructions to workers? *hand written 19.12*

NOTES & REMARKS: *to read posted instructions - only 3 operators in past year. H-3 in room when alarm sounds 11-190*

4. Radiation Protection Procedures

Lic Cond \_\_\_\_\_

C

Operating & emergency procedures implemented?

Security? *room not locked at 20.207*

NOTES & REMARKS: *There is a 24-hour guard at the building.*

5. Materials, Facilities and Instruments

Lic Cond \_\_\_\_\_

N/C

Authorized uses and quantities?

Restricted areas, posting requirements? *20.203*

Survey instruments & dosimeters; operable, properly calibrated?

NOTES & REMARKS: *only one monitor, also a Geiger counter in the room and the alarm sounds. H-3 in room not functioning. Instrument had not been checked since 1979.*

AREAS INSPECTED AND FINDINGS

Licensee: \_\_\_\_\_ License No: \_\_\_\_\_ Amendment No: \_\_\_\_\_

INSPECTION ITEM	CRITERIA	FINDING
6. <u>Receipt and Transfer of Materials</u>		<u>C</u>
Procedures implemented, adequate?	20.205, 71.51	
Transfer of byproduct material?	30.41	
Control of source material,	40.51, 40.64, 70.42, 70.51, 70.53, 70.54	
Labeling and packaging? <i>fully complying</i>	71.5, 30CFR 170-189	
Records of receipt, transfer, storage, survey, and monitoring?	30.51	
Procedures for pickup, receipt, monitoring of packages? <i>N/A</i>	20.205(b)&(c)	

NOTES & REMARKS: *This operation is a source of radiation only. They possess a number of containers used and whole storagekeeping unit.*

7. <u>Personnel Protection - External</u>		<u>N/C</u>
Personnel monitoring control; minimize exposures, control of accumulated dose? <i>no emergency procedures posted.</i>	20.101, 201.102, 20.202	
Surveys conducted, adequate? <i>11/79 was last for 3 months. No survey taken.</i>	20.201	
Records of monitoring, surveys, disposals?	20.401, Lic Cond _____	
Levels in unrestricted areas? <i>unknown. no analysis conducted on current employees.</i>	20.1, 20.105	

NOTES & REMARKS: *Cabinet where 4-3 modules are stored is exhausted and is listed in license.*

8. <u>Personnel Protection - Internal</u>		<u>N/C</u>
Airborne concentrations in restricted areas?	20.103	
Exposure of minors?	20.104	
Posting of airborne radioactivity areas? <i>See license 20.203. Radioactive control program present.</i>	20.203	
Survey, monitoring bioassay requirements; records?	20.201, 20.401	
Leak tests of sealed sources?	Lic Cond _____	

NOTES & REMARKS: *bioassay records not available. Interview with technician indicates no dose at time of inspection and no physical*

## AREAS INSPECTED AND FINDINGS

Licensee: \_\_\_\_\_ License No: \_\_\_\_\_ Amendment No: \_\_\_\_\_

INSPECTION ITEM	CRITERIA	FINDING
9. <u>Effluent Control, Waste Disposal</u>		<u>N/C</u>
Release of effluents?	20.106	
Waste disposal, proper packaging for shipment?	20.301, 20.303, 20.304, 20.305	
Procedures, records?	20.401, Lic Cond _____	

## NOTES &amp; REMARKS:

*No written records of effluents.*

10. <u>Transportation</u>		<u>U</u>
Management controls, audits? -		
Selection of packaging? -	49 CFR 173.393-5, 10 CFR 71	
Preparation of packages for shipment? Filling and loading, closing, liquids?	49 CFR 172.173 49 CFR 172.300	
Markings & labelling?	49 CFR 172.402, 403	
Monitoring?	49 CFR 173.393	
Shipping papers, loading and placarding of vehicles?	49 CFR 172.200	
Reports of incidents?	49 CFR 171.15, 171.16	
Training program?		
Examination of packages?		

## NOTES &amp; REMARKS:

*Licensee conducts an annual inventory of good pieces however, did not have current inventory. Licensee indicated they had purchased a new supply of components. Understanding that*

11. <u>Notifications and Reports</u>		
To individuals?	19.13	
Overexposures, excessive levels and concentrations, incidents?	20.403, 20.405	
Personnel exposures and monitoring, termination reports?	20.407, 20.408	
Theft or loss of licensed materials?	20.402	

## NOTES &amp; REMARKS:

*no exposure records available*

AREAS INSPECTED AND FINDINGS

Licensee: \_\_\_\_\_ License No: \_\_\_\_\_ Amendment No: \_\_\_\_\_

INSPECTION ITEM	CRITERIA	FINDING
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12. Posting of Notices

Part 20, license & documents, procedures, notice of violations?

19.11(a)

n/c

NRC-3? 1977 poster

19.11(c)

NOTES & REMARKS:

*Emergency procedures posted*

13. Environmental Monitoring Program

Lic Cond \_\_\_\_\_

n/c

Implementation of program, scope and frequency as required? *Yes*

Records maintained, reviewed by management? *No*

NOTES & REMARKS:

*They don't have any air or tritium monitors. Tritium monitor not calibrated since 1975*

14. Emergency Preparedness

Lic Cond \_\_\_\_\_

Procedures available for incidents and accidents?

Training for personnel; coordination with supporting groups and agencies?

NOTES & REMARKS:

15. Other License Conditions

NOTES & REMARKS:

INSPECTION REPORT NUMBER \_\_\_\_\_

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77710B - Industrial - Academic

AREAS INSPECTED AND FINDINGS

Licensee: \_\_\_\_\_ License No: \_\_\_\_\_ Amendment No: \_\_\_\_\_

INSPECTION ITEM	CRITERIA	FINDING
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16. Confirmatory Measurements

Licensee's surveys verified on sampling basis? 201.105, 20.201

NOTES & REMARKS:

NRC Instrument: \_\_\_\_\_ Calibration due date: \_\_\_\_\_

17. Independent Inspection Effort

*He tested the tritium alarm system. The alarm does work. However, the unit had not been calibrated since 1979. He did a rough inventory since the license contact indicated they purchased new replacement components for the service dept. It still appeared they were within inventory limits.*

NOTES & REMARKS:

INSPECTION REPORT NUMBER 83-01

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APPENDIX A - DOCUMENTATION OF NONCOMPLIANCE

Licensee: Hamilton Watch Company License No: 37-03572-06

Reference	Basis for noncompliance
Report item <u>1</u> 10 CFR <u>19.12</u> Lic Cond _____ Type n/c _____	Technician and supervisors (although users) unfamiliar with conditions of their license and general radiation protection procedures
Report item _____ 10 CFR <u>19.11 (a, b, c)</u> Lic Cond _____ Type n/c _____	Form NRC-3 old (1977) pt 19 and 20 (1960's) and no notice if when license is maintained or available for review
Report item _____ 10 CFR _____ Lic Cond <u>1507 Nov 8, 1982 app.</u> Type n/c _____	failure to calibrate H-3 monitor monthly and failure to maintain an operable strip chart recorder for H-3 conc. and failure to maintain record
Report item _____ 10 CFR _____ Lic Cond <u>No. 11 Supplement (10/21/77)</u> Type n/c <u>to 7/29/77 application</u>	failure to test H-3 monitor for operability on a daily basis prior to employees entering the controlled area.
Report item _____ 10 CFR _____ Lic Cond <u>#12 Supplement (6/31/77)</u> Type n/c <u>to 7/29/83 application</u>	failure to conduct bioassays on technicians working in the controlled area.
Report item _____ 10 CFR _____ Lic Cond _____ Type n/c _____	

APPENDIX B - LICENSEE ACTION ON PREVIOUS INSPECTION FINDINGS

Licensee: Hamilton Hatch \_\_\_\_\_

License No: \_\_\_\_\_

Identification and summary of action taken	Status
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Report No: <u>80-01</u>	Type n/c: _____	Describe: _____
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Action taken:	OPEN
<u>Clear</u>	CLOSED

Report No: _____	Type n/c: _____	Describe: _____
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Action taken:	OPEN
	CLOSED

Report No: _____	Type n/c: _____	Describe: _____
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Action taken:	OPEN
	CLOSED

Report No: _____	Type n/c: _____	Describe: _____
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Action taken:	OPEN
	CLOSED

Report No: _____	Type n/c: _____	Describe: _____
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Action taken:	OPEN
	CLOSED

Report No: _____	Type n/c: _____	Describe: _____
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Action taken:	OPEN
	CLOSED

APPENDIX C - SUPPLEMENTARY INFORMATION

Licensee: \_\_\_\_\_ License No: \_\_\_\_\_

- |   |   |
|---|---|
| <input type="checkbox"/> Uncorrected/repeated noncompliance       | <input type="checkbox"/> Unresolved items     |
| <input type="checkbox"/> Unusual occurrence, conditions, etc      | <input type="checkbox"/> Inspector's comments |
| <input type="checkbox"/> Basis for change of Category or Priority |   |

Licensee Management has placed no priority on radiation protection. Almost none of the license requirements were being kept. The RSO was not present on the day of inspection and no one else was knowledgeable of license conditions. The technician working in the tritium room repairing watch units had not had a single urinalysis since being assigned to work in the tritium area. He had not received any <sup>formal</sup> training. No emergency procedures were posted. ~~During~~ During close-out, management indicated they were considering closing down this portion of the facility. This is the same story they gave Megan Campbell when last inspected on August 28, 1980. Although the program is very small and certain tests and evaluations should be made routinely. Management seem very responsive to my comments and indicated more priority would be given to radiation protection and training.

# CONVERSATION RECORD

TIME ( )  
8:45pm

DATE

TYPE  VISIT  CONFERENCE  TELEPHONE  
 INCOMING  
 OUTGOING

ROUTING	
NAME/SYMBOL	INT

Location of Visit/Conference:

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU

ORGANIZATION (Office, dept., bureau, etc.)

TELEPHONE NO.

Mr. E. Ditzler

Hamilton Watch Co, Inc

(712)  
394-7141

SUBJECT

Verification information requested for expired lic.

SUMMARY

Mr Ditzler stated that his company was no longer manufacturing retail digital watches containing H3 modules, However they do repair watches that had H3 modules, Hamilton is expected to be out of this end of the business within the year. His delay in response was due to a management mix up, he has again been given responsibility for Radiation safety concerns.

ACTION REQUIRED

NAME OF PERSON DOCUMENTING CONVERSATION

JAMES W. PATTERSON

SIGNATURE

James W. Patterson

DATE

1/27/84

ACTION TAKEN

SIGNATURE

TITLE

DATE

A140

CONVERSATION RECORD

TIME 0900-1100 DATE 9/9/85

TYPE  VISIT  CONFERENCE  TELEPHONE

INCOMING  OUTGOING

ROUTING	
NAME/SYMBOL	INIT

Location of Visit/Conference:

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU ORGANIZATION (Office, dept., bureau) TELEPHONE NO.

Joe Sabol Hamilton Watch

SUBJECT Licensing interview

SUMMARY

The following additional information was requested

- Confirmation that contractor would apply
- 1. Correction of wipe counts for phosphor by contractor.
- 2. Turnaround time for analysis of wipes to allow for corrective action.
- 3. Frequency surveys & bioassays.
- 4. Action levels for contamination surveys & bioassays & corrective actions.

Copy of Reg. Guide 8.21 given.

ACTION REQUIRED

"OFFICIAL RECORD COPY"

NAME OF PERSON DOCUMENTING CONVERSATION

SIGNATURE

DATE

Laurence F. Friedman 9/9/85

ACTION TAKEN

SIGNATURE

TITLE

DATE

A/55