



November 9, 2004

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P-3

Licensing Assistance Section
Nuclear Materials Safety Branch
U.S. Nuclear Regulatory Commission, Region 1
475 Allendale Road
King of Prussia, Pa 19406-1415

Subject: Additional Information Required for Termination of License # 37-24841-02, Docket No. 03032138,

Sir or Madam,

We are sending this additional information per letter dated September 20, 2004 in regards to the termination of License # 37-24841-02.

The following is the additional information requested for environmental assessment.

1. Square footage of the facility versus the square footage of the space used for activities covered under this license.
Facility size (sqft) = 458,000
Pack/unpack area (sqft) = 200
2. Description of facility location: Mixed (Residential / Commercial).

The records in accordance with 10 CFR 30.35(g) and 30.51(d and f) are included with this mailing when applicable and listed below:

1. Records for 10 CFR 30.35 (g) are not applicable since no spills ever occurred from the byproduct material on the irradiated wafers.
2. Records for 30.51(d and f) do not apply because all byproduct material had half-lives of 120 days or less except for ZINC 65, which was not present on the irradiated wafers. Enclosed are records from Penn State showing ZINC 65 was not present on the irradiated wafers received at this location.

Included in this mailing are two copies of each of the following: Form 314, Survey of Pack/Unpack area, and Results from swab and wipes tests performed on table tops in the area.

I respectfully request that the license be terminated once the Environmental Assessment has been submitted to the Commonwealth of Pennsylvania for comment. Please note we will conduct our radiation program in accordance to our present license dated April 30, 2012 until NRC terminates license# 37-24841-02.

Sincerely

Robert Murphy
Managing Director
Fairchild Semiconductor

135578

NMSS/RGNI MATERIALS-002

(6-2004)
10 CFR 30.36(j)(1); 40.42(j)(1);
70.38(j)(1); and 72.54(j)(1)

Estimated burden per response to comply with this mandatory collection request: 30 minutes. This submittal is used by NRC as part of the basis for its determination that the facility is released for unrestricted use. Send comments regarding burden estimate to the Records and FOIA/Privacy Services Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NE08-10202, (3150-0028), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

CERTIFICATE OF DISPOSITION OF MATERIALS

LICENSEE NAME AND ADDRESS

FAIRCHILD SEMICONDUCTOR
125 Crestwood Road
Mountain Top Pa 18707

LICENSE NUMBER

37-24841-02

DOCKET NUMBER

030-32138

LICENSE EXPIRATION DATE

April 30, 2012

- This license has expired. **A. LICENSE STATUS (Check the appropriate box)**
 This license has not yet expired; please terminate it.

B. DISPOSAL OF RADIOACTIVE MATERIAL

(Check the appropriate boxes and complete as necessary. If additional space is needed, provide attachments)

The licensee, or any individual executing this certificate on behalf of the licensee, certifies that:

- 1. No radioactive materials have ever been procured or possessed by the licensee under this license.
- 2. All activities authorized by this license have ceased, and all radioactive materials procured and/or possessed by the licensee under this license number cited above have been disposed of in the following manner:
 - a. Transfer of radioactive materials to the licensee listed below:
 - b. Disposal of radioactive materials:
 - 1. Directly by the licensee:
 - 2. By licensed disposal site:
 - 3. By waste contractor:
 - c. All radioactive materials have been removed such that any remaining residual radioactivity is within the limits of 10 CFR Part 20, Subpart E, and is ALARA.

C. SURVEYS PERFORMED AND REPORTED

- 1. A radiation survey was conducted by the licensee. The survey confirms:
 - a. the absence of licensed radioactive materials
 - b. that any remaining residual radioactivity is within the limits of 10 CFR 20, Subpart E, and is ALARA.
- 2. A copy of the radiation survey results:
 - a. is attached; or b. is not attached (Provide explanation); or c. was forwarded to NRC on: _____ Date
- 3. A radiation survey is not required as only sealed sources were ever possessed under this license, and
 - a. The results of the latest leak test are attached; and/or
 - b. No leaking sources have ever been identified.

The person to be contacted regarding the information provided on this form:

NAME SHARON LEVANDOWSKI	TITLE Plant Chemist, RSO	TELEPHONE (Include Area Code) 570 474 6761 x4898	E-MAIL ADDRESS
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Mail all future correspondence regarding this license to:
125 Crestwood Road Mountain Top Pa 18707

C. CERTIFYING OFFICIAL
I CERTIFY UNDER PENALTY OF PERJURY THAT THE FOREGOING IS TRUE AND CORRECT

PRINTED NAME AND TITLE Sharon Levandowski	SIGNATURE Sharon Levandowski	DATE 11/9/04
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WARNING: FALSE STATEMENTS IN THIS CERTIFICATE MAY BE SUBJECT TO CIVIL AND/OR CRIMINAL PENALTIES. NRC REGULATIONS REQUIRE THAT SUBMISSIONS TO THE NRC BE COMPLETE AND ACCURATE IN ALL MATERIAL RESPECT. 18 U.S.C. SECTION 1001 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

FAIRCHILD

SEMICONDUCTOR
125 Crestwood Road
Mountaintop, PA 18707

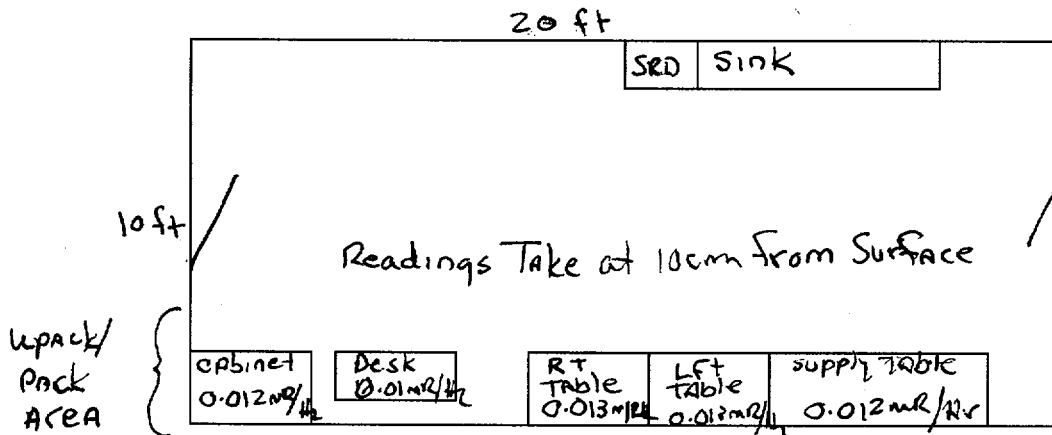
November 9, 2004

Subject: Radiation Survey of Irradiated Wafer Pack / Unpack area Fabrication Area 6

In accordance with 10 CFR 20.1302 of the USNRC regulations, the following is a required survey for Form 314.

Survey Instrument: Bicron Surveyor 2000 , s/n C506E w/ PGM probe, s/n C384E, cal due 4/11/04.

IRRADIATED WAFER AREA PACK / UNPACK ROOM. ROOM DIMENSIONS 20ft X 10ft. Total Square footage 200 sqft.



Normal background radiation levels for this area are in the range of 0.01 - 0.03 mrem/hr. Our true background radiation is an average of the above. According to NRC REG PART 20 Subpart E the area is acceptable for unrestricted use, because there is no residual radioactivity above background radiation.

Sharon Levandowski
Sharon Levandowski
Radiation Safety Officer
Ext 4398



COMPLETE RADIOLOGICAL SERVICES

Analysis of Removable Contamination

Client: Fairchild Semiconduct Date: 1/27/04 Page: 1 of 1
 Purpose of Analysis Smears
 Analysis Performe Cynthia Barto
 Counter Manufactu Ludlum Model: 2929 Ser.#: 147747
 Counter Calibratio 5/5/04
 Bac a 1.9cpm B 38.5 cpm Efficiency: a 34.8% B 36.1%

Sample #	Sample Lo	Count Tim	Gross a	ncpm a	a dpm/100c m2	gross B	ncpm B	B dpm/100c m2
1	Table Top Right Side Unpack Area	2 Min.	2	<BGD		85	4	11.1
2	Supply Table Unpack Area	2 Min.	3	<BGD		105	14	38.8
3	Table Top Left Unpack Area	2 Min.	0			91	7	19.4
4	Table Left	2 Min.	2	<BGD		82	2.5	6.9
5	Table Right	2 Min.	0			89	6	16.6

Technician: Cynthia Barto
 Reviewed by: Todd Miller

Sample Records Showing No Zinc 65
MATERIAL ON IRRADIATED WAFERS

FAIRCHILD SEMICONDUCTOR - MOUNTAINTOP, PA

P.O. Number: V24-V940470

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General Information

Fluence Requested (n/cm²): 1.00E+15
Date Received: 16-Jan-02
Run ID: 02-0383
Date Irradiated: 16-Jan-02

LAYOUT OF RUN

49170W K33H3
49123W K33PG

Sulfur Dosimetry Results

Based on 5 sulfur pellet dosimetry points, the average fluence received in this run was 1.06E+15 n/cm².

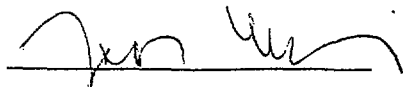
top of stack 1.10E+15 "
bottom of stack 1.03E+15 "

Activation Product Assay

<u>Lot Number</u>	<u>PSUID</u>	<u># of Wafers</u>	<u>avg net cnts</u>	<u>P-32 Activity (limit 10)</u>	<u>As-76 Activity (limit 10)</u>	<u>Na-24 Activity (limit 10)</u>
49123W K33PG	02-0382	18	720	0.135	0.009	0.016
49170W K33H3	02-0383	18	721	0.135	0.008	0.016

activity in uCi: 0.27 0.02 0.03
activity in kBq: 10.0 0.6 1.2

The silicon wafers described above meet the requirements for transfer to the Fairchild Semiconductor Corporation under Nuclear Regulatory Commission license 37-24841-02, expiration date: April 30, 2002.

Signature: 

Date: 01-22-02

General Information

Fluence Requested (n/cm²): 7.50E+14
Date Received: 16-Jan-02
Run ID: 02-0381
Date Irradiated: 16-Jan-02

LAYOUT OF RUN

49339WM K33K7
49339WM K33K5
49339WM K33K3
49339WM K33K6

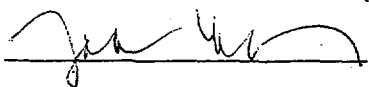
Sulfur Dosimetry Results

Based on 5 sulfur pellet dosimetry points, the average fluence received in this run was 8.07E+14 n/cm².
top of stack 8.24E+14 "
bottom of stack 7.96E+14 "

Activation Product Assay

<u>Lot Number</u>	<u>PSUID</u>	<u># of Wafers</u>	<u>avg net cnts</u>	<u>P-32 Activity (limit 10)</u>	<u>As-76 Activity (limit 10)</u>	<u>Na-24 Activity (limit 10)</u>
49339WM K33K6	02-0378	18	883	0.166	0.041	0.017
49339WM K33K3	02-0379	18	847	0.159	0.047	0.017
49339WM K33K5	02-0380	18	822	0.154	0.043	0.019
49339WM K33K7	02-0381	18	946	0.177	0.048	0.020
activity in uCi:				0.66	0.18	0.07
activity in kBq:				24.3	6.6	2.7

The silicon wafers described above meet the requirements for transfer to the Fairchild Semiconductor Corporation under Nuclear Regulatory Commission license 37-24841-02, expiration date: April 30, 2002.

Signature: 

Date: 01-24-02

General Information

Fluence Requested (n/cm²): 1.00E+15
Date Received: 6-Nov-01
Run ID: 02-0181
Date Irradiated: 6-Nov-01

LAYOUT OF RUN

49190W K313T

Sulfur Dosimetry Results

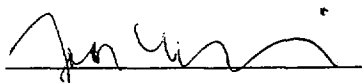
Based on 5 sulfur pellet dosimetry points, the average fluence received in this run was 1.03E+15 n/cm².
top of stack 1.07E+15 "
bottom of stack 1.01E+15 "

Activation Product Assay

<u>Lot Number</u>	<u>PSU ID</u>	<u># of Wafers</u>	<u>avg net cnts</u>	<u>P-32 Activity (limit 10)</u>	<u>As-76 Activity (limit 10)</u>	<u>Na-24 Activity (limit 10)</u>
49190W K313T	02-0181	18	630	0.118	0.004	0.021

activity in uCi:	0.12	< 0.01	0.02
activity in kBq:	4.4	0.2	0.8

The silicon wafers described above meet the requirements for transfer to the Intersil Corporation under Nuclear Regulatory Commission license 37-24841-02, expiration date: April 30, 2002.

Signature: 

Date: 11-12-01

INTERSIL CORPORATION - MOUNTAINTOP, PA
P.O. Number: V24-V940470

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General Information

Fluence Requested (n/cm²): 5.00E+14
Date Received: 2-Mar-01
Run ID: 01-0765
Date Irradiated: 2-Mar-01

LAYOUT OF RUN

49342WM K20WC
49342WM K20WA
09437W K21H6
09437W K21GY

Sulfur Dosimetry Results

Based on 5 sulfur pellet dosimetry points, the average fluence received in this run was 5.47E+14 n/cm².

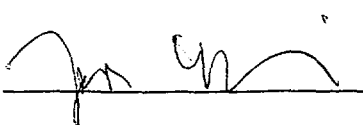
top of stack 5.52E+14 "
bottom of stack 5.44E+14 "

Activation Product Assay

<u>Lot Number</u>	<u>PSUID</u>	<u># of Wafers</u>	<u>avg net cnts</u>	<u>P-32 Activity (limit 10)</u>	<u>As-76 Activity (limit 10)</u>	<u>Na-24 Activity (limit 10)</u>
49342WM K20WC	01-0765	18	827	0.155	0.009	0.003
			activity in uCi:	0.16	0.01	< 0.01
			activity in kBq:	5.7	0.3	0.1

The silicon wafers described above meet the requirements for transfer to the Intersil Corporation under Nuclear Regulatory Commission license 37-24841-02, expiration date: April 30, 2002.

Signature: _____



Date: 3-8-01

INTERSIL CORPORATION - MOUNTAINTOP, PA

P.O. Number: V24-V940470

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General Information

Fluence Requested (n/cm2): 5.00E+14
Date Received: 2-Mar-01
Run ID: 01-0765
Date Irradiated: 2-Mar-01

LAYOUT OF RUN

49342WM K20WC
49342WM K20WA
09437W K21H6
09437W K21GY

Sulfur Dosimetry Results

Based on 5 sulfur pellet dosimetry points, the average fluence received

in this run was 5.47E+14 n/cm2.

top of stack 5.52E+14 "

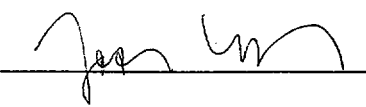
bottom of stack 5.44E+14 "

Activation Product Assay

<u>Lot Number</u>	<u>PSU ID</u>	<u># of Wafers</u>	<u>avg net cnts</u>	<u>P-32 Activity (limit 10)</u>	<u>As-76 Activity (limit 10)</u>	<u>Na-24 Activity (limit 10)</u>
09437W K21GY	01-0762	16	1202	0.200	0.020	0.007
09437W K21H6	01-0763	16	1128	0.188	0.023	0.006
49342WM K20WA	01-0764	18	1202	0.225	0.020	0.007

activity in uCi:	0.61	0.06	0.02
activity in kBq:	22.7	2.3	0.8

The silicon wafers described above meet the requirements for transfer to the Intersil Corporation under Nuclear Regulatory Commission license 37-24841-02, expiration date: April 30, 2002.

Signature: 

Date: 3-7-01

INTERSIL CORPORATION - MOUNTAINTOP, PA
P.O. Number: V24-V940470

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General Information

Fluence Requested (n/cm2): 5.00E+14
Date Received: 10-Oct-00
Run ID: 01-0379
Date Irradiated: 11-Oct-00

LAYOUT OF RUN

49438W K1RP1
49438W K1RP2

Sulfur Dosimetry Results

Based on 5 sulfur pellet dosimetry points, the average fluence received in this run was 5.43E+14 n/cm2.

top of stack 5.66E+14 "

bottom of stack 5.28E+14 "

Activation Product Assay

<u>Lot Number</u>	<u>PSU ID</u>	<u># of Wafers</u>	<u>avg net cnts</u>	<u>P-32 Activity (limit 10)</u>	<u>As-76 Activity (limit 10)</u>	<u>Na-24 Activity (limit 10)</u>
49438W K1RP2	01-0378	18	1071	0.20	0.06	0.06
49438W K1RP1	01-0379	18	1151	0.22	0.05	0.05

activity in uCi:	0.42	0.12	0.12
activity in kBq:	15.4	4.3	4.3

The silicon wafers described above meet the requirements for transfer to the Intersil Corporation under Nuclear Regulatory Commission license 37-24841-02, expiration date: April 30, 2002.

Signature: _____

Date: _____

10-16-00

INTERSIL CORPORATION - MOUNTAINTOP, PA
P.O. Number: V24-V940470

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General Information

Fluence Requested (n/cm2): 1.00E+15
Date Received: 21-Jul-00
Run ID: 01-0087
Date Irradiated: 21-Jul-00

LAYOUT OF RUN

49123W K1MHR
49123W K1MHT
49115W K1MCN

Sulfur Dosimetry Results

Based on 5 sulfur pellet dosimetry points, the average fluence received in this run was 1.10E+15 n/cm2.

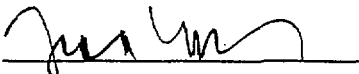
top of stack 1.13E+15 "
bottom of stack 1.08E+15 "

Activation Product Assay

<u>Lot Number</u>	<u>PSU ID</u>	<u># of Wafers</u>	<u>avg net cnts</u>	<u>P-32 Activity (limit 10)</u>	<u>As-76 Activity (limit 10)</u>	<u>Na-24 Activity (limit 10)</u>
49123W K1MHT	01-0086	18	578	0.11	0.00	0.00

activity in uCi:	0.11	0.00	0.00
activity in kBq:	4.0	0.0	0.0

The silicon wafers described above meet the requirements for transfer to the Intersil Corporation under Nuclear Regulatory Commission license 37-24841-02, expiration date: April 30, 2002.

Signature: 

Date: 7-27-00

INTERSIL CORPORATION - FINDLAY, OH
P.O. Number: W53-W778048

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General Information

Fluence Requested (n/cm²): 5.00E+14
Date Received: 1-Mar-00
Run ID: 00-0619
Date Irradiated: 2-Mar-00

LAYOUT OF RUN

49346A F2TOK
49346A F2TOJ
49335A F2T1J
49346A F2RYM

Sulfur Dosimetry Results

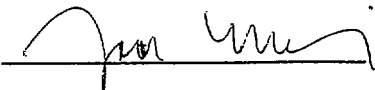
Based on 5 sulfur pellet dosimetry points, the average fluence received in this run was 5.70E+14 n/cm².

Activation Product Assay

<u>Lot Number</u>	<u>PSUID</u>	<u># of Wafers</u>	<u>avg net cnts</u>	<u>P-32 Activity (limit 10)</u>	<u>As-76 Activity (limit 10)</u>	<u>Na-24 Activity (limit 10)</u>
49346A F2RYM	00-0616	11	775	0.089	0.088	0.004
49335A F2T1J	00-0617	06	811	0.051	0.048	0.002
49346A F2TOJ	00-0618	12	793	0.099	0.106	0.004
49346A F2TOK	00-0619	12	796	0.100	0.091	0.004

activity in uCi:	0.34	0.33	0.01
activity in kBq:	12.5	12.4	0.6

The silicon wafers described above meet the requirements for transfer to the Intersil Corporation under Nuclear Regulatory Commission license 37-24841-02, expiration date: April 30, 2002.

Signature:  Date: 3-7-00

INTERSIL CORPORATION - MOUNTAINTOP, PA
P.O. Number: V24-V940470

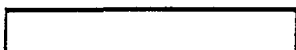
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General Information

Fluence Requested (n/cm2): 1.00E+15
Date Received: 16-Dec-99
Run ID: 00-0409
Date Irradiated: 17-Dec-99

LAYOUT OF RUN

49273W K1A25



Sulfur Dosimetry Results

Based on 5 sulfur pellet dosimetry points, the average fluence received in this run was 9.83E+14 n/cm2.

Activation Product Assay

<u>Lot Number</u>	<u>PSU ID</u>	<u># of Wafers</u>	<u>avg_net_cnts</u>	<u>P-32 Activity (limit 10)</u>	<u>As-76 Activity (limit 10)</u>	<u>Na-24 Activity (limit 10)</u>
49273W K1A25	00-0409	18	25	0.005	0.004	0.015

activity in uCi:	0.00	0.00	0.02
activity in kBq:	0.2	0.1	0.6

The silicon wafers described above meet the requirements for transfer to the Intersil Corporation under Nuclear Regulatory Commission license 37-24841-02, expiration date: April 30, 2002.

Signature: Alison Felton

Date: 12/27/99

General Information

Fluence Requested (n/cm2): 1.50E+15
 Date Received: 23-Mar-99
 Run ID: 99-0799
 Date Irradiated: 23-Mar-99

LAYOUT OF RUN

49368W KOWBG
 49368W KOW04

Sulfur Dosimetry Results

Based on 5 sulfur pellet dosimetry points, the average fluence received in this run was 1.63E+15 n/cm2.

Activation Product Assay

<u>Lot Number</u>	<u>PSUID</u>	<u># of Wafers</u>	<u>avg net cnts</u>	<u>P-32 Activity (limit 10)</u>	<u>As-76 Activity (limit 10)</u>	<u>Na-24 Activity (limit 10)</u>
49368W KOW04	99-0798	18	732	0.14	0.00	0.02
49368W KOWBG	99-0799	18	736	0.14	0.00	0.02

activity in uCi:	0.28	0.01	0.05
activity in kBq:	10.2	0.3	1.7

The silicon wafers described above meet the requirements for transfer to the Harris Corporation under Nuclear Regulatory Commission license 37-24841-02, expiration date: April 30, 2002.

Signature: *[Signature]* Date: 3-20-99