

**From:** [Joseph Koch](#)  
**To:** [Xu, Shirley](#)  
**Subject:** RE: High Energy Device, Proprietary information  
**Date:** Thursday, July 17, 2014 2:08:29 PM

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Ms. Xu,

High Energy Devices, LLC. waives the proprietary statement in all of the documents submitted for the license renewal.

Thank you,

Joseph D. Koch, PhD  
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**From:** Xu, Shirley [<mailto:Shirley.Xu@nrc.gov>]  
**Sent:** Thursday, July 17, 2014 12:49 PM  
**To:** [jkoch@rmwester.com](mailto:jkoch@rmwester.com)  
**Subject:** High Energy Device, Proprietary information

Mr. Koch,

Your letter dated July 10, 2014 with attachments were received. In accordance with 10 CFR 2.390 of NRC's "Agency Rules of Practice and Procedure," all submitted document will be available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC web site at <http://www.nrc.gov/reading-rm/adams.html>.

If you wish to have any part of the document withheld from public disclosure, please submit an affidavit, as required in 10 CFR 2.390(b)(1) and address the five withholding criteria set forth in 10 CFR 2.390(b)(4)(i) through (v). Otherwise, please respond to this e-mail, and state that you waive the proprietary statement in all documents submitted.

Regards,

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License Renewal 24-26366-02E  
Docket No: 030-33623  
Mail Control No: 583783

## Annual Product Distribution Reports

2008 – 2013

Proprietary Information

License Number 24-26366-02E

## 2008 Material Distribution Report

All products were transferred for use under 10 CFR 30.15 or equivalent Agreement State Regulations.

ShpDate	Part #	Type	# Pcs	Radionuclide	Activity Each in uCi	Total Activity in uCi
1/2/2008	TG88	Spark gap	4	Ni-63	0.40	1.6
1/3/2008	TG20A	Spark gap	20	Ni-63	0.40	8
1/16/2008	PMT(301)350	Spark gap	72	Ni-63	0.40	28.8
1/16/2008	PMT(301)350	Spark gap	36	Ni-63	0.40	14.4
1/28/2008	UFT266-1-900	Spark gap	10	Ni-63	0.40	4
1/30/2008	TG20A	Spark gap	12	Ni-63	0.40	4.8
2/6/2008	PMT(301)750	Spark gap	25	Ni-63	0.40	10
2/12/2008	UFT266-1-900	Spark gap	8	Ni-63	0.40	3.2
3/3/2008	TA7.0	Spark gap	15	Ni-63	0.40	6
3/3/2008	UFT266-2-900	Spark gap	10	Ni-63	0.40	4
3/5/2008	PMT(301)600	Spark gap	20	Ni-63	0.40	8
3/5/2008	TG72	Spark gap	3	Ni-63	0.40	1.2
3/5/2008	TG63	Spark gap	6	Ni-63	0.40	2.4
3/24/2008	UFT266-1-900	Spark gap	10	Ni-63	0.40	4
3/26/2008	TA7.0	Spark gap	15	Ni-63	0.40	6
4/2/2008	UMT(279)1.7	Spark gap	54	Ni-63	0.40	21.6
4/2/2008	PMT(301)900-01	Spark gap	4	Ni-63	0.40	1.6
4/9/2008	PMT(301)600	Spark gap	9	Ni-63	0.40	3.6
4/21/2008	UMT(279)1.7	Spark gap	8	Ni-63	0.40	3.2
5/5/2008	UFT266-1-900	Spark gap	16	Ni-63	0.40	6.4
5/14/2008	TG47	Spark gap	10	Ni-63	0.40	4
5/19/2008	TG100	Spark gap	3	Ni-63	0.40	1.2
5/19/2008	PMT(301)2.0	Spark gap	15	Ni-63	0.40	6
5/19/2008	TG73	Spark gap	10	Ni-63	0.40	4
5/27/2008	TG59	Spark gap	10	Ni-63	0.40	4
5/29/2008	UFT266-2-900	Spark gap	10	Ni-63	0.40	4
6/3/2008	PMT(301)600	Spark gap	40	Ni-63	0.40	16
6/4/2008	TA7.0	Spark gap	25	Ni-63	0.40	10
6/5/2008	TG75	Spark gap	6	Ni-63	0.40	2.4
6/5/2008	TG153	Spark gap	5	Ni-63	0.40	2
6/10/2008	UFT266-1-900	Spark gap	14	Ni-63	0.40	5.6
6/11/2008	PMT(301)600	Spark gap	15	Ni-63	0.40	6
6/11/2008	PMT(301)600	Spark gap	30	Ni-63	0.40	12
6/24/2008	UFT266-2-900	Spark gap	11	Ni-63	0.40	4.4
6/25/2008	PMT(301)600	Spark gap	100	Ni-63	0.40	40
6/25/2008	PMT(301)2.0	Spark gap	15	Ni-63	0.40	6
7/2/2008	TG153	Spark gap	1	Cs-137	0.40	0.4
7/9/2008	PMT(301)600	Spark gap	20	Ni-63	0.40	8

# HIGH ENERGY DEVICES

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2008 Material Distribution Report cont.

ShpDate	Part #	Type	# Pcs	Radionuclide	Activity Each in uCi	Total Activity in uCi
7/21/2008	TD93B	Gas tube	10	Kr-85	0.50	5
7/23/2008	TA5.0	Spark gap	1	Ni-63	0.40	0.4
8/11/2008	PMT(301)600	Spark gap	2	Ni-63	0.40	0.8
8/11/2008	TG73	Spark gap	3	Ni-63	0.40	1.2
8/14/2008	TA5.0	Spark gap	1	Ni-63	0.40	0.4
9/2/2008	TA5.0	Spark gap	3	Ni-63	0.40	1.2
9/2/2008	UFT266-1-900	Spark gap	14	Ni-63	0.40	5.6
9/3/2008	TG20A	Spark gap	1	Ni-63	0.40	0.4
9/3/2008	TG20A	Spark gap	24	Ni-63	0.40	9.6
9/3/2008	TG153	Spark gap	10	Ni-63	0.40	4
9/8/2008	TG376	Spark gap	1	Ni-63	0.40	0.4
9/8/2008	TG186	Spark gap	3	Ni-63	0.40	1.2
9/8/2008	UFT266-2-900	Spark gap	14	Ni-63	0.40	5.6
9/30/2008	TG366A	Spark gap	16	Ni-63	0.40	6.4
10/2/2008	TG75	Spark gap	10	Ni-63	0.40	4
10/7/2008	TA7.0	Spark gap	25	Ni-63	0.40	10
10/27/2008	TG73	Spark gap	8	Ni-63	0.40	3.2
10/28/2008	TA2.0	Spark gap	2	Cs-137	0.40	0.8
10/28/2008	PMT(301)350	Spark gap	72	Ni-63	0.40	28.8
10/30/2008	TG59	Spark gap	10	Ni-63	0.40	4
10/30/2008	TG55	Spark gap	10	Ni-63	0.40	4
11/3/2008	TG87	Spark gap	6	Ni-63	0.40	2.4
11/5/2008	TG68	Spark gap	2	Ni-63	0.40	0.8
11/6/2008	TG26A	Spark gap	2	Ni-63	0.40	0.8
11/19/2008	TG65	Spark gap	2	Ni-63	0.40	0.8
11/24/2008	TG71	Spark gap	20	Ni-63	0.40	8
11/24/2008	TG63	Spark gap	4	Ni-63	0.40	1.6
11/24/2008	TG72	Spark gap	4	Ni-63	0.40	1.6
12/8/2008	PMT(301)600	Spark gap	77	Ni-63	0.40	30.8

Total Pieces Shipped	Nuclide	Total Activity in uCi
974	Ni-63	418.4
3	Cs-137	1.6
1	Kr-85	0.5

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License Number 24-26366-02E

## 2009 Material Distribution Report

All products were transferred for use under 10 CFR 30.15 or equivalent Agreement State Regulations.

ShpDate	Type	Part #	# Pcs	Rad	Activity Each in uCi	Total Activity in uCi
1/7/2009	Spark gap	UFT266-1-900	10	Ni-63	0.40	4.00
1/7/2009	Spark gap	TA5.0	3	Ni-63	0.40	1.20
1/13/2009	Spark gap	TG26A	2	Ni-63	0.40	0.80
1/20/2009	Spark gap	UFT266-2-900	3	Ni-63	0.40	1.20
1/26/2009	Spark gap	TG63	3	Ni-63	0.40	1.20
1/26/2009	Spark gap	UFT266-2-900	14	Ni-63	0.40	5.60
1/29/2009	Spark gap	TG72	1	Ni-63	0.40	0.40
1/29/2009	Spark gap	TG47	10	Ni-63	0.40	4.00
2/2/2009	Spark gap	UFT266-1-900	17	Ni-63	0.40	6.80
2/9/2009	Spark gap	UFT266-1-900	8	Ni-63	0.40	3.20
2/9/2009	Spark gap	UFT266-2-900	8	Ni-63	0.40	3.20
2/11/2009	Spark gap	TG131	5	Ni-63	0.40	2.00
2/11/2009	Spark gap	PMT(301)2.0	152	Ni-63	0.40	60.80
2/11/2009	Spark gap	SG5.5	15	Ni-63	0.40	6.00
2/23/2009	Spark gap	PMT(301)350	3	Ni-63	0.40	1.20
3/17/2009	Spark gap	TG366A	10	Ni-63	0.40	4.00
3/18/2009	Spark gap	TG40	4	Ni-63	0.40	1.60
3/25/2009	Spark gap	SG25.0	1	Ni-63	0.40	0.40
3/25/2009	Spark gap	TG26A	2	Ni-63	0.40	0.80
4/1/2009	Spark gap	TD1238	3	Ni-63	0.40	1.20
4/14/2009	Spark gap	TG366A	2	Ni-63	0.40	0.80
4/15/2009	Spark gap	TG65	16	Ni-63	0.40	6.40
4/16/2009	Spark gap	PMT(301)550L	15	Ni-63	0.40	6.00
4/24/2009	Spark gap	TG20A	32	Ni-63	0.40	12.80
5/4/2009	Spark gap	PMT(301)350	108	Ni-63	0.40	43.20
5/6/2009	Spark gap	UFT266-1-900	10	Ni-63	0.40	4.00
5/11/2009	Spark gap	TG73	2	Ni-63	0.40	0.80
5/11/2009	Spark gap	TG64	2	Ni-63	0.40	0.80
5/18/2009	Spark gap	TG366A	4	Ni-63	0.40	1.60
6/1/2009	Spark gap	UFT266-2-900	8	Ni-63	0.40	3.20
6/2/2009	Spark gap	TG88	3	Ni-63	0.40	1.20
6/17/2009	Spark gap	TG186	1	Ni-63	0.40	0.40
6/23/2009	Spark gap	PMT(301)750	15	Ni-63	0.40	6.00
6/24/2009	Spark gap	PMT(301)1.5	5	Ni-63	0.40	2.00
6/24/2009	Spark gap	PMT(301)2.0	15	Ni-63	0.40	6.00
6/24/2009	Spark gap	TG26A	13	Ni-63	0.40	5.20
7/13/2009	Spark gap	UFT266-2-900	8	Ni-63	0.40	3.20
7/21/2009	Spark gap	TG47	25	Ni-63	0.40	10.00
7/21/2009	Spark gap	TG47	25	Ni-63	0.40	10.00
7/22/2009	Spark gap	TG20A	26	Ni-63	0.40	10.40
7/22/2009	Spark gap	TG20A	12	Ni-63	0.40	4.80

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2009 Material Distribution Report cont.

ShpDate	Type	Part #	# Pcs	Rad	Activity Each in uCi	Total Activity in uCi
7/22/2009	Spark gap	TG20A	17	Ni-63	0.40	6.80
7/22/2009	Spark gap	PMT(301)750	15	Ni-63	0.40	6.00
8/13/2009	Spark gap	TG40	3	Ni-63	0.40	1.20
8/13/2009	Spark gap	TG40	1	Cs-137	0.40	0.40
8/18/2009	Spark gap	TA5.0	20	Ni-63	0.40	8.00
8/20/2009	Spark gap	TG65	1	Ni-63	0.40	0.40
8/24/2009	Spark gap	UFT266-1-900	11	Ni-63	0.40	4.40
8/24/2009	Spark gap	UFT266-2-900	8	Ni-63	0.40	3.20
8/31/2009	Spark gap	TG194	1	Ni-63	0.40	0.40
9/2/2009	Spark gap	UMT(275)2.5	20	Ni-63	0.40	8.00
9/29/2009	Spark gap	PMT(301)750	15	Ni-63	0.40	6.00
10/12/2009	Spark gap	PMT(301)900-01	2	Ni-63	0.40	0.80
10/20/2009	Spark gap	TA7.0	25	Ni-63	0.40	10.00
10/21/2009	Spark gap	PMT(301)600	33	Ni-63	0.40	13.20
10/26/2009	Spark gap	PMT(301)600	500	Ni-63	0.40	200.00
10/26/2009	Spark gap	PMT(301)2.0	57	Ni-63	0.40	22.80
10/26/2009	Spark gap	TG73	10	Ni-63	0.40	4.00
10/27/2009	Spark gap	PMT(301)750	20	Ni-63	0.40	8.00
11/9/2009	Gas tube	TN164	1	Kr-85	0.50	0.50
11/11/2009	Spark gap	TG63	4	Ni-63	0.40	1.60
11/11/2009	Spark gap	TG72	4	Ni-63	0.40	1.60
11/16/2009	Spark gap	TG57	1	C137	0.40	0.40
11/16/2009	Spark gap	TG57	3	Ni-63	0.40	1.20
12/2/2009	Spark gap	UFT266-1-900	15	Ni-63	0.40	6.00
12/14/2009	Spark gap	TA5.0	1	Ni-63	0.40	0.40

Total Pieces Shipped	Nuclide	Total Activity in uCi
1387	Ni-63	562.40
2	Cs-137	0.80
1	Kr-85	0.50

# HIGH ENERGY DEVICES

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License Number 24-26366-02E

## 2010 Material Distribution Report

All products were transferred for use under 10 CFR 30.15 or equivalent Agreement State Regulations.

ShpDate	Type	Part #	# Pcs	Rad	Activity Each in uCi	Total Activiy in uCi
1/5/2010	Spark gap	PMT(301)750	15	Ni-63	0.40	6.00
1/5/2009	Spark gap	PMT(301)600	200	Ni-63	0.40	80.00
1/21/2010	Spark gap	TG68	1	Ni-63	0.40	0.40
2/8/2010	Spark gap	PMT(301)750	15	Ni-63	0.40	6.00
2/17/2010	Spark gap	UFT266-2-900	14	Ni-63	0.40	5.60
2/17/2010	Gas tube	TD93B	1	Kr-85	0.50	0.50
2/17/2010	Spark gap	PMT(301)2.0	15	Ni-63	0.40	6.00
3/3/2010	Spark gap	TA7.0	10	Ni-63	0.40	4.00
3/8/2010	Spark gap	PMT(301)750	15	Ni-63	0.40	6.00
3/8/2010	Spark gap	TB25.0	10	Ni-63	0.40	4.00
3/8/2010	Spark gap	TG376	1	Ni-63	0.40	0.40
3/9/2010	Spark gap	TG131	8	Ni-63	0.40	3.20
3/18/2010	Spark gap	TG194	3	Ni-63	0.40	1.20
3/22/2010	Spark gap	TN162	1	Kr-85	0.50	0.50
4/5/2010	Spark gap	TG20A	1	Ni-63	0.40	0.40
4/5/2010	Spark gap	TG20A	28	Ni-63	0.40	11.20
4/5/2010	Spark gap	PMT(301)750	15	Ni-63	0.40	6.00
4/6/2010	Spark gap	PMT(301)2.0	28	Ni-63	0.40	11.20
4/7/2010	Spark gap	TA7.0	1	Ni-63	0.40	0.40
4/13/2010	Spark gap	TA10.0	5	Ni-63	0.40	2.00
4/14/2010	Spark gap	TG131	1	Ni-63	0.40	0.40
4/21/2010	Spark gap	TA7.0	25	Ni-63	0.40	10.00
5/3/2010	Spark gap	TD1238	7	Ni-63	0.40	2.80
5/4/2010	Spark gap	TG63	1	Ni-63	0.40	0.40
5/4/2010	Spark gap	TG376	1	Ni-63	0.40	0.40
5/10/2010	Spark gap	TG64	2	Ni-63	0.40	0.80
5/10/2010	Spark gap	TG73	2	Ni-63	0.40	0.80
5/11/2010	Spark gap	TG26A	3	Ni-63	0.40	1.20
5/12/2010	Spark gap	TG26A	77	Ni-63	0.40	30.80
5/19/2010	Spark gap	TG40	12	Ni-63	0.40	4.80
5/25/2010	Spark gap	UFT266-1-900	4	Ni-63	0.40	1.60
5/25/2010	Spark gap	UFT266-1-900	11	Ni-63	0.40	4.40
5/25/2010	Spark gap	TD1238	1	Ni-63	0.40	0.40
6/2/2010	Spark gap	PMT(301)750	15	Ni-63	0.40	6.00
6/7/2010	Spark gap	UFT266-1-900	10	Ni-63	0.40	4.00
6/16/2010	Spark gap	UFT266-1-900	26	Ni-63	0.40	10.40
6/23/2010	Spark gap	TG131	8	Ni-63	0.40	3.20
7/6/2010	Spark gap	PMT(301)750	41	Ni-63	0.40	16.40
7/19/2010	Spark gap	PMT(301)2.0	91	Ni-63	0.40	36.40
7/20/2010	Spark gap	PMT(301)750	16	Ni-63	0.40	6.40

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2010 Material Distribution Report – cont.

ShpDate	Type	Part #	# Pcs	Rad	Activity Each in uCi	Total Activiy in uCi
8/9/2010	Spark gap	UFT266-2-900	14	Ni-63	0.40	5.60
8/24/2010	Spark gap	TG59	8	Ni-63	0.40	3.20
8/26/2010	Spark gap	PMT(301)750	16	Ni-63	0.40	6.40
8/26/2010	Spark gap	PMT(301)750	48	Ni-63	0.40	19.20
9/13/2010	Spark gap	PMT(301)1.0	8	Ni-63	0.40	3.20
9/22/2010	Spark gap	TA7.0	25	Ni-63	0.40	10.00
9/27/2010	Spark gap	TG40	6	Ni-63	0.40	2.40
9/28/2010	Spark gap	PMT(301)750	25	Ni-63	0.40	10.00
9/28/2010	Spark gap	PMT(301)900-01	3	Ni-63	0.40	1.20
9/28/2010	Spark gap	PMT(301)2.0	21	Ni-63	0.40	8.40
9/28/2010	Spark gap	TG64	3	Ni-63	0.40	1.20
9/29/2010	Spark gap	UFT266-2-900	2	Ni-63	0.40	0.80
10/13/2010	Spark gap	TG65	2	Ni-63	0.40	0.80
10/20/2010	Spark gap	PMT(301)750	2	Ni-63	0.40	0.80
10/20/2010	Spark gap	PMT(301)750	16	Ni-63	0.40	6.40
11/3/2010	Spark gap	TB15.0	2	Ni-63	0.40	0.80
11/3/2010	Spark gap	SG15.0	2	Ni-63	0.40	0.80
11/3/2010	Spark gap	TG73	6	Ni-63	0.40	2.40
11/8/2010	Spark gap	TG73	10	Ni-63	0.40	4.00
11/15/2010	Spark gap	TD1238	7	Ni-63	0.40	2.80
11/15/2010	Spark gap	PMT(301)900-01	1	Ni-63	0.40	0.40
11/23/2010	Spark gap	PMT(301)750	2	Ni-63	0.40	0.80
11/23/2010	Spark gap	PMT(301)350	7	Ni-63	0.40	2.80
12/6/2010	Spark gap	TG376	15	Ni-63	0.40	6.00
12/6/2010	Spark gap	UMT(279)1.7	44	Ni-63	0.40	17.60
12/8/2010	Spark gap	TG8	10	Ni-63	0.40	4.00
12/13/2010	Spark gap	TG63	2	Ni-63	0.40	0.80

Total Pieces Shipped	Nuclide	Total Activity in uCi
1109	Ni-63	418.40
2	Kr-85	1.00
0	Cs-137	0.00

# HIGH ENERGY DEVICES

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License Number 24-26366-02E

## 2011 Material Distribution Report

All products were transferred for use under 10 CFR 30.15 or equivalent Agreement State Regulations.

ShpDate	Type	Part #	# Pcs	Rad	Activity Each in uCi	Total Activiy in uCi
1/10/2011	Spark gap	TG249	2	Ni63	0.40	0.80
1/10/2011	Spark gap	TG73	4	Ni63	0.40	1.60
1/10/2011	Spark gap	UFT266-2-900	10	Ni63	0.40	4.00
1/18/2011	Spark gap	PMT(301)600	300	Ni63	0.40	120.00
1/19/2011	Spark gap	TG131	6	Ni63	0.40	2.40
2/3/2011	Spark gap	UFT266-2-900	18	Ni63	0.40	7.20
2/14/2011	Spark gap	SG6.0W360	2	Ni63	0.40	0.80
2/14/2011	Spark gap	TG40	7	Ni63	0.40	2.80
2/16/2011	Spark gap	TG131	1	Ni63	0.40	0.40
3/1/2011	Spark gap	TG72	4	Ni63	0.40	1.60
3/1/2011	Spark gap	TG63	4	Ni63	0.40	1.60
3/1/2011	Spark gap	UFT266-1-900	6	Ni63	0.40	2.40
4/12/2011	Spark gap	UFT266-1-900	11	Ni63	0.40	4.40
4/13/2011	Spark gap	TG63	2	Ni63	0.40	0.80
4/13/2011	Spark gap	TG72	1	Ni63	0.40	0.40
4/26/2011	Spark gap	TA7.0	25	Ni63	0.40	10.00
5/2/2011	Spark gap	TG194	3	Ni63	0.40	1.20
5/18/2011	Spark gap	TG20A	21	Ni63	0.40	8.40
5/24/2011	Spark gap	TG63	2	Ni63	0.40	0.80
5/24/2011	Spark gap	TA5.0	3	Ni63	0.40	1.20
5/25/2011	Spark gap	SG6.0W360	3	Ni63	0.40	1.20
5/25/2010	Spark gap	UFT266-1-900	22	Ni63	0.40	8.80
6/7/2011	Spark gap	TA7.0	5	Ni63	0.40	2.00
6/28/2011	Spark gap	TG7	3	Ni63	0.40	1.20
6/30/2011	Spark gap	SIG3.0	4	Ni63	0.40	1.60
7/12/2011	Spark gap	PMT(301)1.0	5	Ni63	0.40	2.00
7/18/2011	Spark gap	TA7.0	25	Ni63	0.40	10.00
8/16/2011	Spark gap	PMT(301)2.0	41	Ni63	0.40	16.40
8/16/2011	Spark gap	UFT266-2-900	2	Ni63	0.40	0.80
8/17/2011	Spark gap	UFT266-1-900	6	Ni63	0.40	2.40
8/17/2011	Spark gap	SG25.0	1	Ni63	0.40	0.40
8/22/2011	Spark gap	PMT(301)900-01	15	Ni63	0.40	6.00
8/31/2011	Spark gap	TB25.0	10	Ni63	0.40	4.00
10/5/2011	Spark gap	TG20A	1	Ni63	0.40	0.40
10/5/2011	Spark gap	TG20A	37	Ni63	0.40	14.80
10/18/2011	Spark gap	UFT266-2-900	6	Ni63	0.40	2.40
10/18/2011	Spark gap	TG373	2	Ni63	0.40	0.80
10/24/2011	Spark gap	2.0KV	1	Ni63	0.40	0.40
10/31/2011	Spark gap	UFT266-2-900	20	Ni63	0.40	8.00

# HIGH ENERGY DEVICES

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2011 Material Distribution Report – cont.

ShpDate	Type	Part #	# Pcs	Rad	Activity Each in uCi	Total Activiy in uCi
11/1/2011	Spark gap	SB600	30	Ni63	0.40	12.00
11/7/2011	Spark gap	TG87	11	Ni63	0.40	4.40
11/8/2011	Spark gap	UFT266-2-900	5	Ni63	0.40	2.00
11/30/2011	Spark gap	PMT(301)2.0	15	Ni63	0.40	6.00
11/30/2011	Spark gap	PMT(301)305	25	Ni63	0.40	10.00
12/13/2011	Spark gap	TG65	3	Ni63	0.40	1.20
12/13/2011	Spark gap	TG75	3	Ni63	0.40	1.20
12/13/2011	Spark gap	UFT266-2-900	4	Ni63	0.40	1.60

Total

Pieces Shipped	Nuclide	Total Activity in uCi
715	Ni-63	294.80
0	Kr-85	0.00
0	Cs-137	0.00

# HIGH ENERGY DEVICES

LLC

License Number 24-26366-02E

## 2012 Material Distribution Report

All products were transferred for use under 10 CFR 30.15 or equivalent Agreement State Regulations.

ShpDate	Type	Part #	# Pcs	Rad	Activity Each in uCi	Total Act in uCi
1/5/2012	Spark gap	TG63	4	Ni63	0.40	1.60
1/23/2012	Spark gap	TG73	4	Ni63	0.40	1.60
1/30/2012	Spark gap	PMT(301)900-01	5	Ni63	0.40	2.00
2/1/2012	Spark gap	TA7.0	2	Ni63	0.40	0.80
2/7/2012	Spark gap	TG63	3	Ni63	0.40	1.20
2/7/2012	Spark gap	TG72	3	Ni63	0.40	1.20
2/7/2012	Spark gap	TA7.0	25	Ni63	0.40	10.00
3/6/2012	Spark gap	UFT266-2-900	6	Ni63	0.40	2.40
3/6/2012	Spark gap	SG6.0W360	8	Ni63	0.40	3.20
3/6/2012	Spark gap	SG6.5W360	2	Ni63	0.40	0.80
3/15/2012	Spark gap	SG5.0W360	4	Ni63	0.40	1.60
3/15/2012	Spark gap	SG4.7W360	4	Ni63	0.40	1.60
3/19/2012	Spark gap	SG5.0W360	1	Ni63	0.40	0.40
3/19/2012	Spark gap	SG4.7W360	1	Ni63	0.40	0.40
3/21/2012	Spark gap	SIG2.0	1	Ni63	0.40	0.40
3/28/2012	Spark gap	TD1238	12	Ni63	0.40	4.80
4/17/2012	Spark gap	TG75	3	Ni63	0.40	1.20
4/19/2012	Spark gap	PMT(301)2.0	10	Ni63	0.40	4.00
4/26/2012	Spark gap	SIG3.0	10	Ni63	0.40	4.00
4/30/2012	Spark gap	TG153	10	Ni63	0.40	4.00
5/1/2012	Gas tube	TD29	2	Kr85	0.50	1.00
5/1/2012	Spark gap	UMT(279)1.7	43	Ni63	0.40	17.20
5/2/2012	Spark gap	PMT(301)(2.0	15	Ni63	0.40	6.00
5/7/2012	Spark gap	TG64	1	Ni63	0.40	0.40
5/9/2012	Spark gap	PMT(301)2.0	50	Ni63	0.40	20.00
5/29/2012	Spark gap	UFT266-1-900	9	Ni63	0.40	3.60
6/18/2012	Spark gap	TG131	2	Ni63	0.40	0.80
6/21/2012	Spark gap	UFT266-2-900	2	Ni63	0.40	0.80
7/9/2012	Spark gap	TA7.0	40	Ni63	0.40	16.00
7/16/2012	Spark gap	UFT266-1-900	6	Ni63	0.40	2.40
7/17/2012	Spark gap	UFT266-2-900	2	Ni63	0.40	0.80
7/25/2012	Spark gap	UFT266-2-900	4	Ni63	0.40	1.60
8/15/2012	Spark gap	BX2.5	5	Ni63	0.40	2.00
8/30/2012	Spark gap	TA7.0	5	Ni63	0.40	2.00
9/5/2012	Spark gap	TG87	17	Ni63	0.40	6.80
9/5/2012	Spark gap	UFT266-2-900	11	Ni63	0.40	4.40
9/18/2012	Spark gap	PMT(301)350	5	Ni63	0.40	2.00
9/18/2012	Spark gap	BX2.5	25	Ni63	0.40	10.00

# HIGH ENERGY DEVICES

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2012 Material Distribution Report – cont.

ShpDate	Type	Part #	# Pcs	Rad	Activity Each in uCi	Total Activity in uCi
9/24/2012	Spark gap	TA7.0	25	Ni63	0.40	10.00
9/24/2012	Spark gap	TA3.5	3	Ni63	0.40	1.20
9/25/2012	Spark gap	UFT266-2-900	5	Ni63	0.40	2.00
9/25/2012	Spark gap	UFT266-1-900	5	Ni63	0.40	2.00
10/3/2012	Spark gap	BX2.5	75	Ni63	0.40	30.00
10/9/2012	Spark gap	TG20A	22	Ni63	0.40	8.80
10/9/2012	Spark gap	TG20A	4	Ni63	0.40	1.60
10/9/2012	Spark gap	TG20A	29	Ni63	0.40	11.60
10/24/2012	Spark gap	TG57	14	Ni63	0.40	5.60
11/6/2012	Spark gap	TB15.0	2	Ni63	0.40	0.80
11/6/2012	Spark gap	TG64	4	Ni63	0.40	1.60
11/6/2012	Spark gap	TG73	4	Ni63	0.40	1.60
11/8/2012	Spark gap	TG40	4	Ni63	0.40	1.60
11/8/2012	Spark gap	SG25.0	2	Ni63	0.40	0.80
11/27/2012	Spark gap	UFT266-1-900	10	Ni63	0.40	4.00
12/4/2012	Spark gap	PMT(301)2.0	10	Ni63	0.40	4.00
12/4/2012	Spark gap	BX2.5	100	Ni63	0.40	40.00
12/4/2012	Spark gap	UFT266-2-900	20	Ni63	0.40	8.00
12/5/2012	Spark gap	TG100	22	Ni63	0.40	8.80
12/11/2012	Spark gap	TG73	6	Ni63	0.40	2.40
1/2/2013	Spark gap	TG194	5	Ni63	0.40	2.00

Total

Pieces Shipped	Nuclide	Total Activity in uCi
731	Ni-63	292.40
2	Kr-85	1.00
0	Cs-137	0.00

# HIGH ENERGY DEVICES

LLC

License Number 24-26366-02E

## 2013 Material Distribution Report

All products were transferred for use under 10 CFR 30.15 or equivalent Agreement State Regulations.

ShpDate	Type	Part #	# Pcs	Rad	Activity Each in uCi	Total Activiy in uCi
1/2/2013	Spark gap	TB2.5	3	Ni63	0.40	1.20
1/24/2013	Spark gap	TG131	2	Ni63	0.40	0.80
2/4/2013	Spark gap	TG131	2	Ni63	0.40	0.80
2/7/2013	Gas tube	TD29	10	Kr85	0.50	5.00
2/7/2013	Spark gap	TB15.0	1	Ni63	0.40	0.40
2/13/2013	Spark gap	UFT266-1-900	5	Ni63	0.40	2.00
2/26/2013	Spark gap	TG376	2	Ni63	0.40	0.80
4/1/2013	Spark gap	TG153	2	Cs137	0.40	0.80
4/2/2013	Spark gap	TG87	10	Ni63	0.40	4.00
4/29/2013	Spark gap	PMT(301)350	15	Ni63	0.40	6.00
5/7/2013	Spark gap	TG73	13	Ni63	0.40	5.20
5/8/2013	Spark gap	UFT266-1-900	20	Ni63	0.40	8.00
5/14/2013	Spark gap	PMT(301)2.0	40	Ni63	0.40	16.00
5/14/2013	Spark gap	TG373	10	Ni63	0.40	4.00
5/14/2013	Spark gap	TA7.0	25	Ni63	0.40	10.00
5/28/2013	Spark gap	PMT(301)350	2	Ni63	0.40	0.80
6/17/2013	Spark gap	PMT(301)2.0	87	Ni63	0.40	34.80
6/18/2013	Spark gap	PMT(301)350	20	Ni63	0.40	8.00
6/18/2013	Spark gap	PMT(301)400	15	Ni63	0.40	6.00
6/20/2013	Spark gap	TB25.0	10	Ni63	0.40	4.00
7/2/2013	Spark gap	TG100	1	Ni63	0.40	0.40
7/2/2013	Spark gap	TG249	5	Ni63	0.40	2.00
7/22/2013	Spark gap	UMT(279)1.7	51	Ni63	0.40	20.40
7/23/2013	Spark gap	TG73	1	Ni63	0.40	0.40
7/24/2013	Spark gap	PMT(301)750	2	Ni63	0.40	0.80
7/24/2013	Spark gap	PMT(301)1.1	2	Ni63	0.40	0.80
7/24/2013	Spark gap	PMT(301)2.0	2	Ni63	0.40	0.80
7/24/2013	Spark gap	TG59	3	Ni63	0.40	1.20
8/14/2013	Spark gap	TG73	3	Ni63	0.40	1.20
8/29/2013	Spark gap	TA5.0	3	Ni63	0.40	1.20
8/29/2013	Spark gap	BX2.0	3	Ni63	0.40	1.20
9/16/2013	Spark gap	PMT(301)2.0	38	Ni63	0.40	15.20
9/25/2013	Spark gap	BX2.0	30	Ni63	0.40	12.00
9/30/2013	Spark gap	TG65	5	Ni63	0.40	2.00

# HIGH ENERGY DEVICES

2013 Material Distribution Report – cont.

ShpDate	Type	Part #	# Pcs	Rad	Activity Each in uCi	Total Activiy in uCi
10/8/2013	Spark gap	SB600	3	Ni63	0.40	1.20
10/15/2013	Spark gap	BX2.5	100	Ni63	0.40	40.00
10/21/2013	Spark gap	UFT266-1-900	7	Ni63	0.40	2.80
10/22/2013	Spark gap	TG194	3	Ni63	0.40	1.20
10/22/2013	Spark gap	TB4.5	1	Ni63	0.40	0.40
10/31/2013	Spark gap	BX2.5	5	Ni63	0.40	2.00
10/31/2013	Spark gap	BX10.0	5	Ni63	0.40	2.00
10/31/2013	Spark gap	BX15.0	5	Ni63	0.40	2.00
11/20/2013	Spark gap	TG153	3	Ni63	0.40	1.20
11/25/2013	Spark gap	UFT266-2-900	12	Ni63	0.40	4.80
12/9/2013	Spark gap	UMT(279)1.7	16	Ni63	0.40	6.40

Total

Pieces Shipped	Nuclide	Total Activity in uCi
591	Ni-63	236.40
10	Kr-85	5.00
2	Cs-137	0.80

**From:** Joseph Koch  
**To:** Xu, Shirley  
**Subject:** RE: High Energy Device, Proprietary information  
**Date:** Thursday, July 17, 2014 2:08:29 PM

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Ms. Xu,

High Energy Devices, LLC. waives the proprietary statement in all of the documents submitted for the license renewal.

Thank you,

Joseph D. Koch, PhD  
Director of Operations/Asst. RSO  
R. M. Wester and Associates, Inc.  
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jkoch@rmwester.com  
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**From:** Xu, Shirley [mailto:Shirley.Xu@nrc.gov]  
**Sent:** Thursday, July 17, 2014 12:49 PM  
**To:** jkoch@rmwester.com  
**Subject:** High Energy Device, Proprietary information

Mr. Koch,

Your letter dated July 10, 2014 with attachments were received. In accordance with 10 CFR 2.390 of NRC's "Agency Rules of Practice and Procedure," all submitted document will be available electronically for public inspection in the NRC's Public Document Room or from the Publicly Available Records component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC web site at <http://www.nrc.gov/reading-rm/adams.html>.

If you wish to have any part of the document withheld from public disclosure, please submit an affidavit, as required in 10 CFR 2.390(b)(1) and address the five withholding criteria set forth in 10 CFR 2.390(b)(4)(i) through (v). Otherwise, please respond to this e-mail, and state that you waive the proprietary statement in all documents submitted.

Regards,

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