

From the Desk of

November 27, 2006

VIA UPS OVERNIGHT DELIVERY

Mr. Larry Elliott
Ms. Laurie Ishak
SEC Petition
Office of Compensation Analysis and Support
National Institute for Occupational Safety and Health
4676 Columbia Parkway, MS-C-47
Cincinnati, OH 45226

Re: Special Exposure Cohort Petition
Dow Chemical Company
Class Member

Dear Mr. Elliott and Ms. Ishak:

Enclosed please find the Petitioner Authorization Form, Special Exposure Cohort Petition – Form A, Privacy Act Authorization & Release, Authorization for Release of Medical Records, and Affidavits of former Dow Chemical Company employees.

Should you need any additional documentation, I can be reached at

Very truly yours,

Enclosures

Special Exposure Cohort Petition under the Energy Employees Occupational Illness Compensation Act

Name or Social Security Number of First Petitioner.

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health

OMB Number: 0920-0639

Expires: 05/31/2007 Page 1 of 2

Petitioner Authorization Form

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Instructions:

If you wish to petition HHS to consider adding a class of employees to the Special Exposure Cohort and you are NOT either a member of that class, a survivor of a member of that class, or a labor organization representing or having represented members of that class, then 42 CFR Part 83, Section 83.7(c) requires that you obtain written authorization. You can obtain such authorization from either an employee who is a member of the class or a survivor of such an employee. You may use this form to obtain such authorization and submit the completed form to NIOSH with the related petition. Please print legibly.

For Further Information: If you have questions about these instructions, please call the following NIOSH toll-free phone number and request to speak to someone in the Office of Compensation Analysis and Support about an SEC petition: 1-800-356-4674.

Authorization for Individual or Entity to Petition HHS on Behalf of a Class of Employees for Addition to the Special Exposure Cohort

Name of Class Member or Survivor	-	
Street Address of Class Member or Survivor	Apt. #	P.O. Box
City, State, Zip Code of Class Member or Survivor		
hereby authorize:		
Name of Petitioner		•
Address of Petitioner	Apt. #	P.O. Box
City, State and Zip Code of Petitioner petition the Department of Health and Human Se	• • • • • • • • • • • • • • • • • • • •	
City, State and Zip Code of Petitioner petition the Department of Health and Human Senat includes:	ervices on behalf of a	
City, State and Zip Code of Petitioner o petition the Department of Health and Human Senat includes: ame of Class Member (employee, not the employee) or the addition of the class to the Special Exposur	ervices on behalf of a s survivor) re Cohort, under the l	class of employees
	ervices on behalf of a s survivor) re Cohort, under the I 42 U.S.C. §§ 7384-738 petitioner named ab	class of employees Energy Employee's 35).

Special Exposure Cohort Petition

under the Energy Employees Occupational Illness Compensation Act

U.S. Department of Health and Human Services

Centers for Disease Control and Prevention National Institute for Occupational Safety and Health

OMB Number: 0920-0839

Expires: 05/31/2007 Page 2 of 2

Petitioner Authorization Form

Public Burden Statement

Public reporting burden for this collection of information is estimated to average 3 minutes per response. including time for reviewing Instructions, gathering the information needed, and completing the form. If you have any comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, send them to CDC Reports Clearance Officer, 1600 Clifton Road, MS-E-11, Atlanta GA, 30333; ATTN:PRA 0920-0639. Do not send the completed petition form to this address. Completed petitions are to be submitted to NIOSH at the address provided in these instructions. Persons are not required to respond to the information collected on this form unless it displays a currently valid OMB number.

Use of this form is voluntary. Failure to use this form will not result in the denial of any right, benefit, or privilege to which you may be entitled.

Name or Social Security Number of First Petitioner:

Special Exposure Cohort Petition

under the Energy Employees Occupational Illness Compensation Act

U.S. Department of Health and Human Services

Centers for Disease Control and Prevention National Institute for Occupational Safety and Health

OMB Number: 0920-0639

Expires: 05/31/2007

Special Exposure Cohort Petition — Form A

Page 1 of 2

Use of this form and disclosure of Social Security Number are voluntaries allure to use this formed, this mimber will not result in the denial of any right, benefit of privilege to which yee may be en

Instructions on Completing this Form:

You should use this petition form only if NIOSH has reported to you in writing that it cannot complete the dose reconstruction needed for your cancer claim.

All other petitioners should use Petition Form B to submit a petition to NIOSH.

For Further Information: If you have questions about these instructions, please call the following NIOSH toll-free phone number and request to speak to someone in the Office of Compensation Analysis and Support about an SEC petition: 1-800-356-4674.

A NIOSH Claim Information — Complete as much information as you can in Section A.

- A.1 NIOSH Tracking Number (indicated on all NIOSH correspondence):
- A.2 Print Name of Energy Employee for whom this claim was filed:

Mr./Mrs./Ms. First Name

Middle Initial

Last Name

- A.3 Social Security Number of Energy Employee for whom this claim was filed:
- B Signature of Person Submitting this Petition Complete Section B.

Print and sign your name below to indicate that you are petitioning for HHS to consider adding a class of employees to the Special Exposure Cohort that would include the employee indicated by the tracking number or name under entry 1 above.

Print your name helow

Sign your name below:

First Name

Middle Initial Last Name

First Name

Migrale initial Last Ivame

Please send this form to NIOSH at the address below.

Once NIOSH receives this form, the U.S. Department of Health and Human Services will consider adding a class of employees to the Special Exposure Cohort. Your contact at NIOSH will be available to inform you of the progress of your petition.

Send this form to:

SEC Petition

Office of Compensation Analysis and Support

NIOSH

4676 Columbia Parkway, MS-C-47

Cincinnati, OH 45226

Special Exposure Cohort Petition under the Energy Employees Occupational Illness Compensation Act

U.S. Department of Health and Human Services

Centers for Disease Control and Prevention National Institute for Occupational Safety and Health

OMB Number: 0920-0639

Expires: 05/31/2007 | Page 2 of 2

Special Exposure Cohort Petition — Form A

Public Burden Statement

Public reporting burden for this collection of information is estimated to average 3 minutes per response, including time for reviewing instructions, gathering the information needed, and completing the form. If you have any comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, send them to CDC Reports Clearance Officer, 1600 Clifton Road, MS-E-11, Atlanta GA, 30333; ATTN:PRA 0920-0639. Do not send the completed petition form to this address. Completed petitions are to be submitted to NIOSH at the address provided in these instructions. Persons are not required to respond to the information collected on this form unless it displays a currently valid OMB number.

Privacy Act Advisement

In accordance with the Privacy Act of 1974, as amended (5 U.S.C. § 552a), you are hereby notified of the following:

The Energy Employees Occupational Illness Compensation Program Act (42 U.S.C. §§ 7384-7385) (EEOICPA) authorizes the President to designate additional classes of employees to be included in the Special Exposure Cohort (SEC). EEOICPA authorizes HHS to implement its responsibilities with the assistance of the National Institute for Occupational Safety (NIOSH), an Institute of the Centers for Disease Control and Prevention. Information obtained by NIOSH in connection with petitions for including additional classes of employees in the SEC will be used to evaluate the petition and report findings to the Advisory Board on Radiation and Worker Health and HHS.

Records containing identifiable information become part of an existing NIOSH system of records under the Privacy Act, 09-20-147 "Occupational Health Epidemiological Studies and EEOICPA Program Records. HHS/CDC/NIOSH." These records are treated in a confidential manner, unless otherwise compelled by law. Disclosures that NIOSH may need to make for the processing of your petition or other purposes are listed below.

NIOSH may need to disclose personal identifying information to: (a) the Department of Energy, other federal agencies, other government or private entities and to private sector employers to permit these entities to retrieve records required by NIOSH; (b) identified witnesses as designated by NIOSH so that these individuals can provide information to assist with the evaluation of SEC petitions; (c) contractors assisting NIOSH; (d) collaborating researchers, under certain limited circumstances to conduct further investigations; (e) Federal, state and local agencies for law enforcement purposes; and (f) a Member of Congress or a Congressional staff member in response to a verified inquiry.

This notice applies to all forms and informational requests that you may receive from NIOSH in connection with the evaluation of an SEC petition.

Use of the NIOSH petition forms (A and B) is voluntary but your provision of information required by these forms is mandatory for the consideration of a petition, as specified under 42 CFR Part 83. Petitions that fail to provide required information may not be considered by HHS.

PRIVACY ACT AUTHORIZATION & RELEASE

Contact Name:	
Street Address:	
City, State and Zip:	
County:	
Home Phone: Alterna	te:
Claimant / Worker Name:	
SSN:	
NIOSH Tracking Number:	
Date of birth:	
Date of Death (if applicable):	
AUTHORIZATION & RELEASE I hereby authorize and grant permission to:	
and members of their staffs to make such inquiries of federal, state and loc departments, and to take such other actions on my behalf, as they may dec assist me with respect to the subject of this authorization and all matters r	em necessary or appropriate to
and members of their staffs of any liability arising from said inquiries or o	other actions on my behalf.
Signature / Date	-
DESCRIPTION OF PROBLEM OR CONCERN: In re: claim for comexposure at the <u>Dow Chemical</u> facility located in Granite City, Illinois.	npensation under EEOICPA re:
STATE OF ILLINOIS COUNTY OF MADISON	/
The foregoing instrument was acknowledged before me this, who is personally know	day of factor lie, 2006,
produced identification,	
"OFFICIAL SEAL" SUZANNE W. CALLAHAN NOTARY PUBLIC—STATE OF ILLINOIS MADISON COUNTY, IL MY COMMISSION EXPIRES OCT. 10, 2009 (NOTARY SIGN.	Lu. III.

AUTHO	RIZATION FOR RELEASE	E OF MEDICAL RECORDS	
то:			
RE:			
	DÓ NOT WRITE ABOVE	E THIS LINE	, ,
Claimant / Worker's Name:			
Date of Birth:			
Date of Death (if applicable	;		
SSN:			
	d individual or organization to delow, to the following recipient	disclose the above-named patient's health	!

for the purpose of the above-named individual's claim for compensation under the EEOICPA.

The information to be used and/or disclosed is as follows:

- 1. All records, reports, test results or other documents concerning the medical care, treatment, and examination of the aforementioned person;
- All pathology, original tissue blocks, original tissue slides, records, self-histories, histochemical
 and immunochemical reports, autopsy reports, test results or other documents concerning the
 medical care, treatment, and examination of the aforementioned person;
- 3. Copies of all correspondence concerning the medical care, treatment, examination, or physical condition of the aforementioned person;
- 4. Copies of bills or statements of services rendered for such services;
- 5. X-ray films, MRI films, CT films and all other imaging films.

I understand that the information in the patient's health record may include information relating to sexually transmitted disease, acquired immunodeficiency syndrome (AIDS), or human immunodeficiency virus (HIV). It may also include information about behavioral or mental health services, or treatment for alcohol or drug abuse.

I understand that authorizing the disclosure of this health care information is voluntary. I can refuse to sign this authorization. I need not sign this form in order to assure treatment. I understand that I may inspect or copy the information to be used or disclosed, as provided in 45 CFR 164.524. I understand that any disclosure of information carries with it the potential for an unauthorized re-disclosure of the patient's health information by the recipient, resulting in the health information no longer being protected by federal confidentiality rules.

A copy of the consent and a notation as to any action taken thereon is to be entered in the patient's record. I understand that I have the right to revoke this authorization at any time. I understand that if I revoke this authorization I must do so in writing by sending or presenting my written revocation to the Privacy Contact of the health care provider named above. I understand that the revocation of this authorization will not apply to the extent that the health care provider has taken action in reliance thereon. I understand that if the authorization was obtained as a condition of obtaining insurance coverage, other law provides the insurer with the right to contest a claim under the policy or the policy itself.

A photostatic copy of this Authorization shall be considered as effective and valid as the original. In the absence of an express revocation, the authority granted under this authorization shall remain in effect for one year from the date set forth below.

This authorization does not waive my doctor/patient privilege.

THIS AUTHORIZATION DOES <u>NOT</u> AUTHORIZE YOU TO DISCUSS THE MEDICAL CARE AND/OR CONDITION OF THE ABOVE PARTY. This Authorization is for securing the medical records and office notes only as described herein. This does not authorize the securing of a narrative medical report, nor does it authorize the bearer to conduct ex-parte interviews with any medical personnel regarding the treatments and condition.

The undersigned further agrees to waive any time limitations required by the above provider with respect to their receipt of this authorization and the date on which the authorization for records was signed.

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e], Decea

STATE OF ILLINOIS COUNTY OF MADISON

"OFFICIAL SEAL"
SUZANNE W. CALLAHAN
NOTARY PUBLIC—STATE OF ILLINOIS
MADISON COUNTY, IL
MY COMMISSION EXPIRES OCT. 10, 2009

(NOTARY SIGNATURE)

<u>AFFIDAVIT</u>

STATE OF ILLINOIS	;
COUNTY OF MADISON	Ś

Affidavit No. 1: Was Uranium work at Dow confined to 1957 through 1960 or 1961 in Building 6 doing extrusion and rod straightening under contract with the Mallinckrodt Chemical Works?

- My name is I worked at Dow (Madison) Plant from 1952 to in Rolling Mill. I don't know the year, but ' rolled uranium on 7 Mill. I was one of the three or four helpers. We also had electricians standing by, possibly a millwright, and an oilier. We rolled uranium on Number 7 Mill in the '50s. I know is dead. dead. So I guess I'm the only survivor. It was a small slab. I think it's about 2" thick when it started. We pushed it through the 7 Mill, then carried it around. We had an oven in the vicinity real close to 7 Mill. It was heated between and we would make eight, ten passes or more. It was a hard metal. It was about one foot to two feet wide, a little bit longer than it was wide, and it was a couple inches, one to two inches thick. We even rolled it sideways to get it wider than it originally was. It was probably a half inch to a little bit less than half inch when it was finished. We had to wear coveralls. We did not wear a badge. They had these, I guess, Geiger counters that they carried around. When we went in they put paper all around the mill. At four o'clock when we got off work we had to go to the door of Number 2 shower room. We had to take off our clothes outside, and we didn't have anything on except our shorts when we went in to the shower. The coveralls were all gathered up and taken someplace. The people watching us were Dow supervisors and from someplace other than Dow. (7/21/06 Meeting Transcript, pp.18-23) It was heavy, they were small. They put them in wooden boxes.(7/21/06 Meeting Transcript, p. 25)
- My name is I worked at Dow (Madison) Plant from 1961 to in Rolling Mill, Maintenance, and Casting. They shipped a lot of rods over into the rolling mill and put them on the ovens over there to be straightened. I started over there in the rolling mill in 1962. I was working with and I can't think of the other one's name right offhand. They were talking about running the rods for straightening them. That was uranium. And that was on the flattening ovens in the rolling mill. The straightening was done in extrusion, but some of it went to the rolling mill. Extrusion is 6 Building; when they put it on the ovens it was in 5 Building. (7/21/06 Meeting Transcript, pp. 33-34)
- My name is I worked at Dow (Madison) Plant from 1953 to as a in Casting and Extrusion. The only thing I can say on that is that I was aware of it but through the grape vine. Dow Chemical didn't tell us anything about it. But they weren't kidding us. We recognized that uranium was dangerous. I have seen one ingot that I was told later was uranium but not by a company man. (8/11/06 Meeting Transcript, p. 13)

	Further, Affiants sayeth not.	
	Dated: 10-20-06	
\	SUBSCRIBED AND SWORN before me this day of Fig. Suzanne w. Callahan Notary Public State of Illinois Madison County, IL My commission sypires (ct. 10, 2009)	, 2006
	Dated: Och 20 2006	
	SUBSCRIBED AND SWORN before me this 20 day of 100000000000000000000000000000000000	, 2006
	Dated: 0 Ct. 19, 2006	
	SUBSCRIBED AND SWORN before me this 9 day of Oatobal	, 2006
	Notary Public "O F F I C I A L S E A L " JULIANNE E. PANI. WOOD NOTARY PUBLIC, STATE OF ILLINOIS MY COMMISSION EXPIRES 11/3/2006	

<u>AFFIDAVIT</u>

STATE OF ILLINOIS)
COUNTY OF MADISON)

Affidavit No. 2: Where was the thorium stored and worked on among the Dow plant buildings?

- My name is I worked at Dow (Madison) Plant from 1954 to in Casting and Pot Room. The thorium was stored in the casting. It was brought in on the dock in casting and stored in the back part of the pot room in the storage I brought the thorium into the pot room for charging it. So it was always stored back in there. Plus, there was scrap mixed in there too from the thorium that was cast in the rolling mill. They'd mark it with a marking pen HM 21 and HK 31. We used it right out of there and charged it. As a matter of fact, we charged thorium back in with other materials just to get rid of it. We'd be on AZ 31B or ZK 60. They'd mix it in with that and charge it just to get rid of it. The pot room was in 7 Building. It was kind of separate from the warehouse. The dock was down there. They had the aluminum unit in the south end. I worked with the thorium from the first time they run it to the last time when I retired in During those times we ran it, we had just bib overalls and things like that with the thorium. We didn't have any special equipment at all. (7/21/06 Meeting Transcript, pp. 37-40) They brought it in the barrels. They brought it into the dock, then they brought it in the pot room. There's an area behind the pot room for it. The barrels was about 14 inches wide and maybe about three or four foot high. And the thorium came in bars at that time. It was notched bars like maybe six, eight notches on the bar. They were real light to a barrel. It probably was because they weighed four or five pounds. We'd weigh it on the scale and then put it in the pots to alloy it up within specifications. But then later on we got it in pellet form. It probably came in in barrels because the barrels were all marked "Danger", "Radiation" on all the barrels. The first time we ran it, I questioned the supervisor. Because I went through Hiroshima, certainly a few months after the bomb was dropped and I know what radiation can do to you. And they said, "you don't have to worry about it. You'd have to handle this a thousand years before it will ever affect you". I don't recall where the pellets came from, but those bars came from England. (7/21/06 Meeting Transcript, p. 51)
- My name is I worked at Dow (Madison) Plant from 1960 to in Casting. The thorium, besides being stored, we kept it outside. It was a waste dross or a sludge. It was at the end of that property out there. They had signs out there that said radiation. They used to send people out there every year or so to go through it and pick the metal out of it. And we'd separate that and dig the metal out of it and put it in boxes and then charge it. You'd pick it up, but we had gloves. That was in 1960s. (7/21/06 Meeting Transcript, pp. 45-48)
- My name is I worked at Dow (Madison) Plant from 1961 to in Rolling Mill, Maintenance, and Casting. They had some barrels that had Midland, Texas on it, from the Dow plant down there. (7/21/06 Meeting Transcript, p. 54) I figure the thorium work

- started in '51 and it ended in about '98 is when they had the last slabs over in the mill to be processed. (7/21/06 Meeting Transcript, p. 73)
- My name is I worked at Dow (Madison) Plant from 1955 to in Casting. The thorium barrels that came into the alloy department had on them also "not to have undeveloped photo film within 36 feet of the barrel". That was written on the barrel. (7/21/06 Meeting Transcript, pp. 55-56) The process for melting the thorium in the metal you had to heat up a basket in the metal first. And there was a stirrer that stirred the metal. Then you had to have this thorium ready to dump in that hot basket. And you had to get it under the metal as fast as you could. If you didn't, it would ignite and fuse into one lump and it was absolutely useless. It had to dissolve into the metal. It didn't melt, it just dissolved. So you were over the top of that pot. You were looking down this hot basket and dumping the thorium in it. And then you had to get it under as fast as you could. (7/21/06 Meeting Transcript, pp. 70-71)
- My name is I worked at Dow (Madison) Plant from 1952 to in Rolling Mill. I understand that at night, when it was dark, they would throw this thorium it's the size of a small chocolate Easter egg, that's pretty close to the size. It's gray in color. And they would throw it across the floor just to see the sparks flying. This was the thorium. One guy, got some on his arm and when he died he had a scar. It burned his arm. (7/21/06 Meeting Transcript, pp. 41-42)
- I worked at Dow (Madison) Plant from 1961 to as a in various departments. In the rolling mill, we salvaged the thorium. We used to have to sand this. We didn't have no kind of protection for us and we breathed off this thorium HM and HK metal. I think that's what really probably caused my cancer. They'd bring down a sheet of thorium HM or HK. Then they'd take it to the pickle line and pickle it. Then they'd take it back to the sheet mill and maybe make 20, 30 passes. Then they'd take the same sheets back again, we had to salvage it again. They'd pickle it. We'd grind out the dirt with the sanders and gouge this metal out of there. And this was quite a process, but it was the only way they could do it was by using a sheet mill to roll this type of metal. We had no kind of protection at that time. We were never told what we was even working on really. We breathed this dust eight to 12 hours a day. (8/11/06 Meeting Transcript, pp. 15-16)
- I worked at Dow (Madison) Plant from 1965 to in Rolling Mill My name is and Casting. Some time in 2000 to 2001, we had probably 14 to 17 slabs of thorium metal that came from casting. They were stacked against the 2 Mill. They were there at 2 Mill for probably five to six years along with a bunch of this big scrap boxes. And it was all stored against the 2 Mill motor room. Some time in 2000/2001 an outside company came in with the moon suits, the whole deal, picked everything up and it all the scrap metal in barrels with the lock rims on them and hauled everything off. The reasoning I remember that they were thorium slabs is because we had a girl named ' who bid a job on 2 Mill as an assistant roller. She was awarded the job, and not long after that she reported to the company that she was pregnant. As soon as they found that out they told her she couldn't have the bid. she couldn't work on 2 Mill because of this thorium metal that was stored 75 feet directly behind me against the 2 Mill motor room. It was still up in the air when we went on strike. She hadn't gotten the bid. It had been cleaned up prior to that, but they still wouldn't allow her in that area. (8/11/06 Meeting Transcript, pp. 67-68)
- My name is

 I worked at Dow (Madison) Plant from 1965 to in Extrusion, Casting, and Mag Floor. I worked in casting. We did have thorium products stored in casting for years, and it was in the northwest corner of the leaching area at that time. And they'd been there so long that they just become deteriorated. But they moved them, I

think from there down across the track or someplace, and eventually out of the plant. We did have thorium products in the form of HM, HK stored there for years. There were like slabs, a small slab, I believe. They were small slabs so it would probably be 15 to 12 inches thick. It took up an area of about 12 feet in width and 20 feet in depth. It was just fenced off. It wasn't enclosed any more than just a fence. We knew what it was because when inventory come around that material had to be re-inventoried so that we would know what was in the plant as well as each building. There were no signs on it that said radioactive material. We were told it was thorium. We didn't really have to be told that because we worked around it on the mag floor. We knew it was thorium. (8/11/06 Meeting Transcript, pp. 20-21)

• My name is I worked at Dow (Madison) Plant from 1990 to in the Pot Room. It would have been eight inches long and probably 39 inches wide. (8/11/06 Meeting Transcript, p. 20) Tons of it. (8/11/06 Meeting Transcript, p. 64)

Further, Affiants sayeth not.
Dated: 10/19/06
SUBSCRIBED AND SWORN before me this day of COL 2006 "OFFICIAL SEAL" JULIANNE E PANI WOOD NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION FAPIRES 11/3/2006
Dated: 10 - 19-06
SUBSCRIBED AND SWORN before me this 2 day of October 2006
Notary Public OULIANNE E PANI WOOD OUARY PUBLIC STATE OF ILL CO. MICOMARCON SYRRES 11/3/201
Dated: 10/20/06
SUBSCRIBED AND SWORN before me this 20 day of letter , 2006
Notary Public
<i>-</i>
"OFFICIAL SEAL" SUZANNE W. CALLAHAN NOTARY PUBLIC—STATE OF ILLINOIS
MADISON COUNTY IL MY COMMISSION EXPIRES OCT. 10, 2009

Dated: 10-20-06
SUBSCRIBED AND SWORN before me this day of "OFFICIAL SEAL", 2006 "OFFICIAL SEAL" SUZANNE W. CALLAHAN NOTARY PUBLIC—STATE OF ILLINOIS MADISON COUNTY, IL. MY COMMISSION EXPIRES OCT. 10, 2009
Dated: 10-26-06
SUBSCRIBED AND SWORN before me this day of CALLAHAN SUZANNE W. CALLAHAN NOTARY PUBLIC—STATE OF ILLUNOIS MADISON COUNTY, IL MY COMMISSION EXPIRES OCT. 10, 2009
Dated: 10/26/06
SUBSCRIBED AND SWORN before me this 20 day of
Dated: 10-24-06
SUBSCRIBED AND SWORN before me this 2 mof October , 2006 "OFFICIAL SEAL" Gary L. Fletcher Notary Public, State of Illinois My Commission Exp. 03/07/2007
Dated: 067 19 2006
SUBSCRIBED AND SWORN before me this 2 day of October 2006
Notary Public CULIANNE S PANE WOOD COLING THE OFILING

Dow Affidavit No. 2

Page 4 of 5

Dated: 11-6-06	
SUBSCRIBED AND SWORN before me this	day of November, 2006
Murah a. Haldeman Notary Public	"OFFICIAL SEAL" DEBORAH A. HALDEMAN NOTARY PUBLIC—STATE OF ILLINOIS MY COMMISSION EXPIRES AUG. 1

STATE OF ILLINOIS)
)
COUNTY OF MADISON	j

Affidavit No. 3: What forms of thorium and beryllium were used? (pellets, ingots, billets, slabs, etc.)

in Chem and Spec Labs. Any new alloy has to be established in the spec lab. We ran a meter and a half light emission spectrometer. Your base metal was magnesium and then we add the supplements. As the cast house melted the metal, they'd pull a pin. They'd send it to the spec lab. We'd arc it on the spectrometer, and it would give you percentage of all the elements. So in the tech department, we knew the thorium and beryllium was in the alloys because I had to set the program up in the computer. They had to pull three patch pins from each run. Those patch pins had to be kept. And in the spec lab, we printed out on a computer printout what the analysis was all the way through the buildup of the alloy through the three castings. All of that had to be kept. You can't throw those pins and that record away, so it's got to be there. I know I had to go out and take the radiation level, I don't remember what department. (8/11/06 Meeting Transcript, pp. 29-34)

Beryllium:

- As a in Casting and Pot Room. That beryllium came in 55-gallon drums. They'd use more beryllium on that aluminum unit than we used in the mag. We used an awful lot in the mag floor. It was just a bar about that long and kind of rounded on the top and flat on the bottom. (7/21/06 Meeting Transcript, pp. 62-64) AZ 61 is six percent beryllium. It'd be six percent beryllium. PE was a blend alloy, a pure mag and then we'd blend it in. (7/21/06 Meeting Transcript, p. 61) was the superintendent at the time they were running the hollow billet on the intermittent unit. He took me in his office and said, "I'm going to show you something." I said, "What is it?" He said, "See this, it's a Tomahawk missile." It was AZ 61 because I was on it when the damn thing blew up. (7/21/06 Meeting Transcript, p. 94)
- My name is
 I worked at Dow (Madison) Plant from 1989 to as in Casting. I seem to remember KB Alloys, Incorporated. Was that where the beryllium came from? (7/21/06 Meeting Transcript, p. 71)
- My name is I worked at Dow (Madison) Plant from 1960 to in Casting. I happen to remember is that they said it came from overseas because if we ran out, it would take a month to two months to get it. (7/21/06 Meeting Transcript, p. 71) The beryllium was five pound bars in like a barrel. And they cut this a lot of times with a saw. Make half pieces out of them. The bars were melted in the pot room as well. (7/21/06 Meeting Transcript, pp. 66-69)

My name is I worked at Dow (Madison) Plant from 1989 to in Leaching, Mag Floor, Aluminum Unit, and Maintenance. Beryllium, if I remember right, we alloyed with it. We'd toss little chunks of it in the settling pots of the post up there. At the aluminum unit, I was a metal caster. (8/11/06 Meeting Transcript, pp. 198-200)

Thorium:

- My name is I worked at Dow (Madison) Plant from 1960 to in Casting. The cans always said it came from England. It was like 50—pound cans, and it was five-pound bars. And it was stored in the warehouse, but most of the time it just stayed on the units. (7/21/06 Meeting Transcript, pp. 66-69)
- My name is I worked at Dow (Madison) Plant from 1954 to as a in Casting and Pot Room. The barrels was about 14 inches wide and maybe about three or four foot high. And the thorium came in bars at that time. It was notched bars like maybe six, eight notches on the bar. They were real light to a barrel. It probably was because they weighted four or five pounds. We'd weigh it on the scale and then put it in the pots to alloy it up within specifications. But then later we got it in pellet form. It probably came in in barrels because the barrels were all marked danger, radiation on all the barrels. (7/21/06 Meeting Transcript, p. 51)
- My name is

 I worked at Dow (Madison) Plant from 1953 to as a in Casting and Extrusion. I ran a bushel of pellets in extrusion personally, and the other guy ran as many or more than I did. Every time I'd run it, I would ask, "What is this, what are they going to use this for?" [They'd say] "It's just an experiment, there's nothing in here that will hurt you." (8/11/06 Meeting Transcript, p. 18)
- My name is I worked at Dow (Madison) Plant from 1989 to in Extrusion. People who worked in the pot room have told me where they used to alloy a can with small ingots inside. These were about ten-inch tall cans, four or five inches in diameter, gray-silver in color. I remember seeing these cans when I worked in casting the first year. They would be sitting up against the wall. They would be rusty, slightly deteriorated, dust on them. who worked there 31 years told me in '67 and all the way through '69, they were to bust open these cans and remove these three to four ingots that were inside. They were about the size of a stick of butter is how he explained it. (8/11/06 Meeting Transcript, pp. 23-24)
- My name is

 I worked at Dow (Madison) Plant from 1990 to in the Pot Room. We were never told we were running thorium if we were. The only time I knew anything about any thorium is when, as Mr. said, we melted thorium chips in. And they ran a rope down the middle of the pot room and said don't cross the rope, it won't hurt you. People who were melting chips were given badges, but no one else in the pot room was. If you were working on the opposite unit, you didn't have anything. I believe they melted the chips on the billet unit. And the other shift was running the billet unit which there was probably 25, 30 feet between the units. They just roped it off and said, "Don't cross this line. The smoke won't hurt you." (8/11/06 Meeting Transcript, pp. 29-30)

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I worked at Dow (Madison) Plant from 1952 to

Rolling Mill. I understand that at night, when it was dark, they would throw this

This was the thorium. (7/21/06 Meeting Transcript, pp. 41-42)

thorium – it's the size of a small chocolate Easter egg, that's pretty close to the size. It's gray in color. And they would throw it across the floor just to see the sparks flying.

My name is

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STATE OF ILLINOIS	
COUNTY OF MADISON	

Affidavit No. 4: What years was thorium worked on at Dow?

- My name is . I worked at Dow (Madison) Plant from 1961 to ' in Rolling Mill, Maintenance, and Casting. I figure the thorium work started in '51 and it ended in about '98 is when they had the last slabs over in the mill to be processed. (7/21/06 Meeting Transcript, p. 73)
- My name is

 I worked at Dow (Madison) Plant from 1960 to in

 Casting. That may have been when they stopped making it, but the slabs that they had ran

 sat back in the warehouse for a long time until they cut it up and ran it through with different
 types of metal just to get rid of it. I retired in

 I think we went through most of it
 afterwards. (7/21/06 Meeting Transcript, pp. 73-74)
- My name is I worked at Dow (Madison) Plant from 1954 to in Rolling Mill and Hand Salvage. I worked down there at the rolling mill the whole time I worked there. And we started on that thorium back in the early '50s. Then we used to have to load it in the oven to try to get that flattening. And then they would roll it down to the next - - send it to inspection. And inspection would inspect it for dirt. If they found any dirt, they would send it to hand salvage. You had a sander and you sanded that metal down. And then you had to sand that dirt out. And they didn't give us no equipment, just a pair of gloves and a dust mask. They never mentioned that the thorium dust was dangerous. The only thing they told us that if we was running scraps through there, and if you got metal there that didn't have markings, whether it was thorium or AZ or what, you had to go get that Geiger counter out of the office. And they'd run it over it. That was in the early '50s. And then eventually they stopped that. But the only time they ever really done it again was if they had an odd scrap they was wanting to get rid of. I did that 16 hours a day. If they had overtime. But then we'd keep on going. And then they would send it through a pickle line. They clean the metal with acid. Then they marked it. It was hard work and you had your head down about six inches from the metal. And you were breathing all that dust from that thorium. The dust is coming from the hand salvage. The dust is off the PG wheels and the dust sander. (7/21/06 Meeting Transcript, pp. 159-163) We usually ran that thorium about anywhere from three to four days a week (7/21/06 Meeting Transcript, p. 168) It depends on what grid it was. With a 40 grid, then you're really kicking up dust. (7/21/06 Meeting Transcript, p. died of multiple cancers on 2006, just after this meeting. His testimony cannot be verified by signature. Please consult the transcript and video footage of the July 21, 2006 meeting.)
- My name is

 I worked at Dow (Madison) Plant from 1989 to as a in Casting. For the record, a PG wheel is a wheel about three inches wide and has a series of abrasive flaps on it. These flaps rotate on an air handle and scratch the surface or sand the surface. That would kick up a lot of fine dust. (7/21/06 Meeting Transcript, p. 169).

• My name is I worked at Dow (Madison) Plant from 1965 to in Extrusion, Casting, and Mag Floor. It had to be in the late '70s to some time in the '80s that we would make those runs. The product of that which had laid around in the cast house for years to the point of deterioration. I was on the mag floor at the time when we was making those runs. (8/11/06 Meeting Transcript, p. 42)

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Dated: OCT 19 2006	
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died of multiple cancers on , 2006, just after this meeting. His testimony cannot be verified by signature. Please consult the transcript and video footage of the July 21, 2006 meeting.)

STATE OF ILLINOIS	
COUNTY OF MADISON	;

Affidavit No. 5: Who were the Department of Defense thorium contractors at Dow?

- My name is I worked at Dow (Madison) Plant from 1961 to in Rolling Mill, Maintenance, and Casting. When I was in shipping, I was a crate builder. We shipped a lot of metal to Hughes Aircraft, and Rocky Flats got a whole lot of it. And I had an experience with Martin-Marietta down there in '76, so I know they got a lot of the metal from the plant. They had a place in Wichita, Kansas got a lot of thorium shipped to them. (7/21/06 Meeting Transcript, p. 78)
- My name is
 I worked at Dow (Madison) Plant from 1953 to in Rolling Mill and Warehouse. We shipped to McDonnell also, and Rocky Flats, Lockheed, Martin-Marietta, McDonnell, and Hughes Aircraft. (7/21/06 Meeting Transcript, p. 78)
- My name is I worked at Dow (Madison) Plant from 1952 to in Rolling Mill. The nose cone of the Titan Missile, a lot of people knew about it because thorium happened to be real good for it because it didn't lose its strength at high heat. That must have been in the late '60s. In the rolling mill, we put in a huge cyclotron, some kind of an electrical device and it increased the speed of Number 1 Mill from 500 feet a minute to a thousand feet a minute. That was very important for thorium alloys because once you got them below an inch, they lost their heat real quick, and they would crack and break up. It enabled us to run at a thousand feet a minute instead of 500. (7/21/06 Meeting Transcript, p. 79)
- My name is

 I worked at Dow (Madison) Plant from 1989 to in
 Extrusion. We did some work for Martin-Marietta. They leased a whole press for a week.

 And basically we was doing a work cycle basis for them, and no other metal could be ran until their special metal was processed. We asked them repeatedly what alloy it was, and they would never tell me. It was very hard, very dense, and it tore up the equipment as you processed it which I thought was pretty unique because they would never allow us to do that. But it was their equipment for the week and we was doing the work for them. I absolutely know for a fact it was Martin-Marietta because they repeatedly said so.

 himself was also an operator on that press. (7/21/06 Meeting Transcript, p. 83)

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>-	SUBSCRIBED AND SWORN before in Notary Public Dow Affidavit No. 5	 "OFFICIAL SEAL" SUZANNE W. CALLAHAN NOTARY PUBLIC—STATE OF ILLINOIS MADISSION COUNTY, II MY COMMISSION EXPIRES OCT. 10, 2009	, 2006

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<u>AFFIDAVIT</u>
STATE OF ILLINOIS)
COUNTY OF MADISON)
Affidavit No 6: What was the relationship between Dow and Rocky Flats DOE nuclear weapons facility?
 My name is I worked at Dow (Madison) Plant from 1952 to in Rolling Mill. It was common knowledge in the rolling mill at least, Rocky Flats was Dow Chemical. One of our Dow people who went out there and he liked it so much in Colorado, he stayed there, a colored guy from North Venice. Everybody thought that Dow Chemical and Rocky Flats were the same outfit. (7/21/06 Meeting Transcript, pp. 35-36) When I started there in 1952, they showed us a movie. There was one man from Dow Chemical. He worked for the government for one dollar per year, and that's why they got this plant. And he's the one—that was the beginning of Rocky Flats before I don't think it was even existed until then. (7/21/06 Meeting Transcript, p. 140) The employees out there came from Midland and Madison, Illinois. And I only knew one, I think is his name. But Dow Chemical and Rocky Flats were synonymous. (7/21/06 Meeting Transcript, p. 142) My name is I worked at Dow (Madison) Plant from 1989 to as a in Casting. His name was 7/21/06 Meeting Transcript, p. 35) My name is I worked at Dow (Madison) Plant from 1961 to in Rolling Mill, Maintenance, and Casting. was transferred out there. He got a transfer to go out to Rocky Flats when he left the shear crew. I worked with him that last week he worked there. (7/21/06 Meeting Transcript, p. 36) When I was a crate builder down there, I'd say probably every two months we'd ship out like four truckloads of metal to like Rocky Flats. And the trucks then was about 36,000 pounds per truck because that's all we could get on it, you know the mag was so light. It'd be three skids all the way up to the top of the trailer. (7/21/06 Meeting Transcript, p. 84) My name is I worked at Dow (Madison) Plant from 1973 to in Shipping, Extrusion, and Maintenance. Some of this metal that we was cutting down there, they had people with dress clothes on standing there watching us, and they stayed with that metal all the way through. They wasn't allowed to talk to us. (7/21/06 Meeting Transcr
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Notary Public "OFFICIAL SEAL" SUZANNE W. CALLAHAN NOTARY PUBLIC—STATE OF ILLINOIS MADISON COUNTY, IL MY COMMISSION EXPIRES OCT. 10, 2009

Dow Affidavit No. 6

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STATE OF ILLINOIS)
COUNTY OF MADISON)
Affidavit No. 7: What was the volume of thorium processed at Dow over the years?
• My name is I worked at Dow (Madison) Plant from 1961 to in Rolling Mill, Maintenance, and Casting. When I was a crate builder down there, I'd say probably every two months we'd ship out like four truckloads of metal to like Rocky Flats. And the trucks then was about 36,000 pounds per truck because that's all we could get on it, you know the mag was so light. It'd be three skids all the way up to the top of the trailer. (7/21/06 Meeting Transcript, p. 84)
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Notary Public "OFFICIAL SEAL" SUZANNE W. CALLAHAN
NOTARY PUBLIC STATE OF ILLINOIS
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STATE OF ILLINOIS	
COUNTY OF MADISON)

Affidavit No. 8: How often was thorium run on the extrusion presses, in Castings, in the rolling mill? What was the purpose of these various metal forms?

- My name is I worked at Dow (Madison) Plant from 1952 to in Rolling Mill. We rolled magnesium, it was AZ 31, PE and HK with HM, those are the three thorium alloys. One use was the Titan missile, the nose cone. HK 31 was good for high heat. said it held its strength as high as 650 degrees which is good for space use or space vehicles. (7/21/06 Meeting Transcript, pp.86-87) We rolled a lot of HM 21. Not as much as
- HK, but we rolled a lot. (7/21/06 Meeting Transcript, p. 89)
 My name is I worked at Dow (Madison) Plant from 1973 to in Shipping, Extrusion, and Maintenance. This HK 31, I cut metal on the band saw was caps for cannon shells is what they were used for. There was about a six or eight inch piece, and we had to pack them. I don't know where they went to, but they was for cannon shells. (7/21/06 Meeting Transcript, p. 91)
- My name is I worked at Dow (Madison) Plant from 1961 to in Rolling Mill, Maintenance, and Casting. When I apprenticed in the extrusion they were running HK on the heavy press. They ran it for two months, round-the-clock. And all that went for missiles. I'm not sure, but like the Tomahawk missile or one of them missiles. they sent all that up to O'Fallon. (7/21/06 Meeting Transcript, p. 93)
- My name is I worked at Dow (Madison) Plant from 1989 to as a in Casting. Those were the Sabot shells casings. Those were AZ 61 alloy. (7/21/06 Meeting Transcript, p. 93)

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Notary Public

Dow Affidavit No. 8

"OFFICIAL SEAL"
SUZANNE W. CALLAHAN
NOTARY PUBLIC—STATE OF ILLINOIS
MADISON COUNTY, IL
MY COMMISSION EXPIRES OCT. 10, 2009

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STATE OF ILLINOIS	
COUNTY OF MADISON	;

Affidavit No. 9: What was the source of the thorium?

- I worked at Dow (Madison) Plant from 1954 to My name is in Casting and Pot Room. I don't recall where the pellets came from, but those bars came from England. (7/21/06 Meeting Transcript, p. 51) The thorium was stored in the casting. It was brought in on the dock in casting and stored in the back part of the pot room in the storage area. As a I brought the thorium into the pot room for charging it. So it was always stored back in there. The pot room was in 7 Building. It was kind of separate from the warehouse. The dock was down there. They had the aluminum unit in the south end. I worked with the thorium from the first time they run it to the last time when I retired in 1990. (7/21/06 Meeting Transcript, pp. 37-40) They brought it in the barrels. They brought it into the dock, then they brought it in the pot room. There's an area behind the pot room for it. The barrels was about 14 inches wide and maybe about three or four foot high. And the thorium came in bars at that time. It was notched bars like maybe six, eight notches on the bar. They were real light to a barrel. It probably was because they weighted four or five pounds. We'd weigh it on the scale and then put it in the pots to alloy it up within specifications. But then later on we got it in pellet form. It probably came in in barrels because the barrels were all marked danger, radiation on all the barrels. The first time we ran it, I questioned the supervisor. Because I went through Hiroshima, certainly a few months after the bomb was dropped and I know what radiation can do to you. And they said, "you don't have to worry about it. You'd have to handle this a thousand years before it will ever affect you". I don't recall where the pellets came from, but those bars came from England. (7/21/06 Meeting Transcript, p. 51)
- My name is I worked at Dow (Madison) Plant from 1961 to in Rolling Mill, Maintenance, and Casting. They had some barrels that had Midland, Texas on it, from the Dow plant down there. (7/21/06 Meeting Transcript, p. 54) I figure the thorium work started in '51 and it ended in about '98 is when they had the last slabs over in the mill to be processed. (7/21/06 Meeting Transcript, p. 73)
- My name is

 I worked at Dow (Madison) Plant from 1960 to in Casting. The cans always said it came from England. It was like 50—pound cans, and it was five-pound bars. And it was stored in the warehouse, but most of the time it just stayed on the units. The beryllium was five pound bars in like a barrel. And they cut this a lot of times with a saw. Make half pieces out of them. The bars were melted in the pot room as well. (7/21/06 Meeting Transcript, pp. 66-69)

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STATE OF ILLINOIS
COUNTY OF MADISON

Affidavit No. 10: What were the Dow, Conalco, Phelps-Dodge and Spectrulite thorium license numbers?

Read into the record my

Dow Chemical (AEC C-2782, January 1, 1958) for thorium compounds without limitations

Dow Chemical (AEC STB-527, 1962)

Conalco (NRC STB-1097, August 1982)

Spectrulite Consortium, Inc. NRC STB-1488, October 1986

Spectrulite Consortium, Inc. ISNS/IEMA IL-017500-01, September 9, 1993

(superseded STB-1488)

Further, Affiant sayeth not.

Dated: Oct. 27, 2006

SUBSTRIBED AND SWORN before the this 27 day of Octors 2, 2006

Notary Public

GARY L. FLETCHER
Notary Public - Notary Seal
State of Missouri
County of St. Louis
My Commission Exp. 07/10/2007

STATE OF ILLINOIS	
COUNTY OF MADISON)

Affidavit No. 11: Who knows about thorium being buried near the Casting Dept. at Dow?

- My name is I worked at Dow (Madison) Plant from 1960 to Casting. The thorium, besides being stored, we kept it outside. It was a waste dross or a sludge. It was at the end of that property out there. They had signs out there that said radiation. They used to send people out there every year or so to go through it and pick the metal out of it. And we'd separate that and dig the metal out of it and put it in boxes and then charge it. You'd pick it up, but we had gloves. That was in 19 '60s. (7/21/06 Meeting Transcript, pp. 45-48) I hired in 1960 and that pile was huge then, so it had to go back into the early '50s. That pile was big. It was cleaned up by then I retired in That pile had to be started back in the '50s because it was five to ten times bigger than this room, I know that pile was maybe six feet high and the size would be about half as big as a football field. It was probably 60, 70 yards and 6 feet high. There was a lot of metal out there because it had never got separated, and every year they turned it up. I only did that for two years and then they had different people do it all the time. That was mostly left over from the 60s. In later years it went out in barrels, the sludge. (7/21/06 Meeting Transcript, pp. 111-113) On that stuff - - seepage, that's where that pile was. It connected to the Fox Brothers out there. The dross was just kept being piled higher and higher. As far as the burial, it would have been in the same area. (7/21/06 Meeting Transcript, pp. 205-206)
- My name is I worked at Dow (Madison) Plant from 1989 to in Extrusion. When I first started working there, told me about the lot next door didn't belong to SCI because it was contaminated and they wouldn't purchase it when they purchased the factory. He said, "you wouldn't believe all the radioactive stuff I buried out there in the '50s. And then when they had the cleanup in that field in '95, I was watching out the back door and one of the employees standing next to me said, "They're not digging deep enough." He goes, "That's at least eight, ten feet deep, that stuff we buried." And they was only going about four feet down is what he mentioned. (7/21/06 Meeting Transcript, p. 204) That's where the grade school was. (8/11/06 Meeting Transcript, p. 58)
- My name is I worked at Dow (Madison) Plant from 1961 to in Rolling Mill, Maintenance, and Casting. Back in about '72, I got bumped out of the rolling mill and I got into maintenance. We had to go and bury about eight slabs of thorium metal over there. And dug up the hole and I dumped the slabs in it. And that's the southeast part of the Dow ground over there. We also put some other barrels in there. I don't know what was in there, but everything that was dumped over there was all radioactive materials. They were probably about ten foot deep or better over there. And they covered it up with I'd say at least six, seven foot of dirt not actually dirt, but it's other materials that was around in that area, sludge and all that. That would be closest to Casting, 7 building. Dow built a building on there right now that's sitting on there, and it's just east of where the building is at. (8/11/06 Meeting Transcript, pp. 54-56) On the burying of the slabs and that, it wasn't too far away from where the houses are at, right alongside the plant. I'd say less than half a block. (8/11/06 Meeting Transcript, p. 58)

Further, Affiants sayeth not.	
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Dated: 10-20-06	
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Dated: 10/20/06	·
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<u>AFFIDAVIT</u>

STATE OF ILLINOIS)
)
COUNTY OF MADISON)

Affidavit No. 12: Who knows about the thorium cleanups: ERG in 1992, Post-2000 uranium cleanup?

- My name is . I worked at Dow (Madison) Plant from 1989 to in Casting. Somewhere in the middle '90s ('96, '97, '98) along in that era, we did a cleanup of the thorium scrap and sludge that was left over in the rolling mill. There was probably 120 to 150, 55-gallon barrels of thorium scrap. In the Sunbeam oven, there were probably eight to ten slabs of thorium metal. And down on the dock, in the casting warehouse, east of the track, there was a room that was full of thorium sludge. That room was under lock and key, and you didn't visit that room. I didn't know why you didn't visit it. I didn't know what was really in there except that they gave me a key that had thorium room written on the tag. We took the sludge and joined it up with the other sludge that we took out of the room and shipped it off somewhere. I don't think it was to California. The sludge and the ingots were shipped out. But the slabs remained in the Sunbeam oven until some time later. I think they took all those barrels and shipped them over to the rolling mill. The scrap that I was referring to were in the 55-gallon drums that was stored over on the extreme west side of the rolling mill down on the north end of it. (7/21/06 Meeting Transcript, pp. 74-76) I think the thorium cleanup that we were involved in. In 1996 to 1998, we brought the sludge out, and took the scrap metal that was in the rolling mill and melted it into the melting pots in the mag floor and cast it out in the form of ingot and each barrel was checked for radiation with a Geiger counter. And that's when we were instructed to wear the film badges. Over on the mag floor happened prior to the Corps of Engineers coming in. I think it happened in 1998, possible. It was after '96, and I think it was before the Corps of Engineers came in. When we cleaned that up, routinely all the sludge that was generated on the mag floor was stored in the warehouse for a time until we got enough to load a railcar. And then it was loaded and sent out to California, (7/21/06 Meeting Transcript, pp. 117-118) My impression was that the sludge was being sent somewhere other than California. It wasn't to be reclaimed. It was sent to be either incinerated or stored. (7/21/06 Meeting Transcript, p. 119)
- My name is I worked at Dow (Madison) Plant from 1961 to in Rolling Mill, Maintenance, and Casting. On the other side of 2 Mill, there was about 20, 25 slabs of thorium sitting back there by that blockhouse. And after they did the cleanup in 2000, they disappeared. I don't know where they went to. (7/21/06 Meeting Transcript, p. 76)
- My name is I worked at Dow (Madison) Plant from 1954 to as a in Casting and Pot Room. Several months or a year before I retired, they brought barrels in with the scrap, all thorium, 55-gallon drums in the back there where scrap was stored, and they were putting that stuff in those barrels and shipping it out some place. This was back there where all the scrap was stored. (7/21/06 Meeting Transcript, p. 76)
- My name is I worked at Dow (Madison) Plant from 1961 to in Extrusion, Rolling Mill, Casting, and Maintenance. The barrels he's talking about was stored behind 2 Mill in the rolling mill. (7/21/06 Meeting Transcript, p. 77)

- My name is I worked at Dow (Madison) Plant from 1960 to in Casting. On that sludge pile that you're talking about, now this is what we heard when they did it. They hauled that away they took it out in trucks. It was all trucked out, and they told us it went to Colorado. (7/21/06 Meeting Transcript, p. 122)
- My name is I worked at Dow (Madison) Plant from 1989 to in Extrusion. Post 2000 uranium cleanup they laid the whole factory off on a vacation that week while they cleaned that up. I volunteered as a janitor what week and observed the whole cleanup from beginning to end. They shut all the electrical off, the draped thick plastic four stories down completely encasing my work area. In fact, where me and

worked literally for dozens of years. They didn't clean the whole factory, not the whole building, just around the 7 press. Through the FOIA, I finally found out they removed over 60,000 pounds of radioactive dust and materials which is close to 30 tons. One employee accidentally rode in there on a bicycle and they flagged him down. They took the bicycle out, checked the bicycle, checked his boots, and then let him go on his way. At the time of this cleanup, there was the 7 press which is the one we ran for the Martin-Marietta and where the cleanup took place, the 9 press and the big press - 14,000 ton press. (7/21/06 Meeting Transcript, pp. 124 - 134) And actually there was another one in 2003 that I just recently found out about. Another supervisor, was still an employee there right after the strike. He told me he was told to clean up all scrap metal that's in the factory so they can sell it and get rid of every piece that's in the factory. As he was going through it all, they had a team come in, hired a team to come in with Geiger counters and they found everything that was radioactive, every little piece of scrap they could find and piled it all up in front a saw shop where we'd sharpen our saw blades. He was scrapping all magnesium and all the loose aluminum in that entire factory. About a month later, another group come through with Geiger counters doing radiological surveys which cleaned the factory, and that's when MEL, Magnesium Elektron, bought it. (7/21/06 Meeting Transcript, pp. 133-135) One of the very first cleanups that I ever witnessed was with was having cleanup in that lot he was talking about. They had all those guys walking around in their moon suits and their hoods on. And they was digging down around for to six feet and removing this material. This was the lot next to castings. This was a government cleanup. I believe because this had no company people involved from our factory, no fork trucks, none of our equipment was involved. And like you mentioned, I remember shortly after they did do that cleanup. Maybe eight inches was removed from the whole alley and they replaced all the gravel. The alley led right to the front of the elementary school. I think this was '92. (8/11/06 Meeting Transcript, p. 61)

- My name is

 I worked at Dow (Madison) Plant from 1993 to as a in Extrusion. When I hired in in '93, I was talking to my supervisor.

 And outside the pot room, I was working in the extrusion department, and the office faced the pot room. And outside the pot room was all these old empty pots. There had to be 50 or 60 of them out there. I says, if those are scrap, who don't you get rid of them. And he made the statement at that time, he says, "well, we don't want to talk about anything like that at this time." Those pots had to be contaminated. Then a couple of years after that, they did start cleaning them up and shipping them out of there. (8/11/06 Meeting Transcript, pp. 41-42)
- My name is I worked at Dow (Madison) Plant from 1989 to in Leaching, Mag Floor, Aluminum Unit, and Maintenance. I was in leaching where we would take all the mag sludge and thorium alloy sludge and dump it, bus barrels. We would open up barrels with jackhammers. They were full of sludge. They was there for years and years, just old barrels. We was doing a cleanup to get rid of the barrels. There were barrels and

and barrels. And it was there way before I was there. Besides the barrels, there was piles of sludge, and we actually worked right in the middle of it. I mean, it was there, dust. I remember what we took from the leaching process coming to the mag floor. The word was, we're getting rid of some bad stuff. Then I worked in there during the cleanup and wore the badges that got lost. One unit was running and the other unit was clean. It was the slab unit that was wearing badges. Whatever came from the leaching process went to either unit, whatever was running. Just a little bit of this and a little bit of that. They was real particular of how much. It was a melting process and it'd get dumped out n the tubs, and I guess they got shipped or whatever. There was some slabs in the rolling mill up against the wall that had a little warning on it. It'd be next to the old slitter they removed, real close to the 2 mill. In 1992 we did the cleanup with the badges, the suits, and the paper masks. There was flagging running around parts of the unit, but it didn't matter because everybody had to get around on the other side of it anyway. This was not the same cleanup where the report talks about acreage with the buried material next to the castings department to 7 Building. I'm talking about a actually melting the barrels of waste. They picked certain people to do this. You can't tell them no. We had the spec lab people out there. We had that's company people. Me and was curious about his stuff. As we would do the cleanup, we would get more scareder because some foremen was pretty brave about it, and other foremen like they'd stay way away. I was kind of curious if this was going to hurt us. You know, why are we throwing away our clothes because usually they just got washed. We - - I said, I was scared about this had a lady out of the lab, I remember asking stuff starting to bother me. She goes, there's more radiation comes out of a microwave than it does out of this we was sludging in the barrels. Me and her went to the Geiger counter, right in the shack. She put it up there [to the microwave] and the needle just like barely moved. Then we went straight to the barrels with hot molten sludge in it, and the needle pegged out. Right after the cleanup, I was laid off for six weeks, the whole crew was. But as soon as I came back, my first safety meeting was on a midnights. I asked about the badges first thing. There was a bunch of old-timers in there and they said, "Oh don't worry about it, we used to sit on this stuff and you ain't going to turn green or glow. I never saw again. When she seen the Geiger counter do that she changed. I don't think she wanted to be in there no more either. (8/11/06 Meeting Transcript, pp. 137-148) Around in 2000, : asked me if I could take two people on top of grandma crane and take them above 7 press and stop at a certain location so they could collect dust for samples. So I drove the grandma crane with them guys on top of the bridge to 7 Press, stopped the crane, turned off the power, got on top with them, and watched them and asked questions. They had a Tupperware container type deal with a plastic lid and some spoons. And they had Geiger counters. They got on top of the bridge up into the steel reaching height and took the stuff off and put it in these little containers. I asked him, "Hey, I work up here very day - - matter of fact, I cleaned them cranes too. Can this harm me?" And the dude told me that it's not going to bother you unless you eat it or breathe a whole bunch of it. I watched because I wanted to see what's going on. And the needle did move on it, but it didn't move like it did on the mag floor, it was going crazy. They was up there half an hour or 45 minutes. I can guarantee you they did not take any swipes. The very next day, told me, "You're going to take a different group of guys or maybe it was one guy, and go outside of casting right where the old leaching process, where we stored the pots. There was an aisle way, and then, we used to have pots there. They always put them outside before they pitched them. He told me to take the Bobcat and dig down to ground level because they're going to take a ground sample. They showed me

a spot where to dig and that's what I did. This was across from extrusion. Outside of casting, across the roadway, it was 15 to 20 foot from the building. With the Bobcat, I went just enough to get into some good dirt, an inch or two. I just scratched the surface. This wasn't right after, but it wasn't long after, they took all this dirt. I remember the truckloads were flying in and out of there of dirt. If that stuff's contaminated, it's just blowing in the air. They were eighteen wheelers. I almost think they was like local type trucks. They were open like you could dump in. It was like a wasteland out there, like junk piled here and pots. Those trucks were taking no metal, all dirt. Alongside the building was the junk and out in the middle, it was the dirt. They came back and planted grass and it was beautiful. It was the best looking lawn I ever seen in my life. (8/11/06 Meeting Transcript, pp. 157-172) Back to the rolling mill, a little while later - after the cleanup and all that, I was a plant service attendant and I was unloading some diesel fuel off a truck, pumping it in the pump house. There was a water leak out there, and there was some millwrights out there, and they had a hole dug and they was going to repair the water leak. And there were - - I guess it was EPA too. I'm not sure who it was, but there was a guy out there taking a sample. I asked him about the sample, and he said he's never got a good sample out there yet. (8/11/06 Meeting Transcript, p. 180) I took some people to where they stored the radiation. told me to take them there. He said, "get a ladder". Outside the casting department, there was a window in a door. We took it to the window, pushed the window open, and a couple guys looked in there at the barrels. I left. I was assuming they was going to get rid of them, (8/11/06 Meeting Transcript, p. 188) welded lids on barrels. (8/11/06 Meeting Transcript, p. 186) It was a band and a bolt. I think he welded the bolt or something. I thought it was supposed - - they was supposed to go in two barrels A smaller barrel went in a larger barrel. This was about 1992. (8/11/06 Meeting Transcript, pp. 189 – 190) Before they did the cleanup out there, me and we cleaned every crane in the whole building on Saturdays before they did the cleanup in the extrusion, we cleaned casting cranes, extrusion cranes and rolling mill cranes. I painted almost everything in casting and cleaned first. I cleaned 7 press and painted it. I cleaned the heavy press and painted it. I cleaned 1 Mill and painted it also. (8/11/06 Meeting Transcript, pp. 194-195) When we'd clean the press, you'd get terrible vapors off of it. We took the stuff outside and dumped it on the ground. (8/11/06 Meeting Transcript, p. 139)

Further, Affiants sayeth not.

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Dow Affidavit No. 12

Dated:		
SUBSCRIBED AND SWORN before me this 19th day Little And SWORN before me this 19th day Notary Public	OFFICIAL SEAL" DEBORAH A. HALDEMAN NOTARY PUBLIC—STATE OF ILLINOIS MY COMMISSION EXPIRES AUG. 1, 2009	006
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STATE OF ILLINOIS)
COUNTY OF MADISON)
Affidavit #13: Which agencies granted the Dow thorium licenses?
• Read into the record my
 (1) AEC, certain 1958, 1962 (2) NRC, certain 1982, 1986 (3) IDNS, IL Department of Nuclear Safety, preceded IEMA (4) IEMA, Division of Nuclear Safety granted Spectrulite license IL 01570-01
Further, Affiant sayeth not.
Dated: Oct. 27, 2006
SUBSCRIBED AND SWORN before me this 27 day of CTOBER, 2006 Notary Public GARY L. FLETCHER Notary Public - Notary Seal State of Missouri County of St. Louis My Commission Exp. 07/10/2007

STATE OF ILLINOIS)
)
COUNTY OF MADISON)

Affidavit No. 14: Who knows about the <u>National Industrial Reserve</u> and <u>National Security Clause</u> status of Dow during 1951-1959 (specified in the 1951 quit claim deed from GSA)?

No testimony.

STATE OF ILLINOIS	
COUNTY OF MADISON)

Affidavit No. 15: Who has first hand knowledge of <u>beryllium</u> use at Dow: alloys, quantity, buildings used in for machining, casting, rolling and for storage, years used, licenses?

- My name is I worked at Dow (Madison) Plant from 1954 to as a in Casting and Pot Room. AZ 61 is six percent beryllium. It'd be six percent beryllium. PE was a blend alloy, a pure mag and then we'd blend it in. But we used a lot of beryllium. That beryllium came in 55-gallon drums. They'd use more beryllium on that aluminum unit than we used in the mag. We used an awful lot in the mag floor. It was just a bar about that long and kind of rounded on the top and flat on the bottom. We sometimes put 60 to 70 pounds of beryllium in a pot and it'd run for eight hours straight for seven days a week once we got the casting going. It was a hardener more than anything. I remember using beryllium from when I started and the years I was there. The whole time. We didn't run the same alloy all the time. Sometime we'd run it a month or two at a time. Depends on how much orders they had for it. (7/21/06 Meeting Transcript, pp. 62-65) There was a special alloy we ran one time, it was called lithium. We ran a lot of beryllium in that because the guy that was working with me had a basket in the molten metal and dropped a beryllium bar in there. He had a shield on, and it came back out of that basket and knocked his shield off. We only ran so much. You had to turn all the water off of all the units as far up to the slab unit because you couldn't have any water on it. (7/21/06 Meeting Transcript, p. 95) We made the lithium. But other than the beryllium, I don't remember what went in it. (7/21/06 Meeting Transcript, p. 96)
- My name is

 . I worked at Dow (Madison) Plant from 1960 to in
 Casting. We used beryllium all the time on the aluminum unit. From the time it started to
 the time they probably shut the unit down between five to ten pounds per furnace. The cans
 always said it came from England. It was like 50—pound cans, and it was five-pound bars.
 And it was stored in the warehouse, but most of the time it just stayed on the units. It was
 just a wide open building. It connected the casting department, the pot room, and the
 aluminum unit in that one building. The beryllium was five pound bars in like a barrel. And
 they cut this a lot of times with a saw. Make half pieces out of them. The bars were melted
 in the pot room as well. The pot room was so smoky in there, you couldn't see the end of
 this table. When they alloy a pot, it would just be smoky and it stayed in there because the
 exhaust fans couldn't take it out quick enough. We typically were in the pot room on an
 eight hour or sixteen hour shift. (7/21/06 Meeting Transcript, pp. 66-69)

Further, Affiants sayeth not.	
Dated: 10/19/04	-
SUBSCRIBED AND SWORN before me this Notary Public	day of OFFICIAL SEAL" JULIANNE E. PANI WOOD NOTARY PUBLIC, STATE OF ILLINOIS MAY COMMISSION EXPIRES 11/3/2006
Dated: 10 - 19 - 06	-
SUBSCRIBED AND SWORN before me this	19 day of October, 2006
Notary Public	COLIANNE E PANI WOOD

STATE OF ILLINOIS)
)
COUNTY OF MADISON	j

Affidavit No. 16: Knowledge of "Special Metal" Projects at Dow such as the extrusion of thorium for Martin-Marietta in Processing 1991 - 1994?

My name is I worked at Dow (Madison) Plant from 1989 to Extrusion. We did some work for Martin-Marietta. They leased a whole press for a week. And basically we was doing a work cycle basis for them, and no other metal could be ran until their special metal was processed. We asked them repeatedly what alloy it was, and they would never tell me. It was very hard, very dense, and it tore up the equipment as you processed it which I thought was pretty unique because they would never allow us to do that. But it was their equipment for the week and we was doing the work for them. I absolutely know for a fact it was Martin-Marietta because they repeatedly said so. himself was also an operator on that press. (7/21/06 Meeting Transcript, p. 83) What they did with uranium back in the late '50s and early '60s, they also leased it on a work cycle basis, basically the same way Martin-Marietta did. They also used carbon follower blocks to push the die through the press for the uranium back in the '50s and '60s. Through the Freedom of Information Act, we found out that uranium was not the only metal that was found above the press. There was also thorium 232 which could lead suspect to what the secret alloy was that Martin-Marietta was running. This was a work cycle twice. It was done for a week one month. And then it was done for approximately three or four days the second cycle. So it was about a month apart, these work cycles. We couldn't just work our eight-hour shift. We had to work until the customer said we was done because we was basically working for them. When we was done, they took every scrap piece of metal with them which seemed a little strange at the time. They made sure every single saw chip was picked up when they cut off a sample. It was a very hard, dense, dark metal. It was heavy as lead but hard. That's the reason for the carbon follower blocks. When you run an alloy and before you changed over to a new alloy, you would have to put a purge block in there. It was common practice to purge the die out. Normally two billets would do it. But they had to have six billets to actually clean the inside of the container out. We would use scrap billets to purge these out with because they were just scrap afterwards. They actually took these scrap billets with them because the outside edges contained the alloy. The billets that they brought in were shipped in special individual containers. These were specially individually boxed with the wood pallets. When the customer left, he took the wood pallets and boxing with them. (7/21/06 Meeting Transcript, pp. 100-104) Most aluminum and magnesium temperatures would melt at 1,100 degrees and catch fire if it was magnesium. The special alloy that we did run for Martin-Marietta was set at a higher temperature. It was at 1,150 degrees and the entire billet came out glowing orange which is something we never seen before. (7/21/06 Meeting Transcript, pp. 181-182) There was another time that I actually did work for Martin-Marietta too. That was back on the Lindbergh oven. This was around '96, I believe. And I happened to be down on the Lindbergh oven which is a long oven which is about a half football field in length. And it would heat up metal and then quench it on the back end. Martin-Marietta leased this out I believe. They had sheet metal, real thin squares of sheet metal about half the size of this table. They'd run it through the ovens and heat it up to certain temperatures. Then they would quench it and get it cold. We'd have to carry it and

put it back in a refrigerated boxcar. It had to be so many degrees below zero. When it came out of the oven, it was like a limp rag. We had to use two-by-fours to lift it up over the rollers. And as soon as that water hit it and quenched it, it was harder than steel. We did this for like a three day process. They had to bring in a special truck with ice and load it in there after it was heated. (7/21/06 Meeting Transcript, pp. 153-155) I did work for Martin-Marietta on the light press and as several other helpers and operators. The reason, I know they were Martin-Marietta because they identified themselves as Martin-Marietta. I believe in '83 - or '93 - 1993 when we ran this metal for them. It could have been as '92 because we had two campaigns where we ran this. They were work cycles where they leased the press out for an entire week and nothing else could be ran on that press because it would be contaminated with their alloys or their alloys would be contaminated with our metal. They leased out and owned it for a week while we did the work for them. They were about a month and a half apart. And the second campaign wasn't a week long, it was about a three and a half day production actually there on the site. Their employees were walking around monitoring, they were taking samples cutting samples. And another job of theirs was to oversee that all scrap, every say chip was accounted for and weight was very important to them. No other customer was ever there on the site with their own metal overseeing it. (8/11/06 Meeting Transcript, pp. 47-48) We ran about six billets per day per week for that five-day work week and then the second run was also about five to six billets a day for about three days. So if you figure each billet weighs around 1,200 pounds, you can get an estimate weight of the run we did for Martin Marietta during the two campaigns. (8/11/06 Meeting Transcript, p. 51)

- My name is I worked at Dow (Madison) Plant from 1953 to Rolling Mill and Warehouse. I'm not sure whether this was uranium or not. I was a roller on the finishing mills and I was assigned to 5 Mill with this metal. And there was five technicians came in from Dow Rocky Flats, they did tell me that. I asked them what this was and they said it's an experiment. They had a slab. That was a 36-inch mill, and it was about 24 inches long, and it was about two inches thick. Each technician was assigned to a different project on it. So we covered everything with paper and they made us wear coveralls and a hair net and shoes, covered out shoes. Then they instructed us to go ahead and make different passes on it. On one of these passes when we were getting way down one of the fragments cracked and hit another employee, It punctured him so they sent him to the hospital. I went to see him that night and he was in isolation. All you could do is see him through the window. They wouldn't let us in. That was St. Elizabeth's hospital in Granite City. Whenever we finished the experiment, they had us take everything, all the splinters and everything and then they rolled all the paper up. And they made us first wash the mill down. They had a Geiger counter, and they would keep going over it. And especially the Billy roll, we spent about two hours cleaning that up. They said Tide was the only detergent that would clean it. Then whenever it got down to where they wanted it, then they said it's all right. So they rolled everything up and boxed it up. And they brought all the metal in. (7/21/06 Meeting Transcript, pp.29-32)
- My name is

 I worked at Dow (Madison) Plant from 1965 to
 in Rolling Mill and Extrusion. I worked in extrusion on the 7 Press and 8

 Press. Back in 1969, I ran titanium on 8 Press for 16 hours. And in 1992 to 1993, we ran experimental metal for Martin-Marietta. It was a bar-shaped extruded from a die. It was brought in wooden boxes. We used carbon block on the back end of the metal to push the metal out. It was extruded, and then, it was sent to finishing. And the people that were there leased the press out. And then we extruded, and then they had to clean up all the metal and the carbon after the extrusion was done. (7/21/06 Meeting Transcript, pp. 99-100)

- My name is I worked at Dow (Madison) Plant from 1973 to in Shipping, Extrusion, and Maintenance. It was in '92 or '93 that we cut the ends off from some metal like what he [Mr. was talking about. It was bout two inches thick and six inches square and probably four foot long. We cut each end off so they could take it back to the rolling mill and roll it. All the dust and everything had to be cleaned up. It was so hard you'd use five or six blades trying to cut three or four pieces. They had people in there with suits watching me cut it. Then when we got done cutting it we had to sweep all the chips and everything up and put it in a box. The machine and everything had to be cleaned up. About two weeks later after they took this metal to the rolling mill and rolled it out to sheets, they brought it back over there and we run it through the Lindbergh oven. It had to be run through the heat treat. And when they took it out they had an ice cream freezer truck there. We had to get it as soon as we possibly could and put it in the ice cream freezer truck so they could freeze it. And they'd take it back to the rolling mill and stretch it while it was froze.
 - worked on the ovens there too. He probably remembers. (7/21/06 Meeting Transcript, pp. 25-28)
- My name is I worked at Dow (Madison) Plant from 1961 to in Extrusion, Casting, Maintenance, and Rolling Mill. What is referring to is what came from the stealth bomber from Allied Metals. We ran it special there, and we banded each one through. Then when they came out, they was kind of like real thin maybe strips. Then they would be banded up special. They quenched them and they'd put them in the refrigerator when they ran them out. They took them over to the rolling mill and stretch them. (7/21/06 Meeting Transcript, p. 28)
 - My name is I worked at Dow (Madison) Plant from 1993 to in Extrusion. We did extrude metal for Martin-Marietta, and they sent their reps in. And I was over the heavy press when this operation was going on. We had to follow their instructions. And I don't know what - exactly what year it was, but it was right before Thanksgiving. And we couldn't get our container temperature up to the space they wanted. And they had a plane to catch out. And they left me - - the guy in charge - - I forget if he was from North Carolina or South Carolina. He left his phone number. He had to catch a plane to get back for Thanksgiving. We was instructed to stay with it until we got our container temperature up and work over if we had to extrude that metal. They stored this metal in the Number 2 Building outside. I don't know what kind of metal it was. It was just a special project for them. This was run on that heavy press. (7/21/06 Meeting Transcript, p. 152) It was on a Wednesday before the Thanksgiving shutdown, Martin-Marietta people was there monitoring a special job that we was pushing on the heavy press. And the guy had to leave because he had to catch a flight home like at three o'clock in the afternoon, and I was coming on. And I was told to go out there and work with him and get the specs from him on the container temperature, billet temperatures. And our container wasn't heating up very well that day, and he wouldn't push until we got to the right temperature on the container. He had to leave to catch his plane, and I stayed with the project. I had to call him later that night. It was like 2:30 in the morning when I got home I called him from my home phone at that time and let him know that we got the job done. So they were definitely on the site. I can't remember the shape or the die. I believe the metal was shipped in for them. It was brought in from outside. We didn't cast the metal there. I think it was used for something with the space shuttle. (8/11/06 Meeting Transcript, pp. 47-48)
- My name is I worked at Dow (Madison) Plant from 1965 to as a in various departments. I remember Martin Marietta people being in the plant in 1983. (8/11/06 Meeting Transcript, p. 47) I ran a job down there one day for Martin Marietta. I thought it was the late '80s. It could have been '91. They came in and they ran the metal. They had hot billets. They was 1,000° or something like that. We all thought

they was going to catch on fire and come out liquid. They came in and had mops and big gloves. They greased the containers and put the carbon blocks in behind the billets. When I got ready to start the machine, I turned around to ask them something and they was all squatting down on the floor. I said, "What's going on here?" The said, "We don't know what that thing's going to do." I said, "Thanks for telling me." (8/11/06 Meeting Transcript, p. 73 - 74)

- My name is I worked at Dow (Madison) Plant from 1990 to in the Pot Room. It seems to me the Air Force came in and completely rebuilt the intermittent unit at one time and they ran one billet on that unit and shut it down and it was never used again. It was a billet unit. Most of our other units are continuous cast, there was a saw downstairs. The intermittent unit they done it in drops. (8/11/06 Meeting Transcript, p. 72)
- My name is I worked at Dow (Madison) Plant from 1965 to in Rolling Mill

and Casting. Wasn't that a Tomahawk m run in the early '80s. (8/11/06 Meeting T	issile, ? They did have a Tomahawk missile ranscript, pp. 72-73)
Further, Affiants sayeth not.	
Dated: $10-20-06$	<u>~</u>
SUBSCRIBED AND SWORN before me this	20 day of October, 2006
Kritali Redman Notary Public	"OFFICIAL SEAL" Kristi Redman Notary Public, State of Illinois My Commission Exp. 06/17/2009
Dated: 10/20/2006	
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Notary Public	TO DIARINE E SANT VOCADA
Dated: 10-19-2009	
SUBSCRIBED AND SWORN before me this	19 day of October 2006
Notary Public	OFFICIAL SEAL JULIANNE E PANI WOOD NOTARY PUBLIC STATE OF ILLINOIS NOTARY PUBLIC STATE OF ILLINO

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Dated: Oct. 19. 2006	
SUBSCRIBED AND SWORN before me this 10th day of 10th 10th 10th 10th 10th 10th 10th 10th	9 🖇
Dated: 10/19/06	
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Dated: 11-6-06	
SUBSCRIBED AND SWORN before me this // day of // UMU "OFFICIAL SEAL" Notary Public "DEBORAH A. HALDEMAN NOTARY PUBLIC STATE OF ILLINOIS MY COMMISSION EXPIRES AUG. 1, 2009	, 2006

Dated: 10-24-06	<u> </u>
SUBSCRIBED AND SWORN bef	fore me this 24 day of October 12, 2006
Notary Public	"OFFICIAL SEAL" Gary L. Fletcher Normy Public, State of Illinois My Commission Exp. 03/07/2007

STATE OF ILLINOIS)
COUNTY OF MADISON)

Affidavit No. 17: Knowledge about management ordering records to be shredded at Dow:

• My name is I worked at Dow (Madison) Plant from 1961 to '	in Rolling
Mill, Maintenance, and Casting. and I were working in the pot	room. We went
out to talk to and It was then	told
to get rid of all the badges that we wore as they were all radioact	tive, put
them in a tive-gallon bucket, then he threw them in to the dumpster.	
they are all dead now. But is here to verify it.	This was around
the middle '90s. They were running radioactive material and they had the go	overnment in
there watching. And everyone had to wear badges at that time. (7/21/06 Me	eting Transcript,
pp. 9-11) And then in Number 1 Building, it was just before re	tired. It was
and myself was replacing lights in the basement of Nu	mber 1 Building
when and was throwing away all personal file	
and then removing them, putting them in the dumpster. There was a lot of re	ecords that were
destroyed. retired in 1995 and it was a couple of months before	
(7/21/06 Meeting Transcript, pp. 9-11)	

- Extrusion, Maintenance, and Casting. The badge part had to be before 1995 because we had to wear them when we re maintenance. Every maintenance person had to wear one when we went in to the pot room to work in the casting department. But when we would come out of the casting department, we just threw them in a box. We never did anything else with them. Before the Spectrulite era in 1986, very few people wore badges. But after that, quite a few people wore them. We used the same badge over and over and over. We never got any reports on our badges. They were not read. They were thrown in a box and when you went back in, you got another one. You just picked it up out of the same box. (7/21/06 Meeting Transcript, pp. 12-13)
- My name is I worked at Dow (Madison) Plant from 1989 to as a in Casting. The only time that I came into contact with a badge from 1989 until is when we did some of the thorium cleanup in the pot room, and that was in 1992, 1993. We wore badges for several days only, handed them in. And I don't know really what happened to them. That might be the incident where was referring to about telling him to throw them away. (7/21/06 Meeting Transcript, p. 14)
- My name is

 I worked at Dow (Madison) Plant from 1961 to 2

 Extrusion, Casting, Maintenance, and Rolling Mill.

 Was in the maintenance.

 He hauled off a whole bunch of stuff and dumped it there but not knowing what it was. And then was the oldest guy in the extrusion department. He did the same thing, he hauled off stuff and office paperwork and stuff and dumped it like that. But it didn't necessarily mean it was confidential or anything. Could have been anything. But they cleaned out the offices there. (7/21/06 Meeting Transcript, p. 183)

Further, Affiants sayeth not.	
Dated: 10/20/06	
SUBSCRIBED AND SWORN before me this Notary Phiblic	SUZANNE W. CALLAHAN NOTARY PUBLIC STATE OF ILLINOIS MADISON COUNTY IL MY COMMISSION EXPIRES OCT. 10, 2009
Dated: 10-19-06	
SUBSCRIBED AND SWORN before me this Notary Public	day of CONTON 2006 "OFFICIAL SEAL" JULIANNE E PANI WOOD NOTARY PUBLIC, STATE OF ILLINOIS MY COMMISSION EXPIRES 1.7/5/2008
Dated: 10-20-06	_
SUBSCRIBED AND SWORN before me this Notary Public	SUZANNE W. CALLAHAN NOTARY PUBLIC—STATE OF ILLINOIS MADISON COUNTY, IL MY COMMISSION EXPIRES OCT. 10, 2009
Dated: 0CT 20 2006	
SUBSCRIBED AND SWORN before me this	20day of October, 2006
Notary Public	OFFICIAL SEAL CULIANNE E PANI WOOD MOTARY PUBLIC, STATE OF ELLINOT COMMISSION TO SECTION STATE

STATE OF ILLINOIS)
COUNTY OF MADISON)

Affidavit No. 18: Knowledge of x-ray machines at Dow including a Kelley-Koett Betatron and a 195 Kv portable x-ray unit

- My name is I worked at Dow (Madison) Plant from 1960 to in Casting. Back in the '80s or so, they brought a trailer in next to the buildings and they kept it outside. They had x-ray machine stuff because we would take pieces of the metal that would be cut off and take it out and put it in front of the trailer. And then they'd do whatever they did with it. But we never did go in the trailer. It was some kind of x-ray trailer.
- My name is I worked at Dow (Madison) Plant from 1989 to in Casting. That trailer was brought in from a radiographer, I think from the New Athens, Illinois. He had cobalt source in the back of that trailer. I think it was a very small pill, four or five Curie. And he would x-ray primarily the ZK metal. When we made the ZK billets and every test slice that was taken off of there he would xray. We took a test slice on, I think, every seven billets. They were about an inch and a quarter thick. They were taken to him and he would x-ray them for impurities. He did not have any identifying marks on his trailer. The trailer had a film developer and a small cobalt source in it. He would develop the film so we would have immediate knowledge of whether the metal was getting dirty or not. From the time I began working there until the time that I retired, he was in there every time we ran ZK. We ran ZK probably every two and a half to three months. He was there prior to my coming in there. I knew the gentleman from the 1960s when he worked for St. Louis Testing Labs. The Z in ZK was for Zirconium. (7/21/06 Meeting Transcript, pp. 58-59) The source that was used outside of the shooting room was a cobalt-source, and it was a very small one. I think it was five curies or less. The operator was the owner of the company. He tested all the ZK slices that we used. (8/11/06 Meeting Transcript, p. 103)
- My name is

 I worked at Dow (Madison) Plant from 1955 to in Casting. As a warehouse stockman, I delivered a lot of x-ray slices test slices to the x-ray room in the casting department. I don't know if it's one of these machines that you are talking about, but it was stationary. When you cast the billet, they cut a test slice every so many billets, especially the ZK 60. And that was taken there to x-ray to see how many specks of, I guess dirt or impurities. If it was too much, they rejected it. (7/21/06 Meeting Transcript, pp. 185-186) Every alloy that we cast. (7/21/06 Meeting Transcript, p. 192)
- My name is I worked at Dow (Madison) Plant from 1961 to in Rolling Mill, Maintenance, and Casting. The Kelley-Koett, I got that from the name of it. There's no information on it that they can find except they got 110, 220 on there. If that was the power, they didn't have that until later on in there because and myself was the ones that put it in there. It was sitting in there just north of the Air

Force ovens. Years ago it used to be down there by the 4 building in casting, and then they moved it down. Almost every department had a few portable x-ray units. And then they also had these, like the Magnaflux units. They had quite a few of them ultrasound where the inspectors used the oil. And in extrusion and in the rolling mill they had them sonic tanks – it was in water, they put the metal in water. That was to x-ray.

is the one that said they were Betatron machines. It had to be at least 440 volts. (7/21/06 Meeting Transcript, pp. 187-189)

- My name is I worked at Dow (Madison) Plant from 1965 to in Extrusion, Casting, and Mag Floor. There were a couple of room that would probably fit that description. One would be just west of the 80-inch peeler. That room was an inspection room at one time. There was another room also near the corner of the casting area going west towards the extrusion area. The other area that I mentioned first, that was the x-ray equipment in that room at one time. I don't know anything about the nomenclature of it or anything else. (8/11/06 Meeting Transcript, pp. 88)
- My name is I worked at Dow (Madison) Plant from 1990 to in the Pot Room. The only x-ray machines that I know of were when we would run ZK billets which had zirconium in them, they would [bring] an outside contractor in to actually x-ray our test slices. He would be outside the plant over on the east side of casting sitting there in the alley. He would actually do the x-raying of our test slices. (8/11/06 Meeting Transcript, pp. 101-102)

Further, Affiants sayeth not.	
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Dated: 10-20-06	
SUBSCRIBED AND SWORN before in	of this 20 day of Male 2006
Notary Public	"OFFICIAL SEAL" SUZANNE W. CALLAHAN NOTARY PUBLIC—STATE OF ILLINOIS MADISON COUNTY, IL MY COMMISSION EXPIRES OCT. 10, 2009

	Dated: 10-20-06	
>	SUBSCRIBED AND SWORN before me this "OFFICIAL SEAL" SUZANNE W. CALLAHAN NOTARY PUBLIC STATE OF ILLINOIS MADISON COUNTY, IL MY COMMISSION EXPIRES OCT. 10, 2009	, 2006
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	Dated: 11-6-06	
	SUBSCRIBED AND SWORN before me this 6th day of MMMMW LUNG A. HUMMAN	, 2006
	Notary Public "OFFICIAL SEAL" DEBORAH A. HALDEMAN NOTARY PUBLIC—STATE OF ILLINOIS MY COMMISSION EXPIRES AUG. 1, 2009	

STATE OF ILLINOIS COUNTY OF MADISON) } }
Affidavit No. 19: Kı	nowledge of film badges at Dow <i>prior to</i> Spectrulite: Who analyzed them?
	I worked at Dow (Madison) Plant from 1953 to as a sting and Extrusion. All my years there, I never seen a badge. I didn'ter badge was. (8/11/06 Meeting Transcript, p. 97)
Further, Affiant sayeth not.	
Dated: 0 Ct 19-20	06
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STATE OF ILLINOIS		
COUNTY OF MADISON)	

Affidavit No. 20: Knowledge of film badges at Dow <u>AFTER</u> Spectrulite became the owner: Which company analyzed them?

- My name is I worked at Dow (Madison) Plant from 1954 to as a in Casting and Pot Room. I guess when Spectrulite came in is the first time we started wearing the <u>badges</u>. Up to that time, we never wore the badges. We had a certain hamper we put our clothes in from the pot room, and they were bib overalls with the denim shirts. (7/21/06 Meeting Transcript, p. 40)
- My name is

 I worked at Dow (Madison) Plant from 1989 to as a in Casting. I think the thorium cleanup that we were involved in, in 1996 to 1998, we brought the sludge out, and took the scrap metal that was in the rolling mill and melted it into the melting pots in the mag floor and cast it out in the form of ingot and each barrel was checked for radiation with a Geiger counter. And that's when we were instructed to wear the film badges. (7/21/06 Meeting Transcript, p. 75)
- My name is I worked at Dow (Madison) Plant from 1989 to in Extrusion. mentioned earlier that he was standing next to the owner of the factory when he told a gentleman named to throw the badges away. They were in a bucket at the time or a coffee can, I believe is what it was. (7/21/06 Meeting Transcript, p. 196)
- My name is I worked at Dow (Madison) Plant from 1984 to as a in Chem and Spec Labs. I had three ladies that worked for me in the spec lab. When they got their badges, I don't think anybody ever told them you can't wear these outside in the sunlight because the sunlight will give you a reading on the badge when they analyze it. I think they just went around and they handed out these badges. And when they collected last I heard they were stored in a room out in extrusion. It was a storage, like an eight-by-ten room out there. (8/11/06 Meeting Transcript, p. 38) The ladies that worked for me in the spec lab started out with a pocket dosimeter which at the end of the day you put it in an instrument and you can look through it like a little microscope and read what it was. And then there were badges, but who collected them and were they ever shipped off, I have no idea. (8/11/06 Meeting Transcript, p. 93)
- My name is I worked at Dow (Madison) Plant from 1965 to in Rolling Mill and Casting. We were always told there was not enough radiation in there to bother anybody. I was in the pot room for some of the castings of the metal. I even asked one time about the badges. I said, what was the results of the badges? And they said, no problem, don't worry about it. (8/11/06 Meeting Transcript, p. 69) If I remember right, the foreman came around and collected those badges. (8/11/06 Meeting Transcript, p. 95) I asked [about film badge reports] after one of the runs, and they says, "Oh, they came back. They're great, don't worry about it." I said, "Well, where's the paperwork." I never did see any paperwork.

i	My name is I worked at Dow (Madison) Plant from 1965 to in Extrusion, Casting, and Mag Floor. I did [have a badge]. The similar question as . We would want to know what was the reading or was there a reading since the badge was just a badge, there wasn't a gauge on it where you could look at anything and tell. But it was always that there was no reading. (8/11/06 Meeting Transcript, p. 98)
Further,	Affiants sayeth not.
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Notary	Public "OFFICIAL SEAL" JULIANNE E PANI WOOD NOTARY PUBLIC, STATE OF ILLINOIS COVIMISSION EXPIRES 11/3/2006
Dated:_	10-20-06
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Dated:	0-20-06
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Dated: _	11-7-06
SUBSCR Visited Property Proper	UBED AND SWORN before me this 7 day of November 2006 Shin Deuman Official SEAL CYNTHIA NEWMAN NOTARY PUBLIC STATE OF ILLINOIS MY COMMISSION EXP. JULY 12, 2007

Page 2 of 3

Dow Affidavit No. 20

Dated: 10-24-06		
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Dated: 0CT 19 2006		
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Notary Public	"OFFICIAL SEAL" JULIANNE E PANI WOOD NOTARY PUBLIC, STATE OF ILLINOIS MY COMMISSION EXPIRES 112 TO 15	

•	o. 21: Knowledge about Fox
COUNTY OF MADISON)
STATE OF ILLINOIS)

- My name is I worked at Dow (Madison) Plant from 1961 to in Rolling Mill, Maintenance, and Casting. I don't think any body heard anything until this lady got a hold of And the Corps of Engineers got involved in it, and they traced it back to what they called the Dow ground there alongside of casting. That's where they said it came from, was over there. That's one of the court records up in Edwardsville. The pipe wasn't from Dow. It's a water line pipe over there on Fox Brothers' ground. He was just working on a water line. The radioactive material came from or the radiation came from our plant. (7/21/06 Meeting Transcript, pp. 200-202)
- My name is

 I worked at Dow (Madison) Plant from 1961 to in Extrusion, Casting, Maintenance, and Rolling Mill. The lady said that all came from more or less just the chips and everything in the ground and just in general just working through the ground and just like seepage there. She'd pursued that for several years and tried to win it and nobody wouldn't help her. She's got all the information from the Corps of Engineers and that in Edwardsville. (7/21/06 Meeting Transcript, pp. 202-203)
- My name is I worked at Dow (Madison) Plant from 1960 to in Casting. On that stuff - seepage - that's where that pile was. It connected to the Fox Brothers out there. (7/21/06 Meeting Transcript, p. 205)
- My name is

 I worked at Dow (Madison) Plant from 1954 to

 an Casting and Pot Room. Seemed to me like there was a drainage ditch out
 there that ran right through where that sludge was stacked. Because I was up there a
 couple of times. And it seemed like it was a drainage ditch and especially it was covered
 with sludge and dross. (7/21/06 Meeting Transcript, pp. 206-207)

Further, Affiants sayeth not.

Dated: 10/20/06

SUBSCRIBED AND SWORN before me this 20 day of 12000, 2006

SUBSCRIBED AND SWORN before me this 20 day of 12000, 2006

"OFFICIAL SEAL"

SUZANNE W. CALLAHAN

NOTARY PUBLIC—STATE OF ILLUNOIS

MADISON COUNTY, IL

MY COMMISSION EXPIRES OCT. 10, 2009

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Notato Public	1000	2	JULIANNI	CIAL SEAL E E PANI WOO BLIC STATE OF ILLINO	n i	

STATE OF ILLINOIS)
)
COUNTY OF MADISON)

Affidavit No. 22: Knowledge of Mallinckrodt radioactive wastes stored at Granite City Army Depot and/or Fox Brothers and the IL EPA cleanup of this material

No testimony.

STATE OF ILLINOIS)
COID FEEL OF LA DIOON)
COUNTY OF MADISON)

Affidavit No. 23: Describe the radiation safety program and protective clothing measures at Dow, Conalco, Phelps-Dodge, Spectrulite?

- My name is . I worked at Dow (Madison) Plant from 1954 to as a Crew Leader in Casting and Pot Room. During those times we ran it, we had just bib overalls and things like that with the thorium. We didn't have any special equipment at all. The guys that used it with the thorium threw them in the baskets in the warehouse mixed with the people in the warehouse. I guess when Spectrulite came in is the first time we started wearing the badges. Up to that time, we never wore the badges. We had a certain hamper we put our clothes in from the pot room, and they were bib overalls with the denim shirts. (7/21/06 Meeting Affidavit, p. 40)
- My name is I worked at Dow (Madison) Plant from 1961 to Mill, Maintenance, and Casting. passed away here about a month, month and a half ago. And about a month before he passed away, I was talking to him. And he said that Dow had a Geiger counter, but it was the wrong type, and it would not read anything that we had in the plant and they knew it. And every time they'd come out, they said "look, there's no readings". "That radioactive material is so small it won't even read it on the Geiger counter." That was every time you had a safety meeting or anything like that would come out and say, "Well, I've had the Geiger counter out there and it didn't show nothing, you know, what do you's want?" And as far as protective clothing, they gave us gloves, I guess because they didn't want fingerprints on the metal and the safety glasses was a big deal. And very seldom, they ever gave you any coveralls. On the hand salvage or in the mill you got dust all over you, but they didn't' want to give you coveralls because they didn't want added expense." (7/21/06 Meeting Transcript, pp. 210-220)
- My name is

 I worked at Dow (Madison) Plant from 1989 to as a
 in Casting. I think the incident where he referred to sorting out the scrap, they
 did that in the late '90s or early 2000. (7/21/06 Meeting Transcript, p. 212) I think the
 main problem with the respirators in the pot room was the fact that communication was
 very important. There was two metal casters and they had to talk back and forth because
 magnesium is very volatile. If anything happens, you'd blow the roof off. You couldn't
 communicate with those respirators on. (8/11/06 Meeting Transcript, p. 110)
- My name is I worked at Dow (Madison) Plant from 1989 to in Extrusion. That was right after we was put out on strike. There was a clean(212)up of all the scrap metal in the factory and they found radiation. In 2002 / 2003. (7/21/06 Meeting Transcript, p. 212)

My name is

I worked at Dow (Madison) Plant from 1984 to

as a

in Chem and Spec Labs. When they'd run thorium, we took this old radiac instrument out there and took background readings. Prior to starting at Conalco when I was in the military, I monitored radiation levels in the Air Force. I worked at Wright-Pat in Dayton, Ohio where we had an inactive nuclear reactor. So I've dealt with everything from alpha beta, up to the 2,000 curie cobalt sources. When we started this run I asked the tech department manager if I could contact OSHA or the EPA and get guidance on this. I was told not to contact those agencies. They made those runs in the mid-80s. They came up with an old civil defense radiac meter that they had found in the basement. And thorium, your primary thing you want to watch is the alpha because that's what you ingest. I had three ladies that worked for me in the spec lab. When they got their badges, I don't think anybody ever told them you can't wear these outside in the sunlight because the sunlight will give you a reading on the badge when they analyze it. I think they just went around and they handed out these badges. And when they collected - - last I heard they were stored in a room out in extrusion. It was a storage, like an eight-by-ten room out there. They had drums in there, and that's where everything ended up. When we did radiation measurements, they wanted them outside in the sunlight. We did that. Then we'd walk around randomly in general areas and take background readings. But to me they should have been doing swipe tests where you take a piece of felt paper, wipe it on the equipment, send it off to have that analyzed. That would give you what level was on the equipment. I never did that. And I don't remember ever seeing anyone come in the plant and do that. When I talked to

the department manager in the tech department, I approached him about contacting OSHA or EPA to get guidance on this. I was told not to contact them because the federal government's only after one thing and that's to come in and start fining them. Those people are there for guidance, and I was told not to contact them. (8/11/06 Meeting Transcript, pp. 35-39) In the Air Force when I monitored radioactive material for a certain element, alpha, you have to have an instrument that has a Mylar window on it. If you use a radiation instrument that is for beta and gamma, its got a steel or an aluminum sleeve on it. Alpha won't go through it so you're not going to get any reading. This old radiac instrument that we used at Spectrulite, all it was good for was you could take a background reading out in the sun, but it's only going to give you beta gamma because you can't open it. Alpha instruments, you have to hold it within a quarter of an inch for it to pick up the alpha radiation. (8/11/06 Meeting Transcript, p. 100) When the girls that worked for me in the spec lab, when they'd arc that magnesium pin, it's in a little steel door. You open it up and you'd see this little puff of white smoke come out, where it's right here in their face. Nothing was ever done about that. That was all alloyed with thorium. (8/11/06 Meeting Transcript, p. 105)

My name is

I worked at Dow (Madison) Plant from 1961 to

in various departments. I was referring back earlier about the hand salvage we done there on thorium. For years, we used no protection at all. Later on they came out and they gave us coveralls to wear. And then paper masks which will not filter out the dust. That's the only protection we had. (8/11/06 Meeting Transcript, p. 106)

- My name is I worked at Dow (Madison) Plant from 1990 to in the Pot Room. It wasn't up until I would say 1995 that they did even start a respirator program. When I hired in 1990, we wore respirators for nothing. Then I'd say around 1995, maybe 1994, they started a respirator program, people had to be clean shaven. We weren't ever really required to wear them. They were there if we needed them. They had the canisters on them. But they were just put in a cabinet hung on the back wall. And then that went away, and if we needed one, we'd have to go to the foreman's office and ask them for one. We were fit tested. They put the bag over your head and tested you with the smoke to see if you could smell it or taste it. I believe it seemed like maybe they fit tested us once a year. (8/11/06 Meeting Transcript, pp. 107-109)
- My name is

 I worked at Dow (Madison) Plant from 1988 to in all departments. The problem was in that environment in there when you put your respirator on to breath through it, it would fog up your safety glasses so you couldn't see. It was either wear the respirator and not see or see through your safety glasses and not wear your respirator. (8/11/06 Meeting Transcript, p. 109)

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- My name is I worked at Dow (Madison) Plant from 1990 to in the Pot Room. It wasn't up until I would say 1995 that they did even start a respirator program. When I hired in 1990, we wore respirators for nothing. Then I'd say around 1995, maybe 1994, they started a respirator program, people had to be clean shaven. We weren't ever really required to wear them. They were there if we needed them. They had the canisters on them. But they were just put in a cabinet hung on the back wall. And then that went away, and if we needed one, we'd have to go to the foreman's office and ask them for one. We were fit tested. They put the bag over your head and tested you with the smoke to see if you could smell it or taste it. I believe it seemed like maybe they fit tested us once a year. (8/11/06 Meeting Transcript, pp. 107-109)
- My name is

 I worked at Dow (Madison) Plant from 1988 to 2003 in all departments. The problem was in that environment in there when you put your respirator on to breath through it, it would fog up your safety glasses so you couldn't see. It was either wear the respirator and not see or see through your safety glasses and not wear your respirator. (8/11/06 Meeting Transcript, p. 109)

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STATE OF ILLINOIS)
COUNTY OF MADISON)
Affidavit No. 24: Describe AEC, NRC or IL Dept. of Nuclear Safety inspections at Dow (Madison) plant 1952 to present time:
 My name is I worked at Dow (Madison) Plant from 1989 to in Extrusion. Thorium 232 was found by the bathroom doors and outside the side door as well as above the press. When we were running the metal for Martin-Marietta [1992-93], it was a hot day, we had fans blowing, and the composite follower block we used was made out of graphite. After it was ran through 4,000 pounds of pressure, it came out dust. So we had to scoop that out after every push and process. Being dusty and hot and fans blowing, I would always step out the side door. And we was drinking a lot of water that day so we was walking to the bathroom a lot. I believe it may have been tracked to the bathroom and outside the door by one of us employees if this is the same alloy. (7/21/06 Meeting Transcript, p. 103) My name is I worked at Dow (Madison) Plant from 1984 to us a in Chem and Spec Labs. As far as I know, there was never any inspections. If they did, it was done through the back door. (8/11/06 Meeting Transcript, p. 111)
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STATE OF ILLINOIS)
COUNTY OF MADISON)
Affidavit No. 25: What types of alloys were produced?
• My name is I worked at Dow (Madison) Plant from 1954 to as a in Casting and Pot Room. AZ 61 is six percent beryllium. It'd be six percent beryllium. PE was a blend alloy, a pure mag and then we'd blend it in. (7/21/06 Meeting Transcript, pp. 62-65) HK 31 was three percent thorium and one percent zirconium. (7/21/06 Meeting Transcript, p. 88)
My name is I worked at Dow (Madison) Plant from 1989 to as a in Casting. HM 21 was two percent thorium and one percent manganese. (7/21/06 Meeting Transcript, p. 88)
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STATE OF ILLINOIS)
COUNTY OF MADISON)
Company communications to its supervisory staff when asked about the cleanups, what was found and whether it was dangerous to them or their crews.
 My name is in Extrusion. I was a : lown there when this was taking place, and they met with all the in the extrusion foreman office. We asked how dangerous this was to our health, and they said it wasn't any worse than getting a chest x-ray. (7/21/06 Meeting Transcript, pp. 128-129). My name is I worked at Dow (Madison) Plant from 1989 to in Casting. I asked some of the same questions, what are they finding over there. The answer that I got was, "Oh, they're finding a little bit of contamination dust up on the rafters, it's nothing. They're going to clean it up and get it out of here, but it's not anything at all. (7/21/06 Meeting Transcript, p. 129)
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Contaminated Buildings

My name is I worked at Dow (Madison) Plant from 1961 to Mill, Maintenance, and Casting. As far as thorium used in what buildings, there isn't a building down there that it didn't get into. I Building, they tested from the spec lab. 2 Building, it was stored out there for awhile, 5, 9, 10, 6, 7, 8, there isn't a building there that it wasn't stored in at one time or produced in. Like the rolling mill rolled it. In between each roll they had to sand it down with all the dust blowing all over the place. And then you stencil it and everything else and ship it. (7/21/06 Meeting Transcript, pp. 54-55) From what I gather right now they got black plastic from the ceiling all the way to the floor and barricade everyone out of the extrusion part completely. But they never checked any other departments except right around the 7 press. They never checked nothing in the rolling mill for any kind of radioactive material. They never checked nothing in the casting for any kind of radioactive material. And if we ran it down there, casting had to start it off. (7/21/06 Meeting Transcript, pp. 222-223)

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What they would do with the contaminated solvents:

- My name is I worked at Dow (Madison) Plant from 1954 to in Rolling Mill and Hand Salvage. After we were done [rolling], it would have to be cleaned, the whole sheet. (7/21/06 Meeting Transcript, p. 173) (died of multiple cancers on , 2006, just after this meeting. His testimony cannot be verified by signature. Please consult the transcript and video footage of the July 21, 2006 meeting.)
- My name is I worked at Dow (Madison) Plant from 1952 to in Rolling Mill. In back of 1 Mill, we had a large tank, and it had a roller that would go back and forth. It was a skimming tank. They would skim all the sludge off and they had scrap boxes. The same ones we used for scrap. We would dump it in that. And then I don't know where it went. A fork truck would pick up these scrap boxes loaded with that sludge and take it some place, to a dump I guess. That's how they got rid of the sludge, the Morg oil from I Mill and the hydraulic oil. There was a lot of leaks went down the sewers. Then we would take a fire hose and flush it down to the sewers just to get rid of it. (7/21/06 Meeting Transcript, p. 172)
 - My name is I worked at Dow (Madison) Plant from 1984 to as a in Chem and Spec Labs. All the plant affluent, that's all the liquids discharged from the plant, it all goes through a main sewer. And we monitored that with a sampling pump. Whether it be the radioactivity or the oils that we purposely dumped in the sewer, all of it went to Granite City Water. And anytime oil gets on anaerobic bacteria it kills it. You can't regrow it. Every time that happens, the company is billed for that anaerobic bacteria in the rock. If you are looking for records, there's another set of records you need to be looking for. The only thing we tested for was oil in the water. But if all this stuff is buried, I used to have to go -- we had wells drilled around the plant and we would measure the ground water level especially over where the barium pile was which is just east of the plant. From what I've heard today where they buried thorium and barium [beryllium?], if that gets into the ground water - - Now you've got a problem with drinking water. And like you said, there's residents there. So, What I'm starting to believe right now is we were checking the ground water levels because you had buried stuff there. Those steel drums buried in the ground aren't going to last forever. They're going to rust and rot away. Now you've got the material laying there and if the ground water comes up, it gets saturated with the material and goes back down. The drinking water for this area is pulled out of the Mississippi. So, right now, I'm beginning to wonder what they were monitoring for. It wasn't plant personnel that drilled these wells and put these PVC pipes in. It was an outside company. If you have to hire an outside company that's going to do this drilling, don't they have to get a permit from the city? (8/11/06 Meeting Transcript, pp. 80-83)

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Name of the Control o
STATE OF ILLINOIS)
COUNTY OF MADISON)
Current Cleanup and Pouring Concrete
 My name is I worked at Dow (Madison) Plant from 1984 to is a in Chem and Spec Labs. If you pour concrete floors in there, you're not going to get any readings off the floor. If there's real strong gamma or even some beta may come through it. But any alpha, once you pour concrete, your not going to read it. (8/11/06 Meeting Transcript, pp. 39-40) My name is I worked at Dow (Madison) Plant from 1990 to in the Pot Room. You were talking about trying to get back into that plant, but you know, that pot room floor has been redone several times. I was there from 1990 on and the new concrete was put in probably two or three times in that span of years.
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Cur	rent Cleanup and Po	ouring Concrete	
to get any readings of through it. But any Meeting Transcript, My name is Room. You were ta room floor has been	and Spec Labs. If you pour off the floor. If there's real alpha, once you pour concr pp. 39-40)	strong gamma or even son ete, your not going to read adison) Plant from 1990 to tack into that plant, but you as there from 1990 on and t	you're not going ne beta may come it. (8/11/06 n. n the Pot know, that pot
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"OFFICIAL SEAL"
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COUNTY OF MADISON	,

Incidences involving explosions at the Spectrulite plant:

- My name is . I worked at Dow (Madison) Plant from 1988 to departments. I was in four explosions in the pot room. These explosions are very, very powerful. What concerns me is if thorium had been melted in there before if these particles had got up into the rafters of the roof. And during these explosions, I'm concerned about these particles being brought down and would be in the air and being breathed or getting mixed with the molten metal that was in the air and then this molten metal coming down on me and burning me and therefore putting it into my system. These instances occurred between '89 to '93 or '94. We were in the smoke and dust from the explosion up to ten or 15 minutes. It depended on if we needed to be in there putting out fires. We would get out of there to keep ourselves safe at first. And then we would go in to take care of equipment. had to have skin grafting done for their burns. We had mag create fires without explosions, but they were pretty contained to the unit and didn't really spread out. (8/11/06 Meeting Affidavit, pp. 121-123)
 - My name is I worked at Dow (Madison) Plant from 1989 to ts a in Casting. The configuration of the magnesium pots were oval at the bottom, open at the top. And when an explosion occurred it exploded upward and outward. It blew the roof off the building several times, caught the building on fire several times, two fatalities. It threw that magnesium all around that room. Anybody that was in there got burned and got hit with it. I went into the pot room and helped direct the fire department to put out the various fires that was in there after the explosion happened and tried to keep them from throwing water on more magnesium that would cause more explosions. So, I worked with the fire department. What was worse than anything was the dust and the dirt and the smoke went down in to the subbasement and to the basement where inspectors were working down there. And they had 200 inches that would equate to what 18 feet of stair to climb to get out of that atmosphere down there. There was a basement level where the furnaces were and then there was a subbasement where the inspectors were. If that filled up with smoke and soot and ash and whatever, they had a little bit of a chore to climb the stairs. And any smoke that occurred - - I mean, the floor was basically open, the furnaces were open. Those explosions are volatile. They'll shake the whole neighborhood and not just a certain area. (8/11/06 Meeting Transcript, pp. 129-134)

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STATE OF ILLINOIS)
COUNTY OF MADISON)

Leaching Operations

- My name is

 I worked at Dow (Madison) Plant from 1961 to

 n Rolling
 Mill, Maintenance, and Casting. When they started that leaching area down there north of
 the pot room, they started that to get rid of all the thorium so they didn't have to pay that
 high price for it, getting rid of it. (7/21/06 Meeting Transcript, p. 120)
- My name is I worked at Dow (Madison) Plant from 1989 to in Casting. In about 1985, '86 when took over operations down there, he decided that he was giving away a lot of money by sending the sludge out to California and he could reclaim all that good metal in there himself. They set up a leaching operation and began to separate the sludge from the good metal. We'd get the metal back and reuse it, except that the operation was very slow, it would generate more sludge than the presses could handle. We put in a second one, and that still wouldn't handle it. And the sludge continued to build up and build up until we had a warehouse full of it. And it was 20 feet high and 50 feet wide and 200 feet long. And it kept building up and building up until he finally swallowed his pride and called the guy back out in California and said, "Please take this sludge off my hands." And the guy agreed to take them at the rate of five carloads a week. So, we loaded it one car every day until the warehouse was cleaned out again. The residue from the leaching operation went outside between the casting and the extrusion departments. And a pile of it was built up out there. And his intention was to turn it into a fertilizer and market it. It supposedly was very good for growing plants. That was removed. This was sludge residue after the metal was reclaimed in a leaching process. (7/21/06 Meeting Transcript, pp. 120-121)
- My name is I worked at Dow (Madison) Plant from 1960 to in Casting. On that sludge pile that you're talking about, now this is what we heard when they did it. They hauled that away. They took it out in trucks. It was all trucked out, and they told us it went to Colorado. (7/21/06 Meeting Transcript, p. 121)

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"OFFICIAL SEAL"
SUZANNE W. CALLAHAN
NOTARY PUBLIC—STATE OF ILLINOIS
MADISCN COUNTY, IL
MY COMMISSION EXPIRES OCT. 10, 2009

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<u>AFFIDAVIT</u>
STATE OF ILLINOIS)
COUNTY OF MADISON)
Where did workers take their lunches:
 My name is I worked at Dow (Madison) Plant from 1990 to in the Pot Room. When I hired in 1990 as a metal caster, we were not allowed to leave the mold, and I ate right there on the floor while I watched the mold as the metal was being cast. (8/11/06 Meeting Transcript, p. 118) My name is I worked at Dow (Madison) Plant from 1989 to in Extrusion. In extrusion, everybody also got ten minute breaks and a half hour lunch break But because we was on production on the presses, we only got a lunch break. So that meant usually we had to eat snacks and meals and everything while we was on the job because we only had 20 minutes throughout the whole day. And when we ran that metal for Martin Marietta, I remember specifically, they bought us pizzas, and we was standing there eating pizza with one hand leaning against the raw metal with the other. There was no precautions or warnings whatsoever. (8/11/06 Meeting Transcript, p. 118) My name is I worked at Dow (Madison) Plant from 1988 to in all departments. In the pot room, I was a melter. And a lot of times we had a little shanty that we could go to eat our lunch. But if you had a problem out on the floor, a lot of times I would walk out of that little shanty with my sandwich in my hand and go out on the floor and eat. So, we was eating on the floor a lot of times. (8/11/06 Meeting Transcript, p. 119
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- Kristi Roman
Notary Public "OFFICIAL SEAL"

Dow Affidavit: Lunches

Page 1 of 2

"OFFICIAL SEAL"
Kristi Redman
Notary Public, State of Illinois
My Commission Exp. 06/17/2009

Dated: 10-19-2006

SUBSCRIBED AND SWORN before me this 2 day of 2006

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OFFICIAL SEAL

NOTARY PUBLIC STATE OF ILLINOIS

MY COMMISSION EXPIRES 11/3/2005

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STATE OF ILLINOIS)
COUNTY OF MADISON)
Overtime
 My name is I worked at Dow (Madison) Plant from 1954 to in Rolling Mill and Hand Salvage. I did that 16 hours a day. If they had overtime. (7/21/06 Meeting Transcript, p. 160) There was all the overtime you wanted on that Thorium. A normal workday would be at least three days a week - 16 hours a day (7/21/06 Meeting Transcript, pp. 165-166) And some of them worked even longer. I have worked five 16-hour days. (7/21/06 Meeting Transcript, p. 167) (died of multiple cancers on 2006, just after this meeting. His testimony cannot be verified by signature. Please consult the transcript and video footage of the July 21, 2006 meeting.) My name is I worked at Dow (Madison) Plant from 1989 to 18 a in Casting. The overtime during the '80s and '90s at the Madison plant ran between 45 to 52 percent. That means that everybody worked 20 - 22 hours a week overtime. We got those reports monthly so we knew exactly how much overtime we worked. (7/21/06 Meeting Transcript, p. 167) My name is I worked at Dow (Madison) Plant from 1989 to in Extrusion. When we did that cycle work basis for Martin-Marietta, we didn't do an eight-hour shift and go home. We stayed until they said they was satisfied and they were done. We'd almost work a double shift until the customer said they was ready to go or satisfied with the day's works. It wasn't up to us, it was up to the customer. (7/21/06 Meeting Transcript, pp. 167-168)
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STATE OF ILLINOIS)
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Pot Room Conditions

- My name is I worked at Dow (Madison) Plant from 1960 to in Casting. The pot room was so smoky in there, you couldn't see the end of this table. When they alloy a pot, it would just be smoky and it stayed in there because the exhaust fans couldn't take it out quick enough. We typically were in the pot room on an eight hour or sixteen hour shift. (7/21/06 Meeting Transcript, pp. 66-69)
- My name is I worked at Dow (Madison) Plant from 1961 to in Rolling Mill, Maintenance, and Casting. He was talking about the smoke in the pot room. At times like high humidity, the smoke would be so bad it'd go all the way over into the rolling mill. That's on the other side of the plant. And they'd actually have to go over there and shut them down so they could see what they were doing in the rolling mill. Because when they were rolling, loading the Two Age oven, they couldn't see. The crane men putting the coils on, he couldn't see where he was putting them. That's how bade that smoke got at times. It was shut down many a times down there. (7/21/06 Meeting Transcript, p. 72)
- My name is

 I worked at Dow (Madison) Plant from 1954 to as a in Casting and Pot Room. We were breathing the fumes and everything and handling the raw thorium to put it into the pots. (7/21/06 Meeting Transcript, p. 105)
- My name is I worked at Dow (Madison) Plant from 1988 to in all departments. We had melted thorium chips in the pot room. And they had put up a flag line between the two different units. And the people on one unit who was melting chips were given these radiological badges, and the people on the other unit did not receive these. All these chips being melted would produce a lot of smoke and it would go over that flag line. The smoke didn't know it was not supposed to go over that flag line, and we all breathed that in there. (8/11/06 Meeting Transcript, p. 8)

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<u>AFFIDAVIT</u>

STATE	E OF ILLINOIS)	
COUN	TY OF MADISON)	
	Recharging thorium scrap into other metals to get rid of it:	
•	My name is I worked at Dow (Madison) Plant from 1989 to in Casting. We made billets and slabs because the scrap metal that we me from the rolling mill in the barrels was in extrusion shapes. My name is I worked at Dow (Madison) Plant from 1954 to in Casting and Pot Room. As a I brought the thorium into pot room for charging it. So it was always stored back in there. Plus, there was sor mixed in there too from the thorium that was cast in the rolling mill. They'd mark marking pen HM 21 and HK 31. We used it right out of there and charged it. As a of fact, we charged thorium back in with other materials just to get rid of it. We'd AZ 31B or ZK 60. They'd mix it in with that and charge it just to get rid of it. (7/2) Meeting Transcript, p. 38)	as a to the rap it with a matter be on
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STATE OF ILLINOIS)
COUNTY OF MADISON)

The U.S. Air Force Ownership of Equipment at Dow Industries

- My name is

 I worked at Dow (Madison) Plant from 1954 to s a in Casting and Pot Room. The heavy press was owned by the Air Force.

 And the slab scalper, that had Air Force on it and the big cutter down there that cut the big billets. (7/21/06 Meeting Transcript, p. 139).
- My name is

 I worked at Dow (Madison) Plant from 1960 to

 Casting. That was a thorium machine. This is hearsay, but we was told one time in the
 casting department pot room, if the government needed a certain type of magnesium they
 could come in and take that unit and use it for that week or how long it took. They had that
 right to do it. (7/21/06 Meeting Transcript, p. 139)
- My name is I worked at Dow (Madison) Plant from 1989 to ' as a in Casting. Two Air Force ovens. (7/21/06 Meeting Transcript, p. 139)
- My name is I worked at Dow (Madison) Plant from 1961 to in Extrusion, Casting, Maintenance, and Rolling Mill. When we worked back there, they took and they ran everything on the heavy press that the Air Force wanted. If they had landing met two years in advance, they'd run it, and they didn't take orders for anything except for what they could take and fill the government first. Then they didn't look for no more business until the government was . . . They had priority. That Lindbergh oven belonged to the Air Force. (7/21/06 Meeting Transcript, p. 140)
- My name is I worked at Dow (Madison) Plant from 1952 to in Rolling Mill. When I started there in 1952, they showed us a movie. There was one man from Dow Chemical. He worked for the government for one dollar per year, and that's why they got this plant. And he's the one - that was the beginning of Rocky Flats before I don't think it was even existed until then. I worked on Number 4 Mill when I got there. Alloy hadn't started yet, neither had the extrusion. And everything was owned by the Air Force. I know they owned the fork truck that would carry the sheets. That was Air Force property for many years from '52 to maybe 1960 or beyond. (7/21/06 Meeting Transcript, pp. 140-141)
- My name is I worked at Dow (Madison) Plant from 1961 to in Rolling Mill, Maintenance, and Casting. Almost all the mills, all the presses, all the blockhouses was all under the Air Force, belonged to the US Air Force. And it was like that until Conalco was supposed to have bought it from the Air Force when they came in. That was in the middle '70s. Before that it was all U.S. Air Force, the fork trucks, cranes, all that. And then another thing under Dow was everything they ran for the government was all cost plus. They got whatever it cost them plus extra to run it. (7/21/06 Meeting Transcript, p. 146)

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STATE OF ILLINOIS	
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Dow Employee Outreach Meeting

I've been working recently with a group of workers in Ames, Iowa who had been also processing thorium in the 1940s and '50s and had seen a pattern of pneumoconiosis that did not look typical of beryllium lung disease which certainly appears to be occurring in the Ames work force at an increased rate that I thought might be attributable to thorium and/or in fact thoron based on some of the medical literature. Working with one of the union representatives from the Dow site, we were able to identify ten living workers with symptomatic lung disease and two survivors of men who recently died with the diagnosis of idiopathic pulmonary fibrosis from the site. I have to tell you I have not completely evaluated the medical histories of each of these workers as yet. I'm in the process of doing this. But what I can tell you is that we have seen three non-smokers with pulmonary fibrosis from Dow that does not look typical of beryllium lung disease.

And taking the histories of these workers, one of the things that strikes me is the mass of thorium to which they were exposed and the potential exposures. They described on a regular basis handling hundred pound barrels of thorium which they would smelt, alloy and be exposed to in what appear to be massive concentrations during periods of episodic fire so that it was described to us that the combination of magnesium and thorium, the combination of these metals at some times generated extremely dusty, smoky environments and that there were 11, four-foot fans mounted in the facility to try to improve ventilation.

But they stated that that smoke was so thick that often you couldn't see from one side of the plant to the other. That strikes me as a potential for a very high exposure to fumes of thorium and very possibly, from what we've seen at Ames, fairly high concentration of thoron gas. And I have nothing further to say in terms of how the x-ray equipment which we know was another potential source, may have affected radiation exposures not the quantities of uranium.

So all I can try to suggest at this time is that there does appear to be a pattern of another source, thorium and thoron for which there may be some clinical suspicion or epidemiologic suspicion based on nonsmokers with fibrotic lung disease. And that it does not look like asbestos or beryllium in this group. Certainly, the worker history suggests a fairly dirty workplace, one in which fires occurred, smoke was a significant issue and respiratory hazards were certainly present and where these respiratory hazards to ionizing radiation sources as I believe they were, that that may be a consideration for you in your review. (8/22/06 Outreach Meeting Transcript, pp. 7-10)

• [2] My name is I worked at Dow (Madison) Plant from 1961 to in Rolling Mill, Maintenance, and Casting. I started in casting for a couple weeks, but then

I went to the rolling mill. I worked almost all the jobs except for the rollers in the rolling mill. Then most of the time I was in the shipping part of the mill. When I got bumped out of there, I'd go on the shear crew which would cut up the mag and that. And all the slabs that went in the mill would run through 1 Mill in what we called plate. It was heavy metal, like one inch and above. That would get cut up. And then they we'd run it through a Roto-Cone and they'd brush it to get the dirt and that off of it. Then on the sheet part of it is thin metal. On the Roto-Cone they had a coil section where they ran the coils through there and get the dirt off of it. Then they did that until the explosion of it. Then they would take and cut the sheets up. And when it came off of 2 Mill, they would send it either from 4 Mill or Mill which was the hand sheets. They'd make somewhere around 80 to 125 passes. About every time they'd take three or four passes, they'd have to send it to hand salvage to either sand out the gouges or sand out what dirt got in from the coolant. The dust would be a quarter inch all the way around the hand salvage area. They'd sand it down, then they'd send it back and repeat the process over and over. That description would apply to all thorium metal because AZ31 and PE wouldn't go through the hand salvage as much. It was just the thorium HK and HM. And when they got finished there, they'd send it to the stencil line which would put the lot numbers on it, the alloy, the government specs and that. Then they'd oil it, and pack it for shipping and ship it out. I was a crate builder which I'd block the trucks for about nine years. I'd see a lot of it go out through different places. I've got a write-up here I'd like to hand out to you and you can look at it later. (8/22/06 Outreach Meeting Transcript, pp. 26 - 29)

the one that gave us these alloys. He was the head of casting for Dow. One was cobalt and the other one, the symbol of it is SR/Y; then it's thallium, the symbol is TI; lead, PB; thorium, TH; Uranium, U; Curium, CM; beryllium. And that was used in all forms, solid, liquid, and gas. It came in in solid form. They'd melt it down and then the fumes would come out in the gas form. I They got four alloys of thorium, HK31, HK61, HM21 and HM31. (8/22/06 Outreach Meeting Transcript, p. was the head of casting department and he was also the head of 106)] casting for all of Dow at one time. I can't tell-you exactly where all of that has been used or anything. But that's some of the stuff that he issued to us before he passed away. When I was in the rolling mill, some of the customers were <u>Boeing</u>, <u>Lockheed</u>. We shipped to LocAlloyed, FMC (Food Machinery Corporation), Rocky Flats, Martin-Marietta, Hughes Aircraft, and Rockwell International. And said most of that we used to have to put on warnings, you know, it was radioactive. So that lasted for awhile. (8/22/06 Outreach Meeting Transcript, pp. 107-108)

I'd like to go back to what said earlier about what jobs did you do? Like in the rolling mill, the first week of the month there was no overtime. Then the second week, they worked a little bit of overtime to get caught up. The third week it was anyone that would work over they worked over. And then the fourth was they shipped everything out they so there was a lot of overtime. And to say were you just one job, we have like maybe 20 jobs in the department. And if one was a little bit slack, they'd send them over to work with the other ones. So whenever you were like in maintenance, you were an electrician, a millwright, a pipe fitter or something like that. In extrusion, I started out as a instrument man, then they combined the instrument and the electricians together. But we still kind of kept our same instrument or electrician [designation]. We used to have to go up in the steel [rafters] just to clean the fire checks. There were three fire checks up

there. We had to clean them once a week and that took about two hours for each one to clean it. Then there were two on the 7 press and two on the 6 press that you had to clean. Then you'd go up and you had to work on the - - they had push button controls for the window. You had to work on the motors on the windows and that so you were up in the steel all the time. Then you had the revamping on it. And everyone over all the areas that was contaminated pretty well the people more or less ate their lunch right there. And we were up in the crane and you'd take a beam that's about 12 inches and it's filled up with dust. When you're walking across it, your dumping that dust down on top of the people that's sitting down there below. It'd be north of the 7 press. That's where you worked and repaired stuff. You ate your lunch right in there. You were right in the midst of it all the time. (8/22/06 Outreach Meeting Transcript, pp. 129-132)

They only walked up to the 9 press. They never went any farther to see if there was any radiation any farther. They ran radiation material on 8 Press, 10 Press and that's on down. And the heavy press also pushed, I know, thorium. In '79, they were on tempoon where they were running around the clock, and they pushed it for two months. They were for missiles material. They never checked the rolling mill or the casting department. They just checked around 7 Press and that's where they got the readings from. (8/22/06 Outreach Meeting Transcript, pp. 136-138)

Back in first part of the '90s, they got about six million pounds of ingots in from Russia. And come to find out, it all was radioactive. That's when they had that Chernobyl explosion and all this got contaminated. When the ran it, it was all the way across the 4 Building and all the way in casting where they stacked all this metal. They couldn't figure out why it was spiking the spec lab out there. Well, they finally found out that it was radioactive so they sent it back. Russia sent it back to or sold it to Mexico. Mexico sent it back in, and we got it right back - the same material. We've had a couple of foremen that had to go out there and pull all the tags off of it so no one knew what it was. (8/22/06 Outreach Meeting Transcript, pp. 139-141)

They were talking about the burning of chips and that. Whenever they'd burn and melt chips in, I'd say, seven-eights of it would burn up. And from the casting over to the rolling mill, is probably about 1,200 foot away. Them chips, the smoke and that would be all the way over. It'd go at least 1,200 foot, and it'd be bad over in the mill. (8/22/06 Outreach Meeting Transcript, p. 141)

[3] My name is I worked at Dow (Madison) Plant from 1989 to as in Casting. I want to talk a little bit about 1992 – '3 Martin Marietta came into our plant and awarded us with a prime contractor award, prime supplier award for the work we were doing with an aluminum alloy, aluminum thorium alloy that was being made into the skeletal structure of the outboard fuel tank on the space shuttle. Their group included a female astronaut who was slated to go into space in the spring. This was a special alloy that we made. And I'm sure it contained aluminum and thorium. (8/22/06 Outreach Meeting Transcript, pp. 29-30)

In about 1996, '7, '8 somewhere along in that line, we resurrected about fifty, 55-gallon drums of thorium sludge out of the room across the track down on the shipping dock that was kept under lock and key. At the same time over in the rolling mill, we had probably

another 70 or 80 barrels of thorium scrap. And across the aisle from that was a Sunbeam oven that had 10 to 12 slabs, 6,500 pound slabs. We had to inventory that every year. So I think there are probably inventory records up to '96 or '97. At that time they sent the crews from the lab down to monitor what was going to go on. They gave us all badges, and that's the first time that I saw a badge from 1988. We melted the scrap. We used the same barrels that the scrap came out of to put the sludge in it. And we gathered the sludge out of the room down on the dock and we shipped it all out. And I don't' know where we shipped it out to. We could have shipped it to Oxnard, California where we shipped all of our other sludge. That was another process. We'd pick up the sludge from the mag melting pots and put it in railcars and ship it out to California. A man out in California had a unique way of recovering the metal from that sludge. He had pens built out into the ocean, and he dumped all the sludge out in the ocean. The tide would come in and out and wash the fluxes and the dirt and that out of the sludge. And what was remaining was the heavier metal that sunk to the bottom of his pens. He'd pick that up, melted it, poured it into ingot, alloyed it with aluminum tin cans, and it came back to us in the form of 90/10 magnesium or 90 percent magnesium, ten percent aluminum. We used that to alloy with also. I don't know if the thorium sludge went to California to that same outfit or not. I'm just unaware of where it went to. But I know that there was thorium scrap and slabs in the rolling mill as late as 1996 or '7. (8/22/06 Outreach Meeting Transcript, pp. 75-76)

The procedure used up to the time that retired was we sent the clothing down to a handicapped workshop on the other side of town, and they washed that clothing in baking soda which treated the clothing so that if you got a hot chunk of metal on you, it wouldn't flame. It would smolder and burn through. And then we went to a new improved clothing material, and I think it was Mylar. And it was supposed to be an improved cloth. And we tested it all the time when we sent them out to be washed and we tried to burn them up. We'd take a piece and actually put a flame to it to make sure that it wouldn't flame. And it did do a pretty good job that way except if you got hit with a large amount of magnesium, it wouldn't protect you. (8/22/06 Outreach Meeting Transcript, pp. 118-119)

[Regarding statement on running the odd looking thing on the Lindbergh.] I think it was Allied Signal that sent those billets over to run them in the Lindbergh and then on 7 Press or 12. (8/22/06 Outreach Meeting Transcript, p. 120)

The area, the 40 acres across the street adjacent to the casting area was a known dump. And Conalco or Spectrulite or any of the other companies didn't want any part of that over there. It remained with Dow Chemical. That was Dow's headache, so to speak. (8/22/06 Outreach Meeting Transcript, p. 152)

I want to clarify about that mag prime that came in that referred to – the six million pounds. That did not belong to Spectrulite. We were warehousing that for another company. And we were supposed to use it and melt it in and make an alloy for this company. And that never came to fruition. We felt cheated because we thought they were using us for a warehousing facility and they weren't paying rent on it. We filled up the loading dock with it and we ran out of room. We moved over in the 4 Building adjacent to 7 Press and stored it there. We bought mag prime from Canada; Freeport, Texas. Dow Chemical shipped a lot of it in. In the later years, we were buying mag

prime wherever we could buy it because we didn't have any money. We bought a lot of it, brokered it through the port of New York from Russia, from Kazakhstan on the Red Sea. I don't know where that's at in relation to Chemobyl, but I don't think any of that mag prime was radioactive. (8/22/06 Outreach Meeting Transcript, pp. 152-153)

- [4] My name is I worked at Dow (Madison) Plant from 1993 to in the Pot Room, Extrusion, and Aluminum Unit. Two months ago, I was diagnosed with multiple myeloma and basically the only thing I really wanted to say was I didn't even realize that the place was contaminated. I knew that they worked on these projects earlier, but my understanding was that all of that was cleaned up at that time, the time period that I was working there anyway. I worked in the pot room. I was a mag melter when I was hired. I worked in extrusion for a short time as a light press helper. In the end of my time there, I was a casting foreman in the aluminum unit of the mag floor. And during that time, I was involved in the middle of two explosions. I think that's been pointed out about the dust being knocked off the rafters. (8/22/06 Outreach Meeting Transcript, p. 31)
- I worked at Dow (Madison) Plant from 1953 until I worked in the casting department about 99 percent of my time. I worked in the pot room, worked on the aluminum unit and drove a lift truck. We worked with thorium in the pot room melting it on different alloys. On some of them days it's kind of rainy and cloudy and damp outside that smoke would get so bad it really covered up the whole place when they were charging the metal there, covered up the pot room and it came out into the warehouse where the people was working. One of my jobs was to load this dross and sludge into boxcars. I don't know how many boxcars we loaded, but we did that for quite some time. I have prostate surgery and removed my prostate, have carcinoid tumors. He took three foot of my small intestines out and part of my colon out. That's some of my sickness. (8/22/06 Outreach Meeting Transcript, pp. 31-32)
- I worked at Dow (Madison) Plant from 1954 to as a in Casting and Pot Room. I started in 1954 and retired in I spent all /ears in the casting department in the pot room as a metal caster, crew leader and melter. I was there when they first ran the thorium. I can remember thorium coming in, it was made in England. We'd opened the barrel and fumes came out of the barrel. I asked the foreman, I said, won't this hurt us? It's marked radiation, danger. And he said, No, you've got to use this for a thousand years it won't bother you. So then I worked with it every time they ran it.

While he's speaking about the dust, you could hardly see. I can verify that it was so dusty you couldn't touch the man next to you. All we had was a sailor cap with a shield on it cut from the back. I can also remember that we never had any badges. Our clothes were flame treated. It would flame up, but they'd get burned through. All of us got burned several times in that amount of time we were in there. So up until the time Spectrulite came in, I can't never remember wearing badges. Before that, we used to carry our clothes out and take them in the locker room where the warehouse people that wasn't exposed to it, and threw all of our clothes in the same hamper that they used. Then later on when Spectrulite came in, they started to give us a separate box in the pot room where we could throw our clothes, and they kept them separate from the

warehouse. Up until that time, they didn't keep our clothes separated. And we are wore badges and never told us. At the end of the day, we'd turn our badges in. That was the end of it, we never heard anything thereafter. (8/22/06 Outreach Meeting Transcript, pp. 31-34) The clothing consisted of a bib overall with a blue shirt. I think I stated before that they were flame treated. They wouldn't burn, they'd just flare up. (8/22/06 Outreach Meeting Transcript, p. 118)

I worked on that [lithium] metal when we first ran it. You had to turn water off on two other units besides that because that lithium couldn't have any water around it at all. I had a melter working for me had a basket in a pot. And one of the 6,000 pound pots, he dropped a beryllium bar in it and it come back up and knocked his shield off. And another fellow was working - - one of my casters, a piece of metal hit on his arm, and the moisture in his arm caused that to blow. It had a nasty burn on his arm. That was on the lithium. (8/22/06 Outreach Meeting Transcript, pp. 54-55)

Most of the inventories even when Consolidated had it; they always had a Dow Chemical man come there when we had the inventories, whatever that means. We had to do that twice a year. I wanted to verify some of the members that Dow Chemical did come in. (8/22/06 Outreach Meeting Transcript, p. 74)

I'm concerned about the employees in the pot room and the casting department. I was concerned about the sludge that we took to the dump over the years I was there. When it was first taken out to the dump, there was no designated area for - - between thorium and AZ 31B or ZK 60 or whatever. It was all in one pile. Finally, somewhere along the line, after years, somebody kept complaining about how the thorium or the sludge was stored out in the dump. Then Dow Chemical built us a separate lab outside of the casting department, and they brought - I don't know how many men in here. And they went out there with Geiger counters, and they worked for almost two years I think. I don't know what they did, but they separated it all in a pile, and I think they hauled it away in trucks, didn't they or tailcars after that? They worked two years doing that and still in that time, we were never informed this thorium would hurt us. I handled it many times without gloves. That had to have been under Consolidated Aluminum. (8/22/06 Outreach Meeting Transcript, pp. 146-151)

I retired under Spectrulite. I remember when Spectrulite came in, I had to also get all the scrap material and keep the men supplied with what to charge. I was back in the area where all this scrap is stored and had it mixed in with the thorium alloy and other alloys. There was a man back in there digging around in there. I said, what are you looking for? He said, I'm looking for that thorium. I said, What's your name. He said, and I think that was

And I said; well, if you're going to find it, you'll have to root around all in there because it's always mixed in with the rest of the scrap. They take a marking pen and mark on there HK 31 or HM 21. This was a separate storage area beyond the pot room, where they kept all the scrap metal. (8/22/06 Outreach Meeting Affidavit, pp. 146-151)

• [7] My name is I worked at Dow (Madison) Plant from 1960 to in Casting. I worked mainly in the casting department for years mostly in the pot room and the aluminum unit. We did handle thorium and beryllium almost every day.

The beryllium would be spread all through the department. Then the power sweeper would come around and sweep the floor and the dust would just fly. Like in the pot room it would be so dusty in there. And then that power sweeper would pick up the dust from the thorium and beryllium and just more or less spread it around.

I was burnt in 1963 or '66 with thorium metal. And in one week it went from a blister to almost a quarter of an inch to half inch it ate into my foot. So I had surgery and that done on it. And then I also had cancer of the colon.

The other comment I have is a dump that they had outside where they dumped the thorium. Every year through the '60s and '70s they would send people out there to try to recoup the metal. And we'd dig in it, throw it around. And that stuff would be wet and you'd have that stuff all over your clothes. And it was thorium because they had radiation signs posted around it. (8/22/06 Outreach Meeting Transcript, pp. 34-35)

On where some of the metal went, it was thorium, and they would cut it up in small pieces. We would use it throughout other metals because it would never show up in the spec lab on samples and that. It'd be like 1,000 pounds in the 60,000 pounds – it was lost in there. That's the way they got rid of a lot of that metal. (8/22/06 Outreach Meeting Transcript, p. 75)

On the beryllium process that we had in the casting and the aluminum unit mostly, but on the magnesium there's at least three or four different alloys, AZ61, PE, AZ21 and 31, probably had beryllium in it too. But on the aluminum unit, I retired in 1999. We was using beryllium in almost everything on the aluminum unit in all alloys, at least 5 to 10 to 15 pounds in it on every cast. And we'd cast 80, 90,000 pounds a day. So we did use beryllium in mainly the pot room and the aluminum unit.

And to clarify something else on your water, when they cast in the pot room and the aluminum on thorium metal and that it was cooled by water. That water ran outside into a water tower. And there was always a mist coming off of that. And that would be the same water that was hitting the magnesium that had this thorium in that. Now, whether it would stay in the water or something, but they had like a sump out there. It's the size of a swimming pool. And that water stayed there, and it would be kind of like a mist all the time over the top of it. (8/22/06 Outreach Meeting Transcript, p. 100) We handled that beryllium. It came in - some time in 25-gallon barrels and 50-gallon barrels. And then towards the late '90s, they just started shipping it kind of like in plastic and cardboard on pallets. But 99 percent of the time, it came in barrels that was sealed, and they had danger on the tag. But we used a lot of it because, like on the aluminum unit, they would ha e a 50-gallon barrel sitting up there al the time, and it would only last maybe two or three weeks. (8/22/06 Outreach Meeting Transcript, p. 105)

• [8] My name is

I worked at Dow (Madison) Plant from 1954 to
I worked in the cast house for years in the casting department on the pot room melt
floor and the aluminum unit. The worse thing I can remember is alloying that thorium.
We'd lower a stirrer down into the molten metal, stir it around. And then we had a basket
we'd lower it in, it had holes in it. And this is when the metal got to the right
temperature. I think it was after 1,300 degrees. When that basket got full of metal, we

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had them small barrels of thorium that we had weighted up, and we had to stand over that basket, pick up that small basket and dump right in. It had to be put in that way, otherwise it would have all burned up. They made us throw it in that way. When you threw it in it just flashed up, smoke, fire, and everything come out of it. I lost part of my lung, my right lung. That was before I retired. And I got shortness of breath. (8/22/06 Outreach Meeting Transcript, pp. 35-36)

I haven't heard anybody mention near the back of the pot room not very far and there was a storage facility back there for years. It was thorium chips in barrels and thorium metal that had been pumped out of the bottom of the pots after a run. And it was stored back there for years. We used to have to go back in there twice a year and inventory that. They had to pull it all out and inventory. The pellets were broke. Metal was coming out on the floor. And there must have been dust and dirt on the floor a foot deep. I don't know when they moved it out, but I think sooner or later they moved it out. I know it was back there for over 20 years. (8/22/06 Outreach Meeting Transcript, p. 41)

Dow aluminum unit, when we processed the holder to tap out for casting, they pulled the last sample after they dross it and chlorinated. After they pulled that last sample the last thing that was done 15 pounds of beryllium was spread out over the top of the furnace. Then we went around and casted it. And all the smoke and stuff come right out of it when we did that. And on the mag floor, it was always washed in - in a long ladle underneath the pump pipe going into the holding pot. And then it was melted. That's the way it was melted in the pot room. And we used it all the time. (8/22/06 Outreach Meeting Transcript, p. 101)

- [9] My name is I worked at Dow (Madison) Plant from 1965 to in Extrusion, Maintenance, and Casting. I worked over in maintenance, and we had these radiation badges or whatever they called them. When we went into the pot room, we had to put one on. And then when we came out, we threw them in a big basket. So every time we came in we just picked one up, and when we go out we threw them away, threw them in the basket. And at the end of the day as far as I know they were thrown away because there was always another new basket there the next day. I don't know what year it was. (8/22/06 Outreach Meeting Transcript, pp. 36-37)
- [10] My name is I worked at Dow (Madison) Plant from 1973 to in the Pot Room. We melted thorium chips in oil on the weekends so nobody knew we were melting it. Then we'd put in barrels, and they stored it. But I remember handling thorium with my bare hands and breathing the smoke. Now I'm being treated with skin cancer. They told us at a time when we wore these badges there was nothing to worry about the badges, they don't register, they're okay. Just when you get through, throw them in the can when your clothes changed put your clothes in a hamper in a plastic bag, put your badge in a bucket. It's okay, don't worry about it, there's nothing to worry about. We was under the assumption nothing to worry about for all those years. (8/22/06 Outreach Meeting Transcript, p. 37)
- [11] My name is _ I worked at Dow (Madison) Plant from 1961 to I worked in the rolling mill up until the '70s. I had various jobs. I done hand salvage. We'd take that metal and we'd sand it. We had no kind of protection whatsoever until

the last year or so I retired, they said, we got to give you the mask. They give us a paper mask. You couldn't wear the paper mask because of your safety glasses. You sweated when you couldn't see what you're doing anyhow. I went to the maintenance in 1970, and I worked all over the plant. I worked all over the plant, but especially the extrusion department, I done a lot of welding over there. The area they claimed they cleaned up over the 7 press, we found out was very highly contaminated with radiation. We spent hours down there welding on a press, never told that it would hurt us. (8/22/06 Outreach Meeting Transcript, p. 38)

- I worked at Dow (Madison) Plant from 1955 to in Casting. I'd like to comment on what orought up about the melting of the thorium into the basket. I have a picture of the basket and the condition of the pot room that we worked in. What said, when you put that into that basket, you'd breathe all of those hot fumes. We didn't have any respirators or anything. (8/22/06 Outreach Meeting Transcript, p. 38) I just wanted to drop back to this bomb bodies that they were talking about a while ago. Those were incendiary bomb bodies, and they were split I guess through the government agency or somewhere. When we charged them evidentially all the fuses or the powder wasn't out of them. As they melted, you always kept one eye on that pot of bomb bodies and the other out on the door because you didn't know when you were going to have to run until they were completely melted in. (8/22/06 Outreach Meeting Transcript, p. 52)
- [13] My name is

 I worked at Dow (Madison) Plant from 1954 to as a

 When we first started doing that, they never told us anything about how to alloy, they just told us what to do. When the thorium metal came in they still told us nothing. They never gave us badges. They never told us it would be harmful or anything. And then, when we'd sludge the pots into barrels or boxes a lot of time it'd splash out on the floor and the fumes would come up in your face and everything. You could hardly breathe. And as far as the beryllium and stuff, we had that all through the casting department. I was there for years. (8/22/06 Outreach Meeting Transcript, p. 39) I have prostate cancer and I have a chronic sinus problem. (8/22/06 Outreach Meeting Transcript, p. 40)

At one time they run some **plutonium** through the plant too, through the homogenating ovens. Nobody could get around it, just the guards. All I can tell you is I seen them, the guards with it and they put them on the oven cars. It came in a billet form. It wasn't very big, maybe 250 pounds approximately. When they put it on the oven car, we were told not to get around it. I don't know why, too expensive I guess. But the guard stayed there all the time it was in the oven. I really couldn't tell you how long it was in the oven because of different shifts. Probably a full day. I couldn't tell you the time frame. (8/22/06 Outreach Meeting Transcript, pp. 53-54)

• [14] My name is

I worked at Dow (Madison) Plant from 1953 to

I started out in the central shops where we gathered up trash and such throughout the
plant. We would pick up the chips from the alloy department and take it out to this back
40, you talked about and burn it. I don't know how many years that went on. Finally, I
went into the extrusion department. Worked in the shipping department, finishing

department, pickler, crane operator, scuffer operator, billet cutter. About once a month, I was bumped. Pretty much everything that these people have said is pretty common.

When they would bring in the materials from the outside sources from -- we were told that it was <u>Mallinckrodt</u>, they would rope off the Number 7 extrusion press. And of course, this was all top secret. We didn't know whether it was beryllium or what they were extruding. They would bring in their own operators. They'd bring in their own handlers. And our people would be there, but they would run these extrusions and pretty much clean up their mess after they were finished. In general, there was very little safety throughout the entire plant. (8/22/06 Outreach Meeting Transcript, p. 40) I'm being treated for prostate problems also. (8/22/06 Outreach Meeting Transcript, p. 41)

- [15] My name is ' I worked at Dow (Madison) Plant from 1960 to It would be easier to tell you where I didn't work than where I did work. Worked everywhere, production and maintenance. I remember cutting grass out in this area where they called the dump that was radioactive, getting the tractor stuck back in there. fighting to get it out and everything. In the pot room, I was a sawer, also an inspector. We did nondestructive testing of billets including the HK, HM billets. I did it with direct contact sonic inspection. I worked in extrusion. My biggest contact with the radioactive material was in the hand salvage area in extrusion. Everything had to be straight within 12 1/2 thousandths per foot, very little twists allowed. And the surface always needed salvaged. A lot of sanding, a lot of scraping. In the rolling mill, I worked on the mills as roller, assistant roller, helper. And the big one as far as thorium is concerned was 7 Mill -- 4 Mill where it was just a matter of repetition. You'd throw it over the mill, throw it into the mill and they'd throw it back to us and we'd put it back through again each sheet probably taking 30 or 40 passes each to being perhaps 50-thousandths reduction. My health seems to be pretty good. (8/22/06 Outreach Meeting Transcript, pp. 41-42) As far as I know the only sanding that was done was is the wire brush on 1 Mill. I think its main purpose was to keep the rolls clean. I don't think it actually came in contact with the strip itself. If there was any dust, it would be just smothered by the coolant. I don't think there was ever any airborne dust from that particular operation. (8/22/06 Outreach Meeting Transcript, p. 43)
- [16] My name is ' I worked at Dow (Madison) Plant from 1954 to My primary contact with thorium alloy was in the rolling mill in '58 through 1960, where we were involved in high-end rolling on the plate and sheet mills. And after we'd make a pass and the metal was in the oven we would sand it. After every pass, we would sand this stuff, hand salvage. I pretty much worked all over the plant and pretty much a carbon copy of Mr. said. At the present time, I don't have any health problems to speak of. (8/22/06 Outreach Meeting Transcript, pp. 43-44)
- [17] My name is I worked at Dow (Madison) Plant from 1961 to in Maintenance. And I was in through the whole plant all the time. I worked in all the nonskills and maintenance, and we had to go through the whole plant. In 1991, I had a cardiac arrest, and I don't know if that probably could have been caused from some of that stuff too. I was probably exposed to all of it because I had to go through the whole plant all the time. (8/22/06 Outreach Meeting Transcript, p. 44)

I worked at Dow (Madison) Plant from 1973 to in Shipping, Extrusion, and Maintenance. I worked all over the rolling mill. I worked in the casting, extrusion and on the presses. I even cut some special metal that they run on 7 press. It was for a government work. They had the government people standing there watching me while I was cutting it. And they had to clean the machine, take an air hose and clean the machine with air hose every time you cut a piece of it. And that metal was so hard. I cut it on a band saw that you used three or four blades before we ever figured out how to really slow it down to cut it because it was so hard. When we got through cutting it, they had to sweep it all up and put it in boxes. They stood right there with us while all of it's kept together.

And then another special metal was on the Lindbergh oven on the heavy press there. They had rented the oven for a certain length of time for us to run this metal through the oven. We had to run it through the quench and take it and then put it in an ice cream freezer truck. They wanted to freeze it as quick as they could because - - then they'd take it back and stretch it again. I worked all over the rolling mill and all over the plant really. I had years in there. I've got scars all over my lungs. I don't have any air. I ain't had for the last 20 years where I can hardly breathe from working in that stuff. (8/22/06 Outreach Meeting Transcript, pp. 45-46)

- [19] My name is I worked at Dow (Madison) Plant from 1968 to I worked all aspects of production work. I cut it, I sanded it, I worked around the mills. I went into the apprenticeship program in '89. I became an MT. I've worked on all these machines from the basement to the roof in the entire plant. The only thing we were ever told down there was this stuff won't hurt you, it's so low grade. We raised all kinds of cane with them, and that's the only answer we ever got, the thorium wouldn't hurt you. You could sit on it and it wouldn't bother you. (8/22/06 Outreach Meeting Transcript, p. 46)
- My recollection of working in the pot room and handling thorium metal was when we first started that we didn't use masks. Then later on we started using masks. But during that time, as it's already been stated that we were handling that thorium that the metal has to be up to 1350° or 1400° degrees before you could even melt it. Then when it melted, the fumes would come off of it. We was told it wouldn't hurt you. I never heard no body say a thing about the S02 that we used to breathe in the pot room. And that was very, very powerful. (8/22/06 Outreach Meeting Transcript, p. 47) We used to run lithium metal. I don't know what it is or what it consists of, but I know that when it got on your skin, you could not put it out with water. It would burn worser when you put water on it. (8/22/06 Outreach Meeting Transcript, p. 54)
- [21] My name is

 I worked at the Dow (Madison) Plant from 1953 to

 With the exception of about two months when I first hired in, all my time was
 spent in the extrusion department. Incidentally, the first two months was pretty tough.

 We had to stack the ingots these boys made. We had to unload boxcar loads of World
 War II bomb bodies. These guys may remember it because they had some little round
 dudes in there that could really blow them pots. We were supposed to get them all out.

 They didn't get them out when they sent them to us and we sure didn't get them all out.

You'd see guys running out of there scared to death. Some of them would actually have some flame on their clothes. (8/22/06 Outreach Meeting Transcript, pp. 47-48) The extrusion department didn't open for about a couple months after I started there. And a few weeks before they opened it, they put up the bids. I started out as a press helper. After a few years I got to be an operator. After about ten years, I got to be a crew leader.

We had five smaller presses and we had one large press. Two of these smaller presses was 1,800 ton capacity. Two of the presses was 3,000 tons capacity. We had one press of 5,500 ton capacity. And we had what we called a heavy press that was brought over from Germany after the war. It was 11,500 and they increased it to 13,500 ton. It was my job to see that they had the right metals on each press, had metals waiting for the next job, relieve anybody that needed to be relieved and especially lunch relief.

Getting back to this radiation thing, the first time I ever realized that there might be radiation in that plant we had some guys that came out and said we're going to run a special job today, and that was it. So a little later, I'm standing around there waiting for them to get their stuff done, and I heard the word Weldon Spring. Well dang, you know, that really brings up some memories from World War II. And I thought man, what do I got myself into. The first real dealings I had - - but I didn't know at the time that that was radioactive, but that was running pellets. I'm sure a lot of guys in here that were press helpers remember pellets. I didn't realize that they were radioactive. When they brought them up there to put them in the container, I asked one of the fellows - - I didn't know either one of them. I said, why these little pellets? And he says, we're experimenting. I said what kind of alloy is this? He says, it really don't have a number. We went through things like that down through the years. It's something that as you get older, even after you leave the place, you get to thinking, my goodness, how could they have done that to us? I never seen a badge.

I remember one instance real well. They run the Number 8 press was 1,800 ton and they decided to run one billet. They didn't tell us what it was. But it came down the conveyer out of the heater and it looked like it was going to fall apart. It hit the loader still holding together. So they told the operator go ahead and push it. They had put a box on the exit end. It was either lined with lead or graphite and I don't know which but it was one or the other, I couldn't tell. And when the guys throwed the lever forward to push it, three seconds it was gone through there in that box, just kerplunk. The smoke boiled out of that thing, went up in those overhead beams. I thought right then, if they don't clean this, we're going to be in trouble. And I never did see them clean it. I heard that they did clean it, but I never did. In all the years I never seen them clean it. (8/22/06 Outreach Meeting Transcript, pp. 50-52).

I worked all over the plant. I'm the one that drove that sweeper in alloy. And sometimes that when I would cough, wasn't nothing but black phlegm come out of your throat. And sometime, I would come through there with the sweeper and if they had put something wet in that metal, the flames come up and I'd be caught on the sweeper on fire. And so I have problem skin, skin disease and prostate, breathing problems. (8/22/06 Outreach Meeting Transcript, p. 55)

- [23] My name is I worked at Dow (Madison) Plant from 1961 to . I worked in the pot room and on the aluminum unit. And you've heard about as much as you from these guys that have spoke before me. (8/22/06 Outreach Meeting Transcript, pp. 55-56)
- [24] My name is I worked at Dow (Madison) Plant from 1989 to in Extrusion. I was employed by Spectrulite in January of '89, and I worked there until At the very beginning of this meeting. mentioned how Spectrulite denied ever processing or running thorium. That's a lie. I first started there I started in casting like a lot of people did. I didn't' spend much time there. Then I was transferred the second year to the rolling mill. This was another place where they cut and sanded sheets of thorium which I had no knowledge of back then. I spent the last 12 years directly on 7 Press which was in extrusion. This is where I have the most knowledge of everything I've found in the last couple years of this investigation. The thorium that we found in the extrusion department was thorium 232. The only alloys they ever alloyed in casting and the rolling mill was thorium 230. I got through the Freedom of Information Act how they processed and ran uranium back in the '60s. After reading the process of how they did this on a work-cycle basis with carbon follower blocks, it just came to me out of the blue, we did that for one customer in this factory at one time, the exact same process they did for the uranium. So I started doing some backtracking.

They got their license for thorium; Spectrulite did in October of 1986. Then Mr. nere who testified a few months ago that in '87, he ran a special alloy which they didn't tell him what it was for a special company for one day. I believe this was about six or seven billets. This is important because they just got their thorium license six months before this and then a special company with a special alloy came in and ran this metal for a day. Through these documents, I have obtained through Emergency Management from the Department of Energy, they did a walkover survey in 1989. In this memo, it states that in 1989, they already found the uranium 238 and thorium 232 as contaminants detected and exceeding guidelines. We know how the uranium got there in the '50s and '60s from Mallinckrodt, But how did the thorium 232 get there? It's a good chance that they picked up the contaminants in the 1989 radiological survey. His two helpers he had on that job that day was They were the actual people and on the other side of the press that handled this material, loaded it, caught it coming out and unloaded it. They died about four years later about six months apart of relatively the same illness, a brain tumor.

Also, Martin-Marietta came in, in 1992, and they also ran a work cycle basis just like it was described by Mallinckrodt and they also used carbon follower block because I loaded it on there. Not for one day, but for a whole week we ran this special alloy. It was a hard, heavy, dense metal nothing like anything we ever ran before. It was at a heating temperature of 1,150 degrees. Nothing was ever heated over 1,000 degrees in those heaters because aluminum would melt and magnesium would burn. When this reached over 1,000 degrees, I was really alert. I was waiting to turn that heater off. I was expecting a fire and it didn't happen. This billet came out glowing orange, and I've never seen any metal glowing orange before. They would run about six to seven a day. They would lease this whole press for a week so it was basically their equipment. They came

back, I'd say about a month and a half later and did it again, another work cycle. But this was a much shorter work cycle, about a three-day process. This was the only time we ran this process and never told what the metal was.

In the 2000 cleanup, they laid the whole factory off because they told us there was radioactive uranium dust over our heads. This is the very first time me and any of my other coworkers on this press ever heard of the word radiation of any type, specifically radioactive dust. And they didn't clean up the whole factory. They didn't even clean up the whole building. It was just cleaned over our heads. That week of the shutdown, I volunteered as a janitor just so I could stay there and watch what they were doing. It was a very elaborate cleanup, dozens of Geiger counters on a table, plastic wrapped everywhere. It was done professionally. Whenever I would ask officials who was there with white hats on how dangerous it was, they would always give me the comment, oh, it ain't that bad. One response I got was you'd have to climb up there and eat it for it to hurt you. My reaction was, I work underneath it, what if it falls in my food? They quit talking to me and wouldn't answer my questions from that time on. I started getting sick around January, 2000.

And I found this press that was used to run the uranium in the 50's and 60's and the thorium in the '80s and '90s abandoned in Brooklyn exactly 50 feet past the county line. Now this press, before we went on strike was completely overhauled. This press that I found in Brooklyn was the back half of the press.

There's an elementary school and school ground 20 feet from the property. When they smoke, it goes straight up and comes right back down on these children, the school ground, and in houses around them, and has been doing it for years. This has to be stopped because there is too many people sick, too many people dying. (8/22/06 Outreach Meeting Transcript, pp. 56 - 64) Almost all of us have been working a midnight shift have come out the next morning and notice a fine film of dust on our cars. This dust we are talking about isn't just from trucks driving up and down the road. This is stuff that was emitted from the smoke stacks while they was melting this thorium and beryllium alloys. None of this was ever addressed when they did the cleanup, it was strictly the uranium. In this cleanup, I have documents here that mention over and over from the DOE that they was only going to clean up the uranium, not the thorium in extrusion. That was that thorium 232. Why would they spend all that money to lean up the radiation but only address the uranium and leave something that's just as hazardous if not worse? That's because Martin-Marietta brought this in and left the mess, and these people were not going to clean up another company's mess. (8/22/06 Outreach Meeting Transcript, pp. 66-68)

What Mr. was talking about the dust overhead on the beams and the crane, I have documentation obtained from the Freedom of Information Act from the Department of Nuclear Safety, Illinois IDS that state that the maximum limit amount for safety for these employees before the cleanup in 2000 was between two to four hours a year. That was the most time they could spend up in these cranes, up in these beams according to the documents that I've obtained. I'll be more than glad to give you a copy of them later. (8/22/06 Outreach Meeting Transcript, p. 95)

That memo also went on to state that they was hoping it was hard, pancake type dust. Farther along during coping, they realized that this was a loose fluffy type dust. They mentioned the word suspension several times and the possibility of re-suspension. I can guarantee that working under this press for all those years, coming back from Monday after, say, it rained on a Saturday or a Sunday, I would have to wipe dust off of every desk, all our equipment, and the tooling to read the numbers. So dust was always falling from these beams. The windows would always be open in the summer and that wind would always blow it in. The crane driving back and forth continuously would always shake it off. The heavy press occasionally would break and shatter a giant ramp which would vibrate the whole building. We nicknamed this red rain because the rust would fall off the beams and there would be splotches all over the place that we'd have to blow off with an air hose or wipe off with our hands. So this dust, like he said, was prevalent everywhere. And it wasn't the thick type pancake that he was expecting, but a loose fluffy dust. We didn't have breaks, we was on production. Everybody went to break at two o'clock, then a lunch break, then another break at ten o'clock. We never got that. We worked straight through and only had one break a day and that was lunch. We had to eat most of our meals, our snacks, everything on the press under this dust. (8/22/06 Outreach Meeting Transcript, pp. 133-134)

What everybody heard out there at the time about these ingots from Russia. They were stacked on pallets, and they were stacked just one stack on top of the other just two high. There was enough of them to fill this room. That's how much was sitting out there right next to the 7 Press for up to six months. This was supposedly the second time it came back. These metal ingots from Russia, these magnesium ingots, they were tarnished. They were a dull gray, not shiny like normal. This would give a good credit to coming from overseas because salt water and salt air does this to magnesium. It does corrode it, taint it, and discolor it. (8/22/06 Outreach Meeting Transcript, pp. 141-143) It was slowly alloyed with the rest of the metal. I've spoke to several other employees who worked in the pot room, and they would say they'd throw one gray ingot in with ten shiny ingots. It took six, seven months before this pile-the size of this room finally diminished down to a small enough size. After all these ingots were gone and the floor was empty, of course, there was dust everywhere. I had to clean it up with a sweeper. (8/22/06 Outreach Meeting Transcript, pp. 143-144)

I worked in the pot room and all over like everybody else did. What they didn't bring up, when they are lunch, we used to eat lunch inside the pot room. I road the sweeper. I swept up a lot of that dust and stuff too. We dumped it in the piles and on boxes, then they'd take it in a truck sometimes and dump it out on the waste field they called it. We wore badges sometimes in the pot room and they would take out clothes and put them in a plastic bag. And then we'd take the badges and put them in a box. They never gave us the results or nothing from that because we asked them a couple times.

And about cancerous around here, I got a lot of people that's in the neighborhood that done had cancer just in that area around that plant, a whole bunch. I had a daughter that had cancer and died from it, you know. I stayed in the neighborhood all my life, and wasn't too far from the plant. And so it got to be something going on around there because there's numerous peoples that stays right around that area that do have cancer.

I've been trying to get names and stuff, get people together to file a petition or something for somebody, but I'm working on that. (8/22/06 Outreach Meeting Transcript, pp. 65-66)

[26] My name is I worked at Dow (Madison) Plant from 1965 to I worked in the extrusion department and some time in the rolling mill until '72. Then from 1972 until I worked in the cast house. Most of the time my job was as a magnesium melter, then the other time was spent basically as a service crew leader. I can certainly attest to the fact that these guys - - what they're saying when they speak about the alloy and using thorium and beryllium. I've done both. I've also had to break beryllium into smaller pieces to be alloyed into specific alloys. Then there was an area in our department that was in the annex where radioactive material was kept for years, and was kind of fenced off inn a little area. It then disappeared from there. And I do believe that it was moved down across the track well on the dock area. Now, from there I don't know where it went. But I knew for years we worked around that. Through inventory, as

indicated, we had to inventory that area every year to make sure that the poundage was still there. Wearing of badges, I've done that. Did we get any specific reading? We got no readings according to the report from management. So that's where I am to this point. (8/22/06 Outreach Meeting Transcript, pp. 71-72) And it wasn't always a situation where they just needed someone to go down and to do this process of getting this beryllium ready for the guys to use on the mag floor. And by me being a service crew leader, they said, well, how about having one of your laborers go down there and get some beryllium ready for the guys who are alloying on the mag floor. And that seems like to me it was on a much regular basis because it was always, you know, get who you could get to do it. So I know it was being done because even I did it myself. (8/22/06 Outreach Meeting Transcript, pp. 104-105)

I worked at Dow (Madison) Plant from 1953 to [27] My name is in Rolling Mill and Warehouse. I was in the rolling mill most of my time. I rolled thorium on 1 Mill for seven years from 1961 to 1968. My main comment is I was a finishing mill roller on the mill in 1955 and '556. They brought in five technicians from Dow Rocky Flats. They went and covered the whole area with paper. We had our own street clothes. But they did furnish hair nets and - - for our shoes and coveralls. Then we were instructed to go ahead and make reductions on this metal. While I inquired what is this metal and he said, it's just an experiment, don't you know? And I said, No. They had a Geiger counter with them, but they never gave us any badges or anything. And I said, isn't this dangerous? They said, No, it's probably no worse than getting a chest xray. During this process, I did what I was instructed. On one of these reductions, the metal, it popped and broke and it injured one of our employees, They took him to the hospital that day. Then I went to visit him at night, and he was in quarantine and the only way you could see him was through a window. When they finished this experiment, they went and they rolled up all the paper. They had us wash the whole mill down. And then, they kept going over the Billie roll which the metal-kept rolling over. We just had to continually wash it until it was finally clear. So when they got done, they took all the clothes, they took our hair nets and everything. They rolled it up, they rolled up all the paper and that was it. I never did know what the metal was, (8/22/06 Outreach Meeting Transcript, pp. 79-80)

[28] My name is

I'm the widow of

He worked next door at Fox Brothers Industries. My husband dug down in the building next door to Dow Chemical. It was a leak in there, a water leak. He dug down through about six or eight inches of concrete with a backhoe. He got down there with a shovel and shoveled some of it out so he can find the leak. All at once, water or stuff came in there. He got up out of there with a ladder. It was knee deep water. When he come home that afternoon, he was red all over. This was on Thanksgiving Day. I asked him what happened. He says, I don't know, maybe I got sun burnt, inside a building.

Well, he kept getting sicker, he'd feel like he had the flu. So finally, he said well, I got to go to the doctor. So he went to the doctor. They took blood work. His blood work was really bad. So he went to an oncologist. He had myoprivitiss disease. That's when the bone marrow starts shutting down. About a year or year and a half later he came down with AML, acute myelogenal leukemia. He lived for two years battling leukemia. The doctor'd keep asking him, was you exposed to radiation? He says no, not as far as I know of. When he came down with leukemia, again, they'd keep asking, are you sure you didn't get close to radiation or exposed to it. Out there next door to Dow Chemical out in that field it's there. That's where he got it at. So that stuff what they had buried has seeped down in that water and he got down in that hole. He's not living today. So that whole area is bad. (8/22/06 Outreach Meeting Transcript, pp. 80-82) There's railroad tracks running from Fox Brothers Industrial over there into Dow Chemical at the back. And evidently there has been connection between Dow Chemical and Fox. I don't think Fox Brother owned that at that time. But that building was - - I guess you call it a warehouse for them because the train tracks run over there. So this is a lot bigger than we are getting into. (8/22/06 Outreach Meeting Transcript, p. 84)

- [29] My name is . I worked at Dow (Madison) Plant from 1953 to in Extrusion. The first I heard of badges was at your last meeting. When I started there, every piece of equipment in the plant had an Air Force number on it. I worked there during a shutdown between '69 when it wasn't Conalco, it was Phelps-Dodge took over. I worked there during that shutdown, and we took all kinds of stuff out to burn and to dump. They had a company man go with us and make sure we set it on fire. (8/22/06 Outreach Meeting Transcript, p. 85)
- [30] My name is I worked at Dow (Madison) Plant from 1961 to in Extrusion, Rolling Mill, Casting, and Maintenance. I was employed there from 1961 to I held various jobs through the plant out in the extrusion, worked in the rolling mill on up in fitting and maintenance. In the summertime, they had me going out and cutting the grass. The area she was talking about, to get back there to cut the grass alongside the fence they had to go get the guard. They had a gate there, it was under lock and key. They had to go get the guard to open the gate so I could go back there and cut the grass. As soon as I got done, I had to go get the guard and lock the gate back up. Then my experiences as of right now, I've come down with Parkinson's. So I don't know if that has anything to do with it or not. (8/22/06 Outreach Meeting Transcript, p. 85)

- [31] My name is I worked at Dow (Madison) Plant from 1965 to I was a in both extrusion and the rolling mill for / years. The only thing I'll add is we processed the thorium in extrusion - - light press extrusion. And during this process it was heat treated or hot stretched we called it because the magnesium was very tough to stretch. A lot of it had to be heated before you could stretch it, and then it was sawed. When you saw anything, you're going to get a lot of dust, you're going to get a lot of chips. These chips flew, and you could look in the sunlight and you'll see all kinds of sparkles. The way these chips were cleaned up was mostly with an air hose, blowing with an air hose and then put in a pile and thrown in there. There's no way in the world you could have separated all the scraps of thorium from the regular magnesium. I also worked down at shipping for a number of years, and we shipped thorium. And believe it or not, we put radiation tags on each of the boxes we shipped out. But again, we were all told the same thing as you have heard a hundred times before, you could sleep on the box, you'd be under more danger getting an x-ray. We all heard the same story over and over and over. So you know, it's just like Hitler said, you say it often enough, people will believe it. I remember a lot of this stuff went into military applications. (8/22/06 Outreach Meeting Transcript, pp. 86-87)
- I worked at Dow (Madison) Plant from 1961 to [32] My name is in Extrusion, Casting, Maintenance, and Rolling Mill. My claim for cancer was 2001. It was small cell lymphoma. I don't smoke and I never filed on . smoke. I started in My brother worked in the casting department. He died of cancer at was the head of all the Dow casting departments in the United States, and he offered help to the Department of Labor if they needed anything for this here. He was in charge when they run the straight uranium on 7 Press years ago when they made it from scratch. He said on a rainy day, you could look out in casting, you could tell the difference from the ground from the smoke coming out of the ground. He helped me fill out the forms and he offered to help any way he could to the Department of Labor, but they turned him down as far as any help. At least they never asked him for anything. And he went and had a heart attack and died.

7 Press was the one the uranium was done on and everything surrounding it was where people worked. All these presses that ran these dies had to be cleaned. They were cleaned in caustic acid and all that acid had to run some place. And like where she's talking about between the buildings and that it ran out through there and had to go in the ground some place. And the waste from the dies that had uranium on them had to be washed off these too. It couldn't just go away. Ant the guys working the crane, they had to breathe all that stuff. And the fans and exhaust was a very poor system. So they got to breathe all the caustic and everything up there. And just about all the time the fans were broke, they didn't work good. Caustic would drift from one end of the department to the other. Everybody knows what it smells like. (8/22/06 Outreach Meeting Transcript, pp. 88-89) Beryllium was produced in all metals there. It's put out by Dow Chemical. This book here's put out by Dow and it shows beryllium is used in all the castings there, a certain percent. It tells how much they use on every one there. On the front, it says Dow, the Metallurgency of Magnesium. It was published in 1945. It shows that a percent is used in everything and it has been used in everything. (8/22/06 Outreach Meeting Transcript, pp. 102-103) I didn't comment wher made the statement on

running the odd looking thing on the Lindbergh. I followed him on that shift. And it was for the stealth bomber and it was for Allied Metals. That's the one that went in the refrigerator car there. And they banded it on skids and ran it through and in and out and the put it in the refrigerator car. That was about in the 1990s. (8/22/06 Outreach Meeting Transcript, pp. 119-120)

- [33] My name is

 I worked at Dow (Madison) Plant from 1965 to
 as a in Rolling Mill and Extrusion. I worked on most all the presses.
 On 6 Press and 8 Press, we ran thorium helicopter parts. On 8 Press, one time I ran 16 hours of titanium. And on 7 Press in the '90s, we ran two weeks of a special metal, and they didn't tell us what the metal was composed of or if it was hazardous or anything. It was a special job and they brought their own billets in and took all the scrap and all the metal back out with them. (8/22/06 Outreach Meeting Transcript, p. 91)
- [34] My name is I worked at Dow (Madison) Plant from 1965 to I worked in all the departments but mainly in the rolling mill and the extrusion. I sanded the plates in the rolling mill, and I ran 7 Press in the extrusion department. (8/22/06 Outreach Meeting Transcript, p. 92)
- [35] My name is I worked at Dow (Madison) Plant from 1988 to (until the plant closed). I just want to talk about when we melted radioactive chips in the pot room. And it's kind of ironic how the company thought that these meltings could proceed. One half of our crew would work on one unit, and one crew would work on the other half. The only thing that divided us between the units of the chips being melted and the unit being ran was they ran a flag line down between the units. When they melted the chips, all the smoke and fumes, it didn't know not to cross that flag line. I thought that was kind of pretty bad on the company thinking that a flag line was going to stop chips and fumes from coming over and getting the other workers. (8/22/06 Outreach Meeting Transcript, p. 92)
- [36] My name is . I worked at Dow (Madison) Plant from 1966 to ' I worked in all departments. First of all, I started out in the rolling mill and I served as everything except a roller on one of the mills over in the rolling mill from one time to another. I also worked in extrusion as a finisher helper. I also worked in casting in the pot room. In later years, I got into an apprenticeship program, when I became a Millwright. And at that time, I worked all over the plant. And one of the things that bothered me was when they decided to do the cleanup they said that the dust wasn't harmful. But when I saw what they were doing, I worked from the top of the crane, top of the building all the way down to the lowest part of the cellar, and we did maintenance. We did crane maintenance. And there they were up there in white suits and masks collecting dust. Somebody mentioned the fact that all you had to do was eat it. You eat a lot of dust inspecting cranes and doing maintenance on those cranes up there. And believe me, it was dusty. As far as where the thorium and these products were stored, we were in and out of those areas all the time. As far as the presses in extrusion was concerned, we were from the top of those presses to the bottom because any time any maintenance had to be done, we had to tear it down and do it. And a lot of times, we worked in the cellars like I was saying. Someone mentioned that the press was rebuilt. Well, I don't think there's any press in there that we didn't rebuild starting from the big

press down to the smallest one. We'd tear it apart, rebuild it, put it back together, and get it back on line.

And I have a lot of friends of mine that were in maintenance that are suffering some type of repercussions. But you know, the bad thing about it is you're not sure of where this thing came from. Like the lady over there said her husband went down in the fix a leak. Well, we were down under the ground fixing leaks all the time. And fortunately enough that I didn't fall in the same stream that he fell in. I hope I didn't.

We have what they called artesian wells there on that property. And of course, ground water feeds into those wells. And I'm sure that there should have been some contamination there somewhere. I can lay in my bedroom and I can look out my bedroom window and see SCI. For something this dangerous to be so close to where I live, it kind of tears me up. To know that no one has said this is dangerous. My kids played in the dust that you talk about that was on your cars. But your cars left town, but my kids was still there. This bothers me. I hope to God that I live long enough to see something done about this situation. (8/22/06 Outreach Meeting Transcript, pp. 92-95)

- [37] My name is

 I worked at Dow (Madison) Plant from 1953 to
 I spent a year in the alloy department as a metal caster and we called them then pot men. I think it's a melter now. Then I bid on a job as a rolling mill inspection, and I spent the rest of my time in that job inspecting metal in process and in the final inspection meeting the specs and the gauges, and so on, tolerances. I was diagnosed with prostate cancer in and had surgery. (8/22/06 Outreach Meeting Transcript, p. 99)
- [38] My name is I worked at Dow (Madison) Plant from 1962 to I started in the rolling mill, worked there for about years, I think, then went onto being an electrician. Worked all over the plant after that. But while I was in the mill, I can remember working on hand salvage. We used an air sander to sand HM and HK that would have dings and scratches in it. We had to sand all that stuff out. And other than that, I'll go along with whatever the rest of these guys said. (8/22/06 Outreach Meeting Transcript, p. 100)
- [39] My name is I worked at Dow (Madison) Plant from 1989 to Ι hired in in the leaching process. Approximately worked in there around a signed a bid in casting, and I worked in casting, oh, f vears. I went to the aluminum unit and worked there a few years. Then I went into the maintenance and worked there the rest until we went on strike. Leaching process, I remember that. There was a bunch of old barrels back there. We busted them up and took whatever was in it and put it in tanks and processed it, took the good from the bad. We didn't know exactly what we was doing. We was just trying to get the good metal out of it. Pretty nasty place back there. In casting department, we did a radiation cleanup. We wore badges, suits, like an asbestos type suit, and a dust mask. It was on the slab unit. We melted on the unit only. We didn't cast during the cleanup. I believe the billet unit was casting while we was doing it. Matter of fact, I know they was. I remember I got laid off right after that. And for some reason, I went down and bought a brand new car. I was laid off and people don't normally do that. It was 1992. We took chips and we melted them on the unit with a stirrer and fork truck rollover. I believe we dumped them in tubs and dumped

the barrels into the pots. We melted it. Supposedly all the radiation and I know the dirt goes to the bottom of the magnesium pot. It's called sludge. We would sludge out the dirt, the bad stuff and we would put it in barrels. Then the welder would take and weld it up. I can't remember the amount of barrels, but it seems like seven or 12. I'm not for sure. We worked around the clock doing this, and I actually don't know how long it was. It didn't seem too long. It seemed like a couple weeks or a week or something like that. I know the barrels went to the outside of casting department in a out type building, but you could enter it from the inside. Because I was told by my supervision to take these people that was going to take the barrels out later on. This was quite a few years later. I was to take a ladder and put it up on the outside window so they could look in there and see what they was dealing with. That's exactly what I did. One thing that was kind of odd about the whole deal was the spec lab lady was in there and we was kind of curious about this. Like we don't know nothing about that, we was young guys. We was talking about radiation quite often. And some people wasn't worried about it and some people was, you know. But I asked the spec lab lady, is this stuff going to hurt us. And she goes there's more radiation that comes out of a microwave than what you guys are messing with. So I said all right, lets try it. We took a Geiger counter to the microwave, and the needle moved. Then right after that we walked right straight to the sludge barrels. We took it to there and it pegged out. Then a little while after that I got laid off work. That's the only time I've been laid off there in my whole years. I was off for exactly

weeks. I came back to work and I came back on a midnight shift. I asked in the safety meeting how'd the badges turn out because I was curious. They said everybody was all right. A couple of the guys made fun of me for asking, saying you ain't going to glow in the dark or something like that, you know. Then I asked again later on about them at another safety meeting. I was told they was posted, everybody's fine, but I never did see nothing or hear nothing about it. (8/22/06 Outreach Meeting Transcript, pp. 110-114)

[40] My name is I worked at Dow (Madison) Plant from 1972 to When I started there, I started under Phillips Dodge, then it was Conalco, and I think it was Consolidated, then it went to Spectrulite. But through the years, I did general stockman, aluminum melter, and mag melter, and laborer. I worked in all the departments, extrusion and the rolling mill. But getting back to the pot room for the radiation, we wore special clothes and a name tag with a badge on it. And after each shift, they would collect all these clothes and put them in a plastic bag. And where they went, I don't know after that. And when we was melting the chips, we melted a lot of chips, a lot of five pound chips, serious chips. They would not say anything about the radiation or anything like that. But then when I was out on the floor as a general stockman or fork truck driver I used to drive and used to load up the sludge like Mr.

was talking abut. I did the same procedure he did too. When we sludge out the sludge and put them in barrels and let them cool off, they set them on the side of the wall. Then later on when they cooled off, the fork truck driver would go in there and take them back down on the dock. Then we would load them on the freight trains. As far as this radiation thing, we never was told anything. We knew there was thorium in the pot room and beryllium too. The badges started to be worn after Spectrulite bought it. (8/22/06 Outreach Meeting Transcript, pp. 115-118)

- [41] My name is I worked at Dow (Madison) Plant from 1985 to [Regarding , statement on running the odd looking thing on the Lindbergh.] I was told that they shipped their billets in and ran it on 7 Press and then took everything out. I was told that was Allied Signal. I was a in extrusion at the time. And in the '90s, there was stacks of billets sent in and stacked up across from the canteen there by 7 Press. I think it was who was my boss that told me that it was Allied Signal. It was hush hush, we weren't to talk about it. And I was told that the people who ran those billets ran it on a voluntary basis, but I don't know if that's true. I do not think the people who were actually doing the extruding knew what they were working with. And I was told it was thorium. (8/22/06 Outreach Meeting Transcript, pp. 120-121) We had offices in the plant. My office was in extrusion, and I had to walk all the way through maintenance, halfway through extrusion, and into the offices. Yes, I walked to all the bulletin boards. And the last several years I was there, I was the only the plant. So I had to go to casting and the rolling mill because I did all the manning schedules. I was out and about all the time. (8/22/06 Outreach Meeting Transcript, p. 129)
- [42] My name is I worked at Dow (Madison) Plant from 1978 to The first year I just had came into the rolling mill, I worked as a at that time. I went and picked up paperwork all through the rolling mill area from one end to the together. And there was always billets and the rolled aluminum were out there. Then I went to extrusion. I worked there for a short time. There was always billets and everything out there also. We used to walk around all the time, went into maintenance, and then went in the storeroom area. From there I went and worked the last of the time over in the lab. I worked in the spec lab, the chem. Lab, and also the other lab - - the testing lab. And most of the time, I worked shift work. I was on with B crew, testing all the samples, magnesium and aluminum. And we used to use lathes, shave them off, basically tell them what they needed to add and spark them. You know, tell them what product they needed to add into their molten metal to bring out what other alloy they needed. Then basically, we just wore lab coats. We were told to take them home and wash them. There was not any rules about eating in the lab or anything like that. We tested all those samples out there and just sent out the information to them. We would go out there into the pot room or aluminum unit and check and see what was going on out there periodically. But there were quite a few different alloys that we ran. There was the thorium and beryllium. I was young and naïve and no one ever told me anything about it. When I worked in the chem lab, I used to go down and take oil samples from the trucks that came in and then water samples all over the plant all the way from the outside area back behind the rolling mill, behind extrusion. I used to ride a little bicycle, bring them all back, and they'd test them there in the chem. Lab. Then we used to test a lot of the samples there over in the testing lab. I was senior lab tech. I spent the majority of the time in the lab. First of all, they would send back through the chute a sample. They would pull the magnesium with like glass tubes because when it came back in, it was all the pieces of glass and you'd have your little sample. We would run the lathe and clean it off and then test it. They called it the old gray mare or something, the spectrometer. But we would mark all that down for them on a sheet, what it showed and what they needed to add. They did have a formula there that we were supposed to look at to tell them what was there and to give them a guideline on what to add. Yes, it was set up where it showed thorium, beryllium you know, magnesium, everything that was in

that product that they were making for that alloy. I did not wear a radiation badge because I didn't even know there was radiation in anything I was working with. There was not a radiation safety officer at all. We were never told any safety precautions in any way. We just had safety glasses and a lab coat. I don't know if it makes any difference, but with what I have found that happened with this is a lot of breathing problems. I'm a nonsmoker. I have never smoked in my life, and I have all kinds of breathing problems. (8/22/06 Outreach Meeting Transcript, pp. 122-127)

Further, Affiants sayeth not.	
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Dow Outreach Meeting Affidavit

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Dated: 10/30/06
SUBSCRIBED AND SWORN before me this
Notaty Public MY COMMISSION EXPIRES OCT. 10, 2009
Dated: 10/30/06
SUBSCRIBED AND SWORN before me this 3 day of latalia, 2006
Notary Public "OFFICIAL SEAL"
Dow Outreach Meeting Affidavit Page 28 of 32 SUZANNE W. CALLAHAN NOTARY PUBLIC—STATE OF ILLINOIS MADISON COUNTY, IL MY COMMISSION EXPIRES OCT. 10, 2009

	Dated: 10/18/06	
	SUBSCRIBED AND SWORN before me this 12 day of Cal	_, 2006
	Notory Public Notory Public NOTARY PUBLIC STATE OF ILLINOIS MY COMMISSION FXPRES 11/3,720.2	
	Dated: 10/20/06	
\	SUBSCRIBED AND SWORN before me this	_, 2006
حس	Notary Public	
	Dated: 10/20/06	
	SUBSCRIBED AND SWORN before me this 20 day of 0000	_, 2006
	Notary Public Notary Public NOTARY PUBLIC, STATE OF ILLINOIS MY COMMISSION EXPIRES 11/3/2005	
	Dated: 06T 20 2006	/
\	SUBSCRIBED AND SWORN before me this 20 day of Islatic	_, 2006
<i>ح</i> ر	Notary Public "OFFICIAL SEAL" SUZANNE W. CALLAHAN NOTARY PUBLIC—STATE OF ILLINOIS MADISON COUNTY IL MY COMMISSION EXPIRES OCT. 10, 2009	

Dated: 10-19-2006
SUBSCRIPED AND SWORN before me this 2 day of 2006 "OFFICIAL SEAL" JULIANNE E PANI WOOD NOTARY PUBLIC, STATE OF ILLINOIS AND COMMISSION EXPIRES 11/3/2000
Dated: ///7 /0 6
SUBSCRIBED AND SWORN before me this day of OFFICIAL SEAL JULIANNE E DANI WOOD NOTARY PUBLIC STATE OF ILLINOIS MY COMMISSION FXPRES 11/3/2005
Dated: 10-19-2006
SUBSCRIBED AND SWORN before me this 2 day of 2 Color 2006 Notary Public Notary Public
Dated: 10-27-06
SUBSCRIBED AND SWORN before me this 27 day of OFFICIAL SEAL", 2006 Notary Public Gary L. Fletcher Notary Public, State of Ulinois My Commission Exp. 03/07/2007
Dated: 10-24-06
SUBSCRIBED AND SWORN before me this 24 day of
Notary Public Notary Public Dow Outreach Meeting Affidavit Page 30 of 32 "OFFICIAL SEAL" Gary L. Fletcher Notary Public, State of Illinois My Commission Exp. 03/07/2007
Dow Outreach Meeting Affidavit Page 30 of 32 My Commission Exp. 03/07/2007

Dated: 24 Oct. 06	<i>)</i>
SUBSCRIBED AND SWORN before me this day of day of "OFFICIAL SEAL" JULIANNE E. PANI WOOD NOTARY PUBLIC, STATE OF ILLINOIS MY COMMISSION EXPIRES 11/3/2006	_, 2006
Dated: 10-19-06	
SUBSCRIBED AND SWORN before me this 4 day of Official Seal." Notary Public Notary Public NOTARY PUBLIC—STATE OF ILLINOIS MY COMMISSION EXPIRES AUG. 1, 2009	_, 2006
Dated: 10-19-06	
SUBSCRIBED AND SWORN before me this	_, 2006
Dated: 10/00/06	
SUBSCRIBED AND SWORN before me this 20 day of October OFFICIAL SEAL TARA BRAMAN NOTARY PUBLIC - STATE OF ILLINOIS MY COMMASSION EXPIRES ON 2109	, 2006
Dated: 10-19-06	
SUBSCRIBED AND SWORN before me this day of Chull Notary Public Dow Outreach Meeting Affidavit Page 31 of 32 OFFICIAL SEAL* DEBORAH A. HALDEMAN NOTARY PUBLIC—STATE OF ILLINO MY COMMISSION EX-IRES AUG. 1, 20	000 E