

**NOTE TO FILE**  
**DOCKET 030-36974 - PA'INA HAWAII, LLC**

**August 22, 2006 site visit to CHL Systems, Souderton, Pennsylvania**  
**(9:00 am - 12:45 pm and 1:45 pm - 4:30 pm)**

**Purpose:** The purpose of this site visit was for NRC and the Center for Nuclear Waste and Regulatory Analysis (CNWRA or the Center) to gather technical information from CHL Systems (manufacturer of the GrayStar Genesis irradiator) and GrayStar representatives. The NRC has contracted the Center to perform a topical report on tsunamis, hurricanes, and aircraft crash scenarios for the Pa'ina Hawaii, LLC, license application. Information from the topical report provided by the Center will be used by NRC Headquarters to create an environmental assessment (EA).

**Participants:**

NRC Headquarters - Matthew D. Blevins, Office of Nuclear Materials Safety and Safeguards  
Johari A. Moore, Office of Nuclear Materials Safety and Safeguards

NRC Region IV - Ray L. Kellar, Fuel Cycle and Decommissioning Branch  
Roberto J. Torres, Nuclear Materials Licensing Branch

CNWRA - Jim Durham, Ph.D., Sr. Research Engineer - Performance Assessment  
Amitava Ghosh, Ph.D., Staff Engineer

GrayStar - Martin H. Stein, President, CEO  
Russell N. Stein, Vice President, COO

CHL Systems - Rick Keiper, Senior Engineer

Russell Stein, GrayStar, made a presentation on the safety aspects of the irradiator. The following items are the highlights of the presentation:

1. Genesis irradiators are developed using safety regulatory requirements as the basis for their design (systems approach). Design takes into consideration the safety of the public, the operator, and the environment. Production, training, security, and regulatory concepts are also considered during the design phase.
2. CHL manufactures irradiator components and GrayStar does the marketing. CHL has broad experience manufacturing structural steel and stainless steel equipment and components. CHL, under contract and independently from GrayStar, will be installing the proposed irradiator pool.
3. There are several companies in the world that purport to design and manufacture irradiators. Nordion and GrayStar are the only two companies that are actively selling irradiators at this time.

4. There are different categories of irradiators.
  - A. Category 1 - Self contained, dry storage irradiator. These are used for research and not commercial production.
  - B. Category 2 - Dry source storage (panoramic) irradiator. Sources expose the chamber. It is like a dry storage cask. Two commercial irradiators of this type in Europe.
  - C. Category 3 - Self contained, underwater irradiator. The sealed sources remain shielded under water at all times. The product to be irradiated is placed in a water-tight container and lowered into the water. The Genesis irradiator falls in this category.
  - D. Category 4 - Wet-source storage irradiator. The sources are stored in the water and raised into the air to irradiate a product.
5. There are several Category 4 “door type” of varying design (instead of a labyrinth and maze design) in use throughout the world. A “door type” irradiator is defined as an irradiator that if the source is in the irradiate position and if the door (an integral part of the shield) is open for any reason, the primary shielding of the irradiator would be compromised. Thus, the safety of this type of unit is solely dependent on interlocks and training. In the opinion of GrayStar, the “door type” irradiator is not “inherently safe” to the public in the event of a door malfunction. This type of irradiator design has been approved in Texas, New Jersey, and one will be soon start operation in India.
6. The International Atomic Energy Agency (IAEA) considers categories 1 and 3 irradiators to be inherently safe because of their self-contained design.
7. Nordion and Reviss are the only manufacturers of Cobalt-60 sealed sources used in the Genesis irradiator. The Genesis irradiator design is inspected by these source manufacturers to make sure that the irradiator equipment will not damage their sources that are under warranty.
8. Some technical aspects of the Genesis irradiator and the manufacturing process:
  - A. Sources are stored in helium and kept underwater inside a plenum.
  - B. Passive system - Loss of power will not be a safety issue since sources are not taken out of the pool to irradiate product. Sources are kept underwater.
  - C. Water is continuously monitored
  - D. Inside and outside steel layers of the pool are leak tested during manufacturing.
  - E. The unit is designed not to transfer physical energy down to the sealed sources.
  - F. The design of the Genesis irradiator took into consideration mitigation of malevolent acts.

- G. 10 CFR Part 36 building location requirements and Co-60 source construction and encapsulation were discussed. Sources are in a form that cannot be dispersed.
  - H. Additional bore soil samples will be taken in the area of the proposed pool construction to determine what foundation technique will be used (wet or dry).
  - I. Source loading will occur every one to two years and will take about one day to perform.
  - J. Welding code used for pool fabrication was discussed.
  - K. Discussion was held on Co-60 sources, source-retaining mechanism, and pool design considerations in the context of flooding events (hurricanes and tsunamis) and aviation accidents.
9. The Center is going to perform probability and consequence analysis, and it will develop a topical report on events scenarios (aviation, tsunamis, and hurricanes). The NRC's Office of Nuclear Materials Safety and Safeguards will develop the EA.
10. Participants looked at various pictures of the construction, source loading, and operation of the CFC Logistics irradiator. CHL site tour included viewing various CFC irradiator components.
11. Several clarifications were made relevant to the staff's environmental review:
- A. The outer carbon steel tank is coated with polyurethane and the hole is then backfilled with 1,000 psi concrete thereby minimizing corrosion potential.
  - B. Depth of excavation was pointed out in previously submitted diagrams.
  - C. Ozone air emissions are very low because irradiation occurs with very small amount of air present in the bell. The bells that contain the product are filled with air. The plenum that contains the sources is filled with helium.
  - D. Proposed Co-60 sources will be transported in a Type B cask on a ship through an adjacent port to the proposed site. Specific transportation plans have not been determined.
12. Martin Stein expressed concerns about the future of the irradiator manufacturing industry in light of the current challenge to the categorical exclusion status of irradiators.

**From:** Roberto Torres  
**To:** GrayStarGenesis@aol.com  
**Date:** 07/31/2006 8:36:33 AM  
**Subject:** Site visit - tentative dates

Mr. Stein:

NRC HQ asked me to check your availability for a site tour of the facility on any of these dates (Aug. 25-27, 2006). Please let me know if any of these dates work for you and if half a day or one day is needed for the tour. At this moment I don't know who from NRC is scheduled to attend.

Roberto J. Torres  
Senior Health Physicist  
U.S. Nuclear Regulatory Commission, Region IV  
Division of Nuclear Materials Safety  
Nuclear Materials Licensing Branch  
611 Ryan Plaza Drive, Suite 400  
Arlington, Texas 76011  
Telephone 817-860-8189  
Facsimile 817-860-8188  
rjt@nrc.gov

**CC:** Jack Whitten; Tony Gaines

**Mail Envelope Properties** (44CE0761.EF7 : 18 : 64234)

**Subject:** Site visit - tentative dates  
**Creation Date** 07/31/2006 8:36:33 AM  
**From:** Roberto Torres

**Created By:** RJT@nrc.gov

Recipients	Action	Date & Time
aol.com AM GrayStarGenesis ( <u>GrayStarGenesis@aol.com</u> )	Transferred	07/31/2006 8:37:07

nrc.gov ARL_PO.ARL_DO AM ADG1 CC (Tony Gaines) JEW1 CC (Jack Whitten) RJT BC (Roberto Torres) AM	Delivered     Opened	07/31/2006 8:36:33     07/31/2006 8:36:37
--------------------------------------------------------------------------------------------------------------------	-------------------------------------	----------------------------------------------------------

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ARL_PO.ARL_DO	07/31/2006 8:36:33 AM	aol.com nrc.gov

Files	Size	Date & Time
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**Options**

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<b>Expiration Date:</b>	None
<b>Notify Recipients:</b>	Yes
<b>Priority:</b>	Standard
<b>ReplyRequested:</b>	No
<b>Return Notification:</b>	None

<b>Concealed Subject:</b>	No
<b>Security:</b>	Standard

<b>To Be Delivered:</b>	Immediate
<b>Status Tracking:</b>	Delivered & Opened

**From:** <GrayStarGenesis@aol.com>  
**To:** <RJT@nrc.gov>  
**Date:** 08/03/2006 7:54:27 AM  
**Subject:** Re: Site visit - tentative dates

Hi Roberto,

OK, I've checked with CHL for the dates below. Everything is a go.

Please keep me as up to date as possible on your schedule so that I can keep CHL informed.

Thanks,  
Russell

In a message dated 8/1/2006 8:25:44 AM Eastern Standard Time, RJT@nrc.gov writes:

Mistake from HQ. The dates should be September 26, 27, or 28. Let me know if any of these dates work for you.

**Mail Envelope Properties** (44D1F1F2.7F1 : 23 : 38897)

**Subject:** Re: Site visit - tentative dates  
**Creation Date** 08/03/2006 7:54:00 AM  
**From:** <GrayStarGenesis@aol.com>

**Created By:** GrayStarGenesis@aol.com

**Recipients**

nrc.gov  
ARL\_PO.ARL\_DO  
RJT (Roberto Torres)

**Post Office**  
ARL\_PO.ARL\_DO

**Route**  
nrc.gov

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**Options**

**Expiration Date:** None  
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**Return Notification:** None

**Concealed Subject:** No  
**Security:** Standard

**Junk Mail Handling Evaluation Results**

Message is eligible for Junk Mail handling  
This message was not classified as Junk Mail

**Junk Mail settings when this message was delivered**

Junk Mail handling disabled by User  
Junk List is not enabled  
Junk Mail using personal address books is not enabled  
Block List is not enabled

**From:** <GrayStarGenesis@aol.com>  
**To:** <RJT@nrc.gov>  
**Date:** 08/03/2006 2:12:06 PM  
**Subject:** GRAY\*STAR

Hi Roberto,

CHL is OK with the 22nd., but cannot do the 21st or 23rd.

Please let me know if we are on on the 22nd. of August.

Thanks,  
Russell



**Mail Envelope Properties** (44D24A64.3CB : 24 : 50123)

**Subject:** GRAY\*STAR  
**Creation Date** 08/03/2006 2:10:53 PM  
**From:** <GrayStarGenesis@aol.com>

**Created By:** GrayStarGenesis@aol.com

**Recipients**

nrc.gov  
ARL\_PO.ARL\_DO  
RJT (Roberto Torres)

**Post Office**

ARL\_PO.ARL\_DO

**Route**

nrc.gov

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
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**Return Notification:** None

**Concealed Subject:** No  
**Security:** Standard

**Junk Mail Handling Evaluation Results**

Message is eligible for Junk Mail handling  
This message was not classified as Junk Mail

**Junk Mail settings when this message was delivered**

Junk Mail handling disabled by User  
Junk List is not enabled  
Junk Mail using personal address books is not enabled  
Block List is not enabled

**From:** Roberto Torres  
**To:** GrayStarGenesis@aol.com  
**Date:** 08/03/2006 2:31:46 PM  
**Subject:** Re: GRAY\*STAR

HQ will let me know early next week if 8/22 or 9/26-9/28 works for them.

Roberto J. Torres  
Senior Health Physicist  
U.S. Nuclear Regulatory Commission, Region IV  
Division of Nuclear Materials Safety  
Nuclear Materials Licensing Branch  
611 Ryan Plaza Drive, Suite 400  
Arlington, Texas 76011  
Telephone 817-860-8189  
Facsimile 817-860-8188  
rjt@nrc.gov

>>> <GrayStarGenesis@aol.com> 08/03/2006 2:10:53 PM >>>  
Hi Roberto,

CHL is OK with the 22nd., but cannot do the 21st or 23rd.

Please let me know if we are on on the 22nd. of August.

Thanks,  
Russell

**Mail Envelope Properties** (44D24F22.2C5 : 18 : 64234)

**Subject:** Re: GRAY\*STAR  
**Creation Date** 08/03/2006 2:31:46 PM  
**From:** Roberto Torres

**Created By:** RJT@nrc.gov

<b>Recipients</b>	<b>Action</b>	<b>Date &amp; Time</b>
aol.com GrayStarGenesis ( <u>GrayStarGenesis@aol.com</u> )		

<b>Post Office</b>	<b>Delivered</b>	<b>Route</b>
	Pending	aol.com

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
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<b>Concealed Subject:</b>	No
<b>Security:</b>	Standard

<b>To Be Delivered:</b>	Immediate
<b>Status Tracking:</b>	Delivered & Opened

**From:** <GrayStarGenesis@aol.com>  
**To:** <RJT@nrc.gov>  
**Date:** 08/03/2006 2:36:17 PM  
**Subject:** Re: GRAY\*STAR

Thanks...I'll have CHL pencil you in for the 22nd. and we will wait for HQ.

Russell

HQ will let me know early next week if 8/22 or 9/26-9/28 works for them.

Roberto J. Torres  
Senior Health Physicist  
U.S. Nuclear Regulatory Commission, Region IV  
Division of Nuclear Materials Safety  
Nuclear Materials Licensing Branch  
611 Ryan Plaza Drive, Suite 400  
Arlington, Texas 76011  
Telephone 817-860-8189  
Facsimile 817-860-8188  
rjt@nrc.gov

**Mail Envelope Properties** (44D25014.669 : 19 : 50793)

**Subject:** Re: GRAY\*STAR  
**Creation Date** 08/03/2006 2:35:28 PM  
**From:** <GrayStarGenesis@aol.com>

**Created By:** GrayStarGenesis@aol.com

**Recipients**

nrc.gov  
ARL\_PO.ARL\_DO  
RJT (Roberto Torres)

**Post Office**  
ARL\_PO.ARL\_DO

**Route**  
nrc.gov

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
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**Options**

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**ReplyRequested:** No  
**Return Notification:** None

**Concealed Subject:** No  
**Security:** Standard

**Junk Mail Handling Evaluation Results**

Message is eligible for Junk Mail handling  
This message was not classified as Junk Mail

**Junk Mail settings when this message was delivered**

Junk Mail handling disabled by User  
Junk List is not enabled  
Junk Mail using personal address books is not enabled  
Block List is not enabled

**From:** Roberto Torres  
**To:** GrayStarGenesis@aol.com  
**Date:** 08/13/2006 4:05:20 PM  
**Subject:** August 22 site visit

Mr. Stein:

The NRC contractor (the Center) and NRC staff have confirmed the August 22, 2006 site visit. The attendees are requesting a morning meeting start time (around 9 am) and directions to the facility or initial meeting place.

Two individuals from the Center will be attending. One has top secret clearance and the other is in the process of obtaining clearance. NRC attendees are Matthew Blevins/HQ, Secret clearance; and Johari Moore/HQ, Secret clearance; and a RIV representative (to be determined).

During the site visit information will be shown or discussed with the attendees. Let the attendees know which information is considered proprietary and which is not. Please have GrayStar and CHL's counsels call Margaret Bupp at 301-415-3722 regarding how proprietary information shared during the site visit can be protected from public disclosure.

Please confirm date/time/place and reply to all those included in this email. Thanks.

Roberto J. Torres  
Senior Health Physicist  
U.S. Nuclear Regulatory Commission, Region IV  
Division of Nuclear Materials Safety  
Nuclear Materials Licensing Branch  
611 Ryan Plaza Drive, Suite 400  
Arlington, Texas 76011  
Telephone 817-860-8189  
Facsimile 817-860-8188  
rjt@nrc.gov

**CC:** Jack Whitten

**Mail Envelope Properties** (44DF940F.99C : 18 : 64234)

**Subject:** August 22 site visit  
**Creation Date** 08/13/2006 4:05:19 PM  
**From:** Roberto Torres

**Created By:** RJT@nrc.gov

Recipients	Action	Date & Time
aol.com GrayStarGenesis (GrayStarGenesis@aol.com)		
nrc.gov ARL_PO.ARL_DO PM	Delivered	08/13/2006 4:05:20
JEW1 CC (Jack Whitten) RJT BC (Roberto Torres) PM	Opened	08/13/2006 4:05:23

Post Office	Delivered	Route
ARL_PO.ARL_DO	Pending 08/13/2006 4:05:20 PM	aol.com nrc.gov

Files	Size	Date & Time
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**Options**

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<b>Return Notification:</b>	None

<b>Concealed Subject:</b>	No
<b>Security:</b>	Standard

<b>To Be Delivered:</b>	Immediate
<b>Status Tracking:</b>	Delivered & Opened

**From:** "Rick Keiper" <rick.keiper@chlsystems.com>  
**To:** <RJT@nrc.gov>  
**Date:** 8/14/2006 3:57:34 PM  
**Subject:** directions to CHL Systems

Hello Mr. Torres,

Russell Stein of Gray Star confirmed our meeting on Aug 22nd at CHL Systems.

Here is a map to the CHL facilities.

We're looking forward to meeting with the NRC's people and discussing this project.

Best regards,

Rick Keiper  
Senior Engineer  
CHL Systems  
ph: 215-723-7284  
fax: 215-723-9115  
rick.keiper@chlsystems.com

<<chlmap.pdf>>

**CC:** "Russell Stein (E-mail)" <GrayStarNJ@aol.com>



**Mail Envelope Properties**

(44E0E3A5.A1C : 24 : 51740)

**Subject:** directions to CHL Systems  
**Creation Date** 8/14/2006 3:57:02 PM  
**From:** "Rick Keiper" <rick.keiper@chlsystems.com>  
**Created By:** rick.keiper@chlsystems.com

**Recipients**

nrc.gov

ARL\_PO.ARL\_DO

RJT (Roberto Torres)

aol.com

GrayStarNJ CC (Russell Stein (E-mail))

**Post Office**

ARL\_PO.ARL\_DO

**Route**

nrc.gov

aol.com

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
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**Options**

**Expiration Date:** None  
**Priority:** Standard  
**ReplyRequested:** No  
**Return Notification:** None

**Concealed Subject:** No  
**Security:** Standard

**Junk Mail Handling Evaluation Results**

Message is eligible for Junk Mail handling

This message was not classified as Junk Mail

**Junk Mail settings when this message was delivered**

Junk Mail handling disabled by User

Junk List is not enabled

Junk Mail using personal address books is not enabled

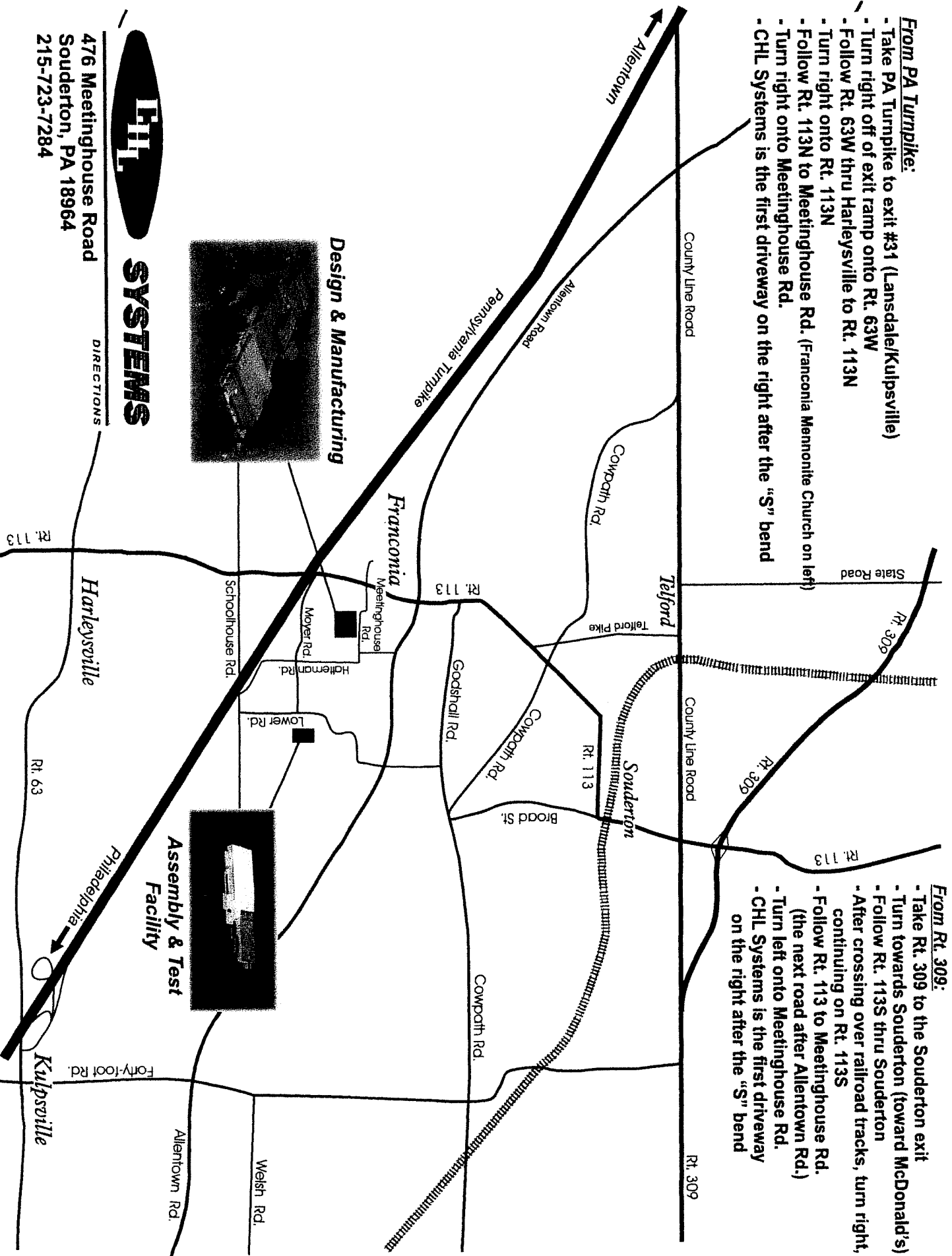
Block List is not enabled

From PA Turnpike:

- Take PA Turnpike to exit #31 (Lansdale/Kulpsville)
- Turn right off of exit ramp onto Rt. 63W
- Follow Rt. 63W thru Harleysville to Rt. 113N
- Turn right onto Rt. 113N
- Follow Rt. 113N to Meetinghouse Rd. (Franconia Mennonite Church on left)
- Turn right onto Meetinghouse Rd.
- CHL Systems is the first driveway on the right after the "S" bend

From Rt. 309:

- Take Rt. 309 to the Souderton exit
- Turn towards Souderton (toward McDonald's)
- Follow Rt. 113S thru Souderton
- After crossing over railroad tracks, turn right, continuing on Rt. 113S
- Follow Rt. 113 to Meetinghouse Rd. (the next road after Allentown Rd.)
- Turn left onto Meetinghouse Rd.
- CHL Systems is the first driveway on the right after the "S" bend



**CHL**

**SYSTEMS**

DIRECTIONS

476 Meetinghouse Road  
Souderton, PA 18964  
215-723-7284

**From:** <GrayStarGenesis@aol.com>  
**To:** <RJT@nrc.gov>  
**Date:** 8/14/2006 9:08:38 AM  
**Subject:** Re: August 22 site visit

Hi Roberto,

I have notified CHL of the meeting. Rick Keiper of CHL should be sending you directions shortly. If you don't receive them soon, please check out: [\\_www.CHLsystems.com\\_](http://www.CHLsystems.com) (<http://www.CHLsystems.com>) [There is a directions section.]

You mentioned in your email two NRC people. Could you let me know who is going to attend from the contractor's side? No one from Reg. IV?? [I guess it is not a "fun" time to fly!]

I look forward to meeting your people on the 22nd.

Thanks,  
Russell

In a message dated 8/13/2006 5:06:16 PM Eastern Standard Time, RJT@nrc.gov writes:

Mr. Stein:

The NRC contractor (the Center) and NRC staff have confirmed the August 22, 2006 site visit. The attendees are requesting a morning meeting start time (around 9 am) and directions to the facility or initial meeting place.

Two individuals from the Center will be attending. One has top secret clearance and the other is in the process of obtaining clearance. NRC attendees are Matthew Blevins/HQ, Secret clearance; and Johari Moore/HQ, Secret clearance; and a RIV representative (to be determined).

During the site visit information will be shown or discussed with the attendees. Let the attendees know which information is considered proprietary and which is not. Please have GrayStar and CHL's counsels call Margaret Bupp at 301-415-3722 regarding how proprietary information shared during the site visit can be protected from public disclosure.

Please confirm date/time/place and reply to all those included in this email. Thanks.

Roberto J. Torres  
Senior Health Physicist  
U.S. Nuclear Regulatory Commission, Region IV  
Division of Nuclear Materials Safety  
Nuclear Materials Licensing Branch  
611 Ryan Plaza Drive, Suite 400  
Arlington, Texas 76011

Telephone 817-860-8189  
Facsimile 817-860-8188  
rjt@nrc.gov

**CC:** <JEW1@nrc.gov>

**Mail Envelope Properties**

(44E083C4.EE6 : 12 : 40678)

**Subject:** Re: August 22 site visit  
**Creation Date** 8/14/2006 9:07:34 AM  
**From:** <GrayStarGenesis@aol.com>  
**Created By:** GrayStarGenesis@aol.com

**Recipients**

nrc.gov

ARL\_PO.ARL\_DO

JEW1 CC (Jack Whitten)

RJT (Roberto Torres)

**Post Office**

ARL\_PO.ARL\_DO

**Route**

nrc.gov

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
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TEXT.htm	2826	
Mime.822	6154	

**Options**

**Expiration Date:** None  
**Priority:** Standard  
**ReplyRequested:** No  
**Return Notification:** None

**Concealed Subject:** No  
**Security:** Standard

**Junk Mail Handling Evaluation Results**

Message is eligible for Junk Mail handling  
This message was not classified as Junk Mail

**Junk Mail settings when this message was delivered**

Junk Mail handling disabled by User  
Junk List is not enabled  
Junk Mail using personal address books is not enabled  
Block List is not enabled

**From:** Matthew Blevins  
**To:** Rick Keiper; Roberto Torres  
**Date:** 8/15/2006 9:31:36 AM  
**Subject:** start time for CHL Systems visit on 8/22

Mr. Keiper,  
Did you have a start time in mind for the 8/22 visit? If possible, we would prefer an AM start time (sometime between 8 and 10). Thanks.  
Matt

Matthew Blevins  
Senior Project Manager  
Division of Waste Management and  
Environmental Protection  
U.S. Nuclear Regulatory Commission  
Phone: (301) 415-7684

>>> "Rick Keiper" <[rick.keiper@chlsystems.com](mailto:rick.keiper@chlsystems.com)> 8/14/2006 4:57:02 PM >>>  
Hello Mr. Torres,

Russell Stein of Gray Star confirmed our meeting on Aug 22nd at CHL Systems.

Here is a map to the CHL facilities.

We're looking forward to meeting with the NRC's people and discussing this project.

Best regards,

Rick Keiper  
Senior Engineer  
CHL Systems  
ph: 215-723-7284  
fax: 215-723-9115  
[rick.keiper@chlsystems.com](mailto:rick.keiper@chlsystems.com)

<<chlmap.pdf>>

**CC:** Russell Stein (E-mail)

**Mail Envelope Properties**

(44E1DABE.AD9 : 2 : 11446)

**Subject:** start time for CHL Systems visit on 8/22  
**Creation Date** 8/15/2006 9:31:26 AM  
**From:** Matthew Blevins  
**Created By:** MXB6@nrc.gov

**Recipients**

aol.com

GrayStarNJ CC (Russell Stein (E-mail))

chlsystems.com

rick.keiper (Rick Keiper)

nrc.gov

ARL\_PO.ARL\_DO

RJT (Roberto Torres)

**Post Office**

ARL\_PO.ARL\_DO

**Route**

aol.com

chlsystems.com

nrc.gov

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	1956	8/15/2006 9:31:26 AM

**Options**

**Expiration Date:** None  
**Priority:** Standard  
**Reply Requested:** No  
**Return Notification:** None

**Concealed Subject:** No  
**Security:** Standard

**Junk Mail Handling Evaluation Results**

Message is not eligible for Junk Mail handling

Message is from an internal sender

**Junk Mail settings when this message was delivered**

Junk Mail handling disabled by User

Junk List is not enabled

Junk Mail using personal address books is not enabled

Block List is not enabled

**From:** <GrayStarNJ@aol.com>  
**To:** <MXB6@nrc.gov>  
**Date:** 8/15/2006 9:38:46 AM  
**Subject:** Re: start time for CHL Systems visit on 8/22

Hi Matt,

We are planning to start at 9:00 unless Rick or other has a problem with that time. I'm about 2 hours away, so 9:00 is about the earliest I can get there and still be able to function.

Are you and your associates staying in the area overnight? Driving in? Flying?

See you on the 22nd.,  
Russell

Russell N. Stein  
GRAY\*STAR, Inc.

Mr. Keiper,  
Did you have a start time in mind for the 8/22 visit? If possible, we would prefer an AM start time (sometime between 8 and 10). Thanks.  
Matt

Matthew Blevins  
Senior Project Manager  
Division of Waste Management and  
Environmental Protection  
U.S. Nuclear Regulatory Commission  
Phone: (301) 415-7684

>>> "Rick Keiper" <rick.keiper@chlsystems.com> 8/14/2006 4:57:02 PM >>>  
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Senior Engineer  
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ph: 215-723-7284  
fax: 215-723-9115  
rick.keiper@chlsystems.com

**CC:** <rick.keiper@chlsystems.com>, <rjt@nrc.gov>



**Mail Envelope Properties**

(44E1DC5D.393 : 10 : 915)

**Subject:** Re: start time for CHL Systems visit on 8/22  
**Creation Date** 8/15/2006 9:38:11 AM  
**From:** <GrayStarNJ@aol.com>  
**Created By:** GrayStarNJ@aol.com

**Recipients**

nrc.gov

ARL\_PO.ARL\_DO

RJT CC (Roberto Torres)

nrc.gov

OWGWPO01.HQGWDO01

MXB6 (Matthew Blevins)

chlsystems.com

rick.keiper CC

**Post Office**

ARL\_PO.ARL\_DO

OWGWPO01.HQGWDO01

**Route**

nrc.gov

nrc.gov

chlsystems.com

Files	Size	Date & Time
MESSAGE	1097	8/15/2006 9:38:11 AM
TEXT.htm	2078	
Mime.822	4641	

**Options**

**Expiration Date:** None  
**Priority:** Standard  
**ReplyRequested:** No  
**Return Notification:** None

**Concealed Subject:** No  
**Security:** Standard

**Junk Mail Handling Evaluation Results**

Message is eligible for Junk Mail handling

This message was not classified as Junk Mail

**Junk Mail settings when this message was delivered**

Junk Mail handling disabled by User

Junk List is not enabled

Junk Mail using personal address books is not enabled

Block List is not enabled

**From:** Matthew Blevins  
**To:** GrayStarNJ@aol.com  
**Date:** 8/15/2006 10:02:36 AM  
**Subject:** Re: start time for CHL Systems visit on 8/22

Russell,  
The HQ NRC staff are driving up from DC area the night before and staying in King of Prussia. The Center people, whom are preparing the accident scenario portion of the environmental review, are flying in from San Antonio and RIV staff would be coming from Dallas.

Nine AM is good for us, I just wanted to make sure we were on the same page. We'll see you at CHL on the 22nd. Thanks for your assistance.  
Matt

Matthew Blevins  
Senior Project Manager  
Division of Waste Management and  
Environmental Protection  
U.S. Nuclear Regulatory Commission  
Phone: (301) 415-7684  
>>> <GrayStarNJ@aol.com> 08/15/06 10:38 AM >>>

Hi Matt,

We are planning to start at 9:00 unless Rick or other has a problem with that time. I'm about 2 hours away, so 9:00 is about the earliest I can get there and still be able to function.

Are you and your associates staying in the area overnight? Driving in?  
Flying?

See you on the 22nd.,  
Russell

Russell N. Stein  
GRAY\*STAR, Inc.

Mr. Keiper,  
Did you have a start time in mind for the 8/22 visit? If possible, we would prefer an AM start time (sometime between 8 and 10). Thanks.  
Matt

Matthew Blevins  
Senior Project Manager  
Division of Waste Management and  
Environmental Protection  
U.S. Nuclear Regulatory Commission  
Phone: (301) 415-7684

>>> "Rick Keiper" <rick.keiper@chlsystems.com> 8/14/2006 4:57:02 PM >>>  
Hello Mr. Torres,

Russell Stein of Gray Star confirmed our meeting on Aug 22nd at CHL Systems.

Here is a map to the CHL facilities.

We're looking forward to meeting with the NRC's people and discussing this project.

Best regards,

Rick Keiper  
Senior Engineer  
CHL Systems  
ph: 215-723-7284  
fax: 215-723-9115  
rick.keiper@chlsystems.com

**CC:** RJT@nrc.gov,rick.keiper@chlsystems.com

**Mail Envelope Properties**

(44E1E1F4.394 : 2 : 14774)

**Subject:** Re: start time for CHL Systems visit on 8/22

**Creation Date** 8/15/2006 10:02:12 AM

**From:** Matthew Blevins

**Created By:** mxb6@nrc.gov

**Recipients**

aol.com

GrayStarNJ

chlsystems.com

rick.keiper CC

nrc.gov

ARL\_PO.ARL\_DO

RJT CC (Roberto Torres)

**Post Office**

ARL\_PO.ARL\_DO

**Route**

aol.com

chlsystems.com

nrc.gov

**Files**

MESSAGE

**Size**

1727

**Date & Time**

8/15/2006 10:02:12 AM

**Options**

**Expiration Date:** None

**Priority:** Standard

**ReplyRequested:** No

**Return Notification:**

Send Mail Receipt when Undeliverable

**Concealed Subject:** No

**Security:** Standard

**Junk Mail Handling Evaluation Results**

Message is not eligible for Junk Mail handling

Message is from an internal sender

**Junk Mail settings when this message was delivered**

Junk Mail handling disabled by User

Junk List is not enabled

Junk Mail using personal address books is not enabled

Block List is not enabled

**From:** <GrayStarNJ@aol.com>  
**To:** <mxb6@nrc.gov>  
**Date:** 8/15/2006 10:08:04 AM  
**Subject:** Re: start time for CHL Systems visit on 8/22

Thanks Matt...

Could you give me a final head count for all of "your" people so that Rick knows which conference room to use?

Thanks,  
Russell

PS GRAY\*STAR will have two people, myself and Martin Stein.

Russell,  
The HQ NRC staff are driving up from DC area the night before and staying in King of Prussia. The Center people, whom are preparing the accident scenario portion of the environmental review, are flying in from San Antonio and RIV staff would be coming from Dallas.

Nine AM is good for us, I just wanted to make sure we were on the same page.  
We'll see you at CHL on the 22nd. Thanks for your assistance.  
Matt

Matthew Blevins  
Senior Project Manager  
Division of Waste Management and  
Environmental Protection  
U.S. Nuclear Regulatory Commission  
Phone: (301) 415-7684

**CC:** <rick.keiper@chlsystems.com>, <RJT@nrc.gov>

**Mail Envelope Properties**

(44E1E335.75D : 5 : 1885)

**Subject:** Re: start time for CHL Systems visit on 8/22

**Creation Date** 8/15/2006 10:07:07 AM

**From:** <GrayStarNJ@aol.com>

**Created By:** GrayStarNJ@aol.com

**Recipients**

nrc.gov

ARL\_PO.ARL\_DO

RJT CC (Roberto Torres)

nrc.gov

OWGWPO01.HQGWDO01

MXB6 (Matthew Blevins)

chlsystems.com

rick.keiper CC

**Post Office**

ARL\_PO.ARL\_DO

OWGWPO01.HQGWDO01

**Route**

nrc.gov

nrc.gov

chlsystems.com

**Files**

MESSAGE

TEXT.htm

Mime.822

**Size**

809

1671

3903

**Date & Time**

8/15/2006 10:07:07 AM

**Options**

**Expiration Date:**

None

**Priority:**

Standard

**Reply Requested:**

No

**Return Notification:**

None

**Concealed Subject:**

No

**Security:**

Standard

**Junk Mail Handling Evaluation Results**

Message is eligible for Junk Mail handling

This message was not classified as Junk Mail

**Junk Mail settings when this message was delivered**

Junk Mail handling disabled by User

Junk List is not enabled

Junk Mail using personal address books is not enabled

Block List is not enabled

**From:** Matthew Blevins  
**To:** GrayStarNJ@aol.com  
**Date:** 8/15/2006 10:16:36 AM  
**Subject:** Re: start time for CHL Systems visit on 8/22

Russell,  
Two from NRC HQ, two from the Center, and I think one from RIV NRC.  
Matt

>>> <GrayStarNJ@aol.com> 08/15/06 11:07 AM >>>

Thanks Matt...

Could you give me a final head count for all of "your" people so that Rick knows which conference room to use?

Thanks,  
Russell

PS GRAY\*STAR will have two people, myself and Martin Stein.

Russell,  
The HQ NRC staff are driving up from DC area the night before and staying in King of Prussia. The Center people, whom are preparing the accident scenario portion of the environmental review, are flying in from San Antonio and RIV staff would be coming from Dallas.

Nine AM is good for us, I just wanted to make sure we were on the same page.  
We'll see you at CHL on the 22nd. Thanks for your assistance.  
Matt

Matthew Blevins  
Senior Project Manager  
Division of Waste Management and  
Environmental Protection  
U.S. Nuclear Regulatory Commission  
Phone: (301) 415-7684

**CC:** RJT@nrc.gov,rick.keiper@chlsystems.com

**Mail Envelope Properties**

(44E1E540.394 : 2 : 14774)

**Subject:** Re: start time for CHL Systems visit on 8/22  
**Creation Date** 8/15/2006 10:16:16 AM  
**From:** Matthew Blevins  
  
**Created By:** mx6@nrc.gov

**Recipients**

aol.com  
GrayStarNJ

chlsystems.com  
rick.keiper CC

nrc.gov  
ARL\_PO.ARL\_DO  
RJT CC (Roberto Torres)

**Post Office**

ARL\_PO.ARL\_DO

**Route**  
aol.com  
chlsystems.com  
nrc.gov

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	939	8/15/2006 10:16:16 AM

**Options**

**Expiration Date:** None  
**Priority:** Standard  
**ReplyRequested:** No  
**Return Notification:**  
Send Mail Receipt when Undeliverable

**Concealed Subject:** No  
**Security:** Standard

**Junk Mail Handling Evaluation Results**

Message is not eligible for Junk Mail handling  
Message is from an internal sender

**Junk Mail settings when this message was delivered**

Junk Mail handling disabled by User  
Junk List is not enabled  
Junk Mail using personal address books is not enabled  
Block List is not enabled



**From:** Matthew Blevins  
**To:** Roberto Torres  
**Date:** 08/23/2006 12:43:24 PM  
**Subject:** Fwd: Contacts for information on Hawaii

FYI, for project file.

>>> <GrayStarNJ@aol.com> 08/23/2006 11:16 AM >>>  
Matt,

I have listed some key people who are familiar with the economic impacts on Hawaii with respect to irradiation processing.

All of these people are with, or related to government agencies, both Federal and Hawaii. I suggest that you contact Pa'ina Hawaii if you need commercial references.

[Note: Although I know these people, I have not talked to them recently and therefore, you would be contacting them without their prior knowledge. I do not want to prejudice their response to you.]

Paul Gahd - Import Specialist, USDA, APHIS, PPQ: 301-734-5210 [Dr. Gahd is presently the key person involved with radiation as a phytosanitary treatment. He's written most of the recent USDA APHIS approvals. If you feel it would be helpful, you can also talk to Alan Green and Richard Dunkle who are above Dr. Gahd in the agency.]

Lyle Wong - Plant Industry Administrator, State of Hawaii, Dept of Agriculture - Dr. Wong is the key person to talk to on this issue in Hawaii, representing their Dept. of Agriculture.]

Sue McCombs - USDA (in charge of Sterile Insect Technology - National Program): 808-349-6784 [Dr. McCombs can give you a USDA and State Programs perspective on the importance of a unit in Hawaii. She currently resides in Hawaii.]

Governor Linda Lingle, Hawaii: 808-586-0034 [If you want to know the economic importance to the State of Hawaii, I would just ask!]

Benjamin Schlapak - Manager, Oahu district Airports, DOT, Hawaii: 808-836-6533 [Mr. Schlapak is the Manager of the Honolulu Airport. He would obviously have an economic perspective on the transportation side of the equation.]

If you would like more contacts, please let me know. For commercial contacts, such as the growers in Hawaii, I recommend that you contact Pa'ina Hawaii.

Enjoy your research,  
Russell

Russell N. Stein  
GRAY\*STAR, Inc.

**Mail Envelope Properties** (44EC93AC.1AE : 2 : 11446)

**Subject:** Fwd: Contacts for information on Hawaii  
**Creation Date** 08/23/2006 12:43:08 PM  
**From:** Matthew Blevins

**Created By:** [MXB6@nrc.gov](mailto:MXB6@nrc.gov)

**Recipients**

nrc.gov  
ARL\_PO.ARL\_DO  
RJT (Roberto Torres)

**Post Office**  
ARL\_PO.ARL\_DO

**Route**  
nrc.gov

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	2854	08/23/2006 12:43:08 PM
TEXT.htm	2746	

**Options**

**Expiration Date:** None  
**Priority:** Standard  
**ReplyRequested:** No  
**Return Notification:** None

**Concealed Subject:** No  
**Security:** Standard

**Junk Mail Handling Evaluation Results**

Message is not eligible for Junk Mail handling  
Message is from an internal sender

**Junk Mail settings when this message was delivered**

Junk Mail handling disabled by User  
Junk List is not enabled  
Junk Mail using personal address books is not enabled  
Block List is not enabled