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Site Management Records: Madison Site Visit and Scoping Meeting

ADMINISTRATIVE RECORD FOR THE MADISON SITE

MADISON, ILLINOIS

Site Management Records-

Madison Site Visit and Scoping Meeting



MEMO FROM

G. L. Palau

August 23, 1993

To:

Dave Adler

Subject:

Madison Site Visit and Scoping Meeting

On Tuesday, August 17, Steve Thieme and I visited the Madison Site and met with Jack Conroy, Vice President-Sales and Marketing, and Bill Moore, Director of Technology and Development — both of Spectrulite Consortium Inc. During the ORNL surveys in 1989, Jack was the VP of Plant Operations — hence his involvement in this meeting. In the future, Bill will be the primary contact.

For the record:

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Steve and I advised that FUSRAP was interested in re-establishing contact with Spectrulite to evaluate the feasibility of undertaking RA at that site. We discussed the recent completion of the Granite City Site cleanup next door.

Jack and Bill immediately voiced concern that Building 6 (the primary one identified with contamination) is currently an active manufacturing area — and that they were reluctant to have their operations affected by a FUSRAP cleanup. They advised that they close down the first week of July and between X-mas and New Year each year. We advised that FUSRAP has no interest in impacting their operations — and that we would not undertake a near-term cleanup if it would have a detrimental effect on SCI operations.

Jack and Bill also noted that they do have an active NRC license for the use of thorium in the manufacture of specialty alloy products. They noted that they have personnel trained to work with these kinds of low-level radioactive materials, and that their workers have no fears or concerns about the residual uranium that may be mixed with the thorium residuals. As a matter of fact, Jack noted that many employees thought a DOE cleanup of uranium was "somewhat of a joke" given the low levels and the thorium background.

We toured the facility - focusing on Building 6. Observations:

- a) Indeed, two of their largest extrusion presses and supporting infrastructure are in the middle of area we would need to clean.
- b) The overheads are significantly more complex than the ORNL designation report leads one to believe. The beams are not simple I-beams -- but rather large structural steel frames approximately 8"-10" wide, ranging from 16'-28' high, with diagonal cross members. It appears

that the ORNL surveys only smeared the lower sections of the beams (things they could reach from the overhead crane they used) — leaving large amounts of surface area unsurveyed. Conduit and piping also run through the overheads. In the "penthouse" areas, the ceiling height is an additional 20'-30' above the structural frames. Other surfaces that would require cleaning include light fixtures, cranes, etc. The roof panels are precast concrete.

A cleanup effort would require extensive scaffolding (either from the floor up....or off the cranes – but in either event, no easy task.

c) The dirt and dust on top of cabinets at ground-level are filmy/grimy in nature — not a loose dust that could easily be vacuumed. Likely, similar contamination exists in the overheads. To remove it effectively would likely require significant hand-wiping (possibly with detergents/solvents) or a pressure wash (possibly with detergents).

The overhead steel looks rusty (....this is virtually an "open-air" facility in a humid climate) — and this further complicates decon efforts (possibly requiring scraping, sanding or grinding of surfaces). Many areas will be difficult to access.

After the tour we discussed the next steps. Both sides are interested in having a better understanding of what a cleanup effort would involve. To that end:

- SCI will allow us to do a more detailed site walkdown and take pictures and video. Steve and I envision he and an Engineering Rep spending about a day quantifying linear feet and square feet of horizontal surfaces, conduit runs, etc. SCI believes that they have old structural drawings of the building...which would also help. SCI would be willing to provide "a little" support to get us up on the cranes to inspect the overheads first hand.
- 2) We also discussed the value of a mini-decon test on a few surfaces in the building.....picking a few spots 1-2 square feet in size and looking at the effectiveness of different decon techniques (vacuuming, dry handwiping, detergent, pressurized hot water, etc.). This would allow us to quantify the effort and labor hours necessary to get the surfaces clean.

Sidelights....a couple of items of interest from the visit:

- 1) The facility focuses primarily on the manufacture of aluminum and magnesium extruded products. They take raw metals, cast them into billets for the extrusion presses, and then extrude products. They have a wide array of clients both domestically and internationally (Boeing wing parts, missile components, the handle grips/arrow rest on bows, etc., etc.).
 - Just like Mallinckrodt, they are little nervous about us taking pictures in the plant lest some industrial/proprietary information leak out.They do test and manufacture custom specialty alloys with trace quantities of different elements.
- This facility has the largest horizontal extrusion press in the world (14,000 tons). It was built by the Third Reich in 1939 for the extrusion of missile bodies for the German war effort (intended to bomb England without the need for planes). At the end of the war, the Germans scuttled the press in a river but, the US military recovered the press and support equipment (hydronline)

pumps, etc.), shipped it to the US, and it was used for early US missile body manufacture. Today, it's still used for a variety of extrusion products including seamless tubing up to 30" OD and a variety of wall thicknesses up to 3".

- 3) Small quantities of raw metal sized approximately 6" OD and 12" long are sold and managed in units called "pigs". Larger quantities of raw metals (3' x 3' x 18") used for casting are sold in units called "sows".
- 4) The Madison site buildings have a total of 800,000 panes of glass. It's not unusual for a big storm to break or blowout more than a 1000 panes at a time.

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cc: Joe Williams
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