

Dragon, Karen E. (CDC/NIOSH/EID)

From: Daniel McKeel
Sent: Saturday, June 13, 2015 9:21 AM
To: NIOSH Docket Office (CDC); Katz, Ted (CDC/NIOSH/OD)
Cc: danmckeel; melius@nysliuna.org; pl.ziemer@comcast.net; Wade, Lewis (CDC/NIOSH/OD) (CTR); Hinnefeld, Stuart L. (CDC/NIOSH/DCAS); Neton, Jim (CDC/NIOSH/DCAS); Allen, David (CDC/NIOSH/DCAS); bradley.clawson@icp.doe.gov; clawbp
Subject: AWE wide documents: NIOSH Docket Office submission
Attachments: McKeel_BirdsboroPA_aweDocket.pdf; Schuetz_BirdsboroBetatron_2pgs..pdf

NIOSH Docket Office and DFO Ted Katz,

Please consider the attached four page report and this cover letter for posting on the DCAS website under AWE Site wide documents, there being no specific NIOSH Docket I am aware of for the Birdsboro Corporation of Pennsylvania AWE site. This information complements recent e-mails I have sent documenting pages 31 and 70 of the Jack Schuetz 2007 contracted report to NIOSH (Sam Glover) that was part of the basis for GSI Appendix BB Rev 0 released in June 2007. Those two pages document that Birdsboro Corp. of Birdsboro, PA had an Allis-Chalmers 24-25 Mev Betatron installed. (PDFs attached) We know further from historical internet documents that the US Army Corps of Engineers constructed the Birdsboro PA Betatron building, we believe in the early 1950s.

This report is

titled: Daniel W. McKeel, Jr., MD, "Submission to NIOSH Docket Concerning Multiple NDT Radiographic Source Terms at the Birdsboro, PA EEOICPA AWE Site," June 13, 2015. Please post as such. Thank you.

The attached report concerns multiple radiographic NDT source terms that my colleague and I have documented, in 2007, 2011-12, and during June 2015, as being present and used at the Birdsboro Corp. PA plant. Documentation was supplied to the ABRWH, NIOSH, and SC&A. New material that is highly pertinent to the recently released (6/2/15) Rev 1 of Birdsboro Appendix B is included from a newly found reference book on Steel Foundries in America and Canada.

Ted Katz, please distribute this cover letter and the attached four page PDF file to all current ABRWH members and to others you believe are appropriate recipients. This memo should be of special interest to Board member Brad Clawson, who was himself an NDT radiographer for ten years prior to becoming an ABRWH Presidential appointee. Thank you.

Sincerely yours,

-- Dan McKeel June 13, 2015 Saturday

Daniel W. McKeel, Jr., MD
GSI, Dow (IL) and TCC SEC
co-petitioner
SINEW cofounder

Daniel W. McKeel, Jr., MD
"Submission to NIOSH Docket
Concerning Multiple NDT Radiographic
Source Terms at the Birdsboro, PA
EEOICPA AWE Site"
June 13, 2015

6/13/15 memorandum — contacted the Steel Founders' Society of America, a trade association apparently, after seeing their publication "Directory of Steel Foundries in the United States and Canada 1957-58" on the internet during May-June 2015. His contact person was SFSA librarian Diana David.

The topic that led to this discovery was the issuance by NIOSH in June 2015 of Rev 1 of Appendix B for the Birdsboro Machine and Foundry Company of Birdsboro, PA.

and McKeel were aware of the fact that Birdsboro foundry was one of the sites that possessed and used an Allis-Chalmers 22-25 Mev Betatrons for NDT radiography.

Pages 31 and 70 of the 72 page report that Jack Schuetz delivered, under contract, to OCAS/NIOSH health physicist Sam Glover in 2007, showed that ATC Betatron Corporation, P.O. Box 2639, West Allis, WI 53214 [phone: (414) 475-2867] listed "Birdsboro Corporation, Birdsboro, Pennsylvania" as having a "25 MEV BETATRON INDUSTRIAL INSTALLATION" on page 31 of the Schuetz report. An asterisked note at the bottom of this page notes: "ATC BETATRON CORPORATION is successor to The ALLIS-CHALMERS Betatron Department. Allis-Chalmers is a currently covered EEOICPA AWE site as is the Birdsboro Foundry Corporation.

Diana David is the librarian of the Steel Founders' Society of America ("SFSA"). Her contact information, from a e-mail to Dan McKeel dated June 10 2015, is as follows:

Diana David
780 McArdle Drive Unit G
Crystal Lake, IL 60014
O: (815) 676 - 6536
M: (205) 936 - 1703
E-mail: d david@sfsa.org

opines this is a private library. He is attempting to obtain the whole book from Ms. David via ILL. The alternate plan is for to do an ILL request from his local St. Charles, MO library. A listing Dan McKeel saw said the book is at the St. Louis Public Library.

The entry in the Directory of Steel Foundries..." book for Birdsboro Steel Foundry and Machine Company reads, in part, as follows:

"24,000,000 volt Betatron, 300 KVP X-Ray, 200 M.C. Cobalt 60 isotopes,
500 Milligram Radium."

A copy of this entire page is enclosed as page 2 of this communication.

Non Destructive Test Facilities: 24,000,000 volt Betatron, 300 KVP X-Ray,
200 M.C. Cobalt 60 Isotopes, 500 Milli-
gram Radium.

Birdsboro Entry Page 40 "Directory of Steel Foundries
in the United States and Canada 1961-62"
Cornell and Google Digitized Edition

★¹⁰⁵**BIRDSBORO CORPORATION**

Main Office and Foundry: Birdsboro, Pennsylvania

Telephone: JUNiper 2-2011



PERSONNEL: G. CLYMER BROOKE, *President*; JAMES M. HEPPENSTALL, *Vice President and Treasurer*; A. L. WENTZEL, *Vice President and Works Manager*; EDWARD C. PETERSON, *Vice President, Rolling Mill Equipment Division*; ROBERT W. FRANK, *Vice President*; LESTER E. LEINBACH, *Secretary*; BERTRAM A. KLINE, *Assistant Vice President*; CORTLANDT W. GUTHRIE, *Assistant to Vice President*; ABRAHAM S. HOTTEL, *Assistant Treasurer*; JOHN L. ROSE, *Works Controller*; RALPH W. BROWN, *Railroad Specialties*; ROBERT V. SIMPSON, *Railroad Specialties*; WALTER GUMPPER, *Purchasing Agent*; HUGH SHIFFER, *Assistant Works Manager*; RODERIC J. O'CONNOR, *Assistant Works Manager*; EDWARD R. LECKRONE, *Foundry Superintendent*; SAMUEL W. GEARHART, JR., *Chief Metallurgist*; A. B. McCULLOUGH, *Director of Industrial Relations*.

Type of Castings Produced: Navy, Ordnance, Ship and Marine, Railroad, Rolling Mill, Hydraulic Press, Rock Crushers, Dredge, Hydro-electric, Steel and Iron Rolls, and Miscellaneous Castings.

Size of Castings Produced: 1 to 100,000 lbs.

Produces: Carbon, Alloy Castings.

Melting Equipment: One 10-ton Basic Electric furnace.
One 20-ton Basic Electric furnace.
One 40-ton Basic Electric furnace.

Heat Treating Equipment: Available at Foundry.

Quenching Equipment: Available at Foundry.

Non Destructive Test Facilities: 24,000,000 volt Betatron, 300 KVP X-Ray, 200 M.C. Cobalt 60 Isotopes, 500 Milligram Radium.

Use of Product: 85% for sale; 15% for own use.

Number of Employees: 1,500.

Monthly Capacity, Net Tons: 2,860.

Maintains: Pattern Shop, Facilities for Machining Castings, Welding Shop, Cast-Weld and Fabrication Department, Roll Foundry.

Further investigation on the DOL/OWCP EEOICPA Statistics by State website that, as of 6/07/15, Birdsboro Corp. had 25 part B claims and 15 cases and only 1 payment. NIOSH performed 5 dose reconstructions and 0 zero, none) had a POC \geq 50%. The 5 completed dose reconstructions apparently were based on Appendix B Rev 0 dated 8/14/2007. There are no cases at NIOSH pending DR for the Birdsboro site as of 6/07/15.

Appendix B Rev 1 for Birdsboro was issued by NIOSH on 6/2/15 and was eight pages long. The document URL link is: www.cdc.gov/niosh/ocas/awedocs.html#b6000. David Allen was the author. Approval was by James Neton. There apparently is no assigned NIOSH Public Docket for Birdsboro. An SEC has apparently not been submitted for the Birdsboro AWE site. The Birdsboro Appendix B is listed under AWE site wide documents.

CDC - NIOSH AWE Site Wide Documents

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es DB | OfficeWorld | r, 40 / Pack | Alumni Libr... of Virginia | Commerce Bank | Rick W

r - Office of Workers' Compensation Programs (OWCP) | CDC - NIOSH A

Appendix B -- Birdsboro Steel & Foundry Company | 1892 -B-15 pages |
Revised June 2, 2015

None of the four classes of Birdsboro Corporation NDT radiography sources documented on pages 1 and 2 of this report were included in Birdsboro Appendix B Rev 0 (2007) or Rev 1 (June 2, 2015). This is a major oversight that needs to be corrected.

NIOSH needs to follow up on this report and research further (a) when each of the Birdsboro NDT source terms were acquired and used for NDT radiographic inspections, which are mentioned on page 3 of 8 of the Rev 1 Appendix B document, as follows:

<quote> Pieces of billets and rods from various rollings were sent to different locations for analysis and inspections. It is not known why Birdsboro received these pieces but it is assumed they were for metallurgical analysis.<end quote> I suggest the pieces of billets and rods were sent to Birdsboro because of the extensive array of NDT radiographic resources at that location as is documented by us herein and earlier.

If NIOSH is unable to bound all radiation source terms—24 Mev Betatron, 300 KVP X-ray, 200 millicurie Co-60 and 500 mg Radium (presumably Ra-226)—for all Birdsboro Corporation PA workers during the covered and residual contamination periods, then NIOSH should issue a §83.14 Special Exposure Cohort for the AWE site, according to OCAS-IG-003 and EEOICPA lawful guidance documents. NIOSH should also rework the five (5) completed Birdsboro dose reconstructions factoring in the 4 documented NDT radiography source terms delineated in this report.

The ABRWH should assign Birdsboro to a work group and ensure that NIOSH incorporates all four NDT radiation source terms into a revised Appendix B Rev 1. The Board needs to task SC&A to review Appendix B Rev 1. The Board needs to assure that NIOSH issues a PER based on Appendix B that includes the four NDT radiography source terms at Birdsboro.

Footnote: All four types of source terms now documented on the record at Birdsboro Steel Foundry Corporation in Birdsboro, PA, were also present at the General Steel Industries (GSI) AWE site located at 1417 State Street in Granite City, IL. The Board, NIOSH and SC&A have been deliberating about GSI Appendix BB Rev 0 and Rev 1 and PERS-024 and PER-057 since June 25, 2007 and still have not resolved all of the SC&A findings. Clearly, a similar deliberative process needs to take place at the Birdsboro PA AWE site based on Rev 1

Birdsboro Corporation of Pennsylvania -- Four NDT Radiographic Sources

(6/2/15) of Birdsboro APPENDIX B and the new information on NDT radiographic sources terms now documented at three time periods: 2007, 2011-12 and June 2015.

Respectfully submitted,

// SIGNATURE ON FILE

6/13/15

Daniel W. McKeel, Jr., MD
GSI, Dow (IL) and Texas City
Chemicals SEC Co-petitioner
SINEW cofounder
Retired Assoc. Prof. of Pathology & Immunology
Washington Univ. Sch. Med. St. Louis, MO

Date

Current Contact Information:

Schuetz, P. 70 of 72 (Sam Glavin Report)

 **25 MEV BETATRON
INDUSTRIAL INSTALLATIONS***

Rock Island Arsenal
Rock Island, Illinois

Allis-Chalmers Company
Milwaukee, Wisconsin

Piscatinny Arsenal
Dover, New Jersey

American Cast Iron Pipe Company
Birmingham, Alabama

Blaw Knox Company
East Chicago, Indiana

Watervliet Arsenal
Watervliet, New York

* Birdsboro Corporation
Birdsboro, Pennsylvania

Pittston
Glassport, Pennsylvania

Hercules, Incorporated #1
Magna, Utah

Esco Corporation
Portland, Oregon

National Forge Company
Erie, Pennsylvania

ARO, Incorporated
Arnold Air Force Station, Tenn.

Aerojet General Corporation
Sacramento, California

Hercules, Incorporated #2
Magna, Utah

Blaw Knox Company
Coraopolis, Pennsylvania

Lockheed Propulsion Company
Redlands, California

Valve Castings Company
Columbus, Ohio

Clark Equipment Company
Lima, Ohio

Hercules, Incorporated #3
Magna, Utah

Naval Weapons Station
Concord, California

Hercules, Incorporated
Cumberland, Maryland

NASA - John F. Kennedy Space Center
Kennedy Space Center, Florida

Milwaukee School of Engineering
Milwaukee, Wisconsin

Naval Weapons Center
China Lake, California

Pueblo Army Depot
Pueblo, Colorado

Letterkenny Army Depot
Chambersburg, Pennsylvania

Naval Supply Center
Charleston, South Carolina

Polaris Missile Facility Pacific
Silverdale, Washington

Chicago Bridge and Iron Company
Birmingham, Alabama

Thiokol Chemical Corporation
Elkton, Maryland

General Steel Castings Company
Granite City, Illinois

Redstone Arsenal
Huntsville, Alabama

Armco Steel Corporation
Torrance, California

IRSIA
Seraing, Belgium

British Admiralty
Coulport, Scotland

RESEARCH

University of California (AEC)
Los Alamos, New Mexico

University of Illinois
Champaign, Illinois

University of Illinois (300 MEV)
Champaign, Illinois

Naval Research Laboratory
Washington, D.C.

ATC Betatron Corporation
West Allis, Wisconsin

University of Sao Paulo
Sao Paulo, Brazil

*ATC BETATRON CORP.
is successor to

The ALLIS - CHALMERS
Betatron Department



BETATRON CORPORATION

P.O. BOX 2639

• WEST ALLIS, WISCONSIN 53214 •

PHONE: (414) 475-2857

Schnitz p. 31 of 72 (San Grove Report)

25 MEV BETATRON MEDICAL and INDUSTRIAL INSTALLATIONS

MEDICAL THERAPY

Memorial Hospital
New York, New York
M.D. Anderson Hospital
Houston, Texas
Washington University Medical School
St. Louis, Missouri
Columbia-Prbyterian Medical Center
New York, New York
Madison Radiation Center
Madison, Wisconsin
Wakari Hospital
Dunedin, New Zealand
Ontario Cancer Institute
Toronto, Canada
Mount Sinai Hospital
New York, New York
Loeffler Radiation Center
Massillon, Ohio
Ohio State University Hospital
Columbus, Ohio
Lester E. Cox Medical Center
Springfield, Missouri
University of Louisville
Louisville, Kentucky
Milwaukee County General Hospital
Milwaukee, Wisconsin
Mount Zion Hospital
San Francisco, California
Temple University Hospital
Philadelphia, Pennsylvania
St. Francis Hospital Center
Beech Grove, Indiana
Presbyterian Medical Center
Denver, Colorado
Methodist Hospital
Memphis, Tennessee
St. Joseph's Hospital
Tampa, Florida
University of North Carolina
Chapel Hill, North Carolina
Veterans Administration Hospital
Hines, Illinois
Quastembert Clinic
Paris, France
Emory University Clinic
Atlanta, Georgia
Veterans Administration Hospital
Bronx, New York
Children's Hospital
San Francisco, California

Loma Linda University
Loma Linda, California
USC Medical Center
Los Angeles, California
Dr. G. ReBoul
Avignon, France
White Memorial Medical Center
Los Angeles, California
Broward General Hospital
Ft. Lauderdale, Florida
University of Oregon Hospital
Portland, Oregon
St. John's Mercy Hospital
St. Louis, Missouri

INDUSTRIAL RADIOGRAPHY

Rock Island Arsenal
Rock Island, Illinois
Allis-Chalmers Company
Milwaukee, Wisconsin
Picatinny Arsenal
Dover, New Jersey
American Cast Iron Pipe Company
Birmingham, Alabama
Blaw Knox Company
East Chicago, Indiana
Watervliet Arsenal
Watervliet, New York
* Birdsboro Corporation
Birdsboro, Pennsylvania
Pittron
Glassport, Pennsylvania
Hercules, Incorporated #1
Magna, Utah
Esco Corporation
Portland, Oregon
National Forge Company
Erie, Pennsylvania
ARO, Incorporated
Arnold Air Force Station, Tenn.
Aerojet General Corporation
Sacramento, California
Hercules, Incorporated #2
Magna, Utah
Blaw Knox Company
Coraopolis, Pennsylvania
Lockheed Propulsion Company
Redlands, California
Valve Castings Company
Columbus, Ohio
Clark Equipment Company
Lima, Ohio

Hercules, Incorporated #3
Magna, Utah
Naval Weapons Station
Concord, California
Hercules, Incorporated
Cumberland, Maryland
NASA - John F. Kennedy Space Center
Kennedy Space Center, Florida
Milwaukee School of Engineering
Milwaukee, Wisconsin
Naval Weapons Center
China Lake, California
Pueblo Army Depot
Pueblo, Colorado
Letterkenny Army Depot
Chambersburg, Pennsylvania
Naval Supply Center
Charleston, South Carolina
Polaris Missile Facility Pacific
Silverdale, Washington
Chicago Bridge and Iron Company
Birmingham, Alabama
Thjokol Chemical Corporation
Elkton, Maryland
General Steel Castings Company
Granite City, Illinois
Redstone Arsenal
Huntsville, Alabama
Armco Steel Corporation
Torrance, California
IRSA
Seraing, Belgium
British Admiralty
Coulport, Scotland

RESEARCH

University of California (AEC)
Los Alamos, New Mexico
University of Illinois
Champaign, Illinois
University of Illinois (300 MEV)
Champaign, Illinois
Naval Research Laboratory
Washington, D.C.
ATC Betatron Corporation
West Allis, Wisconsin
University of Sao Paulo
Sao Paulo, Brazil

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