WESTINGHOUSE LIABILITY OUTLINE - 7/1/97

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KNOWLEDGE/FAILURE TO WARN

I. Westinghouse had actual and constructive knowledge concerning the dangers of asbestos.

A. Answers to Interrogatories, Kanawha: Westinghouse admits to knowledge about the hazards of asbestos as early as the 1940's

B. C.W. Bickerstaff Deposition (5/29/92)

Early industrial hygienists, E.C. Barnes and Wilbur Speicher were members of IHF (p. 63)

Westinghouse was first aware of the of the association between asbestos & cancer in the early 1940's (p. 67)

Westinghouse has been a member of the National Safety Council since its inception (p. 161)

C. Membership in Industry Organizations Westinghouse had access to information concerning the dangers of asbestos since the 1930's

- Air Hygiene/Industrial Hygiene/Industrial Health Foundation (IHF)

Exhibits 5993, 26200: Westinghouse was one of the members of the Konicide Club, the birth name of the IHF. At a Konicide Club meeting in 1933, Dr. Leroy Gardner of the Saranac Labs in Saranac, NY gave an address on "What We Know About Asbestos." Westinghouse was a charter member of the IHF in 1936 and maintained membership until 1984.

Exhibits 7188: Joseph Dilworth, Westinghouse's President served as a member of the IHF Board of Directors for many years.

Exhibits 7213, 7398, 7399: Dr. T. Lyle Hazlett, the Medical Director for Westinghouse served on the Air Hygiene Foundation Medical Committee. He authored

articles regarding occupational dust diseases in the late 1930's, early 1940's

- National Safety Council.

Exhibit 1450: C.B. Auel from Westinghouse served on the Executive Committee from 1934-35 and was a past president; one session focused on the Saranac Laboratory studies

- National Electrical Manufacturers Association: member since 1926 (Answers to Interrogatories, Kanawha)

D. Westinghouse received and presumably reviewed information from other sources advising of the hazards of asbestos

- Exhibit 26299.64: 1936 Article "Asbestosis" -- A.J. Lanza, M.D. (Met-Life Asst. Medical Director)

- Exhibit 26299.65: 1947 Article: "The Effect of Asbestos of Tissue Cultures ..." -- admitted in Kanawha

- Exhibit 26299.169: PA Dept. of Labor & Industry -- Special Bulletin #42 (1937) "Asbestosis"

- Exhibits 26299.168; 26299.170: Sumner Simpson correspondence

E. Westinghouse Internal Documents -- show that Westinghouse knew of the hazards of asbestos and was familiar with proper industrial hygiene procedures

- Exhibit 6745 -- 1946 Process Specification containing caution clause for asbestos, advising use of respirators

- Exhibit 6981

1946 Letter from E.C. Barnes to S. Phila. Works -- use of asbestos for insulating steam turbines presents a potential health hazard

Westinghouse was aware of the need for good ventilation and dust collection systems in all areas where asbestos dust was present.

PLAINTIFF'S EXHIBIT USX-227

The industrial hygiene department recommended the installation of the ventilation and dust collection system so that Westinghouse could "effectively defend" workers' compensation claims that might arise in the future.

- **Exhibit 6883** -- In 1948 Westinghouse recognized the hazards of bystander exposure

- Exhibit 6984 -- Safe Practice Data Sheet for Asbestos (1953)

Westinghouse knew that the asbestos fibers which caused disease were those which could not be seen. Persons working in asbestos dust should wear airline respirators.

- **Exhibit 6985** -- In 1952 William Speicher acknowledges that asbestosis could be far advanced before x-ray could detect it.

- **Exhibits 7398 & 7399:** T. Lyle Hazlett (Westinghouse's Medical Director) articles advising that it was good industrial hygiene to (1) investigate the hazards of a new product before selling it and (2) warn the workers and educate them about the hazards to which they may be exposed

II. None of the information regarding the hazards of asbestos, nor advice of how to protect against those hazards was ever communicated by Westinghouse

A. In fact, Westinghouse's own corporate witnesses testified that they were never advised by Westinghouse of any of the hazards of asbestos. Even though Westinghouse had Safe Practice Data Sheet A-20 for asbestos [Exhibit 6984] dating back to 1953, there is no indication that it was ever disclosed to anyone.

- Gate Transcript in Abrams pg. 9810, 9869-9872
  He spent 40 years designing Westinghouse marine turbines; testified as Westinghouse's own corporate witness on turbines. He was never told by Westinghouse that asbestos was hazardous. When he started with Westinghouse in 1953 he was never shown the Asbestos Safe Practice Date Sheet. Westinghouse never placed a warning on its turbines regarding asbestos.
- Baldwin Transcript in Abrams pgs. 9065-9067; Deposition
- Paterak Deposition pgs. 61-62
- Strauss Deposition (11/9/93) pgs. 37-38, 87
  He does not specifically recall receiving any written

communication from Westinghouse regarding the dangers of asbestos until the 1990's
- Canales Deposition (11/4/93) pg. 46
- Burr Deposition pgs. 34-37
  He was Westinghouse's Medical Administrator and responsible for drafting the protocols for Westinghouse's physicians responsible for conducting physical exams of workers exposed to asbestos
- Gladfelter Deposition pgs. 32, 82, 106
- Burlew Deposition
- Goumas Deposition
- Van Anderson Deposition
- Russell Senkow Deposition (7/21/93)
  He worked at Westinghouse Lester Plant from 1941-1986, but never saw SPDS A-20 (asbestos)
- Mort Dorfman Deposition
- Wayne Hamond Deposition
- C. W. Bickerstaff Deposition (5/29/92) pgs. 103, 106
  Material Data Cards may have contained warnings, but they were only for the Westinghouse material engineers, not placed on the products
- Jeffrey Bair correspondence (see below)
  reveals a concern about liability/"smoking guns" because of Westinghouse's failure to warn about dangers after obtaining knowledge from early industrial hygienists -- Admission

B. "Good Corporate Citizen" Defense -- inquiries to asbestos manufacturers who were in a better position to know and warn

- Westinghouse will ask the jury to infer that had it known about the dangers of asbestos, it would have done the right thing

Defense Exhibits WEC 19, WEC 20 & WEC 21 -- • Letters from the late 1960's and early 1970's wherein William Speicher requested information from some manufacturers of asbestos-containing products regarding the hazards of asbestos

- However these documents can also be used to raise a question in the minds of the jury as to the sincerity of these requests

Why would Westinghouse write to the manufacturers in the late 1960's inquiring about what they already knew since the 1930's and why would they remain silent when the replies received from the manufacturers were contrary to the information known by Westinghouse?

USE OF ASBESTOS

I. Member of the Asbestos Industry

A. A key part of Westinghouse's defense is that it is a unique defendant because it was not part of the asbestos-industry, but was a mere user or supplier of asbestos-containing products and therefore not in a position to warn about the hazards of asbestos. However, Westinghouse's own documents show that Westinghouse is not such a naive player.

? • **Exhibit 6771: Westinghouse has been involved with asbestos since 1908**

• Westinghouse admits to manufacturing or distributing numerous asbestos-containing products (Answers to Interrogatories, Kanawha)

• **Exhibit 7137:** Westinghouse itself manufactured asbestos-containing insulation products offered for sale under the Tuffernell name

• Westinghouse maintained voluminous Material Cards and Process Specifications showing the extensive use of asbestos

Material Cards/Purchasing Dept. Specs. & related correspondence
- cloth
- paper, millboard, sheet
- block
- pipecovering
- sound deadener
- fiber
- pulverized asbestos
- fiber spray
- blankets
- gaskets
- packing
- yarn
- micarta
- moldarta sheets
- wire-inserted cloth
- micarta tubing, micarta bars
- tape
- brake lining
- wire
- ebony finish asbestos lumber

II. **Products at Issue**

A. Per Bruce Mattock, our clients can identify the following Westinghouse asbestos-containing products: turbines and ancillary insulation, micarta/panel board, arc chutes, cranes (brakes, component parts), switch gears and control panels.

B. With the exception of turbines and Micarta, Westinghouse has not produced a 30(b)(6) witness to discuss these products. This is currently the subject of a Motion to Compel.

C. Westinghouse has provided a list of turbine sties (Mr. Goldberg has this list)

D. There are outstanding Requests for Admission concerning the location of Westinghouse cranes.

III. Westinghouse turbines required the use of asbestos-containing insulation. At the very least Westinghouse ordered the use of specified asbestos-containing products on its turbines and sometimes supplied the insulation materials to the field. Westinghouse provided technical direction to the insulation contractors or insulated the turbines through their own service department.

A. Westinghouse manufactured its own asbestos-containing blankets at its Lester facility.

✓ • **Exhibit 7459: "These Tailors Make 'Topcoats' for Turbines"** - Westinghouse News 5/30/50

B. Turbine Drawings

• Art Glatfelter Deposition (pgs. 198-203): Westinghouse designed its turbines to be insulated with asbestos. Westinghouse engineers prepared detailed drawings of each turbine manufactured and sold by Westinghouse. The drawings went into great detail about the application of insulation.

• The type, brand name of the insulation and method of application was specified on the drawing by reference to process specification and material card numbers. The insulation included block, cement, cloth, gaskets, paste, blankets
• **Exhibits 6692, 6741, 6745, 6771, 6808, 7333, 7343**

C. Process Specs.

- Exhibit 6798, 6848: Application of Asbestos Compound by Spraying
- Exhibit 6797: Insulation of Steam Turbine and Associated Equipment
- Exhibit 6745: Making & Attaching Glass-Filled Asbestos Cloth Covered Thermal Insulating Blankets, Mattresses or Bags for Steam Turbines
- Carl Canales Deposition (11/4/93): adherence to process specs. was mandatory, no deviations (p. 78-79)
- Morton Dorfman Deposition: Asbestos insulation process specifications, unless otherwise specified are generally applicable or standard (pgs. 58-61).

D. Standards Book -- Exhibit 6771

- Westinghouse routinely provided insulation materials when it sold its turbines to customers.
- Five different types of contracts relating to the insulation of Westinghouse turbines. Each of these classes involves, at a minimum, the provision of the turbine insulation by Westinghouse.
  Also see Strauss Depo., Paterek Depo., Glatfelter Depo, Hamond Depo & Dorfman Depo.
- Insulation Contractors: Westinghouse sought bids from insulation contractors for the purchase of asbestos-containing insulation materials even when it did not have the installation contract and only the "TD of I/Supervision only contract." If those materials were not desired, a deduction was made in the contract. See Defense Exhibits WEC 144, 145 and Burlew Deposition.

E. Even when Westinghouse did not install or supply the insulation, it kept strict control over its application.

Steam Service Data Letters

✓ • Exhibit 7468: (12/27/62) Turbine Insulation to be applied in the field to Westinghouse turbines. (The memo states that "all district offices

have on file a standards book containing Lester Works Standard 920.1-920.5 on Insulation. Attached to the Steam Service Data Letter is a list of the currently approved insulation materials. The memo concludes with the admonition that "only insulation materials approved by Westinghouse will be permitted on Westinghouse turbines and piping.")
Also see Art Glatfelter Deposition

- Exhibit 26299.221: (1/30/69) Asbestos gasket sheets for cross-over pipes

G. Steam Supervisors' Letter No. 50-8
6/14/50: describes shipment of block insulation by Westinghouse Service Dept. to the field for application by the customer as well as the option to contract for the installation of insulation.

H. • Exhibit 26299.214: Manufacturing Instruction for Insulation Blankets on Gas Turbines

✓ I. Exhibit 6981: Letter: Barnes to Stegemarten (1/11/46):
use of asbestos for insulating steam turbines presents a potential health hazard (also proves early knowledge

J. Russell Senkow Deposition (7/21/93) (Lester Plant worker)
The following asbestos-containing products were used on Westinghouse turbines used : pipe covering, block, powder/paste, gaskets (p.20-21)

K. Carl Canales Deposition (11/4/93)
With an installation contract, insulation was one of the necessary components of the turbine that would be put on line Westinghouse would specify in great detail the insulation to be used. (p. 62)

Outer cylinders were insulated from the high pressure & intermediate pressure sections. Cross-over piping, inlet piping, steam chest and throttle valves were insulated. Block insulation or blankets and a grey paste were used. Heat resistant gaskets were also used. A spray-on insulation material was applied to the outer cylinder. Asbestos-containing industrial Micarta was used in Westinghouse generators (p. 101-106)

Insulation would have to be removed from the turbines during outages which occurred approx. every 3-5 yrs. (p. 122-127). He observed insulation being removed from turbines at Sammis (early - late 1970s), & maybe West Penn Power, Hatfield, Ohio Edison, Burger & Toronto

III. Many asbestos products and turbines were used or distributed in West Virginia and other relevant geographical areas

A. **Exhibit 26299.398:** Customer Assignment List

B. **Exhibit 26299.223:** Power Engineering document

C. Edward Peterak Deposition (11/2/93)
Westinghouse turbines were at Mt. Storm P.S. (p. 86)

D. Carl Canales Deposition (11/4/93)
Westinghouse turbines were at Sammis P.S, American Electric Power Co., Beaver Valley P.S. #1, Burger P.S., Dilles Bottom P.S., Harrison P.S., Harrison Power Plant, Hatfield Ferry P.S, Mt. Storm, Niles P.S., PPG Natrium, Riversville, Toronto P.S., Weirton Steel, Westvaco (p. 26, 65), Hatfield P.S., Armstrong P.S., Mitchell P.S. (p. 67)

E. Peter Strauss Deposition (11/9/93)
He had some involvement in the installation of insulation on the Harrison P.S. turbine in Aug. 1971 according to Westinghouse drawings -- thinks it was JM (p. 18-21). He was certain it was asbestos (p. 33) The vast majority of the time the process specs. & drawings were followed. (p. 26). There were other Exhibit A jobsites where Westinghouse turbines were installed. (See Ex. 2 to Strauss depo)

F. Mitchell P.S. Contract Documents (Defense Exhibits WEC ____)
Westinghouse will install insulation

G. Art Glatfelter Deposition

H. Wayne Hamond Deposition

I. Ray Burlew Deposition

IV. Micarta

A. Product line of high pressure thermoplastic laminates, included decorative and industrial.

- **Defense Exhibit WEC 64:** Industrial Micarta's "genesis came from the need of the late George Westinghouse for an insulation material more adaptable than mineral mica."

- Only six grades contained Asbestos:
  - 200 (asbestos cloth base)
  - 239 (asbestos paper base)
  - H-9491 (asbestos cloth base)
  - H-15017 (asbestos cloth base)
  - 93 (asbestos cloth base)
  - 94 (asbestos paper base)

B. Use

- Could be rolled into plates, machined into shapes, made into tubing or molded -- **Exhibits 6740, 6774**

- Used in instances where heat resistance and electrical insulation properties were required -- **Defense Exhibits WEC 62, 65**

- Used to make wedges for use in generators -- **Exhibit 9060**

- All grades except 94 were advertised as having good machining qualities; recommend the use of band sanders, drills and sanders in order to cut, shape of smooth industrial Micarta -- **Exhibits 6740, 6774**

C. None of the Micarta Data Books, etc. contained any warnings regarding asbestos

D. Encapsulation Defense

- **Exhibit 7010** -- shows that machining asbestos-containing industrial Micarta created dust
- **Exhibit 6996** -- Air sample taken from sawing operation showed 17 fibers per cc, well over the OSHA limit of 5 fibers per cc in 1973

E. Baldwin Deposition

LATE USE/SUBSTITUTION PROGRAM

I. Westinghouse continued to use asbestos into the late 1970s and mid 1980s and only took action to look for substitutes for asbestos and to warn about the hazards when forced to do so by government regulation (OSHA). Furthermore, Westinghouse attempted to get around government regulation by failure to record, etc.,

✓ A. **Exhibit 7016:** Large Rotating Apparatus Division Report (1976) discussing

the department's attempt to eliminate the use of asbestos

• Admitted that the hazards of breathing large quantities of asbestos dust has been recognized since ancient Rome and that the dangers had become widely recognized as an industrial hazard in 1936

• Contained a long list of Westinghouse products in which asbestos was still being used in 1976.

B. Exhibit 7023: (contradicts information in Exhibit 7016)

• "Until the early 1970's asbestos was considered to be relatively safe..."

• Reveals that litigation costs were a motivator for action regarding asbestos

C. Exhibit 26299.135: Letter: Glover to Harrington (2/13/79)
Order placed 2/9/79 for asbestos powder -- "Please be advised that producer's records if sought out by government agencies will easily reveal who is still using this product"

D. Exhibit 7462: Letter: Light to Saunders (1/26/84)
"Recent Shop Safety Tour revealed the continued use of asbestos material." Will look for substitutes.

E. Asbestos Replacement & Education Programs
Not implemented until the late 1970s and mid 1980s

• Exhibit 7457
• Exhibit 7033: 1983 worker training video regarding asbestos
• Exhibits 7883, 7743: Westinghouse Safety & Health Department did not begin to review problems of employee exposure until the 1980's.

F. Exhibit 26299.248: Memo: Griffenhagen to Marchyn (10/19/76)
Asbestos exposure: "a goal of a complete switch over with due consideration to overall financial impact"
(Bates # 09061027-30)

G. Exhibit 26299.265: Letter: Shepard to Golaszewski, et al.
"drawings should be changed to eliminate the ordering of asbestos. Drawings showing Material specs. followed by the

word asbestos may be detected & not ordered, however, any procedure that is dependent on memory is subject to being missed" (Bates # 14004651-6)

H. Exhibit 26299.290: Memo to Jay Kratz (11/28/84)
primer & sound deadeners in turbine enclosures: "must have escaped asbestos purge" at Westinghouse (Bates # 30002180)

I. OSHA Citations

Exhibit 7009: (1/12/76) -- Excluded in Kanawha

Exhibit 26299.101: (8/4/77)

Exhibit 7030: (9/26/80) -- Admitted in Kanawha

II. Westinghouse delayed warnings

• Exhibit 6998: Letter: Botts to Shelby (4/30/73): Mr. Harrington will delay as long as possible using the labels

WILLFUL, WANTON CONDUCT (PUNITIVE DAMAGES)

I. Document Destruction Sweep of "Smoking Guns"

A. Jeffrey Bair Correspondence -- Admitted in Kanawha

• Exhibit 7172: November 5, 1987 memo from the Westinghouse R&D Center to E.P. Massaro, Westinghouse Director of Environmental Affairs listing the corporate activities for October, 1987, among which were: "Assisted Mr. Jeff Bair, Law Department, assess the historical industrial Hygiene records and the impact on Westinghouse from the High Risk Notification Legislation."

• Exhibit 7174: November 19, 1987 memo from Jeffrey J. Bair, Attorney, to Wayne Bickerstaff, Manager Industrial Hygiene indicating that a review of the industrial hygiene documents has been completed and asking for a recommendation as to which files should be destroyed.

• **Exhibit 7171:** Early December 1987 memo drafted by Jeffrey Bair and C.W. Bickerstaff setting forth recommendations (destruction) for what is referred to as "smoking gun" documents.

• **Exhibit 7173:** December 29, 1987 memo from C.W. Bickerstaff to S.R. Pitts proposing as a 1988 Industrial Hygiene objective that the "document retention/reduction of historical corporate and plant industrial hygiene records "be completed by the second quarter."

• **Exhibit 7171.1:** January 22, 1988 rough draft of memo by Jeffrey Bair for review and execution by Wayne Bickerstaff implementing the document retention/destruction program.

• **Exhibit 7055:** January 29, 1988 actual memo sent by C.W. Bickerstaff to J.W. Fisch
  • copies to S.R. Pitts, J.J. Bair, D. Ayers and P. Palmieri).
  •Bickerstaff says that entire project except for #4 will be completed by June 1988
  • Fisch distributed this memo to D. Ayers and P. Palmieri on 2/17/88 -- **Exhibit 7175.1**

• **Exhibit 7171.2:** March 3, 1988 handwritten memo by Jeffrey J. Bair which "[i]nformed Wayne ... begin discarding documents in Nos. 5, 6 & 7."

• **Exhibit 7171.3:** March 8, 1988 memo from Jeffrey J. Bair to S.R. Pitts. "Wayne Bickerstaff and his staff are currently discarding documents as per our retention guidelines."

B. Westinghouse's Response to Smoking Gun Memos

• Westinghouse will argue that the Bair memo constitutes no more than a draft memo by an entry level attorney that was never completed or implemented. In support, Westinghouse will offer a February 9, 1988 document which purports to limit the scope of the document destruction plan. However, this document is contradicted by Fisch's 2/17/88 transmittal of the 1/29/88 Bickerstaff memo to Palmieri and Ayers.

II. Westinghouse deliberately failed to document OSHA violations

• **Exhibit 7418:** Letter: Ingham to Brooks (10/21/75) -- Excluded in Kanawha, but could be revisited if Westinghouse puts on a good corporate citizen defense

III. Westinghouse deliberately failed to disclose air sampling results to employees by cloaking the studies with confidentiality privilege

• **Exhibit 7021** -- Excluded in Kanawha (general badness document)

IV. Westinghouse failed to inform its own engineers and heath and safety personnel until forced to do so by OSHA and even then did so reluctantly (See above)

• **Exhibit 7023:** Letter to all Westinghouse Division Managers soliciting comments that could "help influence the government agencies" (CPSC & EPA) that intend to restrict the use of asbestos

V. Westinghouse continued specification and sale of asbestos containing products after it knew of the hazards of asbestos (See above)

WESTINGHOUSE PROFITS

I. Financial Information (Annual Reports Form 10-K) -- deferred ruling on admissibility in Kanawha until plaintiffs established a prima facie punitive damages case

II. Westinghouse Asbestos Abatement Service

A. Westinghouse profited at both ends --installing asbestos for profit and then removing asbestos for profit

• **Exhibits 7218, 7470.1 - 7470.23** -- abatement documents were excluded in Kanawha