

769394 - 769508

In # 80 769661 → 769853 to do

In # 81 769854 → 770165

In # 82 770553 → 770861

A

769509 - 769637

~~769638~~

769638 - 769660

~~770166~~

770166 - 770381

~~770382 - 770472~~
~~770473 - 770505~~

770382 - 770472

B

770473 - 770505

770506 - 770552

All of 83

C [742959 - 743027 ✓

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769394-769395

DSNO: NRC 00006755 - 0000 6756

EXNO:

TYPE: Letter

AUTH: Legro

INST: EPA

TITL: -

PAGS: 2

DATE: 750816

DIRC: -

SRCE: West-Pro

KWDS: pcb, notification, EPA, enforcement, disposal,

KNMS: Wassersug/EPA

FLD1:

FLD2:

COMM: [mostly legible.
Letter to Westinghouse requesting information on pcb use by
Westinghouse, ~~Waters~~ Including: sources, quantities, uses, ultimate
disposition of pcb's. Information must be supplied within 14
days regardless of confidentiality within the company. Requests
Information for several years. ~~Waters~~

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769396 - 769411

DSNO: NPC0000 6757 - 00006772

EXNO:

TYPE: Instructions

AUTH: -

INST: Westinghouse

TITL: Instructions for handling Inerteen Insulating Fluid P.D.S. 54201CM and
Installation and Maintenance of Inerteen Transformers

PAGS: 16

DATE: 760600 (supersedes 760200)

DIRC: -

SRCE: West. Pro.

KWDS:

KNMS: Health, Environment, Inerteen, ~~room~~ dermatitis, safety

FLD1:

FLD2:

COMM: Characteristics of Inerteen (AFNO 769398), Environmental Considerations (persistent in environment, threat to wildlife, non-toxic to humans, destroy by incineration), Handling precautions (Inerteen vapors irritate mucous membranes, in high concentrations, highly ~~toxic~~ toxic if ingested, minor moderate skin irritant but can be absorbed through skin. Repeated skin contact may result in severe dermatitis), lists protective equipment to be used in certain situations: respirators, neoprene coated aprons + gloves, hand creams. Wash skin after contact with Inerteen. Storage, sampling, Reconditioning, Testing of Inerteen. Installation and Maintenance of Inerteen Transformers

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769412
DSNO: NAE 00006773
EXNO:
TYPE: Bulletin
AUTH: Keiser
INST: Westinghouse
TITL: -
PAGS: 1
DATE: 761122
DIRC: -
SRCE: West. Pro.
KWDS: pcb, Askarel, maintenance, disposal, pollution
KNMS: -
FLD1:
FLD2:
COMM: Letter from Keiser notifying that Westinghouse has determined that some oil filled transformers contain minute quantities of pcb as a pollutant. Will not affect performance of transformer, but may be a problem for maintenance and disposal. Recommends testing for pcb's prior to maintenance or disposal, also recommends testing of oil storage facilities for pcb's.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769413 - 769419

DSNO: NPC00006774 - 00006780

EXNO:

TYPE: Paper

AUTH: Dickson / Environment Canada

INST: International Journal of Environmental Conservation

TITL: Biodegradation, A Solution to Toxic Organic Compounds

PAGS: 7

DATE: -

DIRC: -

SRCE: West. Pro.

KWDS: biodegradation, pcb, Aroclor, pollution,

KNMS: -

FLD1:

FLD2:

COMM: Most (not all) of document readable. Biodegradation of PCB's was found to occur at the PCB/water interface. PCB biodegradation limited by the amount of PCB surface area exposed to water. This research found that keeping PCB's in a fine suspension greatly increases rate of PCB biodegradation (Aroclor 1254 went from hundreds of thousands ppb to less than 20 ppb in 1 week). This technique may be applicable to reducing PCB content in industrial waste - may not necessarily apply to current environmental contamination situations. 4 References.
Better copy of this on PFNO 769677-769683.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769 420 - 769 421

DSNO: NRC 00006781 - 00006782

EXNO:

TYPE: letter

AUTH: Pickard

INST: Indiana State Board of Health

TITLE: Pcb's, Bloomington Indiana

PAGS: 2

DATE: 760324

DIRC: Wills / Westinghouse

SRCE: West. Pro.

KWDS: Pollution, Pcb, discharge, Effluent, Bloomington, regulation

KNMS: Sawyer / Westinghouse; Stephens / Indiana State Board of Health; Williams / Indiana Division of Air Pollution Control; EPA

FLD1:

FLD2:

COMM: mostly readable.
recalls meeting between Sawyer and Representatives from EPA and the Indiana Division of Water Pollution Control re. methods to reduce air & water Pcb discharge. 1) Water discharge: In the interest of protecting downstream users and farmland where sewage sludge is spread, Westinghouse must reduce Pcb water discharge as low and as soon as possible. Lists problem areas/effluents. Expects submission and completion of plans by October 1976. 2) Air effluent: Westinghouse must hire EPA or firm to monitor to determine extent of problem (must coordinate with Indiana Division of Air Pollution Control). Short time schedule reflects seriousness of problem.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769422 - 769423

DSNO: NPL00006783 - 00006784

EXNO:

TYPE: memo

AUTH: Sawyer

INST: Westinghouse

TITL: Inerleen Control - 1976

PAGS: 2

DATE: 761214

DIRC: Williams

SRCE: West. Pro.

KWDS: Inerleen, Pcb, Pollution, effluent, discharge, regulation,

KNMS: EPA, Indiana state Board of Health

FLD1:

FLD2:

COMM: Summarizes meeting with EPA and Indiana State Board of Health and resulting consequences for Westinghouse (see pfno 769420). Submitted revised schedule for completion of projects designed to reduce pcb effluent discharge from Bloomington. Projects include Isolation Sheds for waste storage, solvent cleaner for capacitor, and Purge pump water recycle system. Interim projects included wiping capacitors prior to wash, drying ovens prior to use, and incinerating vapors in their boiler (note!!! is this proper incineration of waste pcb's?). Despite problems, projects were completed on or near the target date. States he has

maintained a good working relationship with the Indiana State Board of Health.
Also has coordinated project to phase-in Wemcol (Pcb replacement fluid?).

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769424-769435

DSNO: NRC00006785-00006796

EXNO:

TYPE: Paper (Presentation)

AUTH: ?

INST: Westinghouse

TITL: Power Capacitors

PAGS: 12

DATE: -

DIRC: -

SRCE: West. Pro.

KWDS: Capacitor, Pcb, biodegradability, Arcolor, healthy environment

KNMS: Sawyer, Kearns,

FLD1:

FLD2:

COMM: mostly readable.
Looks like draft version of document seen previously several times.
Capacitor - what it is, how it is constructed (for same rating, a dry capacitor must be 8x the size of a Pcb capacitor); Pcb's - what it is, different formulations have different Chlorine content (1254 vs. 1242 vs. 1016); Characteristics of a good substitute fluid (none as good for fire safety); common uses of Pcb capacitors; Drawings (Draft slides: capacitor, Pcb's, List of % Chlorine content for Arcolors, List of desired characteristics for pcb replacement fluid)

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769436

DSNO: NP00006797

EXNO:

TYPE: PO (appropriation Request)

AUTH: -

INST: Westinghouse

TITLE: Environmental Control of "Inerteen" - PCB

PAGS: 1

DATE: 731200

DIRC: -

SRCE: West. Pro.

KWDS: Capacitor, Pcb, inerteen, effluent, appropriation, pollution

KNMS: Sauter, Simpson, Williams, Brusoski, Babcock, Sawyer, (3 others unreadable)

FLD1:

FLD2:

COMM: cost for capacitor Impregnating system (to reduce pcb effluent). Also known as manifold fill system.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769437

DSNO: NPC 0000 6798

EXNO:

TYPE: Presentation

AUTH: Brittain

INST: Westinghouse

TITL: Westinghouse statement to solid waste committee

PAGS: 1

DATE: 72 0803

DIRC: -

SRCE: West. Pro.

KWDS: pcb, pollution, landfill, disposal,

KNMS: -

FLD1:

FLD2:

COMM: Statement to Environmental Control Commission (Indiana state? Monroe Co.?) on Westinghouse use of the county landfill to dispose of solid waste containing PCB's. To question of whether Westinghouse considered alternate sources of disposal, Brittain answered that it was considered but no acceptable ones were known of. Since then, have reopened investigation and have located "one or two" locations in the U.S. with disposal potential for Inertec. Working on finalizing arrangements. Westinghouse has ceased disposal of PCB material in landfill; will not resume unless Westinghouse appears before the solid waste subcommittee. Westinghouse states suggest PCB material in landfill will not enter the local environment, But is looking to dump elsewhere to eliminate concern that WEC could possibly be a source of contamination. (Yeah Right.) (river)

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769438 - 769441
DSNO: NPC00006799 - 00006802
EXNO:
TYPE: Bulletin
AUTH: slaut, McClain
INST: Westinghouse
TITL: Inerteen and Environmental Contamination.
PAGS: 4
DATE: Unreadable (Monsanto letter dated 700216)
DIRC:
SRCE: West. Pro.
KWDS: Environment, Inerteen, Aroclor, Pydraul, pollution, disposal, incineration, notification,
KNMS: Monsanto, Sheppard/Westinghouse, Olson/Monsanto
FLD1:
FLD2:
COMM: mostly readable. Handwritten note from Sheppard partially legible.
Bulletin sent to District Engineers and Engineering Managers passing
along letter from Monsanto ^(attached) dated 2/16/70 recommending that PCB
fluids should be handled properly so as to prevent them from
becoming environmental contaminants. Westinghouse bulletin describes
PCB's as being extremely persistent in environment, that tight controls
on usage and disposal of inerteen must be exercised, and that
scrap fluid can be returned to Monsanto for incineration.
Notes from Sheppard cross out that PCB contaminated solids "should
be disposed of in approved chemical landfills or stored" to
"should be disposed of in accord with state and local laws".
Remarks that Monsanto letter be distributed to users of Inerteen capacitors
and transformers.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769 442

DSNO: NPC00006803

EXNO:

TYPE: Label

AUTH: -

INST: ?

TITL: -

PAGS: 1

DATE: ?

DIRC: -

SRCE: West. Pro.

KWDS: Label, PCB, environment, contaminant

KNMS: -

FLD1:

FLD2:

COMM: States: product contains PCB which may be an environmental
contaminant. Extreme care should be taken to prevent any
entry into the environment through spills, leakage, use, disposal,
vaporization, or otherwise.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769443 - 769448

DSNO: WPC0000 6804 - 0000 6809

EXNO:

TYPE: letter

AUTH: Papageorge

INST: Monsanto

TITL: Effluent Standards and Water Quality, Information Advisory Committee, Agenda and
Notice of Public Hearings. Federal Register V. 38 No. 116 pp. 11868

PAGS: 6

Monday 6/18/73

DATE: 730713

DIRC: Sager / EPA

SRCE: West. Pro.

KWDS: NEMA, ANSI, FDA, Pcb, toxicity, Pollutant

KNMS:

FLD1:

FLD2:

COMM: mostly legible. Monsanto comments on the inclusion of PCB's on the proposed list of toxic pollutants. Begins with brief history of Pcb use + production, then the discovery of potential environmental problems. Lists Monsanto and Industry efforts to reduce flow of Pcb's into environment (ANSI C107 guidelines attached). Monsanto recommends that the degree of toxicity of chemical should be taken into account. States Pcb less toxic to humans and environment than many substances not included on the list. Recommends the Interdepartmental Task Force document as a reference on Pcb's.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769449 - 769476

DSNO: MPC 0000 6810 - 0000 6837

EXNO:

TYPE: Report

AUTH:

INST: Westinghouse

TITLE: Environmental Investigations of PCB's associated with the Westinghouse
Bloomington Indiana Plant.

PAGS: 28

DATE: 761200

DIRC: -

SRCE: West. Pro.

KWDS: PCDF, biodegradation,

KNMS: Indiana State Board of Health

FLD1:

FLD2:

COMM: Mostly legible, but some portions unreadable. Describes methods + findings for study done by Westinghouse to measure PCB content of fish, bottom mud, suspended sediment, sewage, and sediments around Bloomington DAD Factory. Sampled creeks, sewer, and ^{river} ~~main~~ sediments around plant. Problem with some biodegradation studies is that lab conditions do not replicate field conditions. Aroclor 1016 is distilled Aroclor 1242. Gives detailed methods section (sampling for PCB's), also analysis + gas chromatograph techniques. Has maps with locations of sampling points in relation to Bloomington DAD Facility. PCB in fish ranged up to 37 ppm. Sediments had up to 38 ppm, suspended sediments up to 664 ppm. See tables pFNO 769463 - 467.

~~Pcb concentration~~

Pcb concentration given by compound (e.g. Aroclor 1016, 1254, etc....).

Discussion does not include analysis on the significance of the pcb quantities found - said to be outside the scope of study.

Sewage sludge for both North and South plants showed significant levels of pcb's; also, chlordane was found in N. plant, complicating the analysis.

Upstream had high levels of pcb; possible waste dump containing capacitor cans upstream. Also, local residents described leak of another unspecified pollutant which changed the water color in this area previously.

Tables compare Westinghouse pcb data with Indiana State Board of health data.
10 references.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769477-769479

DSNO: NRC 00006838 - 00006840

EXNO:

TYPE: Article

AUTH: Beigh, Peoples

INST: Indiana University; City of Bloomington Utilities

TITL: PCB Distribution in Sewage Wastes and Their Environmental and Community Effects

PAGS: 3

DATE: ? (post 760400)

DIRC: -

SRCE: West. Pro.

KWDS: bioaccumulation, pcb, pollution, community effects, health, environment

KNMS: -

FLD1:

FLD2:

COMM:

Better copy on PFNO 769776-769778

Poor quality xerox - portions unreadable. States there is evidence that low levels of PCB can be environmentally devastating. Lists high concentrations of PCB's found in sewage sludge from Bloomington. As a result, because sewage sludge had been given away to farmers, testing was done on farm soil and some samples contained 20-50ppm or more pcb. Describes ongoing analysis of factory workers exposed to pcb's, other city residents by NIOSH and U.S. Health ~~Center~~ Service. The ~~State~~ Indiana State Board of Health issued warnings not to eat fish from 2 creeks near Bloomington plant. Also banned milk for sale from certain farms, although the pcb's there were thought to have originated in silo coatings.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769480 - 769487

DSNO: NPC 0000 6841 - 0000 6848

EXNO:

TYPE: Article

AUTH: -

INST: ~~Maryland Dept. of Natural Resources, Westinghouse~~ Westinghouse Engineer (publication)

TITL: Results of the Chester River Environmental Study

PAGS: 8

DATE: 7/10/70

DIRC: -

SRCE: West. Pro.

KWDS: DDT, chlordane, aldrin, Pcb, DDA, DDE, DDD, toxicity, environment, pollution, Aroclor,

KNMS: Johns Hopkins University; Maryland Dept. of Natural Resources, University of Maryland.

FLD1:

FLD2:

COMM: ^{partially} ~~legible~~ - Some areas xeroxed poorly. PFNO 769480-1 are in reverse order. Says 3 kinds of chlorinated hydrocarbons found consistently in samples - ~~Aroclor~~ Aroclor Pcb's (almost exclusively Aroclor 1242), chlordane, and DDT (and derivatives: DDE, DDD). Discussion of chlordane effects on shellfish, very little specific information on Pcb's. Does list Ppb Pcb's found in cysters, clams, fish, crabs, and sediments. Fish samples had highest overall values (up to 570ppb; 185ppb on average). Pcb concentrations in these organisms were almost always higher than that of DDT and chlordane. Study interested in whether the interaction of 2 kinds of pollutants can adversely affect organisms - no results for this particular question given. PCB influx into Bay thought to be largely ~~from the~~ ^{from the} Susquehanna R. ~~achieved via~~ ^{achieved via} adhering to small suspended sediments.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769488 - 769493

DSNO: NPL0000 6849 - 00006854

EXNO:

TYPE: Article

AUTH: Ouw; Simpson, G.R.; Sivali

INST: Archives of Environmental Health

TITL: Use and Health Effects of Aroclor 1242, a PCB, in an Electrical Industry

PAGS: 6

DATE: 760700

DIRC: -

SRCE: West. Pro.

KWDS: Aroclor, occupational exposure, chloracne, serum, ~~adiposity~~, health, vapor, yusho, PCB,

KNMS: Health Commission of New South Wales, Australia

FLD1:

FLD2:

COMM: Key parts of document unreliable. Measured blood PCB content for ~~exposed~~ Australian occupationally exposed capacitor workers, also for control (not exposed) group. Further divided exposure group into primarily vapor absorption of PCB's (working in capacitor impregnation areas) and skin absorption (process workers). On average, ~~between~~ the vapor-exposed workers had 602 ppb, process workers had 140 ppb. workers with higher blood aroclor levels tended to have more dermatologic complaints. ~~From~~ Exposure testing determined that vapor concentration of Aroclor exceeded the threshold limit value of 1.0 mg/^{cubic} meter. No aroclor was found in control group. Among the dermatologic complaints were chloracne, nausea, body odor, rash, and burning sensation on face and hands. 13 refs.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769494-769508⁸

DSNO: NPC00006855-00006869

EXNO:

TYPE: Newsletter

AUTH: Sniarski (editor)

INST: EPA

TITL: PCB Newsletter - 6th Issue

PAGS: 15

DATE: 740805

DIRC: -

SRCE: West Pro.

KWDS: Pcb, arador, studies, abstracts, Clopion, toxicity, gas chromatograph

KNMS:

FLD1:

FLD2:

COMM:

- mostly legible copy.
- Newsletter's purpose is to provide up-to-date summary of ongoing, recently completed, and planned work & thereby prevent duplication of effort. Abstracts ~~noted below~~ From various authors include work on:
 - Gas chromatograph interpretive approaches for simplicity, speed, precision & accuracy, current work on means of removing pcb from interfering substances without altering the isomer ratios
 - adverse effects of Aroclor 1254 on young coho salmon; other fish studies abstract in newsletter also ~~below~~ use rainbow trout, brook trout, fathead minnows.
 - Toxicity, pharmacokinetics, and residues in food producing animals from pcb in feeding experiments.
- newly published book: chemistry of pcb's (CRC press)

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769509 - 769536

DSNO: NPC00006870 - 00006897

EXNO:

TYPE: Newsletter

AUTH: Smarski (editor)

INST: EPA

TITL: PCB Newsletter - 4th issue

PAGS: 28

DATE: 720330

DIRC: -

SRCE: West. Pro

KWDS: chromatography, Florisil, Silicic, Aroclor, environment, pollution, toxicity, studies,

KNMS: -

FLD1:

FLD2:

COMM: mostly legible. Topics: ^{methods} Analytic and chemical characteristics of PCB's (lots of technical details of gas chromatography methods for PCB analysis); Environmental occurrence and fate of PCB's; and Toxicity and other physiological effects.
of Interest: Cautions for using certain procedures for determining PCB content in fat (to avoid error); comparison of Electron capture vs. Microcoulometric detectors for PCB analysis, method for analyzing PCB content in water; Woods Hole results from study of PCB's in the ocean (high levels found), assumed to be transported in the atmosphere;

(over)

Pcb's in Michigan waters (widespread contamination); Establishment of Pcb lab at N. Michigan University; Toxicity of ~~Polychlorinated~~ Aroclors 1242, 1248, 1254, 1260 on yellow perch, rainbow trout, bluegill, channel-catfish, fathead minnows, flagfish, daphnia species; EPA studies on toxicity of pcb's on estuarine organisms.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769537

DSNO: NR00006898

EXNO:

TYPE: letter (cover)

AUTH: mount

INST: EPA

TITL: -

PAGS: 1

DATE: 701211

DIRC: -

SRCE: West. Pro.

KWDS: pcb, newsletter,

KNMS: -

FLD1:

FLD2:

COMM: cover letter for distribution of 2nd newsletter on PCB's (not attended)
See PFNO 769807-769818 for newsletter.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769538

DSNO: NP000006899

EXNO:

TYPE: letter (cover)

AUTH: Snarski

INST: EPA

TITL: -

PAGS: 1

DATE: 7/10/78

DIRC: -

SRCE: West. Pro.

KWDS: pcb, newsletter

KNMS: -

FLD1:

FLD2:

COMM: cover letter for distribution of 3rd Pcb newsletter (not attached).

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769539 - 769545

DSNO: NRC 0000 6900 - 0000 6906

EXNO:

TYPE: letter

AUTH: Papageorge

INST: Monson to

TITL: Effluent Standards and Water Quality, Information Advisory Committee, Agenda
and Notice of Public Hearings. Federal Register V. 38

PAGS: 7
no. 116 pp 11868, manday 6/18/73

DATE: 730713

DIRC: Sager/EPA

SRCE: West. Pro.

KWDS: Nema, ANSI, FDA, PCB, toxicity, pollutant

KNMS: -

FLD1:

FLD2:

COMM: See review for an identical document pfno 769443-769448. Both are
about the same legibility. This document has two page fives.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769546- 769549

DSNO: NPC00006907- 0000 6910

EXNO:

TYPE: letter

AUTH: Poipageorge

INST: Monsanto

TITL: Re. EPA (40 CFR Part 129) Water Program, Proposed Toxic pollutant Effluent
Standards, Federal Register V. 38 No. 247, pp. 35388-35395, Thursday

PAGS: 4

12/27/73

DATE: 740118

DIRC: Hearing clerk, USEPA.

SRCE: West. Pro.

KWDS: NEPA, pcb, legislation, effluent standards, EPA, comments, objections

KNMS: ~~pcb, legislation, effluent standards, EPA, comments~~

FLD1:

FLD2:

COMM: Monsanto objections to proposed standards:

- 1) Unavailability of all information used in establishing standards (lists documents not available; also objects to extremely short time period between publication and filing of standards).
- 2) objects to grouping all pcb's into one category (vs. high and low homolog mixtures)
- 3) limitation of maximum flow of 10,000 feet per second for determining pcb effluent limitations
- 4) establishing ~~toxicity~~ toxicity based on salmon egg mortality, also based on 200,000 magnification factor;
- 5) establishment of standards prior to establishing acceptable analytic
 (over)

5)(cont) procedures. Proposed effluent limit is below normal level of detection.

6) NO Environmental Economic Impact statement completed

7) Ignores existing point sources of pollution; ~~proposed~~ low effluent standard proposed may not be attainable.

Requests extension of time for submission of testimony.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769550 - 769552⁵⁵²

DSNO: NPC 0000 6911 - 0000 6913⁹¹³

EXNO:

TYPE: ~~presentation~~ presentation

AUTH: -

INST: Westinghouse

TITL: Statement by Westinghouse Management Official, D. M. Skuter, at EPA meeting on
PCB's - January 14, 1976

PAGS: 3

DATE: 760114

DIRC: -

SRCE: West. Pro

KWDS: Arcolor, Enertan, FWPAA, biodegradable, flammability, toxicity, environment

KNMS: -

FLD1:

FLD2:

COMM: mostly legible. Lists Westinghouse efforts to reduce the amount of
pcb entering the environment, and its use of lower chlorinated pcb mixtures.

- Support for argument that pcb's should be considered separately as high and low homolog mixtures
- No known suitable replacement fluid ~~also~~ with equal flammability ^{characteristics} ~~reports~~
- Precipitous action to replace electrical equipment would cost billions.
- U.S. Government should study the toxicology, biodegradability, and flammability of Arcolors 1016, 1242 and use these as a standard to hold against other proposed fluids.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769 553 - 769 555

DSNO: NRC 0000 6914 - 0000 6916

EXNO:

TYPE: presentation

AUTH: -

INST: Westinghouse

TITL: Comments presented by J.B. Brittain at the Environmental Commission of
the City of Bloomington, December 10, 1975.

PAGS: 3

DATE: 751210

DIRC: -

SRCE: West. Pro.

KWDS: Askarel, Inerteen, PCB, biodegradability, safety, pollution

KNMS: Monsanto.; Bloomington Environmental Commission

FLD1:

FLD2:

COMM: response to request from Bloomington Environmental Commission to Westinghouse for information on PCB mixtures. Gives Westinghouse efforts to reduce PCB pollution to the environment. Benefits of lower chlorinated Inerteen mixtures. Says Westinghouse will continue to work with the EPA for the establishment of the lowest practical discharge limits for PCB compounds and will work to improve the already high standards of safety and biodegradability existing in their present dielectric fluid.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769 556-769 557

DSNO: WPC0000 6917-0000 6918

EXNO:

TYPE: Report (Partial?)

AUTH: ?

INST: Westinghouse

TITLE: Pcb use, disposal, Replacement - strategic project, Distribution Apparatus Division

PAGS: 2

DATE: ?

DIRC: -

SRCE: West. Pro.

KWDS: biodegradability, reactor, Pcb, Industry, status, profit, capacitor,

KNMS: -

FLD1:

FLD2:

COMM: Overview of ongoing project. Document mostly legible.

Background - Pcb's have become suspect as an environmental contaminant, do not readily degrade, find their way into the food chain and have adverse effects on some species of wildlife.

~~Discontinuing~~ ~~the~~ ~~discontinuing~~

Discontinuing use of Pcb's would triple cost of capacitors

Objective - retain a strong and profitable business position in the capacitor product line, while eliminating the environmental risks

Actions:

- 1) Continue to reduce pcb effluent & through better manufacturing and disposal controls, and through use of Aroclor 1016
- 2) prevent precipitous banning of pcb's by maintaining contact with govt. and industry groups; support controlled usage
- 3) develop alternative fluid for use if pcb's are banned
- 4) work on developing dry or semi-solid systems.
- 5) Aroclor 1016 being phased in
- 6) Westinghouse fully supports the ANSI C107 guidelines
- 7) lab studies indicate biodegradability and non-flammability are nearly incompatible requirements.

Industry actions have allowed the continued use of pcb's,
providing the necessary time to develop suitable alternatives.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769559 - 769578

DSNO: NPL00006919 - 00006939

EXNO:

TYPE: Report

AUTH: Dakin, Mandelcorn

INST: Westinghouse

TITLE: A Status Report on Chlorinated Biphenyls, regarding Environmental Pollution

PAGS: 21

DATE: 7/12/77

DIRC:

SRCE: West. Pro.

KWDS: PCDFs, Yusho, IBT, PCB, Aroclor, Pollution, effluent, Transformer, Capacitor, Substitute Fluids, FDA, Policy

KNMS: Summa, <see reverse> ; Monsanto

FLD1:

FLD2:

COMM: Proprietary Class 1 document. Mostly legible. ~~First~~ First part deals with status at Westinghouse; second part summarizes meeting with Monsanto and states Monsanto position.

Introduction: Westinghouse and Monsanto actions after onset of the PCB problem: M - restrict sales to closed system users, etc...; WEC: control plant effluents, study pollution problem near ~~plants~~ plants, develop alternate fluids.

Status: Aroclors 1242 and 1016 are essential for use in transformers and capacitors. WEC has developed a suitable fluid for use in capacitors Re. electrical and thermal, but not flammability requirements. Alternative ~~for~~ transformers is the dry type.

<over>

Knms

all Westinghouse

Shoupp

Swiss

Coltman

Wiener

Griner

Baker

Herwald

Boquist

Kueser

Jordan

Brittain

McClain

Sauter

Schuch

Sheppard

Sloat

Wilburn

Keiser

Leely

Munson

Keck

Scholtz

From Monsanto

Benignus

Gossage

Richards

Papageorge

Munch

Keller

Tucker

Monsanto position is that pcb use should be restricted to closed systems, use of low ~~thems~~ chlorinated Aroclor mixtures, proper disposal (disposal in landfill for solids ok), strongly urges electrical industry to justify use of pcb's to govt. and other groups.

Monsanto states: By 1972, no more supply to non-electrical customers; Activated Sludge tests indicate that lower chlorinated pcb's degrade better (but unknown how this translates ~~into~~ under ~~the~~ environmental conditions); FDA limits on PCB's are not related to levels causing harm to humans; Results from (possibly I BT) animal studies on toxicity of aroclors; Yusho Incident; pcb's appear to diffuse very slowly through soil.

Details of meeting with Monsanto: See Table 1 (PFNO 769567)

For composition of liquid chlorinated diphenyls (Aroclors);

Table 2 (PFNO 769568) - Monsanto production & sales of Aroclors 1960-1971; Table 3 (PFNO 769569) Aroclors sold in 1970 and corresponding percent of highly chlorinated isomers; Table 4 (PFNO 769570) Highlights of biodegradability and animal studies Reported by Monsanto.

Lists pcb controls in Europe and Japan (PFNO 769574)

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769574-769582

DSNO: NPC00006940-00006943

EXNO:

TYPE: Report

AUTH: staltenberg

INST: EPA

TITL: Comprehensive In-Plant [unreadable] and water-solid wastes Survey Report

PAGS: 4

DATE: 750121

DIRC: -

SRCE: West. Pro.

KWDS: disposal, effluent, sewer, pch, discharge, landfill, pollution

KNMS: <see reverse>

FLD1:

FLD2: [Portions of documents unreadable.

COMM: Plant inspection by EPA ^{and others} ~~engineers~~ to determine how pch's enter land, air, water surrounding the Bloomington plant. (air info. published separately). Describes paths of sewer effluent, ^{and} rainfall runoff, and how these contribute pch issue to the environment. Describes current solid waste disposal practice (ship to Chem-Trol), also previous practices (Neel's dump, others). Conclusions: Landfill sites are contaminated, contaminated rain runoff from plant should be contained, Recommends engineering and plant changes to control effluent (add roofs, redesign pumps, ---).

Krms

Sawyer
Luzer
Wills Jr. / Westinghouse

yeast
Sleckell
Reising
Birch
Macomber
Stollenberg / EPA

Traylor / Indiana State Bureau of Health

Schneider / Monroe Co. Health. Dept.

Neel / waste hauler

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769583 - 769584

DSNO: NR0000 6944 - 0000 6945

EXNO:

TYPE: Press Release

AUTH: ~~unknown~~

INST: Westinghouse

TITL: For use: At will

PAGS: 2

DATE: 761100

DIRC: -

SRCE: West. pro.

KWDS: disposal, pcb, maintenance, repair, legislation, contamination, oil.

KNMS: Daley

FLD1:

FLD2:

COMM: Seen before. Alerts to the problem that some oil-filled transformers are contaminated with minute quantities of pcb. While this doesn't affect the performance of the unit, there may be problems when maintenance or disposal time comes around due to local laws regulating pcb's. Recommends the units be tested for presence of pcb prior to repair or disposal.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769 585

DSNO: NPC 0000 6946

EXNO:

TYPE: memo

AUTH: Tison

INST: Westinghouse

TITL: Capacitor Dielectric Fluid

PAGS: 1

DATE: 710819

DIRC: miller

SRCE: West. Pro.

KWDS: Capacitor, Inertness, negotiations, supply, termination clause

KNMS: McClain, Kelly ; Monsanto

FLD1:

FLD2:

COMM: Bottom third of memo unreadable. Describes arrangement whereby Monsanto can cease supplying Aroclor on 6 months notice; also, bill in Congress pending which would ban pcb's. Therefore, long range supply of pcb's is uncertain. Other Fluids may be developed but probably will be much more expensive. Says it is ~~unimportant~~ important that the problem be considered when negotiating... [rest unreadable].

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769586

DSNO: WPC 00006947

EXNO:

TYPE: memo

AUTH: Tison

INST: Westinghouse

TITL: Scrap Inerteen

PAGS: 1

DATE: 710800 (believe 710802)

DIRC: Swafford, Pickett

SRCE: West. Pro.

KWDS: Disposal, Inerteen, incineration, Cost.

KNMS: McClain, Harper, Kelly

FLD1:

FLD2:

COMM: seen better version of this previously in Westinghouse docs.
Monsanto will no longer accept scrap inerteen for
recycling - all must be returned for disposal by incineration.
cost = 3¢/lb.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769587

DSNO: NPC 0000 6948

EXNO:

TYPE: Letter

AUTH: Gossage

INST: Monsanto

TITL: -

PAGS: 1

DATE: 701130

DIRC: Tyson/Westinghouse

SRCE: West. Pro.

KWDS: Cost Increase, Aroclor, Environment, toxicological testing, research,

KNMS: -

FLD1:

FLD2:

COMM: - mostly legible. Better version elsewhere in Westinghouse documents.
prices of Aroclor is increasing 2¢/lb effective January 1971,
due to increased manufacturing costs associated with environmental
protection. Reaffirms Monsanto's commitment to continue the supply
of Aroclor to the Electrical Industry.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769558 - 769603

DSNO: NRC 00006949 - 0000 6964

EXNO:

TYPE: Notes

AUTH: ?

INST: Westinghouse

TITL: ~~Outline~~ PCB's - their use, Impact, and eventual Demise

PAGS: 16

DATE: ? (I believe sometime in '76)

DIRC: ?

SRCE: West. Pro.

KWDS: Health, disposal, environment, PCB, discharge, hazards, cancer, dermatitis, Bloomington

KNMS: General Electric, Monsanto,

FLD1:

FLD2:

COMM: Question/Answer format for document covering the following topics: PCB's: their use, Impact, and eventual Demise, Properties, use, and Production of PCB's, Health Hazards and Environmental Behavior of PCB's, Steps taken by Industry and Government to Limit or Eliminate use of PCB's, Steps taken by Westinghouse to limit use and Discharge of PCB's. Looks like something prepared for publication or discussion in Bloomington - to the employees or families? [my speculation], <over>

Selected questions (when ~~writing~~ ~~answers~~ answers given ... document) -

- PCB's are used in electrical gear because they're safe. Yet the controversy around them centers on their threat to health. Isn't that a contradiction?
- Are there other manufacturers [of PCB's]? (Ans: yes, 4 producers overseas. Our (crossed out) out, replaced with U.S.) imports are about 1 million pounds.)
- What are the health hazards of PCB's? (Whole section crossed out, wording changed)
- Do PCB's cause cancer in humans? (A: no link)
- How do PCB's enter the body? (A: Breathe or eat)
- What foods are most likely to be contaminated, and should I eat them?
- How much PCB in my body is considered safe? (A: unknown)
- Why weren't the hazards of PCB uncovered before we started using it?
- Who will pay for cleanup of PCB's (A: mostly, the Federal Govt.)
- Why, if PCB's can be eliminated from transformers, can't they be eliminated from capacitors?
- Have workers at Bloomington been adversely affected by PCB's? (A: some dermatitis)
- Is it possible that the Bloomington plant will be closed over the PCB issue?

Others...

Interesting, potentially important.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769604-769605

DSNO: NPC00006965-00006966

EXNO:

TYPE: letter

AUTH: Wilson

INST: Greeley and Hanson Engineers

TITL: -

PAGS: 2

DATE: 761028

DIRC: Anderson/Westinghouse

SRCE: West. Pro.

KWDS: disposal, sewage, sludge, pcb, contamination, landfill, costs,

KNMS: -

FLD1:

FLD2:

COMM: ^{only}Partially legible. Reporting preliminary conclusions of study of alternative methods of management of pcb containing solids at Winston-Thomass sewage treatment plant, Bloomington. (sludge cake)
Believes environmental risks and disposal costs can be reduced through 1) unrecyclable, 2) wash grit as well as possible, 3) minimize recycle stream, 4) clean drying beds ASAP, 5) isolate pcb from non pcb sludge. Result should be 1500-2000 tons dry pcb sludge cake. Recommends disposing of in sealed landfill, possibly incineration.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769606

DSNO: WPC00006967

EXNO:

TYPE: ~~QWA~~ Report

AUTH: -

INST: Greeley and Hansen

TITL: Report on management of pcb contaminated by-product solids

PAGS: 1

DATE: 761027

DIRC: -

SRCE: West Pro.

KWDS: Sewage, Pcb, Pollution, Contamination, disposal, cost, Environment

KNMS: -

FLD1:

FLD2:

COMM: Sheet with outline only (1 page). No report follows in binder.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769607 m

DSNO: NPC 00006968 m

EXNO:

TYPE: Press Release

AUTH: -

INST: Westinghouse

TITL: What's new in capacitors

PAGS: 1

DATE: ?

DIRC: ?

SRCE: West. Pro.

KWDS: Capacitor, Aroclor 1016, biodegradable, environment.

KNMS: Monsanto

FLD1:

FLD2:

COMM: Westinghouse announcement that it will be using Aroclor 1016 in capacitors. Says it is better for the environment (more biodegradable); otherwise offers same service in capacitors as old fluid. States that proper incineration of liquid & disposal of solids is still necessary. [NOTE - previous documents have shown WEC wasn't going to inform customers of switch to 1016, but GE Spilled the Beans and WEC & came up with this press announcement].

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769608

DSNO: WPC 00006969

EXNO:

TYPE: Letter

AUTH: Gossage

INST: Manuscript

TITL: -

PAGS: 1

DATE: 201130

DIRC: Tyson/WestHagase

SRCE: West. Pro.

KWDS: cost increase, Accolor, Environment, toxicological testing, research

KNMS: -

FLD1:

FLD2:

COMM: Duplicate on pfno 769587 (see letter review)

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769609-769611

DSNO: NPC00006970 - 00006972

EXNO:

TYPE: memo

AUTH: Mandelcorn

INST: Westinghouse

TITL: EPA restrictions on PCB's

PAGS: 3

DATE: 720517

DIRC: <see reverse>

SRCE: west pro

KWDS: toxicity, PCB, bioaccumulation, EPA, FDA, regulations, maximum allowable concentration, environment.

KNMS: Papageorge / Monsanto ; Pittsburgh Press ;

FLD1:

FLD2:

COMM: Partially legible. Believe seen before - may be better copy elsewhere. EPA issued specific regulations for use of PCB's. [Section largely unreadable - something about use where minimal human exposure; something about Pittsburgh Press; also about 181 page report].

Asked Papageorge to explain the rules, esp. the .01ppb max. acceptable level.

Papageorge: .01ppb limit based on FDA limit of 5ppm in fish:

According to 1 lab (cited), After 1 month exposure fish concentration of PCB magnifies 75,000 times, yielding .07ppb as a "SAR" level. A safety factor of "7" was applied, leaving .01ppb as the limit allowed.

Papageorge says his contacts at EPA indicate the .01ppb limit may be enforced only if fish levels exceed 5ppm - but not committing to

Disc

Dakin

Swiss

Wiener

Miller

Bogulst

McClain

Pickett

Sloat

Wilburn

Keiser

Kelly

Munson

Scholz

EPA rules not taking into account present levels of PCB
in environment. Urges WEC to contact EPA in this matter.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769612 - 769613

DSNO: NPC 00006973 - 00006974

EXNO:

TYPE: paper (presentation?)

AUTH: ?

INST: ~~XXXXXX~~ ?

TITL: History of PCB use

PAGS: 2

DATE: 700331 (Handwritten on sheet)

DIRC: ?

SRCE: West Pro.

KWDS: Aroclor, PCB, sales, pollution, Industrial housekeeping

KNMS: Monsanto,

FLD1:

FLD2:

COMM: ^{partially legible.}
Usage of Aroclors in 1946, 1970. About 1/2 of Aroclors sold in 1970 used by Electrical Industry; 1/3 of this used in transformers, 2/3 in capacitors. Estimates that non-electrical uses account for 95-99% of PCBs in environment. Since sales ceased to open users, only about 50 locations still use PCBs in manufacture, and concludes that these plants do not seem to impose a threat to the environment.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769614

DSNO: NPC 00006975

EXNO:

TYPE: label

AUTH: >

INST: Westinghouse

TITL: -

PAGS: 1

DATE: Dec 22 04 09 (best guess)

DIRC: -

SRCE: West. Pro.

KWDS: label, PCB, environment, disposal

KNMS: Greenland, Hughes,

FLD1:

FLD2:

COMM: "This product contains PCB's. Extreme care should be taken to prevent any entry into the environment through spills, leakage, use, disposal, vaporization, or otherwise. Refer to Westinghouse Instruction Book for information on use, handling, and disposal procedures."

PCBD
TECHNICAL DOCUMENTS SCREEN

36

PFNO: 769615-769636

6997

DSNO: WPC000 6976 - 0000 6997

EXNO:

TYPE: report

AUTH: ~~Kurtz~~ Kurtz

INST: Westinghouse

TITLE: Analysis of water for PCB content

PAGE: 22

DATE: 74/010

DIRC: ~~Curry~~ (see reverse)

SRCE: West. Pro

KWDS: PCB, Inertion, Aroclor, chromatography, spiking, methodology, Pollution, sampling,

KNMS: ~~PCB, Inertion, Aroclor, chromatography, spiking, methodology, Pollution, sampling,~~ Tucker/monitors

FLDI:

FLD2:

COMM: mostly readable.
describes procedure used to determine PCB content in water samples.

Procedure was developed to provide data relative to Westinghouse

compliance to existing Federal laws regarding discharge into the

environment. Primary manufacturing sites using Inertion are Skoron, PA;

South Buxton, VA; and Bloomington, Indiana. These plants used

690,000; 4,100,000; 2,000,000 lbs/year of Inertion respectively. NIMT

(materials and manufacturing technology) department was to take the samples.

Water samples taken from all 3 locations.

Technical details on sample analysis given.

over

c:\docs\tech.doc

Date

Gilson

Mally Jr.

Manson

Farber

Colub

McClain

Book

Carlson

Carlson

Bennon

Daniel

Stayer

Brennan

Brutt

Conner

Johnson

Cowan

Shepard

Siefert

Vargo

Pearce Jr.

Wilburn

Regar

12 varieties of

part unreadable

and capacitors

54201CM

1016, 1242, 100

Aroclor

Inerteen

Used at

TCB Content

1016

54201CG

Bloomington

0

1242

54201CM

Sharon, S. Boston

0

1254

54201 KA-70/5

Sharon ('65-'68)

30%

1260

54201CC 6/40

Sharon ('40-'65)

40%

Explains "retention time" for chromatography.

"Spilled"

Table II (PFNOS 769620) gives results of PCB content in water to II and 769623) samples around each location.

Sampling of the three plants is continuing monthly; analyses are being run by the MMT Lab and Robert Tucker's lab at Monsanto.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769637

DSNO: NSC 0000 6998

EXNO:

TYPE: Article

AUTH: Jordan

INST: ~~(? some newspaper?)~~ H T (Herald Tribune?) *Washington Herald Telephone (Probably)*

TITL: PCB's - what happens when they begin biodegrading?

PAGS: 1

DATE: ? (1/2 after ^{est} pcb meeting in Chicago)

DIRC: -

SRCE: West pro.

KWDS: PCDF, Yusho, Benzene, PCB

KNMS: Weber/Monsanto ; Selicoff / Environmental Research (author) ; Sauer/Westinghouse

FLD1:

FLD2:

COMM: Discusses possibility of PCB's metabolizing into PCDF's. Possibility of PCDF's in heated pcb fluids; states batch to batch variability of Pcb fluids should be tested. Says Dept. of Health, Education, and Welfare is preparing a report on data concerning PCDF's and where they are found.
Important document.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769638 - 769660

DSNO: NPC 00006999 - 00007021

EXNO:

TYPE: Report

AUTH: ?

INST:

TITL: Economic Impact of Alternatives to PCB's

PAGS: 23

DATE:

DIRC:

SRCE: West. Pro.

KWDS:

KNMS:

FLD1:

FLD2:

COMM:

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769661- 769663

DSNO: NPC 00007022 - 00007024

EXNO:

TYPE: Report Paper (response to proposed rules)

AUTH: Munson

INST: Westinghouse

TITLE: Draft of portion of Westinghouse Response of EPA PCB Effluent Standards

PAGS: 3

DATE: 740307

DIRC: terrill

SRCE: West Pro

KWDS:

KNMS:

FLD1:

FLD2:

COMM:

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769664 - 769672

DSNO: NPC00007025 - 00007033

EXNO:

TYPE: Report

AUTH: -

INST: GE

TITL: The impact of a "ban" on the use of pcb in capacitors

PAGS: 9

DATE: 73/1/19

DIRC:

SRCE: West Pro

KWDS: Econol, Aroclor 1016, phthalate ^{ester} ~~butyl~~

KNMS: Monsanto,

FLD1:

FLD2:

COMM: Lists potential consequences of a pcb effluent standard so strict that it constitutes an effective ban on pcb's. Consequences of shifting to mineral oil capacitors, or untried pcb replacement fluid capacitor. Predicts worldwide shortage of capacitor materials. Estimates costs. Consequences of scenario whereby capacitors are in short supply - increased unemployment, strain on energy supply, brownouts, ---.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769673 - 769676

DSNO: NPC00007034 - 00007037

EXNO:

TYPE: Legal document (contract)

AUTH: -

INST: Westinghouse

TITL: -

PAGS: 4

DATE: 720115

DIRC: -

SRCE: West. Pro

KWDS: pcb's, indemnification, litigation, document production

KNMS: Herwald ; Monsanto

FLD1:

FLD2:

COMM: indemnification of Monsanto; Monsanto will provide information in the event of litigation, and will otherwise cooperate with Westinghouse. Has Westinghouse proprietary class 1 stamp attached.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769677 - 769683

DSNO: NPC 00007038 - 00007044

EXNO:

TYPE: Paper

AUTH: Dickson/Environment Canada

INST: E. International Journal of Environmental Conservation

TITLE: Biodegradation, a solution to toxic organic compounds

PAGS: 7

DATE: -

DIRC: -

SRCE: West Pro

KWDS: biodegradation, pcb, Aroclor, Pollution

KNMS: -

FLD1:

FLD2:

COMM: See review for same document pfno 769413 - 769419.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769684-769695
DSNO: NPC 0000 7045-0000 7056
EXNO:
TYPE: Report
AUTH: ?
INST: Verfar, Inc.
TITL: ?
PAGS: 12
DATE: ? (Probably just post-1974)
DIRC: ?
SRCE: West. Pro.
KWDS: capacitor, manufacture, effluent, Askarel, pollution, study, survey,
KNMS:
FLD1:
FLD2:
COMM: partial document (pages 17-33 of ?? pages). Lists capacitor manufacturing plants in U.S. on PFNO 769685. Data on PCB usage in capacitors for 1974. Lists 1974 market (No. of units produced) for different types of capacitors, lists amount of askarel in certain kinds of capacitors (ranges from .05 to 77 lbs / capacitor); most popular size capacitor holds 36 lbs askarel. Describes the 3 types of capacitor fill operations (manifold vs. flood type), gives flow charts for large & small capacitor manufacture processes (PFNO 769687-769688).

Asbestos Handling: delivery (rail or truck), systems in factory for pumping/moving fluid around. This section indicates potential sources of pollution during transfer of fluid (most plants have no curbs or dikes).

Informative tables listing sources of plant asbestos wastes (solid & liquid - PFNO 769692); water usage per day (PFNO 769693); Quantity of PCB waste (in lbs/ton of PCB used, solids & liquid waste, and fate of waste - Landfill or Incineration - PFNO 769694); good table on PFNO 769695 listing for plants visited: number of outfalls, Effluent flow, Effluent PCB content, destination of effluent (river, sewer, ...).

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769696-7696⁹⁹99

DSNO: NPL00007057-000070⁰⁶⁰60

EXNO:

TYPE: Bulletin

AUTH: McClain, Sloat

INST: Westinghouse

TITLE: Inertion and Environmental Contamination

PAGS: 4

DATE: 700216 (Monsanto attachment)
date

DIRC: -

SRCE: West. Pro.

KWDS:

KNMS:

FLD1:

FLD2:

COMM: Seen before. Letter with attachment from Monsanto (written by Olson)
warning that Inertion is an environmental pollutant

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769700 - 769703

DSNO: NP00007061 - 00007064

EXNO:

TYPE: Instructions (Specification)

AUTH: -

INST: Westinghouse

TITL: Insulation Specification for Repair of Impregnated Capacitor Bushing
Replacement or Final Test Failure

PAGS: 4

DATE: 740308 (best guess)

DIRC: -

SRCE: West. Pro

KWDS: Capacitor, Repair,

KNMS:

FLD1:

FLD2:

COMM: Specifications for repair of power capacitors with damaged bushings
or ~~the~~ which have failed final tests for capacitance, resistance, or
overvoltage. Says welding temperatures cause inerteen to decompose
and contaminate capacitor. Ultraviolet light rapidly ~~degrades~~
deteriorates Inerteen. No repairs on units containing
Black Inerteen.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769704 - 769725

DSNO: WPC00007065 - 00007086

EXNO:

TYPE: Article

AUTH: Broadhurst / National Bureau of Standards

INST: Environmental Health Perspectives

TITL: Use and Replaceability of PCB's

PAGS: 22

DATE: 721000

DIRC: -

SRCE: West Pro

KWDS:

KNMS:

FLD1:

FLD2:

COMM:

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769726 - 769728

DSNO: NPC 00007087 - 00007089

EXNO:

TYPE: Paper (technical, health info)

AUTH: -

INST: American Industrial Hygiene Association [unreadable]

TITL: Hygiene Guide Series - chlorodiphenyls (containing 42% and 54% chlorine)

PAGS: 3

DATE: 650100

DIRC: -

SRCE: West. Pro.

KWDS:

KNMS:

FLD1:

FLD2:

COMM:

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769 729 - 769 730

DSNO: WPC 0000 7090 - 0000 7091

EXNO:

TYPE:

AUTH:

INST:

TITL: Inerleen - P.D. Spec 54201KJ Rev B

PAGS: 2

DATE: 711120

DIRC:

SRCE:

KWDS:

KNMS:

FLD1:

FLD2:

COMM:

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769731 - 769732

DSNO: WPC0000 7092 - 0000 7093

EXNO:

TYPE:

AUTH:

INST: Westinghouse

TITL: Inerteen - P.D. Spec 54201 KA Rev D

PAGS: 2

DATE: 700220

DIRC:

SRCE:

KWDS:

KNMS:

FLD1:

FLD2:

COMM:

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769733 - 769735

DSNO: Nfc 00007094 - 00007094⁶

EXNO:

TYPE:

AUTH:

INST:

TITL: Inverteen for Capacitors - P.D Spec 54201CF thru CH Rev C

PAGS: 3

DATE: 71 1120

DIRC:

SRCE:

KWDS:

KNMS:

FLD1:

FLD2:

COMM:

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769736 - 769761

DSNO: NPC 0000 7097 - 00007122

EXNO:

TYPE:

AUTH:

INST: Monsanto

TITL: The Aroclor ~~1248~~ Polychlorinated Polyphenyls - Technical Bulletin O-FF/1

PAGS: 26

DATE: -

DIRC:

SRCE:

KWDS:

KNMS:

FLD1:

FLD2:

COMM:

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769 762 - 769 767

DSNO: NA 0000 7123 - 0000 7128

EXNO:

TYPE: letter

AUTH: papageorge

INST: Monsanto

TITLE: Effluent Standards and Water Quality Information Advisory Committee - -

PAGS: 6

DATE: 730713

DIRC:

SRCE: West, Pro.

KWDS:

KNMS:

FLD1:

FLD2:

COMM:

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769 768 - 769 775

DSNO: NPC 0000 7129 - 0000 7136

EXNO:

TYPE: Presentation

AUTH: Papsigeorge

INST: Monsanto

TITL: Polychlorinated Biphenyl (PCB)

PAGS: 5

DATE: 73 1129

DIRC:

SRCE:

KWDS:

KNMS:

FLD1:

FLD2:

COMM:

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769776-769778

DSNO: NRC 0000 7137 - 0000 7139

EXNO:

TYPE: Article

AUTH: Bergh, Peoples

INST:

TITL: PCB

PAGS:

DATE:

DIRC:

SRCE:

KWDS:

KNMS:

FLD1:

FLD2:

COMM: See review find ~~769776-769778~~ 769477-769479

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769 779 - 769 806

DSNO: NPC 0000 7140 - 0000 7167

EXNO:

TYPE:

AUTH: Snarski

INST: EPA

TITL: pcb newsletter - 4th issue

PAGS: 28

DATE:

DIRC:

SRCE:

KWDS:

KNMS:

FLD1:

FLD2:

COMM: sec review pfw 769 509 - 769 536

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769807-769818
DSNO: NJPL00007168 - 00007179
EXNO:
TYPE: newsletter
AUTH: mount
INST: EPA
TITL: Pcb newsletter - 2nd issue
PAGS: 12
DATE: 70 12.11
DIRC: -
SRCE: West. Pro.
KWDS: PCN, Toxicity, Aroclor, Pcb, studies,
KNMS:
FLD1:
FLD2:
COMM: collection of abstracts of recently completed or underway ^{studies,} ~~projects~~
Analytical methods & chemical characteristics - PCN determination, pcb solubility
in water, composition of Aroclor 1221, 1254. Toxicity: effects of pcb's
on birds (Aroclors 1232, 1242, 1248, 1254, 1260, 1262); Testing of pcb's
on a number of fish & invertebrate species (Tables on pfno's 769814-769817).
Effects of pbs on Daphnia species. Environmental Occurrence & fate: catfish
uptake of Pcb study.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769819 - 769821

DSNO: NPL00007180 - 00007182

EXNO:

TYPE: memo

AUTH: Wilburn

INST: Westinghouse

TITL: Pcb- Interim Environmental threat

PAGS: 3

DATE: 70 0423

DIRC: Aldworth

SRCE: West. pro.

KWDS: Pcb, environment, pollution, regulation, market, price, Arcelor, customer notification, corporate guidance.

KNMS: sillette ^{tt} / Canadian Westinghouse; Sloat; Laver, Dunning, Swiss, Blackburn/Westinghouse; Ryan / U.S. Congress

FLD1: Belgius/Monsanto;

FLD2:

COMM: memo describing meeting at Monsanto to discuss Pcb problem. PCB's are in the general Environment, and can bioaccumulate. FDA will probably issue tolerance levels in Food soon. There is increasing pressure on pcb users. Monsanto is ~~trying~~ ^{trying} to protect the market for electrical apparatus usage probably because of profitability, no suitable alternative to pcb's, and use in closed systems. Other markets may be given up, so prices will likely increase for remaining users. Monsanto looking into alternative fluids - hopelessly expensive (developing fluid with 2-3 chlorinated biphenyls (1016)).

Worst Case - Westinghouse out of Inertec + transformer busit. Best case - need much tighter control over use & disposal of Inertec. "Must consider fully informing our Field Engineering and marketing personnel. I recommend we do this, from an Engineering Point of view". Lastly - must consider communications with customers. Utility customers are fairly easily reached. Industrial/commercial customers are more difficult problem - may be able to work through NEMA. Probably should request Monsanto to advertize info. in the technical press. Seeks corporate guidance from all / one of: Laver, Dunning, Swiss, Blackburn.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769822 - 769824

DSNO: WPC00007183 - 00007185

EXNO:

TYPE: Presentation

AUTH: Sinker

INST: Westinghouse

TITL: Statement by Westinghouse official, P. M. Sinker, at EPA meeting on PCB's - 1/14/76

PAGS: 3

DATE: 760114

DIRC:

SRCE:

KWDS:

KNMS:

FLD1:

FLD2:

COMM: Duplicate - see summary PFNO 769550 - 769552

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769825-769826

DSNO: WPL 0000 7186 - 0000 7187

EXNO:

TYPE: Report

AUTH: —

INST: Westinghouse

TITLE: PCB use, Disposal, Replacement Strategic Project - Division Apparatus Division

PAGS: 2

DATE: ?

DIRC:

SRCE:

KWDS:

KNMS:

FLD1:

FLD2:

COMM: see review pino 769556-769557

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769827 m

DSNO: NPC00007188

EXNO:

TYPE: Paper (fact sheet)

AUTH: ?

INST: Westinghouse ~~McClain~~

TITL: Plant Fact Sheet on PCB's that are common knowledge in our plant

PAGS: 1

DATE: -

DIRC: -

SRCE: West. pro

KWDS:

KNMS: Brittain, McClain

FLD1:

FLD2:

COMM: ^{Probably from Bloomington.} Facts presented in bullet format. Includes:
Plant uses pcb's, all pcb solid wastes are disposed of in two sanitary landfills capable of handling pcb waste, the sewage leaving the plant contains less than 2 ppm pcb, Over 90% of pcb's used for capacitors is biodegradable, There is no disgrace or problem with Westinghouse actions. Since PCB's effect on the environment are the subject of political discussions and technical debate among specialized scientists, it is difficult to understand this subject. Brittain and McClain are in a position to get complete and accurate facts -
~~Very~~ Important: all requests for information should be channeled to Brittain's office (will avoid rumors and conflicting reports).
Westinghouse has no knowledge of any health or environmental problems caused by the use of PCB's in Westinghouse capacitors

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769828m

DSNO: NPC 00007189

EXNO:

TYPE: newsletter

AUTH: ?

INST: [Food chemical news?]

TITL: Food chemical news

PAGS: 1

DATE: 700720

DIRC: ?

SRCE: west Pro.

KWDS: FDA,

KNMS:

FLD1:

FLD2:

COMM:

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769529 - 769830

DSNO: NPC 0000 7190 - 0000 7191

EXNO:

TYPE: newsletter

AUTH: ?

INST: ?

TITL: Generator, vol IV: Ascarels

PAGS: 2

DATE: 750409

DIRC: -

SRCE: West. Pro.

KWDS: Inverteb, Pyranol, Pcb, Incineration, disposal, pollution

KNMS: Reid

FLD1:

FLD2:

COMM: Newsletter describes askarel and the problem with releasing it into the environment. Says that your plant may receive a call from an EPA Inspector inquiring about Pcb use, because Pcb appears on the Federal toxic pollutant List. Says Pcb's are incredibly stable in the environment, that there is currently no substitute fluid comparable to askarel, and gives information about proper disposal. Mentions Monsanto bulletin which contains detailed handling and disposal information. 4 references cited (institutions: US task force on pcb's, Monsanto, ANSI, IEEE).

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 769531-769851

DSNO: NPL 00007192 - 00007212

EXNO:

TYPE: Report

AUTH: Deking, Mandelcorn

INST: Westinghouse

TITL: A status report on chlorinated Diphenyls, regarding environmental pollution

PAGS: 22

DATE: 7/12/77

DIRC:

SRCE: West pro.

KWDS:

KNMS:

FLD1:

FLD2:

COMM: see review, pfno 769555-~~769578~~ 769578

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770166

DSNO: WPC 00007527

EXNO:

TYPE: memo

AUTH: Sauter

INST: Westinghouse

TITL: ANSI Committee on use and disposal of Askarels

PAGS: 1

DATE: 710401

DIRC: Rissinger

SRCE: West. Pro.

KWDS: Askarel, ANSI

KNMS: Parris, Slout, McClain, Salazar, Brittain, Pickett

FLD1:

FLD2:

COMM: Recommends that McClain should be on Nema committee.
Letter is a request for NEMA representation in ANSI. Also
Recommends Pickett as a representative to ANSI as well as
McClain.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770167 - 770168

DSNO: NPC00007528 - 00007529

EXNO:

TYPE: Memo

AUTH: Fierro

INST: NEMA

TITL: NEMA Representation on ANSI Standards Committee on Disposal of Asbestos
Used in Electrical Equipment, C107

PAGS: 2

DATE: 710504

DIRC: ~~D.E. Allen, McGraw, Kuzak, Lowe, Reinhardt~~ <See Reverse>

SRCE: West Pro

KWDS: Capacitor, Nema, Asbestos, ANSI, Transformer, Disposal, Committee

KNMS: ~~D.E. Allen, McGraw~~, Peyron, Papageorge, Salazar, Parris, Rark,

FLD1:

FLD2:

COMM: Lists NEMA Delegation (representation) to ANSI, and the
scope of their participation - procedures for the safe use,
maintenance, and disposal of asbestos materials used in electrical equipment.

Dir:

Reinhardt / Colt Industries

D.E. Allen / Allis - Chalmers

Kutzeln / Sangamo Electric

McLain / Westinghouse

Kove / McGraw Edison



PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770169

DSNO: NPC 00007530

EXNO:

TYPE: Letter

AUTH: Fierro

INST: NEMA

TITLE: ANSI Standards Committee on Disposal of Asbestos used in Electrical Equipment,
C107

PAGS: 1

DATE: 710504

DIRC: E. R. Anderson

SRCE: West. Pro.

KWDS:

KNMS: Papageorge/Monsanto; Salazar/NEMA; Peyton/ANSI; Parris, Kirk

FLD1:

FLD2:

COMM: Lists appointment of Chairman and Secretary for ANSI C107 (Papageorge and Salazar, respectively); Lists personnel on NEMA Delegation to ANSI.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770170 - 770171

DSNO: NP00007531 - 00007532

EXNO:

TYPE: Letter

AUTH: miller

INST: NEMA

TITL: -

PAGS: 2

DATE: 710520

DIRC: Carvernaugh

SRCE: West. Pro.

KWDS: NEMA, ANSI, ASTM, Guidelines, Askerel, disposal

KNMS: Papageorge, Peyton, Miller, Salazar

FLD1:

FLD2:

COMM: Refers to Salazar's letter of May 13, 1971. ~~Refers to~~ Responds to Complaint by ASTM that the ANSI C107 Committee will do work in an area ~~where ASTM~~ within the scope of the ASTM. Miller states that it appears that the ASTM is doing no work in the area of Askerel disposal, and that the work should be done, which is why ANSI C107 was formed. Nasty letter.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770172 - 770173

DSNO: NPC-00007533 - 00007534

EXNO:

TYPE: Letter

AUTH: Sauter

INST: Westinghouse

TITL: H. R. 10085 and H. R. 8576

PAGS: 2

DATE: 71 0805

DIRC: Falk/NEMA

SRCE: West. Pro.

KWDS: Asbestos, disposal, legislation, NEMA, ANSI,

KNMS: Ryan/U.S. Congress, Monsanto

FLD1:

FLD2:

COMM: Letter states position NEMA should take and inform interested groups and persons in congress. Refers to legislation introduced by Ryan prohibiting the use of PCB's. Says suitable replacement fluids are not available, history of use does not support conclusion that these materials are so hazardous that a complete ban is necessary, Monsanto is supplying an Asbestos now with a low percentage of persistent materials. Also should control domestic and foreign use of these materials. Recommends NEMA should bring about early action by ANSI C107 to publish guidelines for disposal of asbestos waste.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770174 - 770177

DSNO: WPC00007535 - 00007538

EXNO:

TYPE: memo

AUTH: Aldworth

INST: Westinghouse

TITL: Retrofitting of PCB-Filled Transformers

PAGS: 4

DATE: 76 10 28

DIRC: ~~WV~~ E.V. Clarke, Jr.

SRCE: west. pro.

KWDS: ~~patent~~ retrofit, silicone, transformer, pcb, advice, technical, NEMA, ANSI, EPA

KNMS: Orbeck/Dow Corning; E. Price/Westinghouse; R.A. Baker, D.M. Sawyer / Both WEC

FLD1:

FLD2:

COMM: Dow Corning is recommending refitting pcb transformers with silicone; leaves 3% pcb or 30,000 ppm pcb (which is "unacceptable") - handwritten notes.

Customers are asking for advice: not sure, WEC will investigate retrofit issue for a fee and give best engineering judgement. Concerns 1) Silicone expansion will rupture tank (Dow-Corning says no), 2) will silicone cool units adequately without degrading (tests will be complete within a few weeks). Retrofit may not be a good solution: IEEE, ANSI C107, EPA recommend against retrofit.

Westinghouse reps. on ANSI C107 (slout and ? from Blumington - McClain) have not been advised by WEC re. best course of action whether retrofit is good or bad - issue needs to be decided. ANSI C107 is voting on a standard prohibiting retrofit - expected to pass. If so, EPA likely to make a rule prohibiting retrofit, making it illegal. Repair and service issues re. PCB transformers: WEC wants as little as possible to do with these units, but must repair and support their products. Needs answers to questions as to how to ~~express~~ obtain Inerteen for topping off once Monsanto ceases production; can TC13 and/or oil be used instead?; needs to coordinate efforts with the business office. Urgent need to resolve because final orders for inerteen go to Monsanto within 3 months. May be wise forming a ~~committee to~~ task force to plan strategy, discuss with EPA and NEMA, assess ~~their~~ ability to change course of events as they happen. Task force best headed by Marketing Division. Recommends early organization to deal with these upcoming headache problems. Potentially Important re. advice to customers.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770 178

DSNO: NPC00007539

EXNO:

TYPE: memo

AUTH: McClain

INST: Westinghouse, NEMA

TITL: -

PAGS: 1

DATE: 72 0911

DIRC: Sauter,

SRCE: West. Pro.

KWDS: ANSI C107, meeting, Askarel

KNMS: Parris, Pickett

FLD1:

FLD2:

COMM: Recommends J.H. Pickett substitute for McClain room at ANSI C107 meeting in Gaithersburg, Md, on 10/3/72.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770179

DSNO: NPC 0000 7540

EXNO:

TYPE: memo

AUTH: Squier

INST: Westinghouse / WEMA

TITL: ANSI C107 "Guidelines for Handling and Disposal of Capacitor and
Transformer Grade Asbestos containing PCB's"

PAGS: 1

DATE: 720914

DIRC: McClain

SRCE: West. Pro.

KWDS: B ANSI C107,

KNMS: Pickett

FLD1:

FLD2:

COMM: Agrees that Pickett should substitute for McClain at ^{C107} ANSI meeting
on 10/3/72

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770180 - 770182

DSNO: NPCL00007541 - 00007543

EXNO:

TYPE: Instructions

AUTH: ?

INST: Westinghouse

TITL: Suggested Response to Notice of PCB spill

PAGS: 3

DATE: -

DIRC:

SRCE: West. Pro.

KWDS:

KNMS:

FLD1:

FLD2:

COMM:

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770183

DSNO: NA-00007544

EXNO:

TYPE: memo

AUTH: R. J. Hopkins

INST: Westinghouse

TITL: subject - warning labels

PAGS: 1

DATE: 720404 (stamped, 720410)

DIRC:

SRCE:

KWDS:

KNMS:

FLD1:

FLD2:

COMM:

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770184- 770186

DSNO: NPL00007545 - 00007547

EXNO:

TYPE:

AUTH: D. L. Mellon

INST: Monsanto

TITL: —

PAGS: 3

DATE: 750728

DIRC: Sauter / Westinghouse

SRCE: West. Pro.

KWDS:

KNMS:

FLD1:

FLD2:

COMM:

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770187 - 770197

DSNO: NPC00007548 - 00007558

EXNO:

TYPE: Presentation

AUTH: Sauter

INST: Westinghouse

TITL: Memorandum for file: Testimony of D. M. Sauter at Environmental Management
Board Hearing 9/30/76 and 10/1/76.

PAGS: 11

DATE: 760930 (also 761001) (Also 761002)

DIRC:

SRCE: West. pro

KWDS: Aroclor 1016, 1232, 1221, ANSI C107, WEMA, disposal, Landfill, contamination, effluent,

KNMS: Shoaff, Sawyer, McClain, A. Fink, McDonough, Sterling, Munson,
wecil/waste hauler;

FLD1:

FLD2:

COMM: Testimony of Sauter at Environmental Management Board Hearing in 1976 (probably a State or County hearing). Lots of discussion on effluent from Bloomington plant^{and} waste disposal. Important for these topics; Long list of topics Sauter doesn't know, would be interesting to compare these to some of the memos in the Westinghouse production. History of realization that pcb's were a contaminant, and actions taken. monitoring efforts over the years. Believes ANSI guidelines C107 are being followed. Water with pcb's in it is not in his view Askeel waste. Lists others at Bloomington and their responsibilities for ~~Askeel~~ aspects of Thetean use. Also reporting of information to authorities (none asked for any, so it wasn't provided).

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770198 - 770200

DSNO: NPC00007559 - 00007561

EXNO:

TYPE:

AUTH: Salazar

INST: NEMA

TITL: Bureau of National Affairs (BNA) Report on Enforcement of Water Control act
on a case-by-case basis.

PAGS: 3

DATE: 740703

DIRC: -

SRCE: West pro

KWDS:

KNMS: <see reverse>

FLD1:

FLD2:

COMM: Congressman Wright calls for enforcement of water control act on a
case by case basis. EPA is currently enforcing the act via
uniform national standards. Quarles says the 1 year compliance time is
often insufficient if plant needs major modification.

44 62
J. S. Nelson / GE
S. S. Richel
E. L. Simons /

P. S. Park / Monsanto

N. H. Smith
J. H. Wright / Westinghouse

W. Van Wright / Nema?

also Quarles / EPA

J. C. Wright / U. S. Congress

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770201 - 770260

DSNO: NRC00007562 - 00007621

EXNO: ~~1000~~

TYPE: Paper (standards proposal)

AUTH:

INST: NEMA

TITLE: NEMA Official standards proposal - guidelines for handling & disposal of
Capacitor & transformer Grade Askarels containing PCB's

PAGS: 60

DATE: -

DIRC:

SRCE: West. pro.

KWDS:

KNMS:

FLD1:

FLD2:

COMM:

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770261- 770 262

DSNO: NPLOXXX07622 - CXXX07623

EXNO:

TYPE: Letter

AUTH: McClain

INST: Westinghouse

TITLE: Negative Ballot, Revised Document, ANSI C107.1

PAGS: 2

DATE: 761022

DIRC: Kark /NEMA

SRCE: West. Pro.

KWDS: Effluent, Pcb, Guidelines, requirements

KNMS: Willmore /NEMA

FLD1:

FLD2:

COMM: Concerned that present wording could be interpreted as a "zero" tolerance for Pcb. effluent. This isn't reasonable, since Pcb is already in environment, and also given probable acceptable limits set by Government agencies. Wants to be sure to distinguish between goals and requirements. Suggests wording changes.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770263

DSNO: NR 0000 7624

EXNO:

TYPE: memo

AUTH: McClain

INST: Westinghouse

TITL: PCB situation, Brief

PAGS: 1

DATE: 720523

DIRC: Brittain

SRCE: West. Prod.

KWDS: pcb, effluent, regulation,

KNMS: Munich / Monsanto; McDonough / WEC;

FLD1:

FLD2:

COMM: - Short list of pcb activities:
EPA is moving to control pcb plant effluent based on a Federal task force Report;
ANSI C107 meeting this week will recommend current draft to committee;
Monsanto meeting re. New Fluid cancelled due to illness; McDonough to
visit Monsanto; WEC Fluid #982 - patent application, testing; If EPA
uses draft ANSI C107 document as basis for regulation within 90 or
120 days, Bloomington DAD couldn't comply in time.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770264 - 770265

DSNO: NP000007625 - 000007626

EXNO:

TYPE: Instructions

AUTH:

INST: westinghouse

TITL: Instructions for Surge protection Capacitors

PAGS: 2

DATE: -

DIRC: -

SRCE: west pro.

KWDS: Askarel, Capacitor, Disposal

KNMS: -

FLD1:

FLD2:

COMM: Installation, Maintenance, and Disposal for these units. Disposal Instructions
Say ~~in~~ in order to avoid ^{possible} Environmental contamination, unit should be
disposed of only in supervised dry landfill areas meeting state ~~and~~ requirements
or in proper incineration facilities. Transport containers should control leakage
and prevent loss of askarel to environment. Containers should be labeled
as to contents and environmental precautions.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770266- 770 292

DSNO: NPC 00007627 - 0000 7653

EXNO:

TYPE: Presentation

AUTH: -

INST: Monsanto

TITL: Monsanto Industrial Chemicals Company Welcomes Mr. M.J. McDonough,
Westinghouse Electric Corporation

PAGS: 27

DATE: 720601

DIRC: -

SRCE: West. Pro.

KWDS: Pcb, pollution, Sales, Capacitor, Transformer, Aroclor

KNMS: -

FLD1:

FLD2:

COMM: ~~XXXXXXXX~~ Monsanto Actions in response to Pcb ecological situation, Reasons for increased costs largely due to these actions. Slides show Westinghouse purchases of capacitor and transformer inventories (1968-1972); Prices of Aroclor (Capacitor: 1963-1972; transformer 1968-1972); Pcb Then lists slides of Monsanto presentation to Federal Government, Task Force 5/15/72: Monsanto Pcb actions; Pcb sales (1969, 1970, 1972); degree of biodegradation of Pcb's; Pcb Isomer content used in capacitors by use period; Pcb escape to environment from capacitor failure, worst case; transformer and

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770293-770307

DSNO: NPC00007654-00007668

EXNO:

TYPE: Instructions

AUTH: -

INST: Westinghouse

TITLE: Instruction Book NT 1001 for Part I Network Transformers

PAGS: 15

DATE: -

DIRC:

SRCE: West. pro.

KWDS:

KNMS:

FLD1:

FLD2:

COMM:

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770308 - 770335

DSNO: NPL00007669-00007696

EXNO:

TYPE: Paper (technical, sales)

AUTH: -

INST: Westinghouse

TITL: Large Power Transformers

PAGS: 28

DATE: -

DIRC:

SRCE: West. Pro.

KWDS: wemco oil, transformer, construction,

KNMS: -

FLD1:

FLD2:

COMM: Discussion of electrical forces working in a transformer, construction details, Manufacturing/Construction methods, Standard tests applied to all units, mostly technical discussion.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770336- 770359

DSNO: NPC00007697- 00007720

EXNO:

TYPE: Paper (technical, sales)

AUTH: -

INST: Westinghouse

TITL: Shell Core Furnace Transformers

PAGS: 24

DATE: -

DIRC: -

SRCE: West. Pro.

KWDS: Transformers, Construction, Westinghouse oil,

KNMS: -

FLD1:

FLD2:

COMM: Transformers used for electric furnaces used in metallurgical and chemical processes. Describes special requirements of these units, magnitudes of forces and stresses, ~~the~~ mechanical strength, construction of these transformers. Units are oil-filled.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770360 -

DSNO: INPC00007721-

EXNO:

TYPE: Instructions

AUTH: -

INST: Westinghouse

TITLE: Instructions for Capacitor Units

PAGS: 24

DATE: -

DIRC: -

SRCE: West. P.O.

KWDS: Capacitor, disposal,

KNMS: -

FLD1:

FLD2:

COMM: Receiving, Installation, Maintenance, Field Testing, and disposal Instructions for these units. Disposal Instructions say that the unit contains pcb - a possible environmental contaminant - disposal should be in an approved dry landfill area meeting state requirements or in suitable incineration facilities. Transport containers should prevent loss of materials to the environment, and should be labeled as to contents and environmental hazards.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770364 - 770366

DSNO: NRC00007725 - 00007727

EXNO:

TYPE: Bulletin

AUTH: Willmore

INST: ANSI

TITL: PCB Treatment or disposal facilities.

PAGS: 3

DATE: 76 0323

DIRC: -

SRCE: West. Pro

KWDS: disposal, pcb, ~~landfill~~ landfill, Incineration

KNMS: Motherway, Purris / Both of
ANSI?

FLD1:

FLD2:

COMM: Note from McClain / Westinghouse on cover sheet says Ref. for
customers who ask ").
Lists disposal facilities for pcbs; 7 in California; the rest are
scattered throughout the U.S.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770367-

DSNO: NPC00007728-

EXNO:

TYPE: Letter

AUTH: Salazar

INST: ANSI

TITL: Status of EPA activity on Toxic Pollutants

PAGS: 1

DATE: 750508

DIRC: -

SRCE: West. Pro.

KWDS:

KNMS: Adgate, Cawley, Pisciotta, Mack, Sherr

FLD1:

FLD2:

COMM: Next ANSI C107 meeting will be postponed until the EPA revised levels for PCB's and schedule of Hearings is published in the Federal Register. Papageorgis(?) met with EPA to set up workshops on input to the EPA's evaluation program.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770376 - 770378

DSNO: WPL00007737 - 00007739

EXNO:

TYPE: letter

AUTH: Salazar

INST: ANSI

TITLE: subject: preliminary notice for next meeting

PAGS: 3

DATE: 741004

DIRC: -

SRCE: west pro.

KWDS: ANSI, EPA, proposed toxic pollutant levels, hearings

KNMS: Papageorge/monsanto;

FLD1:

FLD2:

of ANSI C107

COMM: Papageorge urges a meeting in January of 1975, in preparation for upcoming EPA hearings on proposed pollution levels, including pub's. List of ANSI C107 member names attached (20 names), (see pfn 770377-8).

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770380 - 770381

DSNO: NRC 00007741 - 00007742

EXNO:

TYPE: letter

AUTH: Fierro

INST: NEMA

TITL: NEMA Representation on ANSI standards Committee on Disposal
of Asbestos used in Electrical Equipment, C107

PAGS: 2

DATE: 7/05/24

DIRC: -

SRCE: West. pro.

KWDS:

KNMS: ~~Asbestos~~ (see reverse)

FLD1:

FLD2:

COMM: corrected list of NEMA delegation to ANSI.

Krims

D.L. Peyton / ANSI

Pipageorge / mensur

Schwarz / ANSI

Paris / ?

Karik / ?

Reinhardt / colt industries

D.E. Allen / Allis - chalmers

Kuzeln / songtime

McClain / Westinghouse

Reue / McGraw - Edison



PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770382 - 770392

DSNO: NPC 00007743 - 00007753

EXNO:

TYPE: Report (product, engineering)

AUTH: Pearce, E. Jr.

INST: Westinghouse

TITL: Request for Verification

PAGS: 11

DATE: 661100 (or later) no definite date of report specified

DIRC: -

SRCE: West Pro.

KWDS: TCB, Aroclor 1254, Aroclor, PFO, Transformer

KNMS: Monsanto

FLD1:

FLD2:

COMM: Describes request for change from using Inertan 54201KA (70% Aroclor 1254, 30% TCB, 0.2% PFO) as a transformer coolant to using ^{100%} Aroclor 1242 (with .2% PFO). Demonstrates nearly equal performance in all regards, and weighs less. Will result in cost savings on material, transport, and possibly result in a better deal from Monsanto. Other advantages: less weight, lower power factor, shop processing advantages, less effect on transformer components. Tables of properties/comparisons Aroclor 1242, ~~1254~~ Inertan 54201KA on PFNO 770382 - 770392.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770393-770395
DSNO: NPC00007754-00007756
EXNO:
TYPE: memo/notes
AUTH: Brittain
INST: Westinghouse
TITL: Draft - PCB's
PAGS: 3
DATE: 761008
DIRC: ~
SRCE: West. Pro.
KWDS: Pcb, oil, pollution.
KNMS:
FLD1:
FLD2: B 203976
COMM:] see pfno 203778 for further discussion on this.
purpose of document is to draft a notification to customers that minute quantities of Pcb's may be present in many mineral oil filled electrical equipments. Probable reason for the mixture is the proximity of manufacturing and testing ~~operation~~ operations during manufacture of pcb and oil units. Also possible through inspection and maintenance of transformers by the customers. Recommends to notify customers immediately, convince EPA to adopt minimum acceptable levels of Pcb's in oil, develop responses about inquiries as to proper handling and disposal of this oil, appoint a project coordinator full time until problem is past. Recommends a mature, confident, and businesslike approach be taken with customers. Problem could be misunderstood and exaggerated, causing problems in customers and industry.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770396 - 770397

DSNO: NPC 0000 7757 - 0000 7758

EXNO:

TYPE: Bulletin (draft)

AUTH: Brittain, Jr.

INST: Westinghouse ~~(Westinghouse)~~

TITL: Background

PAGS: 2

DATE: 761006

DIRC:

SRCE: West. Pro

KWDS:

KNMS:

FLD1:

FLD2:

COMM: Draft statement for notifying customers of pcb contaminating oil-filled transformers and other devices. Since Westinghouse policy is to cease manufacture of pcb transformers in 1976, future mixing of pcb's in oil will be eliminated. ~~However, in units already manufactured~~

TECHNICAL DOCUMENTS SCREEN

PFNO: 770396-770397

DSNO: NPC 00007757-00007759

EXNO:

TYPE: paper (bulletin ?)

AUTH:

INST:

TITL:

PAGS:

DATE:

DIRC:

SRCE:

KWDS:

KNMS:

FLD1:

FLD2:

COMM:

toxic impurities

PCDF $\rightarrow$ chloracne in rabbits

TCDD = 10x toxicity of PCDF's

Major carcinogenic action from crude mixtures from poss contain. w. chlorinated dibenzofurans.
PCB's - also slightly carcinogenic

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770396-770397

DSNO: NPC00007757-00007758

EXNO:

TYPE: Bulletin (possibly memo)

AUTH: Brittain Jr.

INST: Westinghouse

TITL: ~~Asst~~ Background

PAGS: 2

DATE: 761006

DIRC: -

SRCE: West. Pro.

KWDS: Pcb, oil, contamination, transformer

KNMS: -

FLD1:

FLD2:

COMM: Document possibly for distribution within Westinghouse explaining the problem of contamination of mineral oil electrical equipment by minute quantities of pcb. Probable reason for contamination is the proximity of mineral oil and pcb systems used during manufacture of equipment. Says Federal & state regulations may require special handling of pcb containing mineral oil. States since Westinghouse will cease manufacture of pcb transformers by 12/76, future mixing will be eliminated. Recommends notifying customers and govt. agencies so that inadvertent releases of Pcb to environment do not occur.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770396

DSNO: NPC00007759

EXNO:

TYPE: memo

AUTH: Beal (best guess)

INST: Westinghouse

TITLE: Re. your wire on PCB/oil mixing

PAGS: 1

DATE: 00 12 15 (probably 75 12 15)

DIRC: Litten

SRCE: west. pro.

KWDS: oil, pcb, contamination, notification

KNMS: -

FLD1:

FLD2:

COMM: wire notifying that ^{these} distributors have been notified of PCB/oil mixing problem (see PFNO 770396 for explanation): All Wesco Locations, ~~others~~ others.
~~Electric, etc, Dickman, McGowan, etc,~~

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770399- 770400

DSNO: NPC00007760 - 00007761

EXNO:

TYPE: Memo

AUTH: Bentley

INST: Westinghouse

TITL: Pcb's presence in oil-filled Transformers

PAGS: 2

DATE: 761214

DIRC: Litten

SRCE: West. Pro.

KWDS: notification, pcb, oil, contamination, transformer,

KNMS:

FLD1:

FLD2:

COMM: Lists organizations to which letters of notification (re. Pcb-oil contamination problem) have been sent. 52 distributors listed, see PFNO 770596 for explanation of problem.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770401

DSNO: NPC 00007762

EXNO:

TYPE: memo

AUTH: Kappeler

INST: Westinghouse

TITL: Re. D. P. Keiser 11/22/76 letter on oil/pcb mixing.

PAGS: 1

DATE: 761214

DIRC: Litten

SRCE: West. Pro.

KWDS: oil, pcb, transformer, contamination,

KNMS: Fuller

FLD1:

FLD2:

COMM: Says all distributors in author's district have a copy of
Keiser's letter (re. pcb contamination of oil filled transformers).

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770402 - 770407

DSNO: NRC 00007763 - 00007768

EXNO:

TYPE: Bulletin

AUTH: ?

INST: Westinghouse

TITLE: General Statement of Westinghouse Position

PAGS: 6

DATE: ?

DIRC: ?

SRCE: West. Pro.

KWDS: Insulation, Pcb, Oil, Notification, Contamination,

KNMS: -

FLD1:

FLD2:

COMM: States problem of pcb's mixed in oil transformers, involves the entire industry including oil suppliers, manufacturers, and customers oil handling facilities. Says decision on what to do with equipment once pcb's found in it is up to customer. There is no practical reason for Westinghouse to engage in any conjecture as to how, where, or when the condition originated (see pfno 770396 for admission that ~~manufacturers~~ contamination probably originated during manufacture). Lists question/answer format for common questions which may be asked by customers.

~~Westinghouse~~
says pcb's have been detected in oil at Sharon and S. Boston facilities.
Tests for pcb's are being run on some Westinghouse repair facilities' oil.
Westinghouse recommends to customers test oil transformers for
presence of pcb's and examine existing requirements affecting pcb's.
Westinghouse will keep customers informed on these issues.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770 408

DSNO: NRC 00007769

EXNO:

TYPE: Memo

AUTH: Deasy

INST: Westinghouse

TITL: -

PAGS: 1

DATE: 761109

DIRC: Morris

SRCE: West. Pro.

KWDS: pcb, oil, contamination, notification

KNMS: Roehrig, Colecchia, Cartmell, Kropf, Maiuri, Daley, Wills, Rosenzweig

FLD1:

FLD2:

COMM: Says Roehrig's article intended for ~~the~~ publication in ~~the~~ "Plant Engineering" is being returned. It has division approval, but is now deemed incomplete in light of pcb/transformer oil contamination problem. Problem is one of "timing" - article shouldn't be published before Westinghouse decides how & when they should announce to the trade and possibly the public that there is a pcb contamination problem in some oil-filled transformers. Wills, (law dept.) feels that the

Pcb problem and some potential solutions should be discussed in Roehrig's article to make it complete. (See PFNO 770 396 for discussion of Pcb, oil contamination problem). Stamp on document says "Received 1. Dec 1976"

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770409 - 770410
DSNO: NPC 0000 7770 - 0000 7771
EXNO:
TYPE: press release
AUTH: ~~Boley~~
INST: Westinghouse
TITL: -
PAGS: 2
DATE: ~~on~~ 761124 (best guess)
DIRC: -
SRCE: West. Pro.
KWDS: Nema, pcb, oil, press, ~~with~~ contamination,
KNMS: Daley,
FLD1:
FLD2:
COMM: Press release mailed to these Journals: Electrical Construction & Maintenance,
Electrical Contractor, Industrial Maintenance & Plant Operation, Plant Engineering.
History of pcb use in electrical equipment, other applications.
Discovery of ~~pcb contamination~~ pcb contamination in some oil filled
transformers. Recommends testing oil for pcb's prior to maintenance
or disposal. Recommends to check with local laws. States Nema
task force is looking into the problem.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770411-770423

DSNO: WPC00007772-00007784

EXNO:

TYPE: Article (scientific)

AUTH: VOS / state University of Utrecht (Netherlands)

INST: Environmental Health Perspectives

TITL: Toxicology of Pcb's for Mammals and for Birds

PAGS: 13

DATE: 720400

DIRC: -

SRCE: West. Pro.

KWDS: Phenoclor, Clophen, Aroclor, TCDF, PCDF, Gdd, SCDF, Chloraene, TCDD
Porphyrin, Toxicity, Health, study, animal experiments, PCB, ~~Acro~~

KNMS:

FLD1:

FLD2:

COMM: Study looking at the toxicity of pcb's, and other impurities in phenoclor,
Clophen, and Aroclor 1260. ~~Some of the PCB samples~~ 2 toxins (TCDF and SCDF)

Found in Phenoclor and Clophen but not the Aroclor sample.

PCDF's are strong hepatotoxic and acrogenic compounds.

Toxicity of ~~monochlorinated~~ polychlorinated dibenzofurans; TCDD about
10x more toxic. Porphyrin (esp. of the liver) was found in all 3 groups
(Clophen, phenoclor, Aroclor 1260), which is likely due to the pcb's, not
impurities in the ~~in~~ pcb solutions. Major acrogenic action of pcb
mixtures appears due to possible contamination with PCDF, although
the pcb's do appear to have a slight acrogenic action.

Lists data by other authors in table format: mortality, liver effects & various study animals by different pcb mixtures, including Aroclor. says difference in toxicity among experiments using ^{different batches of} the same mixture (say aroclor 1248) may be due to impurities (such as PCDF) in ^{one} ~~the~~ mixture batch.

See tables 5 and 6 (PFNO 770415-7) Describes liver / endoplasmic reticulum effects. Other enzyme effects. Describes Edema formation (fluid buildup, possible heart failure). Minimal in 400 ppm Aroclor experiment (probably due to lack of toxins in Aroclor sample tested). Describes estrogenic activity of pcb's, (770422), also embryotoxicity and neuropathy.

39 references - good!

Important document re. pcb, impurity toxicity.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770424 - 770441

DSNO: NPC00007785 - 00007802

EXNO:

TYPE: Article (Scientific)

AUTH: L. M. Reynolds

INST: Bulletin of Environmental Contamination and Toxicology

TITL: PCB's and their interference with pesticide Residue Analysis

PAGS: 18

DATE: 690500

DIRC: -

SRCE: West. Pro.

KWDS: PCB, PCN, gas chromatograph, Florisil, hexane, lindane, chlordane, benzene hexachloride, DDE, Aldrin, heptachlor, DDT,

KNMS:

FLD1:

FLD2:

COMM: PCB's will interfere with gas chromatograph electron capture analysis of pesticides (organochlorine compounds). Discusses possibility of PCB's mixed with pesticides. mentions Monsanto's 1965 statement that Aroclor can trap and hold more volatile ingredients making these pesticides and repellants (esp. lindane, chlordane, and benzene hexachloride) ~~ten times more effective~~ Last longer. Lindane with 5-25% PCB was 10 times more effective. Lists details of sample handling and gas chromatography. Conclusion/discussion at the end discusses difficulty in determining PCB readings from that of other common chemicals; why early PCB detection in environment may be incorrect. 11 references.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770442 - 770450

DSNO: WFO0000 7803 - 0000 7811

EXNO:

TYPE: presentation

AUTH: Boquist, Mandelcorn, Nelson

INST: Westinghouse, GE

TITL: The Need for Continued Use of PCBs as Electrical Insulating liquids

PAGS: 9

DATE: ?

DIRC: ?

SRCE: West. Pro.

KWDS: Transformer, capacitor, alternate insulating fluids, safety, PCB

KNMS: Monsanto

FLD1:

FLD2:

COMM: Extensive handwritten notes + corrections on typed draft. List of names on first sheet (barely readable) - possible contributors. Document lists reasons PCB's should still be used in electrical apparatus: fire safety, reliability, long life, small size. Table with percent homolog PCB's by aromatic compound (% biphenyl, trichlorophenyl, etc...) in 1. Simple discussion of PCB use in transformers and capacitors. Disadvantages of substituting dry transformers.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770451 - 770461 7822 ?
DSNO: NPC00007812 - 0000770461
EXNO:
TYPE: presentation
AUTH: Kerns
INST: Westinghouse
TITL: Environmental Relationships of PCB Compounds
PAGS: 11
DATE: ?
DIRC: ?
SRCE: West. Pro.
KWDS: Biodegradable, PCB, environment, toxicity, Aroclor
KNMS: -
FLD1:
FLD2:
COMM: discusses relative biodegradability of Aroclors 1254, 1242, 1016; complains that PCB standards are being imposed based on detection technology which is questionable. Most toxicity studies have used massive doses of 1254; more realistic would have been to study "environmental levels" of 1242 or 1016. Has chromatograms for Aroclors 1016, 1242, 1254.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770462~

DSNO: NRC00007623

EXNO:

TYPE: memo

AUTH: Brittain

INST: Westinghouse

TITL: Consideration of Bio and Non-Biodegradable PCB's.

PAGS: 1

DATE: 7/1/028

DIRC: -

SRCE: West. Pro.

KWDS: biodegradable, Aroclor 124Z, Aroclor 1016, regulation

KNMS: Pupageorge/Monsanto; Snider, McClain, Munson / all of Westinghouse

FLD1:

FLD2:

COMM: supercedes memo dated 7/1/014 on same subject. Lists % pcb homologs for Aroclor 1016 and 104Z (is. % biphenyl, mono-chloro biphenyl, etc...). Appears that 1016 is an improvement, but still contains some higher homolog pcb's. If discussed in a scientific manner, the 1016 could possibly be separated from other pcb's for regulatory purposes.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770463 - 770472

DSNO: NPC 00007824 - 00007833

EXNO:

TYPE: paper

AUTH: Papageorge

INST: Monsanto

TITL: A case study - Pcb's

PAGS: 10

DATE: 75 0100

DIRC: -

SRCE: West. Pro.

KWDS:

KNMS:

FLD1:

FLD2:

COMM: Written for the study on Decision making for regulating chemicals in the Environment, Environmental Studies Board, National Research Council, National Academy of Sciences (at the request of the EPA). Describes Monsanto's restriction in sales of pcb's to open systems, to food processing equipment, finally to any use but transformers and capacitors. Objectives were to minimize pcb entry into the environment, into food, to retain use in electrical equipment where fire resistance was necessary, and avoid disruption to industry. Early reports of catastrophic pcb effects in wildlife not supported. Supportable conclusions include 1) pcb's of higher chlorinated content were present in the environment 2) No documented harm to

(over)

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770473 - 770474

DSNO: NPC00007834 - 00007835

EXNO:

TYPE: Article (^{medical} ~~Technical Report~~)

AUTH: A.G. Crunch / Union Carbide

INST: Industrial Medicine

TITL: Chlorinated Compounds - precautions in Handling

PAGS: 2

DATE: 440100

DIRC: -

SRCE: West.Pro.

KWDS: PCN, PCB, chlorinated diphenyl oxide; chloracne, toxicity, Liver, Jaundice, health,
Industrial hygiene, worker safety

KNMS: Halonix Corp.,

FLD1:

FLD2:

COMM: Exposure to chlorinated compounds can cause chloracne; Also liver damage through
Inhaling vapors. Liver damage cumulative, not through occasional contact.
These compounds are safe to use if precautions are taken: clean work area,
remove fumes via ventilation, (can check for proper functioning), avoid prolonged
Skin/vapor contact, change clothes prior & after work, shower after work
including washing hands & face; barrier cream on face & hands may help.
Do not employ those prone to acne, skin disease, liver disorder, alcoholism,
or ~~syphilitic~~ syphilitics. Observe employees for skin, digestive disorders,
jaundice, or other symptoms. Notify workers to report any skin, digestive
disorders; inform workers of effects of exposure to these ~~chemicals~~ chemicals.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770 475 - 770477

DSNO: NPC 0000 7836 - 0000 7838

EXNO:

TYPE: Article (medical)

AUTH: L. Greenburg / N.Y. State Dept. of Labor

INST: Industrial medicine

TITL: Chlorinated naphthalenes and Diphenyls

PAGS: 3

DATE: 430800 (best guess)

DIRC: -

SRCE: West. Pro.

KWDS: PCN, PCB, toxicity, occupational exposure, Industrial hygiene,

KNMS:

FLD1:

FLD2:

COMM: PCN and PCB used two ways - cold mixed with solvents, or heated to plasticize material. Chlorine from PCN, also for PCB reported in 1936. Acute yellow atrophy of liver attributable to PCN reported in 1936. Lists circumstances of PCN-caused deaths for occupationally exposed workers. Chlorine appears on average 1.5 months after initial ^{exposure} ~~contact~~ with PCN/PCB (Hot), 10 months if material was cold. Conclusion: PCN, PCB "highly toxic"; all precautions should be taken to eliminate contact/exposure. Lists recommended personal and Industrial hygiene methods. Foremen of ~~department~~ exposed workers should be notified of the toxic nature of the material and instructed in safe handling methods. Foremen should check on men in their dept's. and instruct in safe handling methods.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770478

DSNO: NP000007839

EXNO:

TYPE: memo

AUTH: Brittain

INST: Westinghouse

TITL: Consideration of Bio and Non-Bio degradable PCB's

PAGS: 1

DATE: 7/10/28

DIRC: -

SRCE: West pro

KWDS:

KNMS: Suter, McClain

FLD1:

FLD2:

COMM:

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770474 - 770487

DSNO: NR00007840 - 00007848

EXNO:

TYPE: memo

AUTH: Brittain

INST: Westinghouse

TITL: (Of attachment) PCB- Power Capacitors, DAD

PAGS: 9

DATE: 7/12/22

DIRC: Bogulst

SRCE: West pro.

KWDS: capacitor, Interlen, arader,

KNMS: Sauter, McClain, Bridger

FLD1:

FLD2:

COMM: Stamp on document says received 12/22/71.
cover letter for passing on outline of pcb use in capacitors.
Lists uses, importance of interlen in capacitors.

Portions of document listing percentage of business
of capacitors account for are blacked out. Lists weec. high voltage
Power capacitors installations 1947-1967, (customers, RVAR sold)

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770488- 770492

DSNO: NPL00007849 - 00007853

EXNO:

TYPE: Instructions , description

AUTH: -

INST: Westinghouse

TITLE: Interlock - safe practice data sheet I-1

PAGS: 5

DATE: 710430

DIRC:

SRCE: West pro.

KWDS:

KNMS:

FLD1:

FLD2:

COMM:

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770493 - 770495

DSNO: NPC 00007854 - 00007856

EXNO:

TYPE: Memo

AUTH: Rinaldi

INST: Westinghouse

TITL: REF 2610-64

PAGS: 3

DATE: 760401

DIRC: J. M. Shannon

SRCE: West. Pro.

KWDS: Pcb, seminar, Bloomington, press,

KNMS: <see reverse>

FLD1:

FLD2:

COMM: memo to confirm plans for Bloomington PCB seminar for 4/13/76.
Press seminar first half of the day; officials second half of the day.
Lists press to invite (Newsprint, TV, radio stations); officials (see KNMS).
Lists agenda. Wants materials early, for "massaging". Suggests rehearsal.

J. B. Wright

J. P. Daley

E. L. Schwartz

D. K. Boyd

S. M. Moore

B. A. Kerns

R. E. Wills

D. M. Sutter

R. B. Sawyer

J. B. Brittain

all of WEC

D. Neukrantz

Pizzo

Schultz / U.S. Congress

Carroll / U.S. Senate

Mayer McCloskey

W. Brown / Environmental Commissioner

R. Borland / County Health Dept.

? / State Health Dept.

R. Peoples / Electric Utility

T. Moses / Environment Quality Control

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: ~~770~~ 770 496 - 770 503

DSNO: NP000007857- 00007864

EXNO:

TYPE: memo / ~~Registration~~ Guidelines

AUTH: McClain

INST: Westinghouse

TITLE: Capacitor Plant Housekeeping and Employee Safety

PAGS: 8

DATE: 720114

DIRC: Pozefsky / Ansi + GE

SRCE: west. pro.

KWDS:

KNMS:

FLD1:

FLD2:

COMM: First draft proposal for 720208

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770504 - 770505

DSNO: WPC 00007865 - 00007866

EXNO:

TYPE: Article (medical)

AUTH: Meigs, Albom, Karting

INST: J. of the American Medical Association

TITL: Chloracne from an Unusual Exposure to Aroclor

PAGS: 2

DATE: 540424 (best guess)

DIRC:

SRCE: West. Pro.

KWDS: chloracne, PCV, PCB, Aroclor

KNMS:

FLD1:

FLD2:

COMM: History of chloracne from PCV, PCB's. Repeated exposure is necessary. Aroclor was used in a heat exchanger. Hot PCB vapors at 0.1 mg/cubic meter (low concentration), led to 7 cases of chloracne after an average exposure duration of 14.3 months. Blood and Liver tests turned up 2 abnormalities in one worker (cephalin flocculation and thymol turbidity). No good correlation between degree of exposure and development of disease.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770506-770509
DSNO: WPC00007867-00007870
EXNO:
TYPE: Article (scientific)
AUTH: Jensen, Johnels, Olsson, Otterlind
INST: Nature
TITL: DDT and PCB in marine Animals from Swedish waters
PAGS: 4
DATE: 691018
DIRC: -
SRCE: West. Pro.
KWDS: DDT, DDE, DDD, PCB, Clophen, Lindane, aldrin, dieldrin, pesticides, pollution,
KNMS: - Bioaccumulation, environment, metabolism
FLD1:
FLD2:
COMM: wide range of marine organisms tested for PCB, DDT, and DDE.
Table of values found on PFNO 770508. Many organisms tested
(seals, eagles, etc...) are vagrant, and so PCB values (and DDT, etc...) can be representative of a wide area. Results indicate contamination in the Baltic. Eagles had very high residue values (14,000 ppm). Compares DDT/DDE ratio in organisms. 21 References

100BD

TECHNICAL DOCUMENTS SCREEN

PFNO: 770510

DSNO: NPL0000 7871

EXNO:

TYPE: memo

AUTH: Sawyer

INST: Westinghouse

TITL: Inverter/TCB for PCA7 Type coupling capacitors

PAGS: 1

DATE: 760128

DIRC: Dennison, Luzar, R. Stewart

SRCE: West. Prod.

KWDS:

KNMS:

FLD1:

FLD2:

COMM:

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770511-770512

DSNO: NP600007872-00007873

EXNO:

TYPE: letter

AUTH: ~~Borland~~

INST: ~~Monroe Co. Health Officer~~ Westinghouse

TITL: -

PAGS: 2

DATE: 720605

DIRC: ~~Borland~~/Monroe Co. Health Officer

SRCE: West. pro.

KWDS:

KNMS: M. Young/Monroe Co. dump; Shofft/Westinghouse; Cravy/State Sanitation Dept.

FLD1:

FLD2:

COMM: signed 6/6/72, by Borland, Shofft, Cravy

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770513 - 770514

DSNO: WPL00007874 - 00007875

EXNO:

TYPE: letter

AUTH: -

INST: Westinghouse

TITL: -

PAGS: 2

DATE: 720605

DIRC: Borland/Monroe Co. Health Officer

SRCE: West. Pro.

KWDS:

KNMS:

FLD1:

FLD2:

COMM: duplicate of PFNO 770511 - 770512, except only signed by Borland and
Shoaff, not Cravy

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770515 - 770517

DSNO: NPL00007876 - 00007878

EXNO:

TYPE: letter

AUTH: Wheeler

INST: Monsanto

TITL: -

PAGS: 3

DATE: 690303

DIRC: R.T. Innis / Westinghouse

SRCE: west. Prod.

KWDS:

KNMS:

FLD1:

FLD2:

COMM: re. SF. chronicle article.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770518

DSNO: NPC0000 7879

EXNO:

TYPE: Letter (Telegram)

AUTH: Scuter

INST: Westinghouse

TITL: -

PAGS: 1

DATE: 761009

DIRC: ~~W. P. Hart~~ L. P. Hart / GE

SRCE: West. Pro.

KWDS: Capacitors, Aroclor 1016, replacement fluid, meeting, NEMA, legal

KNMS: McClain / Westinghouse; Parits / NEMA

FLD1:

FLD2:

COMM: Says "surprised" Hart and GE legal council misinterpreted letter of 9/17/75 re. alternatives to pcb's., and incorrectly assumed the subject matter had not been cleared with NEMA and WEC counsel. Discussions at the meeting will be on what characteristics: chemical, electrical, environmental, health, and safety must be available for a replacement fluid for Aroclor 1016; discussion will not be on how to design a capacitor or how to evaluate [? impregnation] of capacitor units.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770519 - 770520

DSNO: WRE 00007880 - 00007881

EXNO:

TYPE: Letter

AUTH: F.C. Wright

INST: U.S. Naval Ordnance Laboratory

TITL: -

PAGS: 2

DATE: 591008

DIRC: -

SRCE: West. Pro.

KWDS: Health, toxicity, hazard, occupational exposure, health effects, Inerteen, capacitor, transformer

KNMS: Spiecher, (2 others unreadable - ~~Shaw~~ Stewart, Kelly ?)

FLD1:

FLD2:

COMM: Letter to "Safety Director" at Westinghouse, requesting information about Inerteen: chemical composition, hazardous properties, necessary precautions when handling, hazards of skin absorption, and the maximum allowable concentration in air. Request in response to concern by personnel who have worked with Inerteen. Also requests suitable types of gloves and aprons for use around Inerteen. Lots of handwritten notes on document: suggested max concentration for Capacitor and Transformer Inerteen are .5 mg/cubic meter and 50ppm (or 370 mg/cubic meter), respectively (Transformer suggested MAC seems 3x too high).

higher concentrations may result in chronic irritation of the respiratory tract, eyes, nose, and throat. Possible to have internal reactions although we have never seen them. Highly toxic if taken internally. mild skin irritant if ~~short~~ limited contact; possible severe dermatitis with repeated exposure. Use chemical cartridge for concentrations in air slightly above max limits; Gas mask for higher concentrations. Recommends neoprene gloves + aprons, also face shields/goggles protect from splashing. Important for detail and also because of date.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770521- 770523

DSNO: WPC00007882 - 00007884

EXNO:

TYPE: memo

AUTH: E. C. Barnes

INST: Westinghouse

TITL: -

PAGS: 3

DATE: 470915

DIRC: J.W. Wigert

SRCE: West. Pro.

KWDS: Inerteen, health, exposure, chloracne, maximum air concentration,

KNMS: T.E. Fuller, J. Scott

FLD1:

FLD2:

COMM: Safe practice Data Sheet I-1 information. Says Fuller and Scott know that inerteen is a fairly toxic material which must be handled in a certain way to prevent poisoning. vapor concentrations: data not yet in on the odor level of Inerteen, but chronic poisoning may occur where repeated or recurring exposure to a sufficient concentration of Inerteen vapor over months or years. such exposure may cause internal bodily injury that could be disabling or fatal. Lists Maximum Air concentration at 1mg/cubic meter. Levels below this will be very unlikely to cause poisoning even after long exposure

Brief exposure to higher concentrations may cause irritation of the mucous membranes. Says ~~saturated~~ concentration of Inerteen in Saturated air is 176 mg/cubic meter, although he is not sure of this figure. Ingestion - highly toxic, (1-2 grams ounces may cause serious internal injury or death). Skin irritation: mild irritant, but can be absorbed through skin and cause internal reactions. Long-term exposure may cause chlor-acne - a difficult condition to heal. Lists personal protective equipment (respirators, gloves, etc...). ~~Wash skin~~ personal hygiene - wash skin with soap + water after contact, or use Butyl Stearate as solvent to remove from skin, then use Soap + water. Use protective equipment where necessary. First aid - induce vomiting. Important because 1) time period 2) complete ~~toxicology~~ listing of Inerteen effects 3) may contrast with statements made later that no chronic effects from Inerteen occur.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770524

DSNO: NPC 00007885

EXNO:

TYPE: memo

AUTH: Berberich

INST: Westinghouse

TITL: -

PAGS: 1

DATE: 000414 (year cut off) ^{Probably 60's}

DIRC: -

SRCE: west. Pro.

KWDS: Inerteen, PCB, concentration, formula, composition

KNMS:

FLD1:

FLD2:

COMM: Transformer Inerteen now contains 40% Tcb, 60% Aroclor 1260,
Small percentage of tin tetraphenyl. Says "confidential" on top.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770525 - 770526

DSNO: NPC 00007886 -

EXNO:

TYPE: Press Release

AUTH: H

INST: Westinghouse

TITLE: Westinghouse to Quit Using Pcb's in Transformers

PAGS: 2

DATE: 76 0715

DIRC: -

SRCE: West. Pro.

KWDS: Inertan, Askarel, Liability, Lines, EPA

KNMS: V. J. Rinaldi ; S. R. Pitts ; McDonough

FLD1:

FLD2:

COMM: No ~~water~~ shipped transformers shipped after 12/31/76 will contain Inertan. McDonough says that pcb units were a significant amount of ~~entire~~ total production; Phasing it out will affect customers' ^{and} building designs. Says although WEC has produced Inertan transformers for 40 years, the liability is now getting inordinate. ~~Reverts~~ EPA is expected to establish ~~stiff~~ fines ~~for~~ ^{penalties} and controls for spills and transport of pcbs.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770527 - 770538

DSNO: NPC 00007888 - 00007899

EXNO:

TYPE: Presentation

AUTH: Sauter, Britain, Kerns, Sawyer, Wills Jr.

INST: Westinghouse

TITLE: A series of talks presented at the Westinghouse DAD to state and local
officials on 4/13/76

PAGS: 12

DATE: 760413

DIRC: -

SRCE: west. Pro.

KWDS:

KNMS:

FLD1:

FLD2:

COMM: Graphs and photos included.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770539

DSNO: NPC00007900

EXNO:

TYPE: presentation

AUTH: Rollins

INST: JARD co.

TITL: Statement of the Electronic Industries Association Before Wisconsin's
Department of Natural Resources

PAGS: 1

DATE: 750829

DIRC: -

SRCE: West. Pro.

KWDS: capacitor, transformer, fda, discharge, effluent

KNMS: -

FLD1:

FLD2:

COMM: Explains ~~what~~ function of capacitors and transformers, where they're used, why pcb's are used (nonflammability). Mentions FDA exempting pcb capacitors and transformers from requirement that pcb's no longer be permitted near food; also that the government task force found continued use of pcb's in electrical equipment was necessary. ~~by~~ Says JARD co. limits pcb discharge to less than 11 lbs/day. Handling + disposal is in accord with ANSI guidelines.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770540 - 770541

DSNO: WPC 00007901 - 00007902

EXNO:

TYPE: Press Release

AUTH: -

INST: Westinghouse

TITL: Westinghouse Develops Non-PCB Fluid for use in Capacitors

PAGS: 2

DATE: 761100

DIRC: -

SRCE: West. Pro.

KWDS: isopropylbiphenyl, capacitors, fluid, TSCA

KNMS: Daley, Scuter,

FLD1:

FLD2:

COMM: ~~Ann~~ Announcement that a replacement fluid for capacitors has been found which contains no pcb's. Pcb use will phase out completely by 1977. New fluid is biodegradable and has environmental characteristics similar to mineral oil. Fluid is combustible. Recently passed TSCA bans use of pcb's in 1979. Fluid is called Wemcol (isopropylbiphenyl).

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770542 - 770543
DSNO: NPC 00007903 - 00007904
EXNO:
TYPE: Form (data sheet, ...)
AUTH: -
INST: ~~Monro~~ U.S. Dept. of Labor (OSHA)
TITL: Material Safety Data Sheet
PAGS: 2
DATE: 750411
DIRC: -
SRCE: West. P.O.
KWDS: health, safety, phosgene, Industrial hygiene, personal hygiene, disposal
KNMS:
FLD1:
FLD2:
COMM: For Inerteen Codant, ~~residue~~ 99 + % 42% chlorinated diphenyl, less than 1% ~~phenyl~~ peroxypropene Oxide. Lists physical properties, fire and explosion hazard, Maximum allowable concentration (1 mg/cubic meter), health effects (irritated mucous membranes), First aid techniques. Says material is decomposed by hot surface (600°C) and by electric arc. Hazardous decomposition products: HCl, CO, CO₂, and small amount of phosgene. Clean up procedures in the event of spill; do not pour into sewers or streams. Incinerate at 2000°F or higher; site approved waste disposal only; Return liquid to Monsanto. Personal hygiene: Use protective clothing/goggles. Ventilate work area well.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770544- 770546
DSNO: NAC 00007905- 00007907
EXNO:
TYPE: Article (^{medical/}Scientific)
AUTH: Allen, Norback / Both at
U. of Wisconsin
INST: Science
TITL: Pcb and Triphenyl Induced Gastric Mucosal Hyperplasia in Primates
PAGS: 3
DATE: 730202
DIRC: -
SRCE: West pro.
KWDS: dioxin, toxicity, health, study, ingestion
KNMS:
FLD1:
FLD2:
COMM: ~~Ingestion study of 300 ppm and 5000 ppm~~
Medical discussion of effects of feeding experiment on Rhesus Monkeys.
Pcb (Aroclor 1248) fed at 300 ppm; Polychlorinated Triphenyls ~~arodlor~~ (arodlor 5460)
fed at 5000 ppm. Reviews onset of pcb problems, mentions that
30% of randomly selected americans have significant level of pcb's. Effects on humans
include lowered body weight, hair loss, subcutaneous edema, acneiform lesions,
liver hypertrophy, others. Feeding trial in this study was 3 months in duration.
Effects: 15% weight loss, hair loss, subcutaneous edema, acneiform lesions, liver
hypertrophy, thickening of the stomach wall. 300 ppm diet caused these
problems, which is only 10x higher than levels that have occurred in milk
and fish. Magnitude of chronic effects has yet to be determined.
Reference #12 involves dioxin. 13 references overall.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 770547- 770552

DSNO: NPL00007908-00007913

EXNO:

TYPE: Article (medical)

AUTH: Van Miller, Hsu, J. R. Allen / all at
University of Wisconsin

INST: proceedings of the Society for experimental biology and medicine
[Insert name]

TITLE: Distribution and metabolism of ~~the~~ ^{3H-2,5,2',5'} tetrachlorobiphenyl in rats

PAGS: 6

DATE: 750000

DIRC: -

SRCE: West-pro.

KWDS: Hdp, toxicity, pcb, metabolism, Aroclor 1248, excretion

KNMS:

FLD1:

FLD2:

COMM: ~~Min~~ Study to determine ^{amounts} ~~effects~~ of pure Hdp compound metabolized and
nature of metabolites after 1, 3, 7, and 14 days. 30 mg fed one
time to rats. Animals showed no deleterious effects from dosage.
6 different metabolites found, as well as small amounts of Hdp
which remained unmetabolized (about 90% of Hdp metabolized; 60% of
these are mono or di-hydroxy of tetrachlorobiphenyl). Says other experiments
using Aroclor 1248 instead of pure Hdp show higher amounts of the
Aroclor in lipids; also, effects on animal were more severe.
Study indicates that Hdp is rapidly metabolized and excreted; no
appreciable storage depot within the animal. Metabolism appears
to detoxify pcb's.

PCBD
TECHNICAL DOCUMENT

PFNO: 742959-742960

DSNO: NPC00000001 - NPC00000002

EXNO:

TYPE: MAILING LIST

AUTH:

INST: WESTINGHOUSE

TITLE: MAILING LIST - UTILITY CUSTOMERS
NORTHEASTERN REGION - 12

PAGS: 2

DATE: ~~8/24/76 - 10/16/76~~ 760824 - 761016

DIRC: SHELLY GREENBLATT ~~NEW YORK CITY SALES OFFICE~~

SRCE: ~~SHELL~~ WEST PRO

KWDS: MAILING, CUSTOMERS

KNMS: ←

FLD1:

FLD2:

COMM: CFC - NY CITY SALES OFFICE; CUSTOMERS -
EDISON, ~~CUSTOMER~~ NIAGARA MOHAWK, ROCHESTER G&E,
FALL RIVER ELEC. LIGHT CO.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 742961
DSNO: NPC000 000 03
EXNO:
TYPE: MAILING LIST
AUTH:
INST: WESTINGHOUSE ELECTRIC CORP.
TITL: MAILING LIST - UTILITY CUSTOMERS
MIDEASTERN REGION - 13
PAGS: 1
DATE: ~~9/23/76 - 10/18/76~~ 760923 - 761018
DIRC: HANK WILLIAMS, BOB BOWMAN
SRCE: WEST PRO
KWDS: MAILING, CUSTOMERS
KNMS: ←
FLD1:
FLD2:
COMM: CFC - SALES OFFICES - WASHINGTON, D.C., RICHMOND :
CUSTOMERS - PEPCO, VEPCO

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 742963

DSNO: NP000 000 05

EXNO:

TYPE: ✓

AUTH:

INST: ✓

TITL: ✓

EAST CENTRAL REGION - 15

PAGS: 1

DATE:

~~9/10/76 - 10/31/76~~

760910 - 761029

DIRC:

SRCE: ✓

KWDS: ✓

KNMS:

T. JENSEN, J. DWYER, K. THORNBROUGH, J. RUNNY,
B. DINWIDDLE

FLD1:

FLD2:

COMM:

CFC - SALES ~~OFFICES~~ - ~~T. JENSE~~ OFFICES - ALLENTOWN,
NY CITY, PITTSBURGH - CHATHAM CENTER, LOUISVILLE,
SOUTHFIELD

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 742962
DSNO: NPC 000 000 04
EXNO:
TYPE: MAILING LIST
AUTH:
INST: WESTINGHOUSE ELECTRIC CORP.
TITL: MAILING LIST - UTILITY CUSTOMERS
PAGS: 1
DATE: ~~2/27/76 - 9/28/76~~ ~~760827~~ 760827-760928
DIRC:
SRCE: WEST PRO
KWDS: MAILING, CUSTOMERS
KNMS: J. PETERS, T. BRANDENBURG, B. KUESTER, M. PRAY,
J.L. DANIEL
FLD1:
FLD2:
COMM: CFC - SALES OFFICES - CHARLOTTE, BIRMINGHAM,
SAVANNAH: CUSTOMERS - CRESCENT EMC,
DUKE POWER, ALABAMA POWER CO., S. CAROLINA
PUB. SERV. AUTH.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 742 964
DSNO: NPC 000 000 06
EXNO:
TYPE: ✓
AUTH:
INST: ✓
TITL: ✓
MIDWESTERN - - 16
PAGS: 1
DATE: ~~8/26/76~~ - 9/30/76 760826 - 760930
DIRC:
SRCE: ✓
KWDS: ✓
KNMS: R. DODDS, E. CANNON, B. MULVANEY, J. SPACINSKY
FLD1:
FLD2:
COMM: CFC - ✓ SPRINGFIELD, MINNEAPOLIS, INDIANAPOLIS,
EVANSVILLE: ✓ ILLINOIS POWER CO., STEELE
WASECA ELEC., WADENA CITY (WESCO), HOOSIER ENERGY
(WESCO), JASPER MUNIC. UTILITY (WESCO)

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 742 965

DSNO: NPC000 000 07

EXNO:

TYPE: ✓

AUTH:

INST: ✓

TITL: ✓

MIDLAND ✓ -17

PAGS: 2

DATE: ~~9/10/76~~ - 4/1/77 760910 - 770401

DIRC:

SRCE: ✓

KWDS: ✓

KNMS: C. KENNETT, J. PIERCE, J. USCHKRAT, H. BUTZLOFF,
M. CANNON, G.E. CARSON, B. SIMON

FLD1:

FLD2:

COMM: ✓ ST. LOUIS, KANSAS CITY, CEDAR RAPIDS, DES MOINES,
TULSA, OMAHA : ✓ MEMPHIS LG & W,
KANSAS CITY P & L, IOWA ELEC. P & L Co., IOWA PWR. &
LIGHT Co., LAKEVIEW (IOWA ELEC. SUPPLY Co.),
P.S. Co. OF (TULSA?), EAST RIVER POWER COOP.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 742967
DSNO: NRC000 000 09
EXNO:
TYPE: ✓
AUTH:
INST: ✓
TITL: ✓
~~P. RICE~~ SOUTH CENTRAL REGION - 18
PAGS: 1
DATE: ~~76~~ 760827 - 760908
DIRC:
SRCE: ✓
KWDS: ✓
KNMS: J. RICE, J. HORSTMAN, B. McDONALD
FLD1:
FLD2:
COMM: ✓ ✓ HOUSTON, FT. WORTH: ✓ HOUSTON EXPI (WESCO),
BRAZOS ELEC. PWR. COOP., INC., HOUSTON E (WESCO)

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 742968
DSNO: NPC 000 000 10
EXNO:
TYPE: ✓
AUTH:
INST: ✓
TITL: ✓
PAGS: 1
DATE: 760914 - 770428
DIRC:
SRCE: ✓
KV DS: ✓
KNMS: B. TURNER, B. KINSLOW, R. ROBIDOUX, G. CANADA
FI D1:
F D2:
CUMM: ✓ ✓ EL MONTE, SAN DIEGO, PHOENIX : ✓
CITY OF LOS ANGELES, NEVADA POWER (AM FAC ELEC,
SUPPLY Co.), SO. CALIF. ED., TUCSON GAS & ELEC.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 742969
DSNO: NPC000 000 11
EXNO:
TYPE: ✓
AUTH:
INST: ✓
TITL: ✓
PAGS: 1
DATE: 760901 - 761021
DIRC:
SRCE: ✓
KWDS: ✓
KNMS: A. KESSLER, D. CHRISTIANSEN, R. RUST
FLD1:
FLD2:
COMM: ✓ ✓ SEATTLE, PORTLAND, DENVER: ✓ SEATTLE CITY,
BENTON PU (WESCO), COLO-UTE ELEC. ASSOC.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 742970
DSNO: NPC 000 000 13
EXNO:
TYPE: ~~LABORATORY TEST~~ REPORT - LAB
AUTH:
INST: MONSANTO CO., ANNISTON, ALABAMA
TITL: LABORATORY TEST REPORT, INERTEEN 54201 KA,
ELECTRICAL GRADE
PAGS: 1
DATE: 671124
DIRC: H. PEARCE^(HAND WRITTEN); WESTINGHOUSE ELECTRIC CORP., SHARON, PA
SRCE: ✓
KWDS: INERTEEN, CHLORIDES, CHEMIST~~RY~~, CHEMICAL COMPOSITION
KNMS: NELSON, TURNER, MILLER
FLD1:
FLD2:
COMM: ✓ TEST RESULTS FOR INERTEEN

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 742 971
DSNO: NPC 000 000 74
EXNO:
TYPE: ~~LAB TEST~~ Report - LAB
AUTH:
INST: MONSANTO Co., ANNISTON, ALABAMA
TITL: LABORATORY TEST REPORT, INERTEEN 54201 KA,
ELECTRICAL GRADE
PAGS: 1
DATE: 671212
DIRC: WESTINGHOUSE ELECTRIC CORP., SHARON, PA.
SRCE: ✓
KWDS: INERTEEN, CHLORIDES, CHEMIST, CHEMICAL COMPOSITION
KNMS: BONDS, WOOSTER, YATES, MILLER, S.A. KEMP
FLD1:
FLD2:
COMM: ✓ INERTEEN TEST RESULTS

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 742992
DSNO: NPC 000 000 15
EXNO:
TYPE: REPORT
AUTH: P. D. McCLAIN
INST: ~~WEST~~ (WESTINGHOUSE)
TITL: PCBs USED IN CAPACITORS
PAGS: ~~2~~ 1
DATE: 760127
DIRC:
SRCE: ✓
KWDS: PCB, SCB, ~~TECB~~, AROCLOR, ADDITIVE
KNMS:
FLD1:
FLD2:
COMM: ✓ IDENTIFIES MONSANTO AND WESTINGHOUSE
DESIGNATIONS WITH THE CORRESPONDING ADDITIVES -
AROCOR 1016 CONTAINED "REDUCED AMOUNTS OF
TETRACHLOR-, AND HIGHER CHLORINATED COMPOUNDS"
FROM 1972 - 1976; ~~TECB~~ ~~TECB~~ BEGAN ADDING
GLYCIDAL PHENOL ETHER IN 1968. IMPORTANT!

AROCOR
PRODUCT NAMES

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 742973

DSNO: NPC 000 000 16

EXNO:

TYPE: NOTES

AUTH: (McCLAIN?)

INST: (WESTINGHOUSE?)

TITL:

PAGS: 1

DATE: 00 00 00 (760127)

DIRC:

SRCE: ✓

KWDS: PCBs, SCB, ~~TRCB~~^{TRICHLOROBIPHENYL}, AROCLOR, ADDITIVE, LABEL, NAMEPLATE

KNMS: WESTINGHOUSE, MONSANTO

FLD1:

FLD2:

COMM: ✓ CAPACITORS MANUFACTURED BY WESTINGHOUSE " SINCE 1934 CARRYING NAMEPLATE INFORMATION SUCH AS 'INERTEEN' OR 'NON-FLAMMABLE LIQUID' CONTAIN PCB " ARE LISTED BY TYPE AND YEARS. IMPORTANT! THIS APPEARS TO BE HANDWRITTEN REPORT ASSOCIATED WITH 742972.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 742974
DSNO: NPC000 000 17
EXNO:
TYPE: REPORT
AUTH: (McCLAIN ?)
INST: (WESTINGHOUSE ?)
TITL:
PAGS: 1
DATE: 000000
DIRC:
SRCE: ✓ TRICHLOROBIPHENYL
KWDS: HCB, ~~FE~~ SCAVENGER, GLYCIDYL PHENYL ETHER, SCB,
TIN TETRA PHENYL, ADDITIVE, TCB
KNMS: WESTINGHOUSE, MONSANTO
FLD1:
FLD2:
COMM: ✓ IMPORTANT - SCAVENGER ADDITIVES ^{WITH} ~~1~~ HCB, SCB,
AND TRICHLOROBIPHENYL AND TCB. DESIGNATION
IDENTIFIED FOR WESTINGHOUSE AND ~~MONSANTO~~ MONSANTO.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 742 975 - 742 989

DSNO: NPC 000 000 18 - NPC 000 000 32

EXNO:

TYPE: LETTER (WITH ATTACHMENTS - REPORTS)

AUTH: J. B. BRITTAIN

INST: WESTINGHOUSE ELECTRIC CORP., BLOOMINGTON

TITL: ~~PCB - POWER~~ USE AND IMPORTANCE OF PCBs IN
POWER CAPACITORS

PAGS: 15

DATE: 7/12/72

DIRC: E. BOQUIST

SRCE:

KWDS:

PCB, USE, CAPACITORS, HANDLING, COST, ENVIRONMENTAL HAZARDS,
CAUTION, CONTROL, DISPOSAL, INERTEN, EMPLOYEE SAFETY, CONTAMINATED, LABEL

KNMS:

D. SAUTER, R. McCLAIN, MONSANTO, ANSI, WESTINGHOUSE,
N.R. CLARK, J.F. KUZELA, DR. E.M. MOORE, W.P. PAPAGEORGE,

FLD1:

P.G. BENIGNUS, E.G. HAMMER, F.R. LENGENFELD, DR. T.K. SLOAT,
A.M. SALAZAR

FLD2:

COMM:

✓ BRITTAIN FORWARDS INFO RE ^{USE AND} IMPORTANCE OF PCBs
IN POWER CAPACITORS, AS TO GETHER WITH INFO REQUESTED
WITH REGARD TO HANDLING PCBs IN THE PLANT. PURPOSE
OF REPORT IS TO ESTABLISH NEED FOR CAPACITORS
WITH PCB. OTHER SOURCES OF LEADING CURRENT ARE
SEVERAL TIMES MORE COSTLY TO PURCHASE, INSTALL,
OPERATE, AND MAINTAIN THAN PRESENT DAY CAPACITORS.
MONSANTO HAS ALERTED CUSTOMERS TO EXERCISE CARE IN
USE OF FLUIDS; ACTIONS HAVE REDUCED ENVIRONMENTAL
HAZARDS THAT MIGHT EMANATE FROM CAPACITOR USE.
ESTABLISHING A PLAN (742980) TO CONTROL USE AND DISPOSAL
OF PCB APPEARS DESIRABLE. IMPORTANT (742982) LETTER,
"INERTEN AND ENVIRONMENTAL CONTAMINATION" WAS

DISTRIBUTED BY DAD MARKETING TO HOLDERS OF WESTINGHOUSE
CAPACITOR CATALOGS IN 1970. EACH CAPACITOR UNIT HAD A CAUTION
LABEL AFFIXED AFTER NOV. 1970. SAFE PRACTICE DATA SHEET REVISED
4/30/71 IS ATTACHED AS EXH. "D." EXHIBITS "E" ~~THROUGH~~ "K" ARE NOT
ATTACHED AND ~~ARE~~ RELATE TO DISPOSAL OF CONTAMINATED WASTES,
ENVIRONMENTAL CONTROL, CAUTION LABELS, AND ARCELOR 1016
PHASED INTO PRODUCTION.

REFNO: 742990 - 742996

DSNO: NPC 000 000 33 - NPC 000 000 39

EXNO:

TYPE: LETTER (ATTACHED ANSI DRAFT PROPOSAL)

AUTH: R. D. McClain

INST: WESTINGHOUSE

TITLE: "CAPACITOR PLANT HOUSEKEEPING AND EMPLOYEE SAFETY"

PAGS: 7

DATE: 720114

DIRC: Dr. A. POZEFSKY

SRCE: ✓

KWDS: CAPACITOR, EMPLOYEE SAFETY, STANDARD, LIMITS, PROCEDURES,
PCB, SHIP, VAPORS, FLUID, CONTROL, DISPOSAL, SYSTEMIC EFFECTS,
KNMS: ANSI

FLD1:

FLD2:

COMM: ✓ ~~ATTACHED~~ LIST OF ADDRESSEES IS NOT ATTACHED.

RECOMMENDATIONS BY ANSIC-107 RE MATERIAL USAGE IN
CAPACITORS, SHIPMENT AND TRANSFER OF PCB, HANDLING
DURING MANUFACTURING, CLOSE CONTROL AND DISPOSAL
PROCEDURES, SPILLS. REFERENCE MATERIAL INCLUDES:
MONSANTO TECH. BULLETIN PL-306, AROCLOR PLASTICIZERS (1960);
THRESHOLD LIMIT VALUES FOR 1964 (1964); TOXICITY OF VAPORS
OF AROCLOR 1242 AND 1254 (1956); PROBLEM OF POSSIBLE
SYSTEMIC EFFECTS FROM PCB (1937); ETC.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 742 997- 742 999
DSNO: NPC 000 000 40 - NPC 000 000 42
EXNO:
TYPE: LETTER
AUTH: E. P. WHEELER
INST: MONSANTO
TITL: TOXICITY OF PCB
PAGS: 3
DATE: 730223
DIRC: W. P. SPEICHER
SRCE: ✓
KWDS: TOXICITY, ENVIRONMENTAL HEALTH, ASKAREL,
KNMS: WESTINGHOUSE, MONSANTO, EPA,
FLD1:
FLD2:
COMM: ✓ CONTINUED USE OF PCB CAPACITORS AND TRANSFORMERS
IS ALLOWED UNDER RESTRICTIONS BASED PRIMARILY ON ACTION
BY MONSANTO TO PROVE THAT THE CURRENT QUALITY
PCBS MANUFACTURED IN THE U.S. SHOULD BE USED WITH
APPROPRIATE PRECAUTIONS WITHOUT SERIOUS INDUSTRIAL HAZARDS
AND WITH COMPLETE PROTECTION OF THE ENVIRONMENT.
GOVERNMENT AGENCIES WOULD ^{RIGHTFULLY} QUESTION A CHANGE IN THE
~~USE~~ ASKAREL FLUIDS WHICH WOULD INTRODUCE THE PCN OR
~~POLY~~ POLYCHLORINATED HYDROCARBONS.

PCBD
TECHNICAL DOCUMENTS SCREEN

PFNO: 743000 - 743027
DSNO: NPC 000 000 43 - NPC 000 000 70
EXNO:
TYPE: ARTICLE
AUTH: MONSANTO, SPECIALTY PRODUCTS GROUP (WITH DISCLAIMER)
INST: MONSANTO
TITL: ASKAREL (AFTER 1974)
PAGS: 28
DATE:
DIRC:
SRCE:
KWDS: AROCLOR, ASKAREL, INERTEEN, PYRANOL, PRECAUTIONS, CONTAMINATION,
PCB, CAPACITOR, TRANSFORMER, WARNING, LABEL, INSTRUCTIONS, DISPOSAL, RECYCLING,
KNMS: IEEE, ASTM, NATIONAL ELECTRIC CODE, E.L. RAAB,
DR. T.K. SLOAT, ANSI, DOW CORNING, F.M. CLARK
FLD1:
FLD2:
COMM: ✓ TRANSFORMER ASKAREL HAS BEEN MADE, HANDLED, AND USED
FOR OVER 40 YEARS AND CAN BE HANDLED SAFELY WITH
PRECAUTIONS. (743005) PROLONGED CONTACT MAY CAUSE DRYING,
CHAPPING SKIN. LABELING, DISPOSAL, RECYCLED ASKAREL,
INCINERATION, TOXICITY AND SAFE HANDLING ARE ADDRESSED. (743022)
CAUTION LABEL RECOMMENDATION (743026).