SLIDES —

Ginny put in caps on transparencies
parts of attached pages marked

FEI

PROPOSED OSHA GENERIC CARCINOGEN STANDARD
page (1)

page (2) only material underlined

page (3) 1 slide made for material down to green
1 slide made up as underlined in green
which continues into page (4)

page (5) 1 slide made up as per red underlined

Ginny —
Send copy of notes (not slides) to Ken Perry
along c̄ my letter to Jim McGowen
& following note

" Ken - I meet c̄ Jim McGowen, Fred Irving & Marv
at 2PM Jan 9
Ganz : present this material, & to ~~reco~~ ~~decision~~
options for Alcoa posture. On return & decision
I will contact you Bob "

PLAINTIFF'S
EXHIBIT
AL-1021

ALCOA0004006

PROPOSED OSHA GENERIC CARCINOGEN STANDARD

WHAT IS PROPOSED?

#1 OSHA WILL BY REGULATION MAKE A DETERMINATION THAT A SUBSTANCE USED IN PROCESSING, MANUFACTURING, ETC. IS A CANCER PRODUCER (CARGINOGEN)

#2 UPON SUCH DETERMINATION, OSHA IS REQUIRED TO ISSUE CONTROL REGULATIONS WITHOUT DUE REGARD FOR COST/BENEFIT CONSIDERATIONS

PROPOSED OSHA GENERIC CARCINOGEN STANDARD

PROBLEM: PRESENTED BY:

#1. OSHA WILL ISSUE AND BY REGULATION DETERMINE THAT A COMPOUND IS A CARCINOGEN

A. THERE WILL BE NO FURTHER HEARING OF THE EVIDENCE ON A COMPOUND-BY-COMPOUND BASIS, OF:

(1) VALIDITY OF CATEGORIZATION AS CARCINOGEN

(2) APPROPRIATENESS CONTROL MEASURES TO BE TAKEN

B. COMPOUND CATEGORIZATION TO BE MADE BY OSHA ALONE. ARBITRARY AND UNQUALIFIED BUREAUCRATS COULD DECREE ANY COMPOUND ON NIOSH SUSPECTED CARCINOGEN LIST AS A CARCINOGEN, E.G.,

MERCURY - DESPITE NORMAL BLOOD LEVEL

SODIUM CHLORIDE - DESPITE NORMAL BLOOD LEVEL

CHOLESTEROL - DESPITE NORMAL BLOOD LEVEL

LACTOSE - DESPITE NORMAL BLOOD LEVEL

ETHANOL - DESPITE NORMAL BLOOD LEVEL

C. FIXES BY REGULATION THE STATE OF KNOWLEDGE OF CARCINOGENESIS, IGNORES

--DIFFERENCES IN METABOLIC PATHWAYS

--DIFFERENCES IN DETOXIFICATION PATHWAYS

--IGNORES CONCEPT OF RELATIVE POTENCY OF CARCINOGEN

--PROBLEM OF EXTRAPOLATION FROM ANIMAL TO MAN

--PROBLEM OF MASSIVE DOSE AND RELEVANCY TO MAN AS STATED BY NATIONAL CANCER INSTITUTE

"THE SUBCOMMITTEE RECOGNIZES THAT AT PRESENT THERE IS NO SIMPLE AND UNIVERSAL DEFINITION OF EITHER CARCINOGENESIS OR NEOPLASIA. THE CRITERIA

WHICH ARE DESCRIBED ARE GENERAL GUIDELINES AND NOT RIGID, UNIVERSAL CRITERIA. THE COMPLEXITY OF THE PROBLEM DICTATES THAT THE EVALUATION OF THE POTENTIAL HUMAN HAZARDS OF A GIVEN AGENT MUST BE INDIVIDUALIZED IN TERMS OF THE CHEMICAL AND METABOLIC ASPECTS OF THAT AGENT, ITS INTENDED USE(S), THE DATA AVAILABLE AT THE TIME THAT THE DECISION MUST BE MADE, AND OTHER FACTORS PERTINENT TO THE CASE UNDER CONSIDERATION. EACH CASE MUST BE CONSIDERED ON ITS OWN AND THE CRITERIA APPROPRIATE FOR ONE AGENT MAY NOT NECESSARILY APPLY TO ANOTHER." (NATIONAL CANCER INSTITUTE ADVISORY BOARD, COMMITTEE ON ENVIRONMENTAL CARCINOGENS_

IN SUMMARY:

REGULATION REPRESENTS A SIMPLISTIC CATEGORIZATION SCHEME (WHICH WILL NOT BE OPEN TO SCIENTIFIC SCRUTINY) DESIGNED FOR CONVENIENCE OF THE REGULATORS.

What's Impact on Alcoa?

Review of NIOSH List of Suspected Carcinogens, indexed with compounds used or handled in Alcoa

Primary Products	Mill Products	Allied Products
Ferricoxide (red mud)	Beryllium	Nickel salts
Mercury	Trichloroethylene	Styrene polymer
Carbontetrachloride	Naphthylene	
Beryllium	Dioxane	
Multiple 4,5,6 ring hydrocarbons	perchlorethylene	
Hexachlorobenzane	Chromic acid salts	
Nickel	Titanium dioxide	

Each compound leads to

Element #2 mandates regulation for control of exposure without consideration of merits (cost-benefit relative potency of compound) of such control once compound is designated by OSHA as a carcinogen.

Examples of Controls Mandated

Capital Costs (Mercury, Trichloroethylene)

Engineering controls

--Ventilation, open vessels (10 to 50 x persent $)

--Mechanical seals for pumps ($5-10K each pump)

--Liquid level alarm, each storage and process tank ($3K/tank)

--Enclosure each tank ($20-30K/tank)

--Design and construct vapor traps, each storage tank

New plating, vapor phase tank - probably not practical for retrofit - Design, test, construct new tanks

Segregation of Work Area - construction costs, independent ventilation system required.

LUNCH ROOM CONSTRUCTION - ANY NEAR WORK AREA NEEDS BE PRESSURIZED, TEMPERATURE CONTROLLED, AIR-LOCK TYPE DOOR

OPERATING COSTS

INITIAL ATMOSPHERIC EVALUATION = $(450 = 10X NO. EMPLOYEES)

ONGOING ATMOSPHERIC EVALUATION

STARTUP = $(45 X NO. EMPLOYEES)

ANNUAL OPERATING = $(67 X NO. EMPLOYEES)

MEDICAL SURVEILLANCE = $(120 X NO. EMPLOYEES)

PERSONAL PROTECTIVE EQUIPMENT

(PROVIDE UNIFORMS, CLEAN, LAUNDER, MAINTAIN, REPLACE; OTHER EQUIPMENT) = $170/EMPLOYEE/YEAR

EMERGENCY PLAN AND PRACTICE $\cong$ $400/EMPLOYEE

RECORD KEEPING

STARTUP $\simeq$ $200/EMPLOYEE

ANNUAL OPERATING $\simeq$ $15/EMPLOYEE

TRAINING

STARTUP = $(200 + 15 X NO. EMPLOYEES)

ANNUAL COSTS = $(160 + 15 X NO. EMPLOYEES)

OPTIONS FOR ACTIONS

1. DO NOT TESTIFY AT HEARINGS.

   PRO

   MCA, SOCMA, SPI, API, ETC. WILL TAKE UP BETTER.

   KEEPS ALCOA OUT OF CONTROVERSY, OF BEING "PRO-CANCER"

   SAVE ALCOA COST, TIME FOR PREPARATION EFFORTS

   CON

   DIMINISHES BREADTH OF INDUSTRY FRONT

   MAY IMPAIR ALCOA'S ABILITY TO LEGALLY CONTEST FUTURE ACTIONS STEMMING FROM SUCH REGULATIONS

2. TESTIFY IN RE: SCIENTIFIC QUESTIONS ONLY (NB-78/1/30 DEADLINE FOR SUBMISSION)

   PRO

   KEEPS ALCOA POSTURE "CLEAN" P.R.-WISE

   ONLY REQUIRES TIME INVESTMENT OF BDD

   WILL ALLOW FUTURE LEGAL CONTEST OF SCIENTIFIC ISSUES FOR ANY MATERIAL DIRECTLY TESTIFIED UPON

   CON

   LESS COMPLETE OBJECTION

3. TESTIFY IN RE: SCIENTIFIC TO ECONOMIC OBJECTIONS

   PRO

   REVERSE OF #2 OPTION

   CON

   REVERSE OF #2 OPTION

(NB - IF ECONOMIC IMPACT TO BE WORKED UP, AIHC TEAMS AVAILABLE JAN 8-12 IN WASHINGTON TO AID INDIVIDUAL CORPORATIONS IN TESTIMONY PREPARATION.)

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B. CATEGORIZATION TO BE MADE BY OSHA

C. FIXES BY REGULATION THE STATE OF KNOWLEDGE

IMPACT ON ALCOA

MANDATES REGULATION FOR CONTROL OF EXPOSURE WITHOUT CONSIDERATION OF MERITS

NIOSH LIST OF SUSPECTED CARCINOGENS

PRIMARY PRODUCTS	MILL PRODUCTS	ALLIED PRODUCTS
FERRICOXIDE (RED MUD)	BERYLLIUM	NICKEL SALTS
MERCURY		STYRENE POLYMER
CARBON TETRACHLORIDE		TRICHLOROETHYLENE
BERYLLIUM		NAPHTHYLENE
MULTIPLE 4,5,6 RING HYDROCARBONS		DIOXANE
		PERCHLOROETHYLENE
HEXACHLOROBENZANE		CHROMIC ACID SALTS
NICKEL		TITANIUM DIOXIDE

CAPITAL COSTS

ENGINEERING

--VENTILATION (10 TO 50 X PRESENT $)

--MECHANICAL SEALS ($5-10K, EACH PUMP)

--LIQUID LEVEL ALARM ($3K/TANK)

--ENCLOSURE ($20-30K/TANK)

--VAPOR TRAPS, EACH STORAGE TANK

NEW PLATING, VAPOR PHASE TANK

SEGREGATION OF WORK AREA

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