From the desk of Andy Hafferty

AA-17

1.1.2

~~Q1 Did site E only have Ba / Hg~~ No Date

~~Q2 Which have drums~~

Q3 ~~Which are bulk waste (liquid only)~~

~~Q4 Drilling - danger of hitting drums~~

Q5 - Wastes accepted by RRC after Dec 74 Y or N

if Y

Q5A - What

Q5B - How much

Q5C - where disposed

Q5D - how disposed

~~Q6 - Burrial Depths?~~

~~Q7 - Site visit / DOE visit~~ 15-25

~~Manet. study~~

~~Drill pt. matters~~

IMP. → Access

Q8 Archive samples

(2) Larry Peterson 456-5056

Spokane (509)

(3) Claude Sappington

456-6149

Wa Op Off 753-9014 office Row 6 Olympia

(1) Bob Kievet → 753-9437

EPA

6401 N. Monroe

Maple St. Bridge (Toll)

go N on Maple St.

right on Wellesley

~6 blocks then on corner of

Monroe & Wellesley - turrets on top downstairs

USEPA SF

1439631

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1415 16 Roger Grey

From the desk of Andy Hafferty

(called) SMO 1100hrs on Paula
28 Dec 84

not individual isomers but $\sum_{CL=1}^{CL=n}$ Hondogs

totals.

Region 5 or 7 have dioxin protocols

Region 5 ~~Masha Kuehl~~ 312-353-3805
Carolyn Kucharz = 886-1975
Call back on 2 Jan.

Region 7 Joyce Woods 913-236-3881
will return call 31 Dec 84
Charlie Hensley
Dr. Bob Klemeford

called
4 Jan 1200hrs

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From the desk of Andy Hafferty

Mike Mille

0900 2 Jan 85

Call Dr. A Wong CAL. Anal. Lab.

Dioxin - Cl homologs
Dibenzofuran -

specific isomers

tetra thru octa homologs PCDD & PCDF
1 ppb soils

$900/sample

2378 TCDF
C_{13} OCDD

method ?
Confirmation?
Protocol ?

xtr I.S.
clean up EPA clean-ups
alumina
"C"

DB-5 column screen
quant homologs

SP-2330

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From the desk of Andy Hafferty

As of 19 Dec. 84
Meeting w/ B. Eusebio

Res. Rec.

1. Objective (s)

Conduct a Tier 2A dioxin sampling of Resource Recovery; Pasco, Wa. Want to know if dioxin is present on the site.

Key words

Dioxin - isomers PCDD & PCDF analyses
Tier 2A - QA/QC safety
Sampling - matrices / where / how many drums/ponds/soil/water/sludges
On site - if found then a 2nd study for migration

Sub objective:
Want isomer info on PCDDs and PCDFs
Want 1 ppb LLD's

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2. What to do - most direct route to fulfill objective(s)

~~A. Review all available records on Res Rec.~~

A. Information.

Q. What wastes were delivered to Res. Rec.

A_1 - Res. Rec. Records

A_2 - Hauler Records

A_3 -

Sea Cascade lv ~~Alt~~ 8:05

ar. 9:20

Sputnik lv 6:45

ar. 7:35

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From the desk of Andy Hafferty

March 17, 1981

Letter from Res Rec. Corp Pres. J.R. Kimberly, Jr to EPA. notification of Request to Withdraw Haz. Waste Permit Application WAT540010089

as of Jan 1, 1981 the landfill in Pasco was transferred to new co. "The Pasco Sanitary Landfill"

no haz. wastes accepted at site since Nov. 17, 1980.

June 29, 1984

Memo from JUB to DOE

refers to March 84 as 6th G.W. monitoring

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From the desk of Andy Hafferty

List of Disposers who used Res. Rec./Posco LDFl.

1. Kennewick Disposal Co
   1974 thru 1981

Type	Source
Organics	Fertilizer
Inorganics	Utility Co.
Solvents	Lab/Hospital
Heavy Metals	Unknown
Mixed Municipal wastes	
Unknown	

2. Kerley Chemical Co. Inc.
   1980 thru 1981

Ammonium Sulfide	Fertilizer
Ammonium Thiosulfate	

3. Res. Rec.
   1972 thru 1974

Organics	General chemical
Inorganics	plating/Polishing
Solvents	Paint Mfg
Pesticides	Solvent reclaiming
Heavy Metals	resin mfg
Acids	pesticide mfg
Bases	chloralkali plant
	shipyard

4. Chemical Processors, Inc
   1971 thru 1976

Organics	manufacturing
Inorganics	
Solvents	

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5. Basin Disposal Inc

1972 thru 1980

type	source
solvents	Sanitary/Refuse
acids	
mixed municipal wastes	
unknown	

6 Pasco Sanitary Land Fill

1972 thru 1974

same list as 3.

7 Chevron Chemical Co.

no dates

Fertilizer	fertilizer

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From the desk of Andy Hafferty

2 Jan 85

0800 Review Res. Rec. Files

Meet Lazar Homolog analyses

0900 call Cal Anal Lab

Homolog anal

1000 Meet Bill & Jeff

discuss

1130 Meet Bill Jeff Andy Dave

discuss times

~~Lunch~~

1400 Rev.ner S.I. Res Rec

1500 Call Lauri Cohen for DOE

contact

- Bob Kievet 434-9014

Wash Op Off - Olympia

1600 called Larry Peterson Spokane DOE

1800 Statistical Sampling Plan

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From the desk of Andy Hafferty

Drum sites - circle

Dry ponds - grid

possible combination

soils only

sample each distinct horizon

or every (5)(10)? feet which

ever is smaller.

Touchet Formation 0-40 ft
Pasco Gravel 40-60 ft

TOC or TOX ???

Drums stacked 3 hi - ≤ 15 feet max

+ 4 feet soil max on top -

≈ 20 feet below surface

lets max depth

of borings as 30 feet

Auger + Split spoon to 40 ft.

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From the desk of Andy Hafferty

Objective: Determine if is dioxin and/or PCDD

PCDF are present in the soil ~~/sediment~~ of the Res. Rec. Haz waste disposal site

associated with contam at ≥ 1 ppb

Difficulties:

Access to site

Some material in drums of unknown integrety

sound waste type 2 YD from Rhodia / PCP wastes / Aromatic Taxes

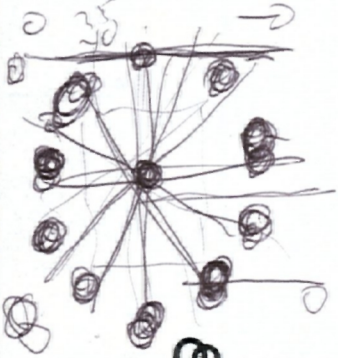
75 PCDD isomers and 135 PCDF isomers

not all "understood"

0
5
10 — toxicity vs frequency of each isomer
15
20 — high analytical costs
25 — homologs!?
30
35 → LLD isomers 1 ppb
40

hi haz drilling eg drums

nitemp. rushed dioxin



Time Constraints

Set-up - Take down

Security

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From the desk of Andy Hafferty

1230 Joyce Woods called

1330 called

Dave Miller

Battelle

Columbus Ohio

614-424-6490

4-8 DD & DF homologs

30x 18hrs

Col. chron.

hi res anal.

confirmed 10 pptrillion/10g s

$1200 → $2500

has several stds for isomer work ~ $500 each

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