No Date

Jim Everts
Ben Eusebio
John Osborn

Bruno, Idaho
Enviro
Safety
System
Inc

1.1.2

AA-22

Laurie cohen

is dioxin there?

drums

soils

Jack Seeva EPA
contact for Res Rec.

draft workplan 15 Mar EPA

28 Feb in-house

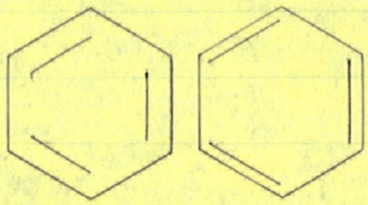
Geo contact - Roland
Drill contact - Roland
Chem. contact - Andy
Stat. contact - Andy / EPA thru Ben E.
sampling techniques
QUAPP - Gorelick generic
SMO - Osborn

bias pattern!!!!

→ Phase 1 source verification / ident
2 migration

sampling plan - site specific only unique item only
generics will be in QUAPP
reference as much as possible

Format - regular work plan
task approach



Introduction generic
EPA task
Objectives: indicates this is phase 1 of two phase approach
pressence of dioxin & isomers etc.

USEPA SF
1439629

letter to EPA L.V.
for aerial photog.

by end of Jan. get all data in !!!

Start subcontracting,
by 20 Feb.

We have ① EPA-600/4-83-020
Prep of Soil Sampling protocol: Techniques & Strategies (Mason)
② Final Draft Report Sampling Guidance Manual For National Dioxin Study (Vorsar)
③ Soil Sampling Q.A. User Guide
EPA 600/4-84-043

Freebies

Paint Inte

Chemical & Process tech encyclo
1974
Ed DM. Considine

Wayne Elson 442-1828

Comm. Jour. on Dioxin

EPA Pub. Biblio Quarterly Abstracts Bull. Keyword Index
Dibenzodioxin

Oct-Dec-83 Furans - 0 TCDD - 0 Dibenzofuran - 0

83

Dioxin - Eval. of Haz-Waste Incineration in a Cement Kiln at San Juan Cement DE8301 2571

24D - NA. 245T - 0

Jul-Sep 83 Furans - 0 TCDD - 0
Dioxin - 0
24D - 0 245T 0

Apr-Jun 83 Furans - 0 TCDD - 0
Dioxin - 0
24D - 0 245-T-0

Jan-Mar 83 Furans - 0 TCDD - 0
Dioxin - 0
24D 245T

Jan-Mar 84 Furans - 0 TCDD - 0

84

Dioxin Determ. of Dioxin Levels in Carbon Reactivation Process Effluent Streams PB 84-137710 EPA 600/2-84-013

* 24D Relative Airborne Losses of Commercial 24D Formulations from a Simulated Wheat Field PB 84-142322 EPA 600/J-83-126

* 245T Photolysis Rates of (245 Trichlorophenoxy) Acetic Acid & 4Amino-3,5,6-Trichloro Picolinic Acid in Natural waters PB 84-142488 EPA 600/J-83-143

Apr-Jun 84 Furans - 0 TCDD - 0

Dioxin - Destruction of PCB-Contam. Soils with a High Temp Fluid-Wall (HTFW) Reactor PB 84-168798 EPA-600/D-84-072

24D - 0 245T - 0

Report on the Feasibility of APEG Detox of Dioxin Contam. Soil EPA 600/2-84-071

July-Sep 84 Furans - 0 TCDD - 0 24D - 0 245T - 0

Dioxin - EPA Method Study 26 Method 613 2378 TCDD " Lazar "

* PB 84-188879 EPA 600/4-84-037

Feasibility of Using Solid Adsorbents for Dioxin Sampling

* PB 84-215482 EPA 600/7-84-060

Oct-Dec-82 Furans - 0 TCDD - 0 245-T-0 24D-0

Dioxin - Test Protocol A Environ. Assess. of Refuse Thermal Processing Facilities PB 82-201567

Determ. of TCDD in Indust & Munic. Wastewaters PB 82-196882 EPA-600/4-82-028

MUST * Dioxins PB 82-136847 EPA 600/2-80-197

82

Jul-Sep 82 — 0

Apr-Jun 82 — 0

Jan-Mar 82 — 0

81

Oct-Dec 81 Furan — 0 245T-Sev Dioxin

24D - Ambient Water Qual. Criteria for 24D PB81 117533 EPA 440/5-80-042

Dioxin - Risk Assess on 245T, 245TP, 2378 TCDD PB81-234825 EPA600/6-81-003

Dibenzofuran Bacterial degradation of Dibenzo-p-dioxin & Chlorinated Dibenzo-p-dioxins

?* PB81-171639 decomp products

Jul-Sep 81 Furan — 0 TCDD — 0 245T - one on spontaneous abort.

Dioxin — 0 Dibenz. furan — 0

Apr-Jun 81 — 0

Jan-Mar 81 — 0

Oct-Dec 80 Furan — 0 TCDD — 0 * 245T - 245T: Positive Document!

24D — 0 PB80-212665 EPA/SPRD-80/76

* Dioxin. Vol 1 Sources, Exposure, Transport & Control PB80-220072

GC/MS Paper PB80-177330 for 2378 TCDD

Dibenzofurans (dioxins) Effects of PCP on Hepatic Drug-Metabolizing Enzymes & Porphyria related to Contam. w/ Dibenzo-p-Dioxins & Dibenzofurans

PB80-129976

80

Jul-Sep 80 Furan — 0 TCDD — 0 245T — 0

Dioxin — 0

Dibenzofuran — 0

Apr-Jun 80 Furan — 0 TCDD — 0 245T — 0

Diox — 0

Dibenzofur — 0

Jan-Mar 80 Furan 0 TCDD — 0 — 245T 0

Di — 0

79

Oct Dec 79 245T — 0 TCDD — 0 Furan 0

Dioxin Dibenzodioxin — Ambient Water Qual. Criteria 2378 TCDD

PB-292442/1BE 1978 64p

81

Jul-Sep 79 — 0

Apr-Jun 79 — 0

Jan-Mar 79 — 0

78

Oct-Dec 78 245-T - ~~several~~ TCP 24D } Method for Determ. of Low levels of Exposure to 24D & 245T PB 276 306/8BE several papers on exposure

Dibenzofuran - one on 2378 DBF tox in chicks

Dioxin Chlorodibenzo-p-dioxin Contam of 2 Commercially available PCPs PB-280 096/OBE
& some tox. studies

Oct-Dec 77 — 0

77

Dioxins 1980 EPA-600/2-80-197

Dioxin Vol 1 Sources, exposure, transport, control 1980
EPA-600/2-80-156

Dioxin Vol 2 Analytical methods for Indust. waste 1980
EPA-600/2-80-157

Dioxin Vol 3 Assess. of dioxin forming chem. proc. 1980
EPA 600/2-80-158

Dioxin.

- "Dioxin in MO. = Troubled Times" Science 1/22/83 60-62
- "Times Beach: the Long Road to Recovery," Science News 4-23-83 :220
- Dioxin Issue C&EN 6/6/83
- EPA Plan to Beefup budget for Dioxin Res. C&EN 7/11/83: 16
- Dioxin Digest Sci News 9/3/83 : 156
- Chlorinated Dioxins as herbicide Contaminants ESaT, Nov 83 p 530A-540A
- "EPA Outlines Plan to Identify/Clean Dioxin-Contam. Sites C&EN. 1/2/84: 20

Outline / Proposed Res. Rec Work

1. 3 contaminated zones A, B, and (C+D)
2. Hollow stem auger drilling
3. 10 holes around each zone (30 total)
4. sample every 5 feet to twenty feet then every 10 feet to forty feet (first soil horizon at ~40')
   0, 5, 10, 15, 20, 30, 40 (at least 1' below the horizon)
5. total samples 210 samples + QC requirements
6. Sampling: Time: 2 weeks +
   Drilling Cost: 15-20 K
7. Analyses Time ?
   Cost ≈ $400,000 +