Monsanto

FROM (NAME & LOCATION) A. E. Leisy, W. G. Krummrich Plant

DATE : October 13, 1975 CC: W. B. Papageorge - B1ND

SUBJECT : VERSAR VISIT

REFERENCE :

TO : Mr. R. W. Flint

The technical people from Versar requested information on types and control of waste effluents, both air and water from the incinerator and the operating departments. They were also interested in the control equipment operating and technical techniques. The following is a summary of information discussed.

1. Incinerator

Cost of construction	$900,000 plus site preparation and utilities
Operating expenses	$600,000 in 1976 est.
Operating capacity	6,000,000 pounds plus

Permit exists
Safeguards to insure complete combustion
Limits of analysis 10 ppb
Air and sewer losses No detectable amount and 0 to 0.4 #/day
High costs result of high temperature to burn PCB completely.

They visited the incineration area and asked to see tank truck, tank car, and drum unloading areas and were interested in how we controlled the sumps and actually followed lines (without help) to confirm sumps were pumped through sample station. There was a negative comment about area around drum emptying station. A block sketch on blackboard indicated flow of material for them.

2. Department

Entire area curbed with all liquid flow through sampling and measuring station.
HCl scrubbed and sent to another area for PCB removal.
Flow varied from 150-300 gpm depending upon operations.
$FeCl_3$ and CaOH solids to residue to incineration.
Heat transfer units air cooled except for 1016 system which had water unit but run under vacuum system to prevent water contamination.
Ejector tail pipes directed to sumped area.
Air sampling results negative -- no PCB found.
Average PCB losses from department at 0.5 pound per day or less to sewer.

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2. Department (Cont'd)

The subject of direct contact--process water--PCB came up. Visitors considered ejectors were possible source. No others existed. The question was asked as to people tolerance to product. Information was given that there had been no case where any person had adverse reaction to the products during any time with Aroclors. They were aware that Aroclors 1221, 1242, 1254, and 1016 were now being produced, and had some knowledge as to what happened to HCl off-gas.

3. Tank Car Loading

Area sumped under cars.
Procedures existed for insuring integrity of car before leaving Monsanto. Prior knowledge existed that customer owned (F.O.B. WGK). Imparted our reactions to calls for help in case of spill, etc.

4. Subjects that were referred to W.B.P.

Technical papers on carbon/foam effluent studies.
Soil migration studies.
BiØ - they brought up
Who else burns PCB
Background loss
Solids disposal prior to incinerator use
Sauget Treatment Plant
Incinerator permit, and permit application
Process info re temperatures, pressures, compositions, and operating techniques

Discussion subjects were limited generally to hardware for control of effluents.

5. Information not brought up and not discussed.

Personnel monitoring
Current disposal of solids such as rags
Types/locations of landfills
Individual stream PCB losses
Protective equipment
Losses of PCB from WGK plant.
Disposal of returned empty drums.

A. E. Leisy

/tm
attachment: Copies of written information supplied to visitors per W.B.P.

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