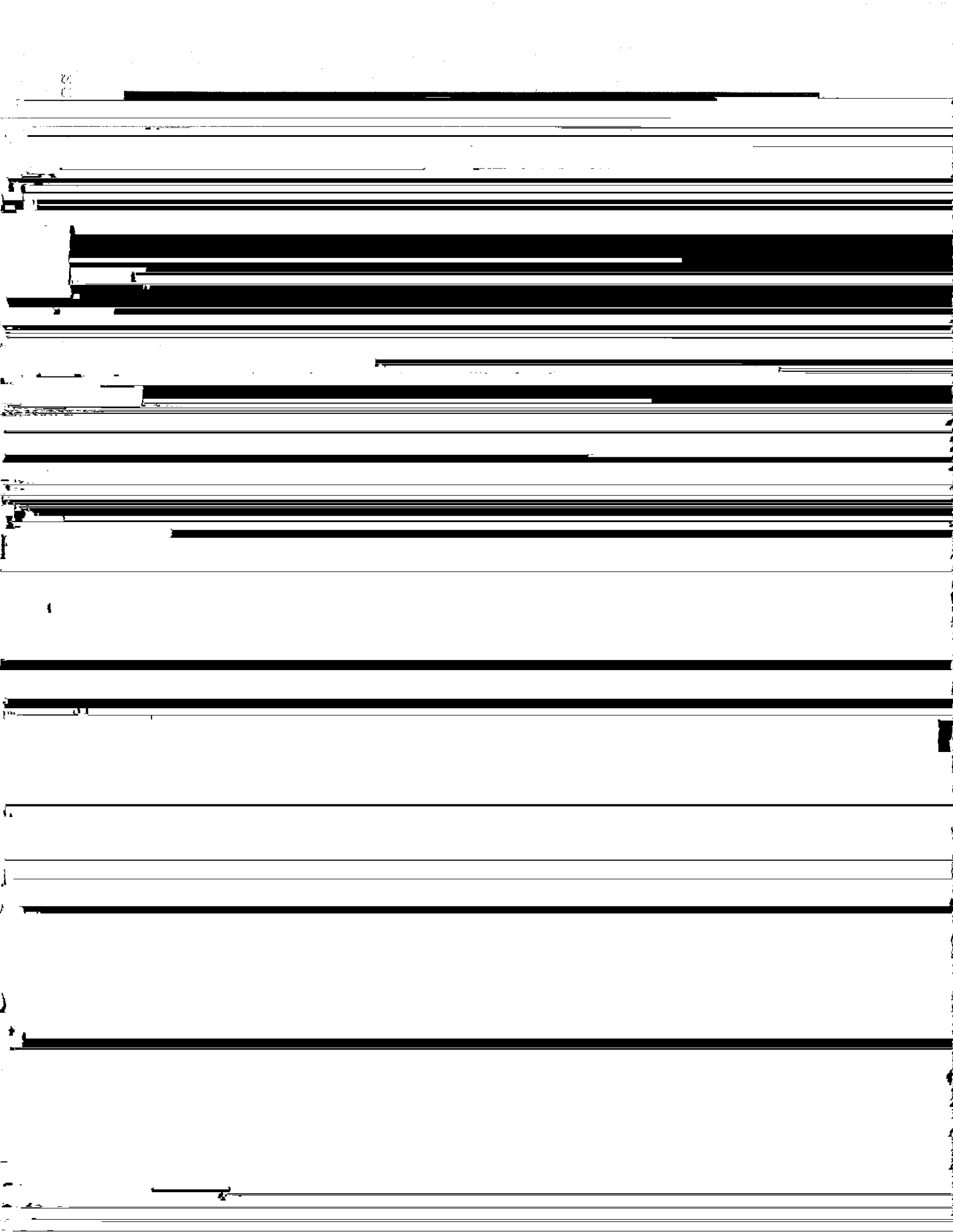
FEBRUARY 2005
VAPOR INTRUSION SAMPLING REPORT



being operated at the time of the site visit. There were only slight odors of plastics noted at some work areas but no odors of cleaning solvents, with the exception of the restrooms. Housekeeping is a high priority at this plant. All work areas were extremely clean with no debris, trip hazards, or

waste materials noted anywhere throughout the facility.

Floor drains or other potential conduits for subsurface vapors were identified in the following areas:

- Building 2 restrooms (two restrooms on the office side, two restrooms on the production side) – one floor drain in each bathroom plus one shower drain in the women's restroom on the

[redacted]

Conditioned air is provided to the maintenance office and the lab. The lab has two floor drains located in the center of the room. A wall-mounted exhaust fan is located in the product storage area. The product storage room contains 5-gallon paint containers, spray paint cans, roof coatings, contact cement, and mastics, all arranged very neatly with no signs of spillage. The outside door of the product storage room is kept open during business hours. A large floor drain is located in the center of the harness board room; and the archive room has one floor drain. A forklift is parked in an outside chemical storage area (behind a chain-link fence) located adjacent to Building 1 (southeast corner).

An exterior covered walkway is present between Buildings 3 and 4. Benches are located along the

[redacted]

[redacted]

are summarized Table 1.

Material Safety Data Sheet Review

A review of material safety data sheets (MSDS) was performed for chemicals currently used at the

4. VAPOR INTRUSION SAMPLING

Sampling was originally scheduled for a 24-hour period from Wednesday, December 29 through Thursday, December 30, 2004. The WPI plant was to have minimal operations (four personnel) for the entire week between the Christmas and New Year holidays. The reduction of plant operations would have minimized the potential contribution of WPI process-related VOC sources to ambient indoor air however, it was discovered that painting of the floor in Building 3 at one of the proposed sampling locations was going to be performed during this period. To minimize

potential contributions from sources of VOCs not related to groundwater, the decision was made

weather conditions at the time of sampling.

following dilution and re-analysis. For conservativeness, the original e-qualified concentrations are included in the tables.

6. DATA INTERPRETATION

Florida Department of Health for the TO-15 sampling and analyses performed within the Tallevast

- 1,4-Dichlorobenzene typically enters the environment when it is used in mothballs and in toilet-deodorizer blocks. It is not very soluble in water (ATSDR, 2005).
- 1,4-Dichlorobenzene was not detected in the near surface groundwater the most likely source for vapor intrusion.
- Although the concentrations varied among the different sampling locations, all of the compounds detected in outside air were detected within indoor air.
- A large number of the compounds detected in ambient air were also found to be present in materials observed to be used at the facility or identified in MSDS (Table 2).

[redacted]

Table 1
Direct-Reading Instrument Results

[redacted]

Tallevast, Florida

Building #	Room/Location	FID ppm readings	Air Velocity (fpm))	Comments
2	Receiving room	7-8	2	Door closed, no activity
	Receiving inspection	7.4	0	2 workers present
	Harness assembly area	6.3-8.4	0-1	Several workers present
	Office hallway	6-7	0 vent-400 +	

Table 2
MSDS Review for Chlorinated Compound Use
Former American Beryllium Company
Tallevast, Florida

Product Name	Chemical Composition
FK1718 aerosol	43.1% chlorofluoromethane 39.8% aliphatic HC

Table -3
Soil Gas Sample Locations With TCE and PCE Detection

Sampling Location	TCE (ppbv)	PCE (ppbv)	Comments
SGS-3	0.7	ND	East of Building 5
SGS-4	0.59	5.8	East of Building 2
SGS-5	0.5	2.5	Center of parking lot
SGS-6	0.5U	4.1	Near 17th Street

Table 4
Proposed Vapor Intrusion Sampling Locations
Former American Beryllium Company
Tallevast, Florida

Table 5
Vapor Intrusion Sampling Information
Former American Beryllium Company
Tallevast, Florida

Building	Sample Identification	SUMMA Canister Number	Location	Sample Start Time (01/07/2005)	Sample Stop Time (01/08/2005)	Comments
Building 1	WPI-VIM-01	12455	Roof	1845	1845	Rooftop near air intake. Access to roof shut and locked.
	WPI-VIM-02	12404	Main work area.	1828	1828	Placed on ladder in center of main work area below return vent. HVAC running. Area secured.

SDR
RL
bv)
A
A
000
4
5
00
.0
A
00
A
A
A
0
A
A
A
00

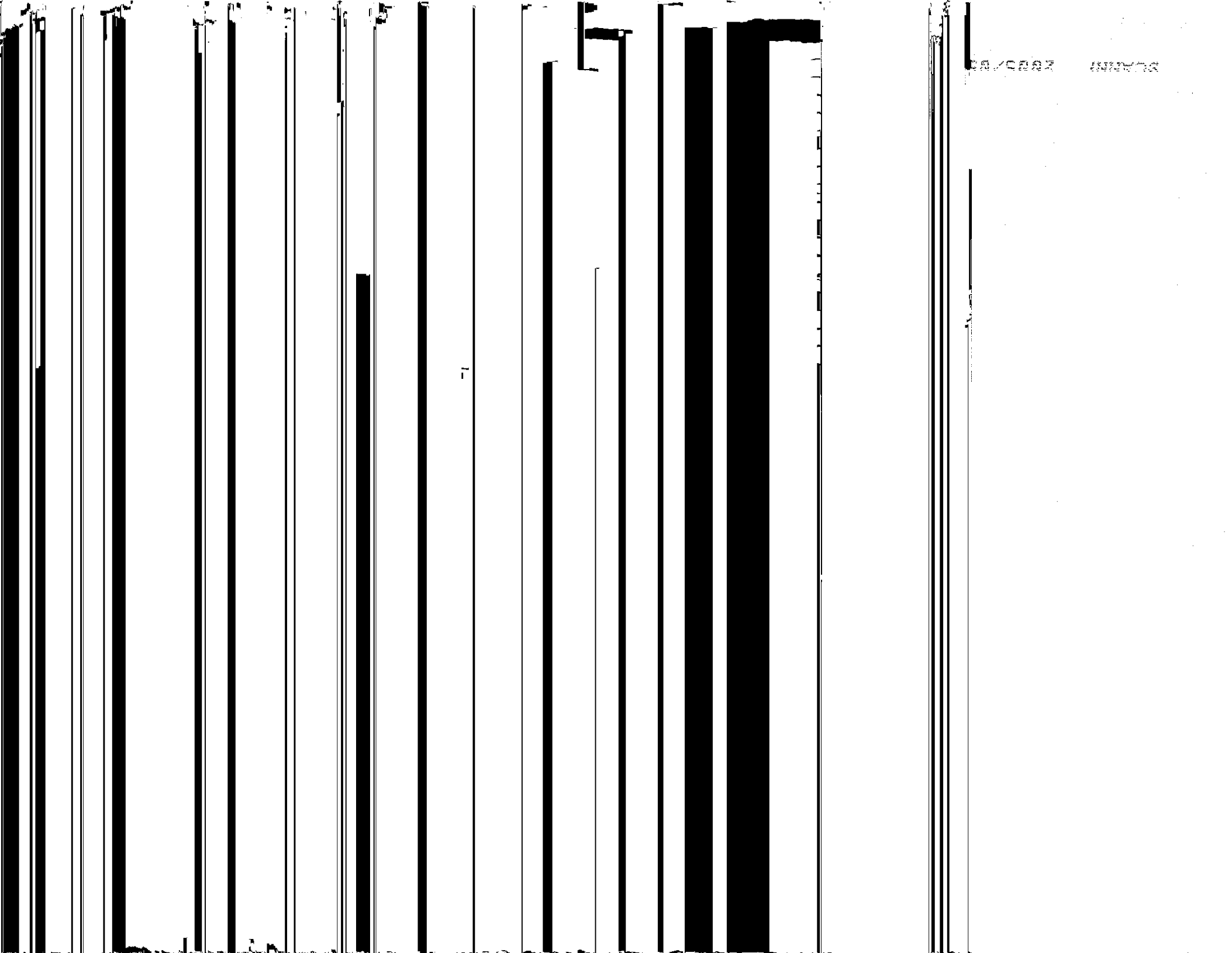
TSDR MRL ppbv)
NA
NA
20
NA
NA
3000
4
5
50
NA
1000
NA
NA
NA
600
60
80
NA
NA
NA
100

	ATSDR MRL (ppbv)
	20
	NA
	13000
	4
	5
	50
	NA
	NA
	NA
	NA
	600
	80
	NA

[illegible] [illegible]

OR
L
y)

0



	ATSDR MRL (ppbv)
2	NA
2	NA
2	NA
2	NA
5	13000
2	4
2	5
5	50
2	NA
5	NA
2	1000
	NA
5	NA
5	NA
5	300
2	NA
2	600
2	80
2	NA
2	NA
2	NA
2	100