



Memorandum

To: CSXT Ref. No.: 11149125

From: GHD Date: August 3, 2017

CC:

Re: **Summary of Air Monitoring/Sampling Results for August 2-6, 2017**

The purpose of this memorandum is to provide CSXT site management a summary of the air monitoring activities, results, and observations from the air monitoring being performed at the work site, located near Hyndman, PA. This shift summary report summarizes the manually and real-time logged cumulative air monitoring data collected between 10:30 EST on August 2, 2017 through 18:00 EST on August 6, 2017. GHD focused air monitoring primarily in the work area and surrounding community of the incident location. Real-time monitoring was used as a screening tool to quickly indicate the presence of airborne concentrations of chemicals of interest for the purpose of evaluating conditions in the work area and community environments.

Manually Logged Real-time Data

The purpose of the manually logged data was to characterize (in real time) potential vapors and gases related to the incident. These data were collected using handheld monitoring instruments equipped with a PID (10.6 eV lamp) for monitoring volatile organic compounds (VOCs), hydrogen sulfide (H₂S), and Sulfur Dioxide (SO₂). The data collected from these instruments was logged into an electronic handheld data collection device and stored in a secure GHD database.

Air Monitoring Data Evaluation and Summary of Results

A summary of the manually logged data is provided in Table 1.

Table 1 – Summary of Real-Time Roving Air Monitoring Data from 16:00 August 5, 2017 thru 15:30 August 6, 2017

Analyte	Number of Readings	Number of Detections	Maximum Concentration	Average Concentration	Units
SO ₂	370	27	12.8	0.1	ppm
H ₂ S	378	0	0.0	0.0	ppm

**Table 1 – Summary of Real-Time Roving Air Monitoring Data
from 16:00 August 5, 2017 thru 15:30 August 6, 2017**

Analyte	Number of Readings	Number of Detections	Maximum Concentration	Average Concentration	Units
VOC	185	1	0.2	0.0	ppm
PM _{2.5}	167	167	0.890	0.067	mg/m ³

GHD personnel did not detect any VOC or H₂S readings above the established action level in the work area during the period beginning at 10:30 on August 2, 2017. There were SO₂ readings at or above the community and work area action level of 0.2 and 5 ppm respectively. These readings were taken while the LPG tank car was on fire. GHD personnel will continue to monitor for chemicals of interest until site cleanup / restoration is completed.

**Table 2 – Summary of Real-Time Roving Stationary Air
Monitoring Data from 10:30 August 2, 2017 thru
18:00 August 6, 2017**

(295-002460) at the corner of Hogback Rd. and Honeysuckle Lane. 39.82584, -78.72245

Analyte	Number of Readings	Number of Detections	Maximum Concentration	Average Concentration	Units
H ₂ S	58464	22831	1.5	0.09	ppm

(295-003216) South of Derailment 39.82461, -78.72294

Analyte	Number of Readings	Number of Detections	Maximum Concentration	Average Concentration	Units
H ₂ S	19451	6962	0.4	0.03	ppm

(295-003347) Dollar General 39.82301, -78.71836

Analyte	Number of Readings	Number of Detections	Maximum Concentration	Average Concentration	Units
SO ₂	57684	1029	1	0.0	ppm

(295-003348) South of Derailment 39.82438, -78.72234

Analyte	Number of Readings	Number of Detections	Maximum Concentration	Average Concentration	Units
SO ₂	38629	5630	1	0.1	ppm
H ₂ S	38629	16300	1	0.3	ppm

(295-003349) Southwest of Derailment on Gooseberry Drive 39.82528, -78.72398

Analyte	Number of Readings	Number of Detections	Maximum Concentration	Average Concentration	Units
SO ₂	38784	2087	2.9	0.02	ppm
H ₂ S	38784	1835	0.2	0.0	ppm

(295-003350) North of Derailment 39.82767, -78.72154

Analyte	Number of Readings	Number of Detections	Maximum Concentration	Average Concentration	Units
SO ₂	36988	1556	0.4	0.0	ppm
H ₂ S	36988	977	0.3	0.0	ppm

The information contained in this memorandum will be considered preliminary until a final Quality Assurance/Quality Control (QA/QC) review of the data is completed. At the completion of the project, a report will be prepared in which all data collected through real-time monitoring and integrated sampling analyses will be compiled, summarized, and reported to Hazmat Response. All data contained in the final report will have been through the final QA/QC process, will be reviewed by a GHD certified industrial hygienist (CIH), and will be considered final.

This data summary was prepared by:



Justin Rhodes, CIH

GHD Inc