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May 4, 2023

Mr. Josh Peters
On-Scene Coordinator
U.S. Environmental Protection Agency, Region 5
Superfund and Emergency Management Division
2565 Plymouth Road
Ann Arbor, MI 48105

**Subject: Data Validation Reports
E Palestine Site - ER
EPA Contract No.: 68HE0519D0005
Task Order/Task Order Line Item No.: 68HE0520F0032/0001EB201
Document Tracking No. 1800**

Dear Mr. Peters:

Tetra Tech, Inc. (Tetra Tech) is submitting these data validation reports for seventy air samples collected at the E Palestine Site. The samples were collected on March 10, 11, and 12, 2023, and were analyzed for acrylates by Eurofins Analytics. The final laboratory data package was received on April 20, 2023.

Analytical data were evaluated in general accordance with the Tetra Tech *Quality Assurance Project Plan, Superfund Technical Assessment and Response Team (START V), EPA Region 5, Revision 4* (August 2022), and the *National Functional Guidelines (NFG) for Organic Superfund Methods Data Review* (November 2020).

No rejection of results was required for this data package. The results may be used as qualified based on the findings of this validation effort.

If you have any questions regarding this data validation report, please feel free to contact me.

Sincerely,

Shanna M Vasser Digitally signed by Shanna M Vasser
Date: 2023.05.04 23:49:38 -04'00'

Shanna Vasser, PE
Civil Engineer

Enclosure

cc: Karl Schultz, Tetra Tech Program Manager
Dustin Grams, Tetra Tech Project Manager
Mayra Arroyo Ortiz, Tetra Tech Project Document Control Coordinator
TO-TOLIN File

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ATTACHMENT

**DATA VALIDATION REPORTS
EUROFINS ANALYTICS REPORT NOS.
B072-109, B073-169 AND B073-190**

**DATA VALIDATION CHECKLIST – STAGE 2A
EPA REGION 5 START CONTRACT**

Site Name	E Palestine Site - ER	TO/TOLIN No.	68HE0520F0032/0001EB201
Document Tracking No.	1800a	Laboratory	Eurofins Analytics, LLC, Ashland VA
Laboratory Report No.	B072-109	Analyses	
		2-Ethylhexyl acrylate and n-butyl acrylate by laboratory standard operating procedure (SOP) IHGC-P029	
Samples and Matrix	Eight air samples		
Collection Date(s)	03/10/2023		
Field Duplicate Pairs	None		
Field QC Blanks	EPD-ST-FB-031023		

INTRODUCTION

This checklist summarizes the Stage 2A validation performed on the subject laboratory report, in accordance with the U.S. Environmental Protection Agency (EPA) *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use* (January 2009). Analytical data were evaluated in general accordance with the Tetra Tech *Quality Assurance Project Plan, Superfund Technical Assessment and Response Team (START V), EPA Region 5, Revision 4* (August 2022), and the EPA *National Functional Guidelines (NFG) for Organic Superfund Methods Data Review* (November 2020).

OVERALL EVALUATION

No rejection of results was required for this data package. The results may be used as qualified based on the findings of this validation effort. .

Data completeness:

Within Criteria	Exceedance/Notes
Y	<p>Sample EPD-ST-DW-01-031023-1 was cancelled due to pump failure.</p> <p>Level II data package did not have require QC forms; thus a level IV package was reviewed.</p> <p>The results for the field blank were reported in units of micrograms (µg) while the other sample results were reported in units of µg, milligram per cubic meter (mg/m³), and parts per million (ppm) (volume) in the laboratory report and only ppm in the electronic data deliverable (EDD).</p> <p>The laboratory report included the following note: “The method reference, Rohn & Haas IH9805 is referenced to the AIHA certification as IHGC-P029” and “Rohn & Haas IH9805” is listed on the EDD and qualified data table as the Method.</p>

**DATA VALIDATION CHECKLIST – STAGE 2A
EPA REGION 5 START CONTRACT**

Sample preservation, receipt, and holding times:

Within Criteria	Exceedance/Notes
Y	

Method blanks:

Within Criteria	Exceedance/Notes
Y	

Field blanks:

Within Criteria	Exceedance/Notes
Y	

Surrogates and labeled compounds:

Within Criteria	Exceedance/Notes
NA	

MS/MSDs:

Within Criteria	Exceedance/Notes
NA	

Laboratory duplicates:

Within Criteria	Exceedance/Notes
NA	

**DATA VALIDATION CHECKLIST – STAGE 2A
EPA REGION 5 START CONTRACT**

Field duplicates:

Within Criteria	Exceedance/Notes
NA	

LCSs/LCSDs:

Within Criteria	Exceedance/Notes
Y	

Sample dilutions:

Within Criteria	Exceedance/Notes
NA	

Re-extraction and reanalysis:

Within Criteria	Exceedance/Notes
NA	

MDLs/RLs:

Within Criteria	Exceedance/Notes
Y	Method detection limits were not reported. Non-detect sample results are reported as less than the reporting limit in the laboratory report and at the reporting limit (flagged U) in the EDD and attached qualified data table.

Tentatively identified compounds:

Within Criteria	Exceedance/Notes
NA	

**DATA VALIDATION CHECKLIST – STAGE 2A
EPA REGION 5 START CONTRACT**

Other [specify]:

Within Criteria	Exceedance/Notes
NA	

Overall Qualifications:

See results summary pages attached for changes to the laboratory qualifiers based upon this validation. The following is a list of qualifiers and definitions that may be used for the validation of this data package:

J	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.
J-	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.
NJ	The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated value is the approximate concentration of the analyte in the sample.
R	The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.
U	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).
UJ	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.
NF	The tentatively identified compound was manually searched for but was not found in the sample.

E PALESTINE SITE - ER AIR ANALYTICAL RESULTS SUMMARY
EUROFINS ANALYTICS REPORT NO. B072-109

Sample_ID	Method	CAS#	Analyte	Lab_Result	Lab_Qual	MDL RL	Units	VAL_Result	VAL_Qual
EPD-ST-FB-031023	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	2.8	U	2.8	ug	2.8	U
EPD-ST-FB-031023	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	1.3	U	1.3	ug	1.3	U
EPD-ST-UW-01-031023-1	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.014	U	0.014	ppm	0.014	U
EPD-ST-UW-01-031023-1	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.009	U	0.009	ppm	0.0090	U
EPD-ST-WA-01-031023-1	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.014	U	0.014	ppm	0.014	U
EPD-ST-WA-01-031023-1	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.009	U	0.009	ppm	0.0090	U
EPD-ST-WA-02-031023-1	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.016	U	0.016	ppm	0.016	U
EPD-ST-WA-02-031023-1	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.01	U	0.01	ppm	0.010	U
EPD-ST-WA-03-031023-1	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.013	U	0.013	ppm	0.013	U
EPD-ST-WA-03-031023-1	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.009	U	0.009	ppm	0.0090	U
EPD-ST-WA-04-031023-1	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.012	U	0.012	ppm	0.012	U
EPD-ST-WA-04-031023-1	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.008	U	0.008	ppm	0.0080	U
EPD-ST-WA-05-031023-1	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.012	U	0.012	ppm	0.012	U
EPD-ST-WA-05-031023-1	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.008	U	0.008	ppm	0.0080	U
EPD-ST-WA-06-031023-1	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.013	U	0.013	ppm	0.013	U
EPD-ST-WA-06-031023-1	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.009	U	0.009	ppm	0.0090	U

**DATA VALIDATION CHECKLIST – STAGE 2A
EPA REGION 5 START CONTRACT**

Site Name	E Palestine Site - ER	TO/TOLIN No.	68HE0520F0032/0001EB201
Document Tracking No.	1800b	Laboratory	Eurofins Analytics, LLC, Ashland VA
Laboratory Report No.	B073-169	Analyses	
		2-Ethylhexyl acrylate and n-butyl acrylate by a laboratory standard operating procedure (SOP) IHGC-P029	
Samples and Matrix	Twenty-six air samples		
Collection Date(s)	03/11/2023		
Field Duplicate Pairs	None		
Field QC Blanks	EPD-ST-FB-031123		

INTRODUCTION

This checklist summarizes the Stage 2A validation performed on the subject laboratory report, in accordance with the U.S. Environmental Protection Agency (EPA) *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use* (January 2009). Analytical data were evaluated in general accordance with the Tetra Tech *Quality Assurance Project Plan, Superfund Technical Assessment and Response Team (START V), EPA Region 5, Revision 4* (August 2022), and the EPA *National Functional Guidelines (NFG) for Organic Superfund Methods Data Review* (November 2020).

OVERALL EVALUATION

No rejection of results was required for this data package. The results may be used as qualified based on the findings of this validation effort. .

Data completeness:

Within Criteria	Exceedance/Notes
Y	<p>Sample EPD-ST-WA-02-031123-1 was cancelled due to pump failure.</p> <p>Report amended (03/21/23) with recalculated air volumes for samples EPD-ST-8H-DW-01-031123-1 and EPD-ST-8H-WA-02-031123-1.</p> <p>Level II data package did not have required QC forms; thus a level IV package was reviewed.</p> <p>The results for the field blank were reported in units of micrograms (μg) while the other sample results were reported in units of μg, milligram per cubic meter (mg/m^3), and parts per million (ppm) (volume) in the laboratory report and only ppm in the electronic data deliverable (EDD).</p>

**DATA VALIDATION CHECKLIST – STAGE 2A
EPA REGION 5 START CONTRACT**

Data completeness (continued):

Within Criteria	Exceedance/Notes
Y	The laboratory report included the following note: “The method reference, Rohn & Haas IH9805 is referenced to the AIHA certification as IHGC-P029” and “Rohn & Haas IH9805” is listed on the EDD and qualified data table as the Method.

Sample preservation, receipt, and holding times:

Within Criteria	Exceedance/Notes
Y	

Method blanks:

Within Criteria	Exceedance/Notes
Y	

Field blanks:

Within Criteria	Exceedance/Notes
Y	

Surrogates and labeled compounds:

Within Criteria	Exceedance/Notes
NA	

MS/MSDs:

Within Criteria	Exceedance/Notes
NA	

**DATA VALIDATION CHECKLIST – STAGE 2A
EPA REGION 5 START CONTRACT**

Laboratory duplicates:

Within Criteria	Exceedance/Notes
NA	

Field duplicates:

Within Criteria	Exceedance/Notes
NA	

LCSs/LCSDs:

Within Criteria	Exceedance/Notes
Y	

Sample dilutions:

Within Criteria	Exceedance/Notes
NA	

Re-extraction and reanalysis:

Within Criteria	Exceedance/Notes
NA	

MDLs/RLs:

Within Criteria	Exceedance/Notes
Y	Method detection limits were not reported. Non-detect sample results are reported as less than the reporting limit in the laboratory report and at the reporting limit (flagged U) in the EDD and attached qualified data table.

**DATA VALIDATION CHECKLIST – STAGE 2A
EPA REGION 5 START CONTRACT**

Tentatively identified compounds:

Within Criteria	Exceedance/Notes
NA	

Other [specify]:

Within Criteria	Exceedance/Notes
NA	

Overall Qualifications:

See results summary pages attached for changes to the laboratory qualifiers based upon this validation. The following is a list of qualifiers and definitions that may be used for the validation of this data package:

J	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.
J-	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.
NJ	The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated value is the approximate concentration of the analyte in the sample.
R	The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.
U	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).
UJ	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.
NF	The tentatively identified compound was manually searched for but was not found in the sample.

E PALESTINE SITE - ER AIR ANALYTICAL RESULTS SUMMARY
EUROFINS ANALYTICS REPORT NO. B073-169

Sample_ID	Method	CAS#	Analyte	Lab_Result	Lab_Qual	MDL RL	Units	VAL_Result	VAL_Qual
EPD-ST-8H-DW-01-031123-1	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.018 U	U	0.018	ppm	0.018 U	U
EPD-ST-8H-DW-01-031123-1	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.012 U	U	0.012	ppm	0.012 U	U
EPD-ST-8H-WA-02-031123-1	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.012 U	U	0.012	ppm	0.012 U	U
EPD-ST-8H-WA-02-031123-1	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.008 U	U	0.008	ppm	0.008 U	U
EPD-ST-DW-01-031123-1	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.013 U	U	0.013	ppm	0.013 U	U
EPD-ST-DW-01-031123-1	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.009 U	U	0.009	ppm	0.009 U	U
EPD-ST-DW-01-031123-2	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.024 U	U	0.024	ppm	0.024 U	U
EPD-ST-DW-01-031123-2	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.016 U	U	0.016	ppm	0.016 U	U
EPD-ST-DW-01-031123-3	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.02 U	U	0.02	ppm	0.02 U	U
EPD-ST-DW-01-031123-3	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.014 U	U	0.014	ppm	0.014 U	U
EPD-ST-FB-031123	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	2.8 U	U	2.8	ug	2.8 U	U
EPD-ST-FB-031123	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	1.3 U	U	1.3	ug	1.3 U	U
EPD-ST-UW-01-031123-1	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.011 U	U	0.011	ppm	0.011 U	U
EPD-ST-UW-01-031123-1	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.007 U	U	0.007	ppm	0.007 U	U
EPD-ST-UW-01-031123-2	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.025 U	U	0.025	ppm	0.025 U	U
EPD-ST-UW-01-031123-2	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.016 U	U	0.016	ppm	0.016 U	U
EPD-ST-UW-01-031123-3	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.021 U	U	0.021	ppm	0.021 U	U
EPD-ST-UW-01-031123-3	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.014 U	U	0.014	ppm	0.014 U	U
EPD-ST-WA-01-031123-1	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.013 U	U	0.013	ppm	0.013 U	U
EPD-ST-WA-01-031123-1	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.008 U	U	0.008	ppm	0.008 U	U
EPD-ST-WA-01-031123-2	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.022 U	U	0.022	ppm	0.022 U	U
EPD-ST-WA-01-031123-2	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.015 U	U	0.015	ppm	0.015 U	U
EPD-ST-WA-01-031123-3	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.016 U	U	0.016	ppm	0.016 U	U
EPD-ST-WA-01-031123-3	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.011 U	U	0.011	ppm	0.011 U	U
EPD-ST-WA-02-031123-2	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.023 U	U	0.023	ppm	0.023 U	U
EPD-ST-WA-02-031123-2	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.015 U	U	0.015	ppm	0.015 U	U
EPD-ST-WA-02-031123-3	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.02 U	U	0.02	ppm	0.02 U	U
EPD-ST-WA-02-031123-3	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.013 U	U	0.013	ppm	0.013 U	U
EPD-ST-WA-03-031123-1	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.013 U	U	0.013	ppm	0.013 U	U
EPD-ST-WA-03-031123-1	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.009 U	U	0.009	ppm	0.009 U	U
EPD-ST-WA-03-031123-2	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.028 U	U	0.028	ppm	0.028 U	U
EPD-ST-WA-03-031123-2	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.018 U	U	0.018	ppm	0.018 U	U
EPD-ST-WA-03-031123-3	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.027 U	U	0.027	ppm	0.027 U	U
EPD-ST-WA-03-031123-3	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.018 U	U	0.018	ppm	0.018 U	U
EPD-ST-WA-04-031123-1	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.013 U	U	0.013	ppm	0.013 U	U
EPD-ST-WA-04-031123-1	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.009 U	U	0.009	ppm	0.009 U	U
EPD-ST-WA-04-031123-2	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.024 U	U	0.024	ppm	0.024 U	U
EPD-ST-WA-04-031123-2	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.016 U	U	0.016	ppm	0.016 U	U
EPD-ST-WA-04-031123-3	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.018 U	U	0.018	ppm	0.018 U	U
EPD-ST-WA-04-031123-3	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.012 U	U	0.012	ppm	0.012 U	U
EPD-ST-WA-05-031123-1	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.014 U	U	0.014	ppm	0.014 U	U
EPD-ST-WA-05-031123-1	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.009 U	U	0.009	ppm	0.009 U	U
EPD-ST-WA-05-031123-2	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.026 U	U	0.026	ppm	0.026 U	U
EPD-ST-WA-05-031123-2	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.017 U	U	0.017	ppm	0.017 U	U
EPD-ST-WA-05-031123-3	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.022 U	U	0.022	ppm	0.022 U	U
EPD-ST-WA-05-031123-3	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.015 U	U	0.015	ppm	0.015 U	U
EPD-ST-WA-06-031123-1	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.012 U	U	0.012	ppm	0.012 U	U
EPD-ST-WA-06-031123-1	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.008 U	U	0.008	ppm	0.008 U	U
EPD-ST-WA-06-031123-2	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.024 U	U	0.024	ppm	0.024 U	U
EPD-ST-WA-06-031123-2	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.016 U	U	0.016	ppm	0.016 U	U
EPD-ST-WA-06-031123-3	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.022 U	U	0.022	ppm	0.022 U	U
EPD-ST-WA-06-031123-3	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.015 U	U	0.015	ppm	0.015 U	U

**DATA VALIDATION CHECKLIST – STAGE 2A
EPA REGION 5 START CONTRACT**

Site Name	E Palestine Site - ER	TO/TOLIN No.	68HE0520F0032/0001EB201
Document Tracking No.	1800c	Laboratory	Eurofins Analytics, LLC, Ashland VA
Laboratory Report No.	B073-190	Analyses	
		2-Ethylhexyl acrylate and n-butyl acrylate analysis by laboratory standard operating procedure (SOP) IHGC-P029	
Samples and Matrix	Thirty-six air samples		
Collection Date(s)	03/12/2023		
Field Duplicate Pairs	None		
Field QC Blanks	EPD-ST-FB-031223-1 and EPD-ST-FB-031223-2		

INTRODUCTION

This checklist summarizes the Stage 2A validation performed on the subject laboratory report, in accordance with the U.S. Environmental Protection Agency (EPA) *Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use* (January 2009). Analytical data were evaluated in general accordance with the Tetra Tech *Quality Assurance Project Plan, Superfund Technical Assessment and Response Team (START V), EPA Region 5, Revision 4* (August 2022), and the EPA *National Functional Guidelines (NFG) for Organic Superfund Methods Data Review* (November 2020).

OVERALL EVALUATION

No rejection of results was required for this data package. The results may be used as qualified based on the findings of this validation effort. .

Data completeness:

Within Criteria	Exceedance/Notes
Y	<p>Samples EPD-ST-WA-03-031223-2 and EPD-ST-UW-01-031223-4 were cancelled due to pump failures.</p> <p>Report amended (03/31/23) to correct one sample ID from EPD-ST-8H-DW-01-031223-2 to EPD-ST-8H-UW-01-031223-1.</p> <p>Level II data package did not have required QC forms thus a level IV package was reviewed.</p> <p>Lab receipt chain of custody (COC) form includes a duplicate EPD-ST-WA-03-031223-3 sample logged at 14:30 and EPD-ST-FB-031223-1 sample logged at 16:46. Field COC correctly logged a single EPD-ST-WA-03-031223-3 sample at 14:19 and EPD-ST-FB-031223-1 at 14:30.</p>

**DATA VALIDATION CHECKLIST – STAGE 2A
EPA REGION 5 START CONTRACT**

Data completeness (continued):

Within Criteria	Exceedance/Notes
Y	<p>The results for the field blank were reported in units of micrograms (μg) while the other sample results were reported in units of μg, milligram per cubic meter (mg/m^3), and parts per million (ppm) (volume) in the laboratory report and only ppm in the electronic data deliverable (EDD).</p> <p>The laboratory report included the following note: “The method reference, Rohn & Haas IH9805 is referenced to the AIHA certification as IHGC-P029” and “Rohn & Haas IH9805” is listed on the EDD and qualified data table as the Method.</p>

Sample preservation, receipt, and holding times:

Within Criteria	Exceedance/Notes
Y	

Method blanks:

Within Criteria	Exceedance/Notes
Y	

Field blanks:

Within Criteria	Exceedance/Notes
Y	

Surrogates and labeled compounds:

Within Criteria	Exceedance/Notes
NA	

**DATA VALIDATION CHECKLIST – STAGE 2A
EPA REGION 5 START CONTRACT**

MS/MSDs:

Within Criteria	Exceedance/Notes
NA	

Laboratory duplicates:

Within Criteria	Exceedance/Notes
NA	

Field duplicates:

Within Criteria	Exceedance/Notes
NA	

LCSs/LCSDs:

Within Criteria	Exceedance/Notes
Y	

Sample dilutions:

Within Criteria	Exceedance/Notes
NA	

Re-extraction and reanalysis:

Within Criteria	Exceedance/Notes
NA	

**DATA VALIDATION CHECKLIST – STAGE 2A
EPA REGION 5 START CONTRACT**

MDLs/RLs:

Within Criteria	Exceedance/Notes
Y	Method detection limits were not reported. Non-detect sample results are reported as less than the reporting limit in the laboratory report and at the reporting limit (flagged U) in the EDD and attached qualified data table.

Tentatively identified compounds:

Within Criteria	Exceedance/Notes
NA	

Other [specify]:

Within Criteria	Exceedance/Notes
NA	

Overall Qualifications:

See results summary pages attached for changes to the laboratory qualifiers based upon this validation. The following is a list of qualifiers and definitions that may be used for the validation of this data package:

J	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.
J+	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.
J-	The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.
NJ	The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated value is the approximate concentration of the analyte in the sample.
R	The sample result is rejected as unusable due to serious deficiencies in one or more quality control criteria. The analyte may or may not be present in the sample.
U	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).
UJ	The analyte was analyzed for, but was not detected at or above the associated value (reporting limit), which is considered approximate due to deficiencies in one or more quality control criteria.
NF	The tentatively identified compound was manually searched for but was not found in the sample.

E PALESTINE SITE - ER AIR ANALYTICAL RESULTS SUMMARY
EUROFINS ANALYTICS REPORT NO. B073-190

Sample_ID	Method	CAS#	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	VAL_Result	VAL_Qual
EPD-ST-8H-DW-01-031223-1	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.014	U			0.014 ppm	0.014	U
EPD-ST-8H-DW-01-031223-1	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.009	U			0.009 ppm	0.009	U
EPD-ST-8H-UW-01-031223-1	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.012	U			0.012 ppm	0.012	U
EPD-ST-8H-UW-01-031223-1	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.008	U			0.008 ppm	0.008	U
EPD-ST-8H-WA-02-031223-1	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.012	U			0.012 ppm	0.012	U
EPD-ST-8H-WA-02-031223-1	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.008	U			0.008 ppm	0.008	U
EPD-ST-8H-WA-06-031223-2	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.016	U			0.016 ppm	0.016	U
EPD-ST-8H-WA-06-031223-2	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.011	U			0.011 ppm	0.011	U
EPD-ST-DW-01-031223-1	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.03	U			0.03 ppm	0.03	U
EPD-ST-DW-01-031223-1	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.02	U			0.02 ppm	0.02	U
EPD-ST-DW-01-031223-2	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.029	U			0.029 ppm	0.029	U
EPD-ST-DW-01-031223-2	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.019	U			0.019 ppm	0.019	U
EPD-ST-DW-01-031223-3	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.024	U			0.024 ppm	0.024	U
EPD-ST-DW-01-031223-3	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.016	U			0.016 ppm	0.016	U
EPD-ST-DW-01-031223-4	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.027	U			0.027 ppm	0.027	U
EPD-ST-DW-01-031223-4	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.018	U			0.018 ppm	0.018	U
EPD-ST-FB-031223-1	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	2.8	U			2.8 ug	2.8	U
EPD-ST-FB-031223-1	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	1.3	U			1.3 ug	1.3	U
EPD-ST-FB-031223-2	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	2.8	U			2.8 ug	2.8	U
EPD-ST-FB-031223-2	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	1.3	U			1.3 ug	1.3	U
EPD-ST-UW-01-031223-1	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.028	U			0.028 ppm	0.028	U
EPD-ST-UW-01-031223-1	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.019	U			0.019 ppm	0.019	U
EPD-ST-UW-01-031223-2	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.027	U			0.027 ppm	0.027	U
EPD-ST-UW-01-031223-2	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.018	U			0.018 ppm	0.018	U
EPD-ST-UW-01-031223-3	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.027	U			0.027 ppm	0.027	U
EPD-ST-UW-01-031223-3	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.018	U			0.018 ppm	0.018	U
EPD-ST-WA-01-031223-1	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.028	U			0.028 ppm	0.028	U
EPD-ST-WA-01-031223-1	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.019	U			0.019 ppm	0.019	U
EPD-ST-WA-01-031223-2	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.027	U			0.027 ppm	0.027	U
EPD-ST-WA-01-031223-2	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.018	U			0.018 ppm	0.018	U
EPD-ST-WA-01-031223-3	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.028	U			0.028 ppm	0.028	U
EPD-ST-WA-01-031223-3	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.019	U			0.019 ppm	0.019	U
EPD-ST-WA-01-031223-4	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.024	U			0.024 ppm	0.024	U
EPD-ST-WA-01-031223-4	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.016	U			0.016 ppm	0.016	U
EPD-ST-WA-02-031223-1	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.029	U			0.029 ppm	0.029	U
EPD-ST-WA-02-031223-1	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.019	U			0.019 ppm	0.019	U
EPD-ST-WA-02-031223-2	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.029	U			0.029 ppm	0.029	U
EPD-ST-WA-02-031223-2	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.019	U			0.019 ppm	0.019	U
EPD-ST-WA-02-031223-3	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.029	U			0.029 ppm	0.029	U
EPD-ST-WA-02-031223-3	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.02	U			0.02 ppm	0.02	U
EPD-ST-WA-02-031223-4	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.025	U			0.025 ppm	0.025	U
EPD-ST-WA-02-031223-4	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.017	U			0.017 ppm	0.017	U
EPD-ST-WA-03-031223-1	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.028	U			0.028 ppm	0.028	U
EPD-ST-WA-03-031223-1	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.019	U			0.019 ppm	0.019	U
EPD-ST-WA-03-031223-3	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.028	U			0.028 ppm	0.028	U
EPD-ST-WA-03-031223-3	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.018	U			0.018 ppm	0.018	U
EPD-ST-WA-03-031223-4	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.027	U			0.027 ppm	0.027	U
EPD-ST-WA-03-031223-4	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.018	U			0.018 ppm	0.018	U
EPD-ST-WA-04-031223-1	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.029	U			0.029 ppm	0.029	U
EPD-ST-WA-04-031223-1	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.019	U			0.019 ppm	0.019	U
EPD-ST-WA-04-031223-2	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.026	U			0.026 ppm	0.026	U
EPD-ST-WA-04-031223-2	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.017	U			0.017 ppm	0.017	U
EPD-ST-WA-04-031223-3	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.031	U			0.031 ppm	0.031	U
EPD-ST-WA-04-031223-3	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.021	U			0.021 ppm	0.021	U
EPD-ST-WA-04-031223-4	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.027	U			0.027 ppm	0.027	U
EPD-ST-WA-04-031223-4	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.018	U			0.018 ppm	0.018	U
EPD-ST-WA-05-031223-1	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.028	U			0.028 ppm	0.028	U
EPD-ST-WA-05-031223-1	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.019	U			0.019 ppm	0.019	U
EPD-ST-WA-05-031223-2	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.029	U			0.029 ppm	0.029	U
EPD-ST-WA-05-031223-2	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.019	U			0.019 ppm	0.019	U
EPD-ST-WA-05-031223-3	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.026	U			0.026 ppm	0.026	U
EPD-ST-WA-05-031223-3	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.017	U			0.017 ppm	0.017	U

E PALESTINE SITE - ER AIR ANALYTICAL RESULTS SUMMARY
EUROFINS ANALYTICS REPORT NO. B073-190

Sample_ID	Method	CAS#	Analyte	Lab_Result	Lab_Qual	MDL	RL	Units	VAL_Result	VAL_Qual
EPD-ST-WA-05-031223-4	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.023	U			ppm	0.023	U
EPD-ST-WA-05-031223-4	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.016	U			ppm	0.016	U
EPD-ST-WA-06-031223-1	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.027	U			ppm	0.027	U
EPD-ST-WA-06-031223-1	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.018	U			ppm	0.018	U
EPD-ST-WA-06-031223-2	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.031	U			ppm	0.031	U
EPD-ST-WA-06-031223-2	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.021	U			ppm	0.021	U
EPD-ST-WA-06-031223-3	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.025	U			ppm	0.025	U
EPD-ST-WA-06-031223-3	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.017	U			ppm	0.017	U
EPD-ST-WA-06-031223-4	Rohm & Haas IH9805	103-11-7	2-Ethylhexyl acrylate	0.025	U			ppm	0.025	U
EPD-ST-WA-06-031223-4	Rohm & Haas IH9805	141-32-2	n-Butyl acrylate	0.017	U			ppm	0.017	U