

MINE METHANE CAPTURE OFFSET PROJECT DATA REPORT FOR ACTIVE UNDERGROUND MINES

OPR Staff Use Only	Date Report Received:	OPR Tracking Number:	Date Report Reviewed:	OPR Staff Use Only
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PART I. ENTITY SUBMITTING REPORT

Is this report being submitted by the Offset Project Operator (OPO) or by the Authorized Project Designee (APD)?	☒ OPO ☐ APD
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Note: The person completing this form should be an OPO/APD employee.

Report Version Number: 2	Date Report Completed: 5/31/2019	Date Report Submitted: 5/31/2019
Person Completing Report: David Rea	Phone Number: 307-872-6526	Email Address: david.rea@solvay.com

PART II. OFFSET PROJECT INFORMATION

Offset Project Name: Solvay Chemicals, Inc. Waste Mine Methane Project	OPR Project ID#: CAR-1105	ARB Project ID# (if known): CAMM-5178
Mine Methane Capture Activity Type(s):	☐ Ventilation Air Methane	☒ Mine Methane Drainage
Reporting Period Start Date: 1/1/2018	Reporting Period End Date: 12/31/2018	Offset Project Commencement Date: 8/13/2010

PART III. OPO/APD/TC INFORMATION

Part III.A OPO

OPO Name: Solvay Chemicals, Inc.	OPO's CITSS ID#: CA 1743		
Mailing Address: 3333 Richmond Avenue	City: Houston	State: TX	Zip: 77098
Physical Address (if different):	City:	State:	Zip:
Contact Person: David Rea	Phone Number: 307-872-6526	Email Address: david.rea@solvay.com	

Part III.B APD (if applicable)

☐ **No APD/Not Applicable**

APD Name:	APD's CITSS ID#: CA _ _ _ _		
Mailing Address:	City:	State:	Zip:
Physical Address (if different):	City:	State:	Zip:
Contact Person:	Phone Number:	Email Address:	

Part III.C.1 Technical Consultant #1 (if applicable)

☒ **No Technical Consultants**

Technical Consultant Name:	Organizational Affiliation, if applicable:		
Phone Number:	Email Address:		
Mailing Address:	City:	State:	Zip:
Physical Address (if different):	City:	State:	Zip:

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Part III.C.2 Technical Consultant #2 (if applicable)		☐ Only One Technical Consultant	
Technical Consultant Name:		Organizational Affiliation, if applicable:	
Phone Number:		Email Address:	
Mailing Address:	City:	State:	Zip:
Physical Address (if different):	City:	State:	Zip:

If the project has more than two technical consultants, either expand this section or report their information on attached paper.

Part IV. QUESTIONS	
1. Has the offset project met all local, state, and federal regulatory requirements during the Reporting Period for Mine 2, except for any period being excluded pursuant to section 95973(b)(1)? (If "no," an explanation of the non-compliance must be provided.) <i>Indicate any excluded time periods below:</i>	☒ Yes ☐ No
2. Is all the information in the offset project listing still accurate? <i>If "yes," skip to Part V.</i>	☐ Yes ☒ No
a. Does Part II above report an updated Offset Project Commencement Date, Reporting Period Start Date, and/or Reporting Period End Date?	☒ Yes ☐ No
b. Does Part III above report updated OPO/APD Information?	☐ Yes ☒ No
c. Does Part III above report updated Technical Consultant Information?	☒ Yes ☐ No
d. Are there any other updates about Others Involved in Project, aside from the Technical Consultants, to report? <i>(If "yes," provide those updates on separate attached paper.)</i>	☐ Yes ☒ No
e. Are there any updates about the Offset Project Location to report? <i>(If "yes," provide those updates on separate attached paper.)</i>	☐ Yes ☒ No
f. Does Part V below report updated information about Mining Methods Employed?	☐ Yes ☒ No
g. Are there any updates about the Mine Information, aside from Mining Methods Employed and Mineral Production, to report? <i>(If "yes," provide those updates on separate attached paper.)</i>	☐ Yes ☒ No
h. Does any other information in the project listing need to be updated? <i>(If "yes," provide those updates on separate attached paper.)</i>	☐ Yes ☒ No

PART V. MINE INFORMATION	
Mining Method(s) Employed (e.g., longwall or room and pillar) during Reporting Period: Longwall, room and pillar	
Mineral Production during Reporting Period (including both mineral produced and quantity with units of measurement): Trona - 4,550,279 mechanical short tons	

PART VI. REPORTED GHG EMISSION REDUCTION CALCULATIONS		
Part VI.A Calculated Values for Active Underground VAM Activities		☒ Not Applicable
How many qualifying and non-qualifying destruction devices were used in this reporting period for Active Underground VAM Activities? <i>Note: If there are more than three (3) destruction devices, either expand this section to report information for those destruction devices or submit the required reporting information for those devices on separate, attached paper.</i>	Number Non-Qualifying Devices:	Number Qualifying Devices:
Emission Reductions (ER):		
Part VI.A.1 Baseline Values (for All Destruction Devices)		
Baseline C_{CH4}:	VA_{B,i}:	

Part VI.A.2 Baseline Values by Destruction Device

Device	Type	$C_{CH_4,exhaust,i}$	$C_{CH_4,MG}$	$MG_{SUPP,i}$	Operational Hours
1.	☐ Qualifying ☐ Non-Qualifying				
2.	☐ Qualifying ☐ Non-Qualifying				
3.	☐ Qualifying ☐ Non-Qualifying				

☐ Provide the hourly average flow rates (for both $VA_{flow,i,y}$ and $CA_{flow,i,y}$) as an attachment.

For $CA_{flow,i,y}$ (in the baseline scenario), was the flow rate monitored, or was the default maximum quantity used?

☐ Monitored
☐ Default

Part VI.A.3 Project Values (for All Destruction Devices)

Project C_{CH_4} :

Part VI.A.4 Project Values by Destruction Device

Device	$VA_{p,i}$	$C_{CH_4,exhaust,i}$	$C_{CH_4,MG}$	$MG_{SUPP,i}$	Operational Hours
1.					
2.					
3.					

☐ Provide the hourly average flow rates (for both $VA_{flow,i,y}$ and $CA_{flow,i,y}$) as an attachment.

For $CA_{flow,i,y}$ (in the project scenario), was the flow rate monitored, or was the default maximum quantity used?

☐ Monitored
☐ Default

Part VI.A.5 Other Values

$CONS_{ELEC}$:	$CONS_{HEAT}$:	$CONS_{FF}$:
CEF_{ELEC} :	CEF_{HEAT} :	CEF_{FF} :

Part VI.B Calculated Values for Active Underground Mine Methane Drainage Activities

☐ Not Applicable

How many qualifying and non-qualifying destruction devices were used in this reporting period for Active Underground Mine Methane Drainage Activities?

Note: If there are more than two (2) destruction devices, either expand this section to report information for those destruction devices or submit the required reporting information for those devices on separate, attached paper.

Number
Non-Qualifying
Devices:
0

Number
Qualifying
Devices:
2

How many methane sources were used in this reporting period for Active Underground Mine Methane Drainage Activities?

Note: If there are more than three (3) methane sources associated with any destruction device, either expand this section to report information for those methane sources or submit the required reporting information for those sources on separate, attached paper.

Number
Sources:
1

How many pre-mining surface wells included in the project were mined through during this reporting period?

Note: If more than two (2) wells were included and mined through, either expand this section to report information for those wells or submit the required reporting information for those wells on separate, attached paper.

Number
Wells:
0

Emission Reductions (ER):

283,656

Part VI.B.1 Baseline Values for First Destruction Device

Is this a qualifying or non-qualifying destruction device?

☒ Qualifying
☐ Non-Qualifying

Source	Baseline C_{CH_4}	$PSW_{B,i}$	$PIB_{B,i}$	$PGW_{B,i}$
1.	0%	N/A	N/A	0

2.				
3.				
Part VI.B.2 Baseline Values for Second Destruction Device ☐ Not Applicable (Only One Destruction Device)				
Is this a qualifying or non-qualifying destruction device?				☒ Qualifying ☐ Non-Qualifying
Source	Baseline C _{CH4}	PSW _{B,i}	PIB _{B,i}	PGW _{B,i}
1.	0%	N/A	N/A	0
2.				
3.				
Part VI.B.3 Project Values for First Destruction Device				
Source	Project C _{CH4}	PSW _{P,i}	PIB _{P,i}	PGW _{P,i}
1.	82.5%			999,929,670
2.				
3.				
Part VI.B.4 Project Values for Second Destruction Device ☐ Not Applicable (Only One Destruction Device)				
Source	Project C _{CH4}	PSW _{P,i}	PIB _{P,i}	PGW _{P,i}
1.	81.4%			20,254,886
2.				
3.				
Part VI.B.5 Values for Pre-Mining Surface Wells, First Destruction Device				
☒ N/A	Baseline C _{CH4,MG} :	Baseline MG _{SUPP,i} :	Project C _{CH4,MG} :	Project MG _{SUPP,i} :
☐ N/A	Identification of 1 st well:			
	PSW _{nqd,i} :	PSW _{e,pre,i} :	PSW _{e,post,i} :	PSW _{P,all,i} :
☐ N/A	Identification of 2 nd well:			
	PSW _{nqd,i} :	PSW _{e,pre,i} :	PSW _{e,post,i} :	PSW _{P,all,i} :
Part VI.B.6 Values for Pre-Mining Surface Wells, Second Destruction Device				
☒ N/A	Baseline C _{CH4,MG} :	Baseline MG _{SUPP,i} :	Project C _{CH4,MG} :	Project MG _{SUPP,i} :
☐ N/A	Identification of 1 st well:			
	PSW _{nqd,i} :	PSW _{e,pre,i} :	PSW _{e,post,i} :	PSW _{P,all,i} :
☐ N/A	Identification of 2 nd well:			
	PSW _{nqd,i} :	PSW _{e,pre,i} :	PSW _{e,post,i} :	PSW _{P,all,i} :
Part VI.B.7 Other Values				
CONS _{ELEC} :		CONS _{HEAT} :		CONS _{FF} : 70,624,578

CE_{ELEC}:		CE_{HEAT}:	CE_{FF}: 0.055 kg CO ₂ /scf (Natural Gas)
☐ N/A	Site-specific Methane Destruction Efficiency for First Device: 97.4%	Description of Process: Ratio of measured off gas CH ₄ concentration and flow (SCF) to fuel gas CH ₄ concentration and flow (SCF)	Third Parties Involved: Montrose Air Quality Services
☒ N/A	Site-specific Methane Destruction Efficiency for Second Device:	Description of Process:	Third Parties Involved:

Part VII. ATTESTATION AND OPO SIGNATURE

 Initial	I certify under penalty of perjury under the laws of the State of California the GHG reductions and/or GHG removal enhancements for			
	Project Name: Solvay Chemicals, Inc. Waste Mine Methane Project		Reporting Period Start Date: 1/1/2018	Reporting Period End Date: 12/31/2018
	from		to	
are measured in accordance with the Compliance Offset Protocol Mine Methane Capture Projects, April 25, 2014, and all information required to be submitted to ARB is true, accurate, and complete.				
In signing this form, I certify under penalty of perjury of the laws of California that the information contained in this form is true, accurate, and complete. I further certify that I am an Account Representative of the Offset Project Operator (OPO).				
SIGNATURE: 		PRINTED NAME: Todd Brichacek		
TITLE: Senior Vice President - Site Manager		DATE: 5/31/2019		