

APPLICATION FOR LISTING A MINE METHANE CAPTURE OFFSET PROJECT

OPR Staff Use Only	Date Application Received:	OPR Tracking Number:	Date Application Reviewed:	OPR Staff Use Only
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PART I. ENTITY APPLYING FOR LISTING

Is this form being submitted by the Offset Project Operator (OPO) or by the Authorized Project Designee (APD)? Notes: 1. The person completing this form should be an OPO/APD employee. 2. If the APD is submitting this form, the OPO should submit the form Designation of Authorized Project Designee simultaneously.			☒ OPO ☐ APD
Name of Person Completing Form: James Phillip		Organizational Affiliation, if applicable: Solvay Chemicals, Inc.	
Date Form Completed: 11/21/2014	Phone Number: 307-872-6519	Email Address: jim.phillip@solvay.com	

PART II. OFFSET PROJECT INFORMATION

Offset Project Name: Solvay Chemicals, Inc. Waste Mine Methane Project			
Mine Methane Capture Activity Type(s):			
☐ Active Underground Mine Ventilation Air Methane	☐ Active Surface Mine Methane Drainage		
☒ Active Underground Mine Methane Drainage	☐ Abandoned Underground Mine Methane Recovery		
Offset Project Commencement Date: 8/13/2010	First Reporting Period Start Date: 1/1/2015	First Reporting Period End Date: 12/31/2015	
Specify the action(s) that identify the offset project commencement date: First destruction of waste mine methane after the commissioning of the incinerator (enclosed flare - BR11)			
Is the project transitioning to the Compliance Offset Protocol Mine Methane Capture Projects after previously being listed as an early action offset project?			☒ Yes ☐ No

PART III. OPO/APD INFORMATION

Part III.A OPO					
OPO Name: Solvay Chemicals, Inc.		Organizational Affiliation, if applicable:		OPO's CITSS ID#: CA 1 7 4 3	
Mailing Address: 3333 Richmond Avenue		City: Houston		State: TX	Zip: 77098
Physical Address (if different):		City:		State:	Zip:
Contact Person: James D. Phillip		Phone Number: 307-872-6519		Email Address: jim.phillip@solvay.com	
Part III.B APD (if applicable) ☒ No APD/Not Applicable					
APD Name:		Organizational Affiliation, if applicable:		APD's CITSS ID#: CA _ _ _ _	
Mailing Address:		City:		State:	Zip:
Physical Address (if different):		City:		State:	Zip:
Contact Person:		Phone Number:		Email Address:	

PART IV. OFFSET PROJECT LOCATION

*Street Address of Mine Site (if available): 400 County Road 85	*City: Green River	*State: WY	*Zip: 82935
*Latitude of Mine Site: 41.5	*Longitude of Mine Site: -109.7564		
Mine Basin: 535 Green River Basin Sweetwater, WY (37)			
*Does the project occur on private, public, or a combination of private and public lands? ☐ Private ☐ Public ☒ Private and Public			
*Does the offset project occur on any of the following categories of land? (check all that apply) ☐ Land that is owned by, or subject to, an ownership or possessory interest of a Tribe ☐ Land that is "Indian lands" of a Tribe as defined by 25 U.S.C. §81(a)(1) ☐ Land that is owned by any person, entity, or Tribe, within the external borders of such Indian lands ☒ None of the above			
If "none of the above," skip to Part V. Otherwise, proceed to the questions below.			
*Does a limited waiver of sovereign immunity between ARB and the governing body of the Tribe exist? ☐ Yes ☐ No			
*Describe how the land within the Project Area is owned:			

PART V. MINE INFORMATION

*Mine Safety and Health Administration (MSHA) Identification Number: 48-01295	*MSHA Classifications		
	☐ Coal ☐ Metal ☒ Nonmetal	☒ Underground ☐ Surface	☒ Active ☐ Abandoned
*Mining Method Employed (e.g., longwall, room and pillar, or open pit): longwall, room and pillar			
*Average Annual Mineral Production (specify mineral produced and unit): 2009 - 2013 average = 4,160,975 short tons of trona/year			
*Year of Initial Production: 1981		*Year of closure (estimate if mine is not yet closed): 2075+	
Name of state and/or federal agency(ies) responsible for issuing mine leases and/or permits: State of Wyoming DEQ, US Bureau of Land Management, US EPA,			
Permits obtained, or to be obtained, to build and operate the project: See Exhibit 1			
Describe the mine and resource ownership and operation structures: See Exhibit 2			

PART VI. OTHERS INVOLVED IN PROJECT

*Mine Owner:	Name: Solvay Chemicals, Inc					
	Mailing Address: 3333 Richmond Avenue	City: Houston	State: TX	Zip: 77098		
*Parent Company:	Name (if different from Mine Owner): Solvay America, Inc.					
	Mailing Address: 3333 Richmond Avenue	City: Houston	State: TX	Zip: 77098		
*Mine Operator:	Name (if different from Mine Owner):					
	Mailing Address:	City:	State:	Zip:		
*Surface Owner:	Name (if different from Mine Owner): Bureau of Land Management, United States Department of the Interior & Anadarko Land Company					
*Mine Methane Owner:	Name (if different from Mine Owner):					
	Mailing Address:	City:	State:	Zip:		
*Methane Destruction System Owner:	Name (if different from mine owner, OPO, or APD):					
	Mailing Address:	City:	State:	Zip:		
Other Parties with a Material Interest:	1.	Name:				
		Contact Person:	Phone Number:	Email Address:		
	2.	Name:				
		Contact Person:	Phone Number:	Email Address:		
Technical Consultants:	1.	Name: R O Hughes Consulting		Organizational Affiliation, if applicable:		
		Phone Number: 307-870-7022		Email Address: ronhughes2526@gmail.com		
		Mailing Address: 2526 Greystone Drive		City: Grand Junction	State: CO	Zip: 81505
		Physical Address (if different):		City:	State:	Zip:
	2.	Name:		Organizational Affiliation, if applicable:		
		Phone Number:		Email Address:		
		Mailing Address:		City:	State:	Zip:
		Physical Address (if different):		City:	State:	Zip:

PART VII. GHG EMISSIONS

Describe any mine methane destruction occurring at the mine prior to the offset project commencement date:
none

Provide a qualitative characterization and quantitative estimate of the baseline emissions at the mine including an explanation of how the quantitative estimate was reached:
See Exhibit 3

Describe the project activities that will lead to GHG emission reductions:
See Exhibit 4

Is this offset project being implemented and conducted as the result of any law, statute, regulation, court order, or other legally binding mandate? If yes, explain below:

☐ Yes
☒ No

*Have any GHG reductions associated with the offset project ever been registered with or claimed by another registry or program, or sold to a third party prior to our listing? If yes, identify the registry or program, vintage(s) of credits issued, reporting period(s), and verification bodies below:

☒ Yes
☐ No

*Registry/Program:

Climate Action Reserve, CMM Protocol

*Reporting Period(s):

8/13/2010 - 3/31/2011
4/1/2011 - 3/31/2012
4/1/2012 - 3/31/2013
4/1/2013 - 3/31/2014
4/1/2014 - 12/31/2014

*Vintage(s):

2010 - 2014

*Credits Issued:

395,063 mt CO₂e

*Verification Bodies that have performed verification services:

Ruby Canyon Engineering

PART VIII. ATTACHMENTS

On an attached separate sheet(s) of paper provide:

Attachment A: *Documentation showing the Offset Project Operator's legal authority to implement the offset project.

Attachment B: *Bird's-eye view map of the mine site that includes the items specified in MMC Protocol section 7.1(b)(34).

Attachment C: *Diagram of the project site that includes the items specified in section 7.1(b)(35) or 7.1(b)(36), according to activity.

Attachment D: *If the project is located on one of the categories of Tribal land listed in Part IV, provide documentation demonstrating that the land within the Project Area is owned by (or subject to an ownership or possessory interest of) a tribe or private entity. Also provide documentation that demonstrates the existence of a limited waiver of sovereign immunity between ARB and the governing body of the Tribe entered into pursuant to section 95975(l) of the Cap-and-Trade Regulation.

PART IX. ATTESTATIONS AND OPO SIGNATURE

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

from

Crediting Period
Start Date:

1/1/2015

to

Crediting Period
End Date:

12/31/2024

will be measured in accordance with the Compliance Offset Protocol Mine Methane Capture Projects and all information required to be submitted to ARB is true, accurate, and complete.

I understand I am voluntarily participating in the California Greenhouse Gas Cap-and-Trade Program under title 17, article 5, and by doing so, I am now subject to all regulatory requirements and enforcement mechanisms of this program and subject myself to the jurisdiction of California as the exclusive venue to resolve any and all disputes arising from the enforcement of provisions in this article.

I understand that the offset project activity and implementation of the offset project must be in accordance with all applicable local, regional, and national environmental and health and safety laws and regulations that apply to the offset project location. I understand that offset projects are not eligible to receive ARB or registry offset credits for GHG reductions and GHG removal enhancements that are not in compliance with the requirements of the cap-and-trade program.

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 VP - Site Manager	DATE: 11/21/2014

Background for Application of Listing a Mine Methane Capture Offset Project

Section 7.1 of the Compliance Offset Protocol Mine Methane Capture Projects and Section 95975 of the Cap-and-Trade Regulation describe the requirements and process for an Offset Project Operator (OPO) or Authorized Project Designee (APD) to list an offset project with an approved Offset Project Registry. This form is designed to help an OPO or APD fulfill the requirements for listing an offset project. The information in the completed form should be submitted to the approved Offset Project Registry with which the OPO or APD would like their offset project listed.

Where to Submit Information Contained in This Form

Please complete the information on the form using your computer. Then, you may add an electronic signature to the form, or print, sign, and scan the form. The completed and signed information and all supporting documentation should be submitted to the appropriate Offset Project Registry.

This form is also available from the ARB website at:

<http://www.arb.ca.gov/cc/capandtrade/offsets/forms/forms.htm>

Detailed Instructions for Application to List a Mine Methane Capture Offset Project

To facilitate checking boxes, this form is protected with restricted editing. If the applicant wishes to unprotect the form, the password is "form."

Note that Abandoned Mine Methane Recovery activities that are comprised of multiple mines, as allowed for by section 2.4 of the Compliance Offset Protocol Mine Methane Capture Projects, must provide the items marked with an asterisk (*) for each involved mine.

Part I. Entity Applying for Listing:

- Indicate whether the Offset Project Operator (OPO) or Authorized Project Designee (APD) is submitting the information for project listing.
- Section 95975(a) of the Cap-and-Trade Regulation requires the OPO and, if applicable, the APD, to register with ARB for the Cap-and-Trade Program prior to listing a project. It also requires that neither the OPO nor APD may be subject to any Holding Account restrictions imposed as part of an enforcement action. To register with ARB, please visit the website for Compliance Instrument Tracking System Services (CITSS): <https://www.wci-citss.org/>
- List the name, organization, phone number, and email address of the person submitting the information. This person should be an employee of the OPO or APD, whichever entity is making the submission. The person submitting the information need not be the same person as the contact person listed for the OPO or APD in Part III and also need not be the person signing the form in Part IX.
- The person submitting the information should indicate the date the form is completed.

Part II. Offset Project Information:

- Provide the name for the offset project.
- Indicate the mine methane capture activity type(s) proposed. At active underground mines, an OPO or APD may operate both VAM and methane drainage activities as a single offset project sharing the earliest commencement date. Alternatively, the OPO or APD may elect to operate separate offset projects for each activity with unique commencement dates. If the OPO or APD chooses to operate separate offset projects, listing information must be submitted separately.
- Indicate the offset project commencement date; an approximation is acceptable if the precise date is unknown. Specify the action(s) that identify the offset project commencement date.
- Indicate the start and end dates of the first reporting period; approximations are acceptable if the precise dates are unknown.
- State whether the project is transitioning to the Compliance Offset Protocol Mine Methane Projects, after previously being listed as an early action offset project.

Part III. OPO/APD Information:

- Enter contact information for the OPO and APD. Every offset project will have an OPO. If an offset project does not have an APD, please mark the box indicating the offset project does not have an APD and leave the remaining fields blank.
- For both the OPO and, if applicable, the APD, enter the entity's name, its CITSS ID number, its mailing address, and the name, phone number, and e-mail of a contact person for the entity. The CITSS ID is six characters in length, with two letters followed by four numbers (e.g., "CA1234"). **DO NOT PROVIDE THE OPO's or APD's CONFIDENTIAL CITSS ACCOUNT NUMBER**, which begins with the CITSS ID number followed by a hyphen and more numbers.

Part IV. Offset Project Location:

- Provide the street address, if available, and latitude and longitude of the mine site.
- Provide the mine basin as defined by AAPG Geologic Note: AAPG-CSD Geological Provinces Code Map: AAPG Bulletin, Prepared by Richard F. Meyer, Laurie G. Wallace, and Fred J. Wagner, Jr., Volume 75, Number 10 (October 1991).
- Indicate whether the project occurs on private, public, or a combination of private and public land.
- Specify if the project is located on one of the categories of Tribal land listed. If the project is located on Tribal land, the project must submit the related attachments listed in section VIII.

Part V. Mine Information

- Provide the Mine Safety and Health Administration (MSHA) identification number associated with the mine. Indicate how the mine is classified by MSHA.
- Specify the mining method employed, the year of initial production, year of closure (estimate if mine is not yet closed), and the average annual mineral production.
- Name the state and/or federal agency(ies) responsible for issuing mine leases and/or permits.
- List any permits obtained, or to be obtained, for the purposes of building or operating the offset project.
- Describe the mine and resource ownership and operation structures including the mine owner/lessee, parent companies, mine operator, mine methane owner/lessee, surface owner, methane destruction system owner, and any other parties with a material interest in the mine or project.

Part VI. Others Involved in Project:

- Identify the mine owner, parent company (if applicable), mine operator, surface owner, mine methane owner, methane destruction system owner, and any other parties with a material interest.
- Identify any technical consultants. For each, provide the entity name as well as the name and specified contact information of a person able to answer questions regarding the offset project.
- Please identify all such entities and/or individuals expanding the section or attaching additional sheets as necessary. Expanding the section will require unrestricting the editing, for which the password is "form."

Part VII. GHG Emissions:

- Describe any mine methane destruction occurring at the mine prior to the offset project commencement date. List the source of the methane destroyed, destruction device(s) used, and device operation dates.
- Provide a qualitative characterization and quantitative estimate of the baseline emissions at the mine including an explanation of how the quantitative estimate was reached.
- Describe the project activities that will lead to GHG emission reductions including the methane end-use management option(s), destruction devices, and metering and data collection systems to be employed by the project.
- Disclose if the offset project is being implemented and conducted as the result of any law, statute, regulation, court order, or other legally binding mandate. If yes, provide further detail for the reductions claimed and/or credits that have been issued.
- Disclose if any GHG reductions associated with the offset project have ever been registered with or claimed by another registry or program, or sold to a third party prior to our listing. Identify the registry or program as well as the vintage(s) of credits issued, reporting period(s), and verification bodies that have performed verification services.

Part VIII. Attachments:

- As required by the Compliance Offset Protocol Mine Methane Protocol, provide the following as attachments to the listing information contained in this form:
 - A. Documents showing the Offset Project Operator's legal authority to implement the offset project
 - B. Bird's-eye view map of the mine site that includes:

1. Longitude and latitude coordinates
 2. Governing jurisdictions (Governing jurisdictions are any local, state or federal government organization that has jurisdiction over any aspect of the offset project. This includes air quality, water quality, zoning or other agencies.)
 3. Public and private roads
 4. Mine permit boundary
 5. Mine lease boundary, if applicable
- C. Diagram of the project site that includes:
1. For active underground ventilation air methane activities:
 - a. Location of ventilation shafts included in the project. Assign a number to each piece of equipment and, on a separate sheet of paper:
 - 1) Indicate whether the ventilation shaft is currently existing or planned
 - 2) Indicate whether or not the ventilation shaft was connected to a non-qualifying destruction device at any point during the year prior to offset project commencement
 - b. Location of equipment used to collect, treat, store, meter, and destroy ventilation air methane in use prior to offset project commencement. Assign a number to each piece of equipment and, on a separate sheet of paper:
 - 1) Indicate whether or not the piece of equipment will be part of the project
 - 2) Provide a description, including the purpose, of the piece of equipment
 - 3) For destruction devices, provide the operation dates (approximate dates are acceptable)
 - 4) For destruction devices, indicate whether it is a qualifying or non-qualifying destruction device in accordance with chapter 2 of the Compliance Offset Protocol Mine Methane Capture Projects
 - 5) For non-qualifying destruction devices that were operating at the mine prior to offset project commencement and during the year immediately preceding offset project commencement, provide the volume or mass of ventilation air sent to the device during the three-year period prior to offset project commencement (or during the length of time the device is operational, if less than three years), adjusted for temperature and pressure using equation 5.11 of the Compliance Offset Protocol Mine Methane Capture Projects, if applicable, averaged according to the length of the initial reporting period
 - 6) For non-qualifying destruction devices that were operating at the mine prior to offset project commencement and during the year immediately preceding offset project commencement, provide the volume or mass of ventilation air sent to the device during the time period a law, regulation, or legally binding mandate, in place for less than three years prior to offset project commencement, was in effect, adjusted for temperature and pressure using equation 5.11 of the Compliance Offset Protocol Mine Methane Capture Projects, if applicable, and averaged according to the length of the initial reporting period
 - c. Location of equipment used to collect, treat, store, meter, and destroy ventilation air methane installed as part of the project. Assign a number to each piece of equipment and, on a separate sheet of paper
 - 1) Provide a description, including the purpose, of the piece of equipment
 - 2) For destruction devices, provide the operational date or expected operational date (approximate dates are acceptable)
 - 3) For destruction devices, indicate whether it is a qualifying or non-qualifying destruction device in accordance with chapter 2 of the Compliance Offset Protocol Mine Methane Capture Projects
 2. For active underground mine methane drainage activities, active surface mine methane drainage activities, and abandoned underground mine methane recovery activities:
 - a. Location of wells and boreholes included in the project. Assign a number to each piece of equipment and, on a separate sheet of paper:
 - 1) Indicate whether the well/borehole is currently existing or planned
 - 2) Indicate whether or not the well/borehole was connected to a non-qualifying destruction device at any point during the year prior to offset project commencement
 - 3) Indicate the methane source type (i.e., pre-mining surface well, pre-mining in-mine borehole, post-mining gob well, existing CBM well that would otherwise be shut-in and abandoned, abandoned well that is reactivated, or converted dewatering wells)
 - 4) For pre-mining surface wells, indicate whether or not the well is mined through, and when the well was, or is expected to be, mined through

- b. Location of equipment used to collect, treat, store, meter, and destroy MM/SMM/AMM in use prior to offset project commencement. Assign a number to each piece of equipment and, on a separate sheet of paper:
 - 1) Indicate whether or not the piece of equipment will be part of the project
 - 2) Provide a description, including the purpose, of the piece of equipment
 - 3) For destruction devices, provide the operation dates (approximate dates are acceptable)
 - 4) For destruction devices, indicate whether it is a qualifying or non-qualifying destruction device in accordance with chapter 2 of the Compliance Offset Protocol Mine Methane Capture Projects
 - 5) For non-qualifying destruction devices that were operating at the mine prior to offset project commencement and during the year immediately preceding offset project commencement, provide the volume or mass of mine gas sent to the device during the three-year period prior to offset project commencement (or during the length of time the device is operational, if less than three years), adjusted for temperature and pressure using equation 5.11 of the Compliance Offset Protocol Mine Methane Capture Projects, if applicable, averaged according to the length of the initial reporting period
 - 6) For non-qualifying destruction devices that were operating at the mine prior to offset project commencement and during the year immediately preceding offset project commencement, provide the volume or mass of mine gas sent to the device during the time period a law, regulation, or legally binding mandate, in place for less than three years prior to offset project commencement, was in effect, adjusted for temperature and pressure using equation 5.11 of the Compliance Offset Protocol Mine Methane Capture Projects, if applicable, and averaged according to the length of the initial reporting period.
- c. Location of equipment used to collect, treat, store, meter, and destroy MM/SMM/AMM installed as part of the project. Assign a number to each piece of equipment and, on a separate sheet of paper:
 - 1) Provide a description, including the purpose, of the piece of equipment
 - 2) For destruction devices, provide the operational date or expected operational date (approximate dates are acceptable)
 - 3) For destruction devices, indicate whether it is a qualifying or non-qualifying destruction device in accordance with chapter 2 of the Compliance Offset Protocol Mine Methane Capture Projects
- D. If the project is located on one of the categories of Tribal land listed in Part IV, provide documentation demonstrating that the land within the Project Area is owned by (or subject to an ownership or possessory interest of) a tribe or private entity. Also provide documentation that demonstrates the existence of a limited waiver of sovereign immunity between ARB and the governing body of the Tribe entered into pursuant to section 95975(l) of the Cap-and-Trade Regulation.

Part IX. Attestations and OPO Signature:

- Section 95975(c) of the Cap-and-Trade Regulation requires three attestations for listing an offset project. The required attestations are provided in this section. The person signing the form should initial each attestation (no typed or printed initials).
- The first attestation requires the applicant to provide the offset project name and the start and end dates of the crediting period to complete the statement. The offset project name should match the name entered in Part II. The dates for the Offset Project's crediting period must also be provided. Please note that the dates provided in the attestation are for the crediting period, not for the first reporting period provided in Part II. The crediting period dates may be approximate if precise dates are not known.
- Amendments adopted in April 2014 to section 95975(d) require the attestations "be provided to an Offset Project Registry with the listing information, if being listed with an Offset Project Registry."
- The individual signing the document must be registered in CITSS as the OPO's Primary Account Representative or Alternate Account Representative. The individual signing the document may be an APD employee and/or representative; but to sign the document, the individual must be an Account Representative on the OPO's CITSS account.
- Please provide the person's signature, printed name, corporate title, and date signed.