OMB Number: 4040-0004
Expiration Date: 12/31/2022

Application for Federal Assistance SF-424

* 1. Type of Submission:
- [ ] Preapplication
- [x] Application
- [ ] Changed/Corrected Application

* 2. Type of Application:
- [x] New
- [ ] Continuation
- [ ] Revision

* If Revision, select appropriate letter(s):

* Other (Specify):

* 3. Date Received:

4. Applicant Identifier:

5a. Federal Entity Identifier:

5b. Federal Award Identifier:

State Use Only:

6. Date Received by State:

7. State Application Identifier:

8. APPLICANT INFORMATION:

* a. Legal Name: Solvay Specialty Polymers, LLC USA

* b. Employer/Taxpayer Identification Number (EIN/TIN): (b) (4)

* c. UEI: (b) (4)

d. Address:

* Street1: 4500 Mcginnis Ferry Rd
Street2:
* City: ALPHARETTA
County/Parish:
* State: GA: Georgia
Province:
* Country: USA: UNITED STATES
* Zip / Postal Code: 30005-3914

e. Organizational Unit:

Department Name:

Division Name:

f. Name and contact information of person to be contacted on matters involving this application:

Prefix:

* First Name: (b) (6)

Middle Name: (b) (6)

* Last Name: (b) (6)

Suffix:

Title:

Organizational Affiliation:
Solvay Specialty Polymers, LLC USA

* Telephone Number: (b) (6)

Fax Number:

* Email: (b) (6)

Application for Federal Assistance SF-424

*** 9. Type of Applicant 1: Select Applicant Type:**

Q: For-Profit Organization (Other than Small Business)

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

*** 10. Name of Federal Agency:**

Department of Energy

11. Catalog of Federal Domestic Assistance Number:

CFDA Title:

*** 12. Funding Opportunity Number:**

DE-FOA-0002678

* Title:

BIPARTISAN INFRASTRUCTURE LAW (BIL) BATTERY MATERIALS PROCESSING AND BATTERY MANUFACTURING

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

Add Attachment | Delete Attachment | View Attachment

*** 15. Descriptive Title of Applicant's Project:**

Solvay Specialty Polymers USA, LLC seeks to build a new battery-grade polyvinylidene fluoride (PVDF) facilityto supply the needs of the North American E.V. and stationary energy storage market.

Attach supporting documents as specified in agency instructions.

Add Attachments | Delete Attachments | View Attachments

Application for Federal Assistance SF-424

16. Congressional Districts Of:

* a. Applicant GA-06 * b. Program/Project GA-12

Attach an additional list of Program/Project Congressional Districts if needed.

Add Attachment | Delete Attachment | View Attachment

17. Proposed Project:

* a. Start Date: 01/01/2023 * b. End Date: 01/01/2025

18. Estimated Funding ($):

* a. Federal	178,000,000.00
* b. Applicant	(b) (4) [redacted]
* c. State	0.00
* d. Local	0.00
* e. Other	0.00
* f. Program Income	0.00
* g. TOTAL	(b) (4) [redacted]

*** 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

☐ a. This application was made available to the State under the Executive Order 12372 Process for review on _____.

☐ b. Program is subject to E.O. 12372 but has not been selected by the State for review.

☒ c. Program is not covered by E.O. 12372.

*** 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes," provide explanation in attachment.)**

☐ Yes ☒ No

If "Yes", provide explanation and attach

Add Attachment | Delete Attachment | View Attachment

21. *By signing this application, I certify (1) to the statements contained in the list of certifications and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

☒ ** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

Prefix: * First Name: (b) (6) [redacted]

Middle Name:

* Last Name: (b) (6) [redacted]

Suffix:

* Title: (b) (6) [redacted]

* Telephone Number: (b) (6) [redacted] Fax Number:

* Email: (b) (6) [redacted]

* Signature of Authorized Representative: (b) (6) [redacted] * Date Signed: 06/21/2022

Location(s) of Work Documentation

DE-FOA-0002678

Control Number: 2678-1616

Prime Applicant/ Team Member	Address	City	State	Nine Digit Zip Code (ZIP+4)
Solvay Specialty Polymers USA, LLC.	3702 Clanton Road	Augusta	Georgia	30906-8807

This workbook contains Trade Secrets, Confidential, Proprietary, or Privileged Information which is considered Limited Rights Data and Exempt from Public Disclosure.

Instructions and Summary

Award Number: _____

Award Recipient: _____

Date of Submission: 6/29/2022

Form submitted by: Solvay Specialty Polymers USA, LLC
(May be award recipient or sub-recipient)

Please read the instructions on each worksheet tab before starting. If you have any questions, please ask your EERE contact!
Do not modify this template or any cells or formulas!

1. If using this form for award application, negotiation, or budget revision, fill out the blank white cells in workbook tabs a. through j. with total project costs. If using this form for invoice submission, fill out tabs a. through j. with total costs for just the proposed invoice and fill out tab k. per the instructions on that tab.
2. Blue colored cells contain instructions, headers, or summary calculations and should not be modified. Only blank white cells should be populated.
3. Enter detailed support for the project costs identified for each Category line item within each worksheet tab to autopopulate the summary tab.
4. The total budget presented on tabs a. through i. must include both Federal (DOE) and Non-Federal (cost share) portions.
5. All costs incurred by the preparer's sub-recipients, vendors, and Federal Research and Development Centers (FFRDCs), should be entered only in section f. Contractual. All other sections are for the costs of the preparer only.
6. Ensure all entered costs are allowable, allocable, and reasonable in accordance with the administrative requirements prescribed in 2 CFR 200, and the applicable cost principles for each entity type: FAR Part 31 for For-Profit entities; and 2 CFR Part 200 Subpart E - Cost Principles for all other non-federal entities.
7. Add rows as needed throughout tabs a. through j. If rows are added, formulas/calculations may need to be adjusted by the preparer. Do not add rows to the Instructions and Summary tab. If your project contains more than five budget periods, consult your EERE contact before adding additional budget period rows or columns.
8. ALL budget period cost categories are rounded to the nearest dollar.

BURDEN DISCLOSURE STATEMENT

Public reporting burden for this collection of information is estimated to average 24 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Office of Information Resources Management Policy, Plans, and Oversight, AD-241-2 - GTN, Paperwork Reduction Project (1910-5162), U.S. Department of Energy 1000 Independence Avenue, S.W., Washington, DC 20585; and to the Office of Management and Budget, Paperwork Reduction Project (1910-5162), Washington, DC 20503.

SUMMARY OF BUDGET CATEGORY COSTS PROPOSED

The values in this summary table are from entries made in subsequent tabs, only blank white cells require data entry

Section A - Budget Summary

	Federal	Cost Share				Total Costs	Cost Share %	Proposed Budget Period Dates
Budget Period 1	(b) (4)	[redacted]				[redacted]	[redacted]	1/1/23-12/31/23
Budget Period 2	(b) (4)	[redacted]				[redacted]	[redacted]	1/1/24-12/31/24
Budget Period 3	(b) (4)	[redacted]				[redacted]	[redacted]	1/1/25-12/31/25
Budget Period 4	$0	$0				$0	0.00%	
Budget Period 5	$0	$0				$0	0.00%	
Total	(b) (4)	[redacted]				[redacted]	[redacted]	

Section B - Budget Categories

CATEGORY	Budget Period 1	Budget Period 2	Budget Period 3	Budget Period 4	Budget Period 5	Total Costs	% of Project	Comments (as needed)
a. Personnel	(b) (4)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
b. Fringe Benefits	(b) (4)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
c. Travel	$0	$0	$0	$0	$0	$0	0.00%	
d. Equipment	(b) (4)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
e. Supplies	$0	$0	$0	$0	$0	$0	0.00%	
f. Contractual								
Sub-recipient	$0	$0	$0	$0	$0	$0	0.00%	
Vendor	(b) (4)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
FFRDC	$0	$0	$0	$0	$0	$0	0.00%	
Total Contractual	(b) (4)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
g. Construction	$0	$0	$0	$0	$0	$0	0.00%	
h. Other Direct Costs	$0	$0	$0	$0	$0	$0	0.00%	
Total Direct Costs	(b) (4)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
i. Indirect Charges	$0	$0	$0	$0	$0	$0	0.00%	
Total Costs	(b) (4)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	

Additional Explanation (as needed): This workbook contains Trade Secrets, Confidential, Proprietary, or Privileged Information which is considered Limited Rights Data and Exempt from Public Disclosure.

Detail ed Budget Just fication

a. Personnel

INSTRUCTIONS PLEASE READ!!!
1. List project costs solely for employees of the entity completing this form. All personnel costs for subrecipients and vendors must be included under f. Contractual.
2. All personnel should be identified by position title and not employee name. Enter the amount of time (e.g., hours or % of time) and the base pay rate and the total direct personnel compensation will automatically calculate. Rate basis (e.g., actual salary, labor distribution report, state civil service rates, etc.) must also be identified.
3. If loaded labor rates are utilized, a description of the costs the loaded rate is comprised of must be included in the Additional Explanation section below. DOE must review all components of the loaded labor rate for reasonableness and unallowable costs (e.g. fee or profit).
4. If a position and hours are attributed to multiple employees (e.g. Technician working 4000 hours) the number of employees for that position title must be identified.
5. Each budget period is rounded to the nearest dollar.

SOPO Task #	Position Title	Budget Period 1			Budget Period 2			Budget Period 3			Budget Period 4			Budget Period 5			Project Total Hours	Project Total Dollars	Rate Basis
		Time	Pay	Total	Time	Pay	Total	Time	Pay	Total	Time	Pay	Total	Time	Pay	Total			
1	Sr. Engineer (EXAMPLE!!!)	2000	$85.00	$170,000	200	$50.00	$10,000	200	$50.00	$10,000	200	$50.00	$10,000	200	$50.00	$10,000	2400	$190,000	Actual Salary
2	Technicians (2)	4000	$20.00	$80,000	0	$0.00	$0	0	$0.00	$0	0	$0.00	$0	0	$0.00	$0	4000	$80,000	Actual Salary
	Solvay USA Staff																		
(b) (4)	[redacted]																		
	Solvay USA Office/Site Commissioning & Start Up Planning Team																		
(b) (4)	[redacted]																		
	Solvay USA Operations Team																		
	[redacted]																		(b) (4) [redacted]
	[redacted]																		[redacted]
	[redacted]																		[redacted]
	[redacted]																		[redacted]
	Solvay USA Site Location Staff																		
(b) (4)	[redacted]																		
	Solvay Subject Matter Expert Staff																		
(b) (4)	[redacted]																		
	Total Personnel Costs	(b) (4) [redacted]																	

Additional Explanation (as needed) The increase in hourly rates accounts for an annual 3% cost of living raise.

b. Fringe Benefits

INSTRUCTIONS - PLEASE READ!!!

1. Fill out the table below by position title. If all employees receive the same fringe benefits, you can show "Total Personnel" in the Labor Type column instead of listing out all position titles.
2. The rates and how they are applied should not be averaged to get one fringe cost percentage. Complex calculations should be described/provided in the Additional Explanation section below.
3. The fringe benefit rates should be applied to all positions, regardless of whether those funds will be supported by Federal Share or Recipient Cost Share.
4. Each budget period is rounded to the nearest dollar.

Labor Type	Budget Period 1			Budget Period 2			Budget Period 3			Budget Period 4			Budget Period 5			Total Project
	Personnel Costs	Rate	Total	Personnel Costs	Rate	Total	Personnel Costs	Rate	Total	Personnel Costs	Rate	Total	Personnel Costs	Rate	Total	
EXAMPLE!!! Sr. Engineer	$170 000	20%	$34 000	$10 000	20%	$2 000	$10 000	20%	$2 000	$10 000	20%	$2 000	$10 000	20%	$2 000	$38 000
Total Personnel	(b) (4) [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]			[redacted]			[redacted]	[redacted]
			$0			$0			$0			$0			$0	$0
			$0			$0			$0			$0			$0	$0
			$0			$0			$0			$0			$0	$0
			$0			$0			$0			$0			$0	$0
			$0			$0			$0			$0			$0	$0
			$0			$0			$0			$0			$0	$0
			$0			$0			$0			$0			$0	$0
			$0			$0			$0			$0			$0	$0
			$0			$0			$0			$0			$0	$0
			$0			$0			$0			$0			$0	$0
			$0			$0			$0			$0			$0	$0
			$0			$0			$0			$0			$0	$0
			$0			$0			$0			$0			$0	$0
			$0			$0			$0			$0			$0	$0
			$0			$0			$0			$0			$0	$0
			$0			$0			$0			$0			$0	$0
			$0			$0			$0			$0			$0	$0
			$0			$0			$0			$0			$0	$0
			$0			$0			$0			$0			$0	$0
			$0			$0			$0			$0			$0	$0
			$0			$0			$0			$0			$0	$0
			$0			$0			$0			$0			$0	$0
			$0			$0			$0			$0			$0	$0
Total	(b) (4) [redacted]		[redacted]	[redacted]		[redacted]	[redacted]		[redacted]	[redacted]		[redacted]	[redacted]		[redacted]	[redacted]

A federally approved fringe benefit rate agreement, or a proposed rate supported and agreed upon by DOE for estimating purposes is required at the time of award negotiation if reimbursement for fringe benefits is requested. Please check (X) one of the options below and provide the requested information if not previously submitted.

A fringe benefit rate has been negotiated with, or approved by, a federal government agency. A copy of the latest rate agreement is/was included with the project application.*

X There is not a current federally approved rate agreement negotiated and available.**

*Unless the organization has submitted an indirect rate proposal which encompasses the fringe pool of costs, please provide the organization's benefit package and/or a list of the components/elements that comprise the fringe pool and the cost or percentage of each component/element allocated to the labor costs identified in the Budget Justification (Form EERE 335.1).

**When this option is checked, the entity preparing this form shall submit an indirect rate proposal in the format provided in the Sample Rate Proposal at https://www.energy.gov/eere/funding/downloads/sample-indirect-rate-proposal-and-profit-compliance-audit or a format that provides the same level of information and which will support the rates being proposed for use in the performance of the proposed project.

Additional Explanation (as necessary): Please see tab "Fringe Benefit Rate Calc Basis" at the end of this workbook for the list of elements that comprise our fringe benefits.

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c. Travel

INSTRUCTIONS - PLEASE READ!!!

1. Identify Foreign and Domestic Travel as separate items. Examples of Purpose of Travel are subrecipient site visits, DOE meetings, project mgmt. meetings, etc. Examples of Basis for Estimating Costs are past trips, travel quotes, GSA rates, etc.
2. All listed travel must be necessary for performance of the Statement of Project Objectives.
3. Only travel that is directly associated with this award should be included as a direct travel cost to the award.
4. Federal travel regulations are contained within the applicable cost principles for all entity types.
5. Travel costs should remain consistent with travel costs incurred by an organization during normal business operations as a result of the organizations written travel policy. In absence of a written travel policy, organizations must follow the regulations prescribed by the General Services Administration.
6. Columns E, F, G, H, I, J, and K are per trip.
7. The number of days is inclusive of day of departure and day of return.
8. Recipients should enter City and State (or City and Country for International travel) in the Depart from and Destination fields.
9. Each budget period is rounded to the nearest dollar.

SOPO Task #	Purpose of Travel	Depart From	Destination	No. of Days	No. of Travelers	Lodging per Traveler	Flight per Traveler	Vehicle per Traveler	Per Diem Per Traveler	Cost per Trip	Basis for Estimating Costs
	Domestic Travel	**Budget Period 1**									
1	**EXAMPLE!!!** Visit to PV manufacturer			2	2	$250	$500	$100	$160	$2,020	Current GSA rates
										$0	
										$0	
										$0	
										$0	
	International Travel										
										$0	
	Budget Period 1 Total									**$0**	
		Budget Period 2									
										$0	
										$0	
										$0	
										$0	
	International Travel										
										$0	
	Budget Period 2 Total									**$0**	
	Domestic Travel	**Budget Period 3**									
										$0	
										$0	
										$0	
										$0	
	International Travel										
										$0	
	Budget Period 3 Total									**$0**	
	Domestic Travel	**Budget Period 4**									
										$0	
										$0	
										$0	
										$0	
	International Travel										
										$0	
	Budget Period 4 Total									**$0**	
	Domestic Travel	**Budget Period 5**									
										$0	
										$0	
										$0	
										$0	
	International Travel										
										$0	
	Budget Period 5 Total									**$0**	
	PROJECT TOTAL									**$0**	

Additional Explanation (as needed):

d. Equipment

INSTRUCTIONS - PLEASE READ!!!

1. Equipment is generally defined as an item with an acquisition cost greater than $5,000 and a useful life expectancy of more than one year. Please refer to the applicable Federal regulations in 2 CFR 200 for specific equipment definitions and treatment.
2. List all equipment below, providing a basis of cost (e.g. vendor quotes, catalog prices, prior invoices, etc.). Briefly justify items as they apply to the Statement of Project Objectives. If it is existing equipment, provide logical support for the estimated value shown.
3. During award negotiations, provide a vendor quote for all equipment items over $50,000 in price. If the vendor quote is not an exact price match, provide an explanation in the additional explanation section below. If a vendor quote is not practical, such as for a piece of equipment that is purpose-built, first of its kind, or otherwise not available off the shelf, provide a detailed engineering estimate for how the cost estimate was derived.
4. Each budget period is rounded to the nearest dollar.

SOPO	Equipment Item	Qty	Unit Cost	Total Cost	Basis of Cost	Justification of need
				Budget Period 1		
3.4.5	EXAMPLE!!! Thermal shock chamber	2	$70,000	$140,000	Vendor Quote - Attached	Reliability testing of PV modules- Task 4.3
(b) (4)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
				$0		
				$0		
				$0		
				$0		
	Budget Period 1 Total			(b) (4)		
				Budget Period 2		
(b) (4)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
				$0		
	Budget Period 2 Total			(b) (4)		
				Budget Period 3		
(b) (4)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
				$0		
	Budget Period 3 Total			(b) (4)		
				Budget Period 4		
				$0		
				$0		
				$0		
				$0		
				$0		
				$0		
	Budget Period 4 Total			$0		
				Budget Period 5		
				$0		
				$0		
				$0		
				$0		
				$0		
				$0		
	Budget Period 5 Total			$0		
	PROJECT TOTAL			(b) (4)		

Additional Explanation (as needed): This workbook contains Trade Secrets, Confidential, Proprietary, or Privileged Information which is considered Limited Rights Data and Exempt from Public Disclosure.

e. Supplies

INSTRUCTIONS - PLEASE READ

1. Supplies are generally defined as an item with an acquisition cost of $5,000 or less and a useful life expectancy of less than one year. Supplies are generally consumed during the project performance. Please refer to the applicable Federal regulations in 2 CFR 200 for specific supplies definitions and treatment.

2. List all proposed supplies below, providing a basis of costs (e.g. vendor quotes, catalog prices, prior invoices, etc.). Briefly justify the need for the Supplies as they apply to the Statement of Project Objectives. Note that Supply items must be direct costs to the project at this budget category, and not duplicative of supply costs included in the indirect pool that is the basis of the indirect rate applied for this project.

3. Multiple supply items valued at $5,000 or less used to assemble an equipment item with a value greater than $5,000 with a useful life of more than one year should be included on the equipment tab. If supply items and costs are ambiguous in nature, contact your DOE representative for proper categorization.

4. Add rows as needed. If rows are added, formulas/calculations may need to be adjusted by the preparer.

5. Each budget period is rounded to the nearest dollar

SOPO	General Category of Supplies	Qty	Unit Cost	Total Cost	Basis of Cost	Justification of need
				Budget Period 1		
4,6	**EXAMPLE** Wireless DAS components	10	$360.00	$3,600	Catalog price	For Alpha prototype - Task 2.4
				$0		
				$0		
				$0		
				$0		
				$0		
				$0		
				$0		
				$0		
	Budget Period 1 Total			**$0**		
				Budget Period 2		
				$0		
				$0		
				$0		
				$0		
				$0		
				$0		
				$0		
				$0		
	Budget Period 2 Total			$0		
				Budget Period 3		
				$0		
				$0		
				$0		
				$0		
				$0		
				$0		
				$0		
				$0		
	Budget Period 3 Total			$0		
				Budget Period 4		
				$0		
				$0		
				$0		
				$0		
				$0		
				$0		
				$0		
				$0		
	Budget Period 4 Total			$0		
				Budget Period 5		
				$0		
				$0		
				$0		
				$0		
				$0		
				$0		
				$0		
				$0		
	Budget Period 5 Total			$0		
	PROJECT TOTAL			**$0**		

Additional Explanation (as needed):

f. Contractual

INSTRUCTIONS - PLEASE READ!!!

1. The entity completing this form must provide all costs related to sub-recipients, vendors, and FFRDC partners in the applicable boxes below.

2. Sub-recipients (partners, sub-awardees): Subrecipients shall submit a Budget Justification describing all project costs and calculations when their total proposed budget exceeds either (1) $250,000 or (2) 25% of total award costs. These sub-recipient forms may be completed by either the sub-recipients themselves or by the preparer of this form. The budget totals on the sub-recipient's forms must match the sub-recipient entries below. A subrecipient is a lega entity to which a subaward is made, who has performance measured against whether he objectives of the Federal program are met, is responsible for programmatic decision making, must adhere to applicable Federal program compliance requirements, and uses the Federal funds to carry out a program of the organization. All characteristics may not be present and judgment must be used to determine subrecipient vs. vendor status.

3. Vendors (including contractors): List all vendors and contractors supplying commercial supplies or services used to support the project. For each Vendor cost with total project costs of $250,000 or more, a Vendor quote must be provided. A vendor is a legal entity contracted to provide goods and services within normal business operations, provides similar goods or services to many different purchasers, operates in a competitive environment, provides good or services that are ancillary to the operation of the Federal program, and is not subject to compliance requirements of the Federal program. All characteristics may not be present and judgment must be used to determine subrecipient vs. vendor status.

4. Federal Funded Research and Development Centers (FFRDCs): FFRDCs must submit a signed Field Work Proposal during award application. The award recipient may allow the FFRDC to provide this information directly to DOE however project costs must also be provided below.

5. Each budget period is rounded to the nearest dollar.

SOPO	Sub-Recipient	Purpose and Basis of Cost	2023 Budget	Budget Period	Budget Period	Budget	Budget	Project Total
2,4	EXAMPLE!!! XYZ Corp.	Partner to develop optimal lens for Gen 2 product. Cost estimate based	$48,000	$32,000	$16,000	$8,000	$4,000	$108,000
								$0
								$0
								$0
								$0
								$0
								$0
								$0
								$0
								$0
								$0
		Sub-total	$0	$0	$0	$0	$0	$0

SOPO Task #	Vendor Name/Organization	Purpose and Basis of Cost	Budget Period 1	Budget Period 2	Budget Period 3	Budget Period 4	Budget Period 5	Project Total
6	EXAMPLE!!! ABC Corp.	Vendor for developing robotics to perform lens inspection. Estimate	$0	$32,900	$86,500	$0	$0	$119,400
(b) (4)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]			[redacted]
								$0
								$0
								$0
		Sub-total	(b) (4) [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

SOPO	FFRDC	Purpose and Basis of Cost	Budget	Budget Period	Budget Period	Budget	Budget	Project Total
								$0
								$0
								$0
								$0
		Sub-total	$0	$0	$0	$0	$0	$0

	Total Contractual		(b) (4) [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Additional Explanation (as needed): This workbook contains Trade Secrets, Confidential, Proprietary, or Privileged Information which is considered Limited Rights Data and Exempt from Public Disclosure.

g. Construction

PLEASE READ!!!

1. Construction, for the purpose of budgeting, is defined as all types of work done on a particular building, including erecting, altering, or remodeling. Construction conducted by the award recipient is entered on this page. Any construction work that is performed by a vendor or subrecipient should be entered under f. Contractual.

2. List all proposed construction below, providing a basis of cost such as engineering estimates, prior construction, etc., and briefly justify its need as it applies to the Statement of Project Objectives.

3. Each budget period is rounded to the nearest dollar

Overall description of construction activities: Example Only!!! - Build wind turbine platform

SOPO	General Description	Cost	Basis of Cost	Justification of need
	Budget Period 1			
3	EXAMPLE ONLY!!! Three days of excavation for platform site	$28,000	Engineering estimate	Site must be prepared for construction of platform.
	Budget Period 1 Total	$0		
	Budget Period 2			
	Budget Period 2 Total	$0		
	Budget Period 3			
	Budget Period 3 Total	$0		
	Budget Period 4			
	Budget Period 4 Total	$0		
	Budget Period 5			
	Budget Period 5 Total	$0		
	PROJECT TOTAL	**$0**		

Additional Explanation (as needed):

h. Other Direct Costs

INSTRUCTIONS - PLEASE READ!!!

1. Other direct costs are direct cost items required for the project which do not fit clearly into other categories. These direct costs must not be included in the indirect costs (for which the indirect rate is being applied for this project). Examples are: tuition, printing costs, etc. which can be directly charged to the project and are not duplicated in indirect costs (overhead costs).

2. Basis of cost are items such as vendor quotes, prior purchases of similar or like items, published price list, etc.

3. Each budget period is rounded to the nearest dollar.

SOPO	General Description and SOPO Task #	Cost	Basis of Cost	Justification of need
			Budget Period 1	
5	**EXAMPLE!!!** Grad student tuition - tasks 1-3	$16,000	Established UCD costs	Support of graduate students working on project
	Budget Period 1 Total	$0		
			Budget Period 2	
	Budget Period 2 Total	$0		
			Budget Period 3	
	Budget Period 3 Total	$0		
			Budget Period 4	
	Budget Period 4 Total	$0		
			Budget Period 5	
	Budget Period 5 Total	$0		
	PROJECT TOTAL	**$0**		

Additional Explanation (as needed):

i. Indirect Costs

INSTRUCTIONS - PLEASE READ

1. Fill out the table below to indicate how your indirect costs are calculated. Use the box below to provide additional explanation regarding your indirect rate calculation.

2. The rates and how they are applied should not be averaged to get one indirect cost percentage. Complex calculations or rates that do not do not correspond to the below categories should be described/provided in the Additional Explanation section below. If questions exist, consult with your DOE contact before filling out this section.

3. The indirect rate should be applied to both the Federal Share and Recipient Cost Share.

4. Each budget period is rounded to the nearest dollar.

	Budget Period 1	Budget Period 2	Budget Period 3	Budget Period 4	Budget Period 5	Total	Explanation of BASE
Provide ONLY Applicable Rates:							
Overhead Rate	0.00%	0.00%	0.00%	0.00%	0 00%		**For this project at this time we are capping overhead at 0%**
General & Administrative (G&A)	0.00%	0.00%	0.00%	0.00%	0 00%		**For this project at this time we are capping G&A at 0%**
FCCM Rate, if applicable	0.00%	0.00%	0.00%	0.00%	0.00%		
OTHER Indirect Rate	0.00%	0.00%	0.00%	0.00%	0.00%		
Indirect Costs (As Applicable):							
Overhead Costs						**$0**	
G&A Costs						**$0**	
FCCM Costs, if applicable						**$0**	
OTHER Indirect Costs						**$0**	
Total indirect costs requested:	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	

A federally approved indirect rate agreement, or rate proposed (supported and agreed upon by DOE for estimating purposes) is required if reimbursement of indirect costs is requested. Please check (X) one of the options below and provide the requested information if it has not already been provided as requested, or has changed.

An indirect rate has been approved or negotiated with a federal government agency. A copy of the latest rate agreement is included with this application, and will be provided electronically to the Contracting Officer for this project.

There is not a current, federally approved rate agreement negotiated and available*.

***When this option is checked, the entity preparing this form shall submit an indirect rate proposal in the format provided by your DOE contact, or a format that provides the same level of information and which will support the rates being proposed for use in performance of the proposed project. Additionally, any non-Federal entity that has never received a negotiated indirect cost rate, except for those non-Federal entities described in Appendix VII to Part 200—States and Local Government and Indian Tribe Indirect Cost Proposals, paragraph D.1.b, may elect to charge a de minimis rate of 10% of modified total direct costs (MTDC) which may be used indefinitely.As described in §200.403 Factors affecting allowability of costs, costs must be consistently charged as either indirect or direct costs, but may not be double charged or inconsistently charged as both. If chosen, this methodology once elected must be used consistently for all Federal awards until such time as a non-Federal entity chooses to negotiate for a rate, which the non-Federal entity may apply to do at any time.**

You must provide an explanation (below or in a separate attachment) and show how your indirect cost rate was applied to this budget in order to come up with the indirect costs shown.

Additional Explanation (as needed): * MPORTANT: Please use this box (or an attachment) to further explain how your total indirect costs were calculated. If the total indirect costs are a cumulative amount of more than one calculation or rate application, the explanation and calculations should identify all rates used, along with the base they were applied to (and how the base was derived), and a total for each (along with grand total).

Cost Share

PLEASE READ

1. A detailed presentation of the cash or cash value of all cost share proposed must be provided in the table below. All items in the chart below must be identified within the applicable cost category tabs a. through i. in addition to the detailed presentation of the cash or cash value of all cost share proposed provided in the table below. Identify the source organization & amount of each cost share item proposed in the award.

2. Cash Cost Share - encompasses all contributions to the project made by the recipient, subrecipient, or third party (an entity that does not have a role in performing the scope of work) for costs incurred and paid for during the project. This includes when an organization pays for personnel, supplies, equipment, etc. for their own company with organizational resources. If the item or service is reimbursed for, it is cash cost share. All cost share items must be necessary to the performance of the project. **Vendors may not provide cost share.** Any partial donation of goods or services is considered a discount and is not allowable.

3. In Kind Cost Share - encompasses all contributions to the project made by the recipient, subrecipient, or third party (an entity that does not have a role in performing the scope of work) where a value of the contribution can be readily determined, verified and justified but where no actual cash is transacted in securing the good or service comprising the contribution. In Kind cost share items include volunteer personnel hours, the donation of space or use of equipment, etc. The cash value and calculations thereof for all In Kind cost share items must be justified and explained in the Cost Share tem section below. All cost share items must be necessary to the performance of the project. If questions exist, consult your DOE contact before filling out In Kind cost share in this section. Vendors may not provide cost share. Any partial donation of goods or services is considered a discount and is not allowable.

4. Funds from other Federal sources MAY NOT be counted as cost share. This prohibition includes FFRDC sub-recipients. Non-Federal sources include any source not originally derived from Federal funds. Cost sharing commitment letters from subrecipients and third parties must be provided with the original application.

5. Fee or profit, including foregone fee or profit, **are not allowable** as project costs (including cost share) under any resulting award. The project may only incur those costs that are allowable and allocable to the project (including cost share) as determined in accordance with the applicable cost principles prescribed in FAR Part 31 for For-Profit entities and 2 CFR Part 200 Subpart E - Cost Principles for all other non-federal entities.

6. NOTE A Recipient who elects to employ the 10% de minimis Indirect Cost rate **cannot claim the resulting indirect costs as a Cost Share contribution.**

7. NOTE A Recipient **cannot claim "unrecovered indirect costs"** as a Cost Share contribution, **without prior approval.**

8. Each budget period is rounded to the nearest dollar.

Recipient Provided Cost	Organization/Source	Type (Cash or	Cost Share Item	Budget	Budget	Budget	Budget	Budget	Total
a. Personnel	Solvay	Cash	Solvay Labor	(b) (4) [redacted]	[redacted]	[redacted]			[redacted]
b. Fringe	Solvay	Cash	Solvay Employee Benefits & Statutories	(b) (4)	[redacted]	[redacted]			[redacted]
c. Travel									$0
d. Equipment	Solvay	Cash	Project Scope Equipment and Material	(b) (4)	[redacted]	[redacted]			[redacted]
e. Supplies									$0
f. Contractual (NOT	Solvay	Cash	Project Contractors / Vendors	(b) (4) [redacted]	[redacted]	[redacted]			[redacted]
g. Construction									$0
h. Other									$0
i. Indirect									$0
Total recipient provided				(b) (4) [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
f. Subrecipient (3rd Party)	**Organization/Source**	**Type (Cash or**	**Cost Share Item**	**Budget**	**Budget**	**Budget**	**Budget**	**Budget**	**Total**
Sub-Recipient cost share									$0
Sub-Recipient cost share									$0
Sub-Recipient cost share									$0
Sub-Recipient cost share									$0
Sub-Recipient cost share									$0
Sub-Recipient cost share									$0
Sub-Recipient cost share									$0
Sub-Recipient cost share									$0
Sub-Recipient cost share									$0
Sub-Recipient cost share									$0
Sub-Recipient cost share									$0
Sub-Recipient cost share									$0
Sub-Recipient cost share									$0
Sub-Recipient cost share									$0
Sub-Recipient cost share									$0
Total subrecipient				$0	$0	$0	$0	$0	$0
Total Contractual Cost Share				(b) (4)	[redacted]	[redacted]			[redacted]
Grand Total Cost Share All Sources			Totals	(b) (4)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
			Cost Share Percentage per Budget Period	(b) (4)	[redacted]	[redacted]	0.0%	0.0%	

Total Project Cost: (b) (4) [redacted]

Cost Share Percent of Award: (b) (4) [redacted]

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Applicant Name: 0 Award Number: 0

Budget Information - Non Construction Programs

OMB Approval No. 0348-0044

Section A - Budget Summary

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds: Federal (c)	Estimated Unobligated Funds: Non-Federal (d)	New or Revised Budget: Federal (e)	New or Revised Budget: Non-Federal (f)	New or Revised Budget:	New or Revised Budget: Total (g)
1. Budget Period 1				(b) (4)			
2. Budget Period 2				(b) (4)			
3. Budget Period 3				(b) (4)			
4. Budget Period 4				$0	$0		$0
5. Budget Period 5				$0	$0		$0
6. Totals				(b) (4)			

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity: Budget Period 1	Budget Period 2	Budget Period 3	Budget Period 4	Budget Period 5	Total (5)
a. Personnel	(b) (4)					
b. Fringe Benefits	(b) (4)					
c. Travel	$0	$0	$0	$0	$0	$0
d. Equipment	(b) (4)					
e. Supplies	$0	$0	$0	$0	$0	$0
f. Contractual	(b) (4)					
g. Construction	$0	$0	$0	$0	$0	$0
h. Other	$0	$0	$0	$0	$0	$0
i. Total Direct Charges (sum of 6a-6h)	(b) (4)					
j. Indirect Charges	$0	$0	$0	$0	$0	$0
k. **Totals** (sum of 6i-6j)	(b) (4)					
7. Program Income						$0

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Applicant Name: 0 Award Number: 0

Budget Information - Non Construction Programs

OMB Approval No. 0348-0044

Section A - Budget Summary

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds: Federal (c)	Estimated Unobligated Funds: Non-Federal (d)	New or Revised Budget: Federal (e)	New or Revised Budget: Non-Federal (f)	New or Revised Budget:	New or Revised Budget: Total (g)
1. Budget Period 1				(b) (4)			
2. Budget Period 2				(b) (4)			
3. Budget Period 3				(b) (4)			
4. Budget Period 4				$0	$0		$0
5. Budget Period 5				$0	$0		$0
6. Totals				(b) (4)			

Section B - Budget Categories

6. Object Class Categories	Grant Program, Function or Activity: Budget Period 1	Budget Period 2	Budget Period 3	Budget Period 4	Budget Period 5	Total (5)
a. Personnel	(b) (4)					
b. Fringe Benefits	(b) (4)					
c. Travel	$0	$0	$0	$0	$0	$0
d. Equipment	(b) (4)					
e. Supplies	$0	$0	$0	$0	$0	$0
f. Contractual	(b) (4)					
g. Construction	$0	$0	$0	$0	$0	$0
h. Other	$0	$0	$0	$0	$0	$0
i. Total Direct Charges (sum of 6a-6h)	(b) (4)					
j. Indirect Charges	$0	$0	$0	$0	$0	$0
k. **Totals** (sum of 6i-6j)	(b) (4)					
7. Program Income						$0

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Control Number #2678-1616

SOLVAY BATTERY-GRADE PVDF MANUFACTURING FACILITY
CURRENT AND PENDING SUPPORT - MICHAEL FINELLI

Funding source	Award Amount	Period	Months/year
Solvay Specialty Polymers USA, LLC	N/A	Ongoing	12

I, (b) (6) [redacted], certify to the best of my knowledge and belief that the information contained in this Current and Pending Support Disclosure Statement is true, complete and accurate. I understand that any false, fictitious, or fraudulent information, misrepresentations, half-truths, or omissions of any material fact, may subject me to criminal, civil or administrative penalties for fraud, false statements, false claims or otherwise. (18 U.S.C. §§ 1001 and 287, and 31 U.S.C. 3729-3730 and 3801-3812). I further understand and agree that (1) the statements and representations made herein are material to DOE's funding decision, and (2) I have a responsibility to update the disclosures during the period of performance of the award should circumstances change which impact the responses provided above.

(b) (6) 6/29/2022

SOLVAY BATTERY-GRADE PVDF MANUFACTURING FACILITY
CURRENT AND PENDING SUPPORT - WALLY KANDEL

Funding source	Award Amount	Period	Months/year
Solvay Specialty Polymers USA, LLC	N/A	Ongoing	12

I,(b) (6) [redacted], certify to the best of my knowledge and belief that the information contained in this Current and Pending Support Disclosure Statement is true, complete and accurate. I understand that any false, fictitious, or fraudulent information, misrepresentations, half-truths, or omissions of any material fact, may subject me to criminal, civil or administrative penalties for fraud, false statements, false claims or otherwise. (18 U.S.C. §§ 1001 and 287, and 31 U.S.C. 3729-3730 and 3801-3812). I further understand and agree that (1) the statements and representations made herein are material to DOE's funding decision, and (2) I have a responsibility to update the disclosures during the period of performance of the award should circumstances change which impact the responses provided above.

(b) (6) [redacted]

SOLVAY BATTERY-GRADE PVDF MANUFACTURING FACILITY
CURRENT AND PENDING SUPPORT - BRIAN CHALMERS

Funding source	Award Amount	Period	Months/year
Solvay Specialty Polymers USA, LLC	N/A	Ongoing	12

I, (b) (6) [redacted], certify to the best of my knowledge and belief that the information contained in this Current and Pending Support Disclosure Statement is true, complete and accurate. I understand that any false, fictitious, or fraudulent information, misrepresentations, half-truths, or omissions of any material fact, may subject me to criminal, civil or administrative penalties for fraud, false statements, false claims or otherwise. (18 U.S.C. §§ 1001 and 287, and 31 U.S.C. 3729-3730 and 3801-3812). I further understand and agree that (1) the statements and representations made herein are material to DOE's funding decision, and (2) I have a responsibility to update the disclosures during the period of performance of the award should circumstances change which impact the responses provided above.

(b) (6) [redacted]

Control Number #2678-1616

SOLVAY BATTERY-GRADE PVDF MANUFACTURING FACILITY
CURRENT AND PENDING SUPPORT - PHILLIP MCCRAY

Funding source	Award Amount	Period	Months/year
Solvay Specialty Polymers USA, LLC	N/A	Ongoing	12

I, (b) (6) [redacted] certify to the best of my knowledge and belief that the information contained in this Current and Pending Support Disclosure Statement is true, complete and accurate. I understand that any false, fictitious, or fraudulent information, misrepresentations, half-truths, or omissions of any material fact, may subject me to criminal, civil or administrative penalties for fraud, false statements, false claims or otherwise. (18 U.S.C. §§ 1001 and 287, and 31 U.S.C. 3729-3730 and 3801-3812). I further understand and agree that (1) the statements and representations made herein are material to DOE's funding decision, and (2) I have a responsibility to update the disclosures during the period of performance of the award should circumstances change which impact the responses provided above.

[redacted]

SOLVAY BATTERY-GRADE PVDF MANUFACTURING FACILITY
IDENTIFICATION OF POTENTAIL CONFLICTS OF INTEREST OF BIAS IN SELECTION OF REVIEWERS

To the best of our knowledge, there are no collaborators and co-editors to report for key personnel.

All employees of Solvay and its affiliates are considered potential conflicts of interest and should not be considered as reviewers for this application.

SOLVAY BATTERY-GRADE PVDF MANUFACTURING FACILITY
DATA MANAGEMENT PLAN

1. Data types and sources

Data means all data and information, in any form or medium (on paper or digital records), including, but not limited to, technical, engineering, scientific, manufacturing, marketing, financial, and commercial information, such as, for example databases, reports, product formulations, manufacturing processes, know-how, contracts, samples, budgets, and business plans, or (project) meeting minutes, whether generated by Solvay or received from any third party.

2. Content and format

Information will be stored as Microsoft Word documents, Microsoft Excel Spreadsheets, Microsoft Powerpoint presentations, Adobe Acrobat files, and Google Docs, Google Sheets, Google Slides and GMail. The project will also use intelligent 3D modeling software to generate design drawings in Autodesk AutoCAD, and Navisworks viewer software will be used for review of the model and all contained information.

The format of all studies, reports, specifications and drawings will be consistent with project standard cover sheets, naming and numbering conventions, and drawing formats.

3. Sharing and preservation

Data will be shared according to its classification (Limited Rights, Protected, Unlimited Rights and Public) as determined below.

Data will be preserved in accordance with DOE requirements and Solvay's internal policy. Documents will be stored in a third party supplied document controls software platform. The features of the final system chosen for the project will be:

- Corporate ownership: All files are owned by a corporate secure account.
- File loss prevention: Prevents users from deleting files or folders.
- File recovery: Dedicated trash per folder with configurable retention time.
- Shared security: Possibility to prevent users from sharing files or folders.
- External sharing control: Configures an approved list of external users, groups and domains with whom external sharing is authorized.
- Document metadata: Allows structuration and categorization of documents through added properties (strings, numbers, people, URLs, dates, value lists…).

4. Protection

According to Solvay policy, all data will be protected from unauthorized disclosure or use, corruption, loss or destruction. Solvay SBS and IT are both ISO 27001 certified[1]. Some of the principles for data protection are summarized as follows:

(b) (4)

[redacted]

5. Rationale

Solvay (including affiliate operating companies) operate in a competitive industry. Technical details regarding technology advances under this program, if made public, would provide competitors valuable insight and be a competitive disadvantage to Solvay. Therefore, Solvay (including affiliate operating companies) uses the below categories to classify the data used and generated on this project.

---

[1] ISO 27001 provides an international benchmark for implement, managing, and maintaining information security within a company.

6. Data classification

a. Limited Rights Data

Limited rights data means data, other than computer software, that embody trade secrets or are commercial or financial and confidential or privileged, to the extent that such data pertains to items, components, or processes developed at private expense, including minor modifications. On this project, Solvay (including affiliate operating companies) and its project partners will utilize limited rights data including, but not limited to:

- Specific design, operating and test information from previously existing laboratory scale, pilot plants and commercial facilities for the production of PVDF
- Unpublished experimental data from laboratory scale, existing pilot plants and commercial scale facilities for production of PVDF
- Data files supporting pre-existing patents and patent applications
- Data files supporting patent applications related to production of PVDF from internal work not funded by the project
- Solvay company specific economic assumptions and market forecasts
- Cost estimates, CAPEX and equipment breakdown for the production of PVDF
- Data included in this proposal's Budget Justification Workbook
- Project site information included in the Environmental Questionnaire form DOE F 540
- Data submitted for the application for FOA #DE-FOA-0002678
- Techno-economic analysis input data from prior studies protected by NDA
- Solvay proprietary property data used to simulate integrated process model and conduct performance assessment, including individual components
- Solvay proprietary design methodology and data for PVDF
- PVDF process performance and data from existing performance models
- Computer simulations for thermodynamics, mass transfer, and fluid dynamics used for equipment design to meet required performance
- Models of PVDF production and plant performance and cost
- PVDF production operation details
- PVDF design practices and modeling best practices
- Solvay's internal documentation for proprietary work, such as (b) (4) [redacted]
- Files containing models of PVDF-specific properties, process configuration, and specific process operating conditions
- Specific composition and chemistry of PVDF
- Solvay's in-house proprietary analytical methods
- Process information on PVDF production and related production costs
- Unpublished experimental, physical and chemical data for PVDF production
- Solvay internal equipment costing database

- Solvay proprietary design methodology and data used in layouts, 3-d plant models and structural analysis

b. Restricted Computer Software

Restricted computer software means computer software developed at private expense and that is a trade secret, is commercial or financial and confidential or privileged, or is copyrighted computer software, including minor modifications of the computer software. On this project, Solvay (including affiliate operating companies) and its project partners will utilize restricted computer software including, but not limited to:

Non-commercial items:

- (b) (4) [redacted]

Commercials items:

- Third-party software tools employed in the project, some of which may include custom Solvay add-on features, including the following:
  - Industry standard software tools for design and drafting, integrated with a 3D modeling environment
  - Mechanical and chemical engineering modeling software packages from proven industrial based suppliers (Aspen, ChemCad)
  - Office applications: Microsoft Office Suite
  - 3D modeling software, selected between Solvay and the Engineer, to integrate all engineering disciplines, and provide 3D output, in addition to the core 2D plans and specifications (PDMS, Autodesk Revit, Solidworks)
  - Computerized Flow Dynamic software

c. Protected Data

Due to the competitive nature of the industry, Solvay (including affiliate operating companies) consider certain data developed during the program to be business sensitive. While Solvay will share such data with the DOE in reviews and as needed by the DOE, the data will be considered "Protected Data". Protected Data is technical data, or commercial or financial data, first produced in the performance of this program which, if it had been obtained from and first produced by a non-federal party, would be a trade secret or commercial or financial information that is privileged or confidential. Such data will be marked as "Protected Data". The determination of which data are protected will be made by the Principal Investigator. Protected data includes, but is not limited to, the following:

- Component design geometry, especially of those features that are responsible for improved performance
- Boundary and initial conditions applied to analyses

- Flow physics parameters (pressure, temperature, mass flow rate, velocity, turbulence, etc., in multidimensional, nondimensionalized, or integrated forms)
- Statistical treatments of analytically-predicted physics
- Manufacturing processes, methods and cost estimates
- Results summaries revealing strategic decisions for product development
- Detailed reports, studies, specifications, drawings and lists for the process design, including the Inside Battery Limits (ISBL) design components for the core process, supply and connections to the Outside Battery Limits (OSBL) components, for inventory storage, utilities, and emissions treatment and recovery systems
- Detailed process flow diagrams with associated heat and mass balance data for all core process streams and utilities
- General arrangement drawings and views (plans and elevations) of the primary ISBL production units for feedstock, reaction, and product finishing
- Solvay's simulation output and heat and material balances
- Output data from HAZOP/PHA process risk and safety studies
- Description and specifications of major process equipment
- Overall control philosophy and detailed process control information
- Detailed description and specification of the engineering packages for feedstock thermal treatment, monomer purification, reaction and monomer recovery, and product finishing
- Specific information on construction strategy and costs
- Specific cases in the system optimization, including performance and cost estimation methods and cost and performance data, including but not limited to overall total installed cost (TIC) for the project, final as completed integrated schedule, utility loads and costs, operating and maintenance costs, and packaging and shipping costs

d. **Unlimited Rights**

Unlimited rights means the rights of the Government to use, disclose, reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, in any manner and for any purpose, and to have or permit others to do so. Unlimited rights data generated during this program include the following:

- Project reports provided to the DOE with "Protected Data" and "Limited Rights Data" removed
- Presentations provided to the DOE with "Protected Data" and "Limited Rights Data" removed
- Informative description of PVDF production
- Summary performance and cost data from published information on production of PVDF
- Informative process flow diagrams and data related to general ranges of operating conditions

e. **Public Data**

Public data will include public versions of DOE progress reports and DOE summary presentations. In addition, when possible, program information will be disseminated to the public through conferences and presentations. When disseminated, the data will likely be non-dimensionalized and generalized to avoid the distribution of protected information. The goal of sharing information with the public is to provide relevant information on the development and benefits of these technologies.

SOLVAY BATTERY-GRADE PVDF MANUFACTURING FACILITY ENVIRONMENTAL INFORMATION VOLUME

Notice of Restriction on Disclosure and Use of Data: Pages 1-4, 6, 8, and 11-19 of this document may contain trade secrets or commercial information that is privileged or confidential, and is exempt from public disclosure. Such information shall be used or disclosed only for evaluation purposes or in accordance with a financial assistance or loan agreement between the submitter and the Government. The Government may use or disclose any information that is not appropriately marked or otherwise restricted, regardless of source. Confidential information is enclosed within brackets []. [End of Notice]

I. GENERAL

II. CONTENT

A. ENVIRONMENTAL INFORMATION DESCRIBING THE PROJECT AND THE PROJECT SITE(S).

1. Summary

Solvay will construct and operate a chemical manufacturing facility for the production of polyvinylidene fluoride (PVDF) [redacted] The process involves various chemical reactions and separations. The proposed facility will be located [on a plat adjacent to and west of the existing Solvay Specialty Polymers facility located on Clanton Road in Augusta, Georgia. The adjacent plat was previously developed for parking.] Solvay will redevelop the site to support the PVDF manufacturing process. Site activities will include clearing and grading, pouring foundations, and location of utilities. Construction activities are expected (b) (4) [redacted]

The proposed facility will result in air and water emissions as well as generation of non-hazardous wastes. The air emissions will be subject to State air permitting requirements as well as State and Federal air control requirements. The wastewater will be discharged to the local POTW after pretreatment to meet categorical standards for wastewater and returned to the same surface water source. The waste generated can be disposed of in accordance with applicable regulations; Solvay has significant experience in reusing and recycling waste materials generated by processes and will strive to do so with the waste from this process. The production of PVDF involves use of flammable materials. Solvay has many years of experience using hazardous materials while protecting the environment and neighbors. The facility will be

located with sufficient buffer to protect neighbors and will implement design practices to effectively reduce the likelihood and impact of release scenarios.

The benefits of the facility include development of an unused industrial property as well a production of a chemical that improves the lithium-ion electric storage battery. Electrification of mobile sources helps offset generation of greenhouse gasses from combustion of fossil fuels when the electricity is generated from non-fossil fuel sources such as wind, solar, nuclear, and hydroelectric. In addition to reduction of GHGs, criteria pollutant pollution (e.g., particulate, nitrogen oxides, and sulfur dioxide) will also be reduced due to fleet electrification.

The project is not a test facility, thus the risks associated with a test facility are not applicable.

2. Proposed Project and Its Alternatives

a. Proposed Project

Solvay's objective is to construct a facility for manufacture of a polymer for use in batteries in accordance with all applicable local, state, federal requirements. Solvay proposes physical modification of existing open plot space facilities and ground disturbing activities to accommodate a new production plant with an approximate area of 30 acres. The site location is [west of Clanton Road in Augusta, GA]. No offsite facility requirements are required. Site activities will include clearing and grading, pouring foundations, and location of utilities. Construction activities are expected (b) (4) [redacted]. The project would require new permits in the following areas, to be further defined and developed in the Project Permitting Plan.

- Land disturbance Permits - County permit and soil and erosion protection plans
- Air Emissions Permit - Flue gas emission from boiler and gas treatment unit
- Stormwater construction permit and Stormwater Management Plan - Update to address land disturbance areas and change in pervious land area
- NPDES Permit Update - Dilute brine wastewater to be sent to Municipal WWTP
- County Building Permits - General occupied buildings and structures
- Solid Waste Disposal Authorization
- Federal Emergency Planning and Community Right to Know Act (EPCRA) notifications.
- Federal notification of regulated waste activity for hazardous waste generation

b. Alternatives to Proposed Project

A complete description of likely alternatives to the project, including a "no action" alternative, shall be provided. The description shall address technology-specific aspects of the action, such

as process design configurations, and site-specific considerations, such as alternative waste disposal sites, etc.

Alternative locations have been considered. [The site was chosen as it is currently owned by Solvay, is adjacent to Solvay's existing, operating Augusta, GA facility], and is in an area with rail, road and utilities access.

The no action alternative would result in the facility not being built at the proposed location. The impacts would be a delay in bringing the polymer product to market. This delay would potentially result in delay of battery production and release of more GHGs to the atmosphere during the delay. Further, (b) (4) [redacted]; there are significant downstream environmental benefits that cascade through downstream product manufacturing, products in use, and end of life management.

Substitutes for the PVDF may be available, but are currently less resilient, untested, and involve similar production processes.

3. Existing Environment

a. Land Use

[The entirety of the subject property and Solvay's property are zoned Heavy Industrial based on a review of the County GIS website[1] and local zoning codes[2]. Adjacent properties include zoning as One-Family Residential, Manufactured Home Residential, General Business, Agricultural, and Neighborhood Business. A rail spur owned by the Development Authority Of Richmond County serves the site. The rail spur is served by Norfolk Southern. The area is categorized as moderate to low flood risk. The facility is served by Interstate 20/520 and US Highway 25. The proposed site is an industrial area served by natural gas and electric utilities.

Three parks are between 1 and 3 miles from the project:

- Butler Creek at 1812 Phinizy Rd
- Gracewood Park at 2309 Tobacco Rd
- Apple Valley Park at 1725 Marvin Griffin Rd]

[1] https://gismap.augustaga.gov/augustajs/
[2] https://www.augustaga.gov/DocumentCenter/View/13958/Zoning-District-List?bidId=

b. Atmospheric Conditions/Air Quality

[The proposed project will be located near Augusta, Georgia which has a humid subtropical climate. Air pollution sources are regulated by the Georgia Environmental Protection Division (GA EPD) Air Quality Branch. The State of Georgia is in the US EPA's Region 4 (Southeast). Richmond county and adjacent counties are in attainment for all National Ambient Air Quality Standards (NAAQS's). Ambient air monitoring data for Richmond County are summarized as follows based on 2020 data[3].

Pollutant	**Measured Concentration**	**Standard**
Ozone	0.056 ppb	0.070 ppb
SO2	58.2 ppb	75 ppb
PM2.5 – Annual	10.69 $\mu g/m^3$	12 $\mu g/m^3$
PM2.5 – 24-hr	22.8 $\mu g/m^3$	35 $\mu g/m^3$

All measured values for the county are less than NAAQS with margin to accommodate additional growth and increases in emissions].

c. Hydrologic Conditions/Water Quality

Surface Water Resources:

[The proposed project lies wholly within the Lower Spirit Creek subwatershed. The United States Geological Survey (USGS) identifies this subwatershed as 12-digit Hydrologic Unit Code 030601060303. The Lower Spirit Creek watershed drains an area encompassing approximately 29 square miles and discharges directly into the Savannah River. The Lower Spirit Creek watershed includes Spirit Creek and its tributaries, other than Little Spirit Creek.

The USGS does not map any aquatic resources on the site. Based on the USGS mapped boundary for the Lower Spirit Creek subwatershed, surface runoff from the site discharges into an unnamed tributary to Spirit Creek. The USGS identifies this tributary as an intermittent stream that has been assigned Reach Code 03060106001129.]

Section 305(b) of the federal Clean Water Act (CWA) requires states to assess water quality every two years, and CWA Section 303(d) requires the states to submit a list of all waters not meeting their designated uses. [Spirit Creek is listed on the Georgia 2022 Integrated 305(b)/303(d) list of impaired waters for not supporting an indigenous fish community (impairment Bio F) attributed to elevated thallium. In 2016, the Georgia Environmental Protection Division (GA EPD) published a Total Maximum Daily Load (TMDL) evaluation of seven tributaries to the Savannah River, including Spirit Creek. (b) (4) [redacted]

[3] https://airgeorgia.org/docs/report20.pdf

(b) (4) [redacted]

Groundwater Resources:

The predominant aquifer underlying the site is the [Southeastern Coastal Plain Aquifer System (USGS, Publication HA 730_G). (b) (4) [redacted]. Depth to the aquifer system ranges from 50 to 100 feet below ground surface in the vicinity of the Site. Augusta Utilities, which supplies potable water to the city of Augusta and surrounding area, operates its water supply Well field No. 2, which is located approximately 1.5 miles east of the project location. According to a 2009 report published by the USGS, the project location is hydrologically upgradient from the drinking water well field. (b) (4) [redacted]]

Flood Hazard Areas:

[The entire site is located in Federal emergency Management Agency flood hazard Zone X. The southernmost portion of the site is mapped as having a 0.2 percent chance of flooding in a given year, I.e., the 500-year flood hazard zone. The site does not lie within a local or federal regulatory flood management zone. A copy of FEMA Flood Hazard Map panel 13245C0210G, City of Augusta depicting the site location is attached to this submittal.]

Unique Aquatic Habitats:

[The United States Fish and Wildlife Service (USFWS) National Wetland Inventory does not map any wetland features on the site. The nearest NWI mapped feature is a riverine wetland south of Clanton Road. A NWI map encompassing the project location is attached to this submittal. A wetland delineation of the site was not performed. National Wetland Inventory maps identify potential aquatic resources by interpretation of stereo, color-infra red aerial photographs, and may not accurately depict site features.]

Recreational Areas:

[The nearest publicly owned recreation area to the site is Butler Park, located at 1812 Phinizy Road, and which is operated by Augusta Georgia Recreation and Parks. This park is approximately 0.8 miles northeast of the site. Gracewood Community Center and Park, located at 2309 Tobacco Road, are approximately 1.3 miles west of the project location. Apple Valley Park, located at 1725 Marvin Griffin Road, is approximately 2 miles north, northeast of the project location.]

Public Water Supplies:

[The site lies approximately 0.6 miles west of one of the Augusta Utilities groundwater withdrawal wellhead protection areas. In a USGS study of groundwater resources in Richmond County, groundwater flow direction in the site vicinity was to the east, toward the Augusta Water Groundwater Plant #2 well field. (b) (4) [redacted]

Water Availability:

(b) (4) [redacted]

Wastewater Treatment and Disposal:

Process wastewater is subject to the new source, effluent guidelines for the Organic Chemicals, Plastics and Synthetic Fibers category. Process wastewater will be pretreated onsite to meet or exceed the federal effluent guidelines. (b) (4) [redacted]

d. Geologic/Soil Conditions

Geologic Stability:

[The Belair fault zone is located near Augusta, Georgia, with faults being mapped predominantly in the crystalline rocks of the Piedmont physiographic province. This fault zone is not particularly active and the USGS considers the Augusta area to be of low risk for slight or damaging earthquake activity.]

Soil Composition and Productivity:

[The United States Department of Agriculture, Natural Resources Conservation Service (NRCS) maps five soil types on the site. In order of descending site coverage, they are Troup fine sane,]

[1 to 5 percent slopes (50.1%), Fuquay loamy sand, 1 to 5 percent slopes (20.8%), Dothan loamy sand, 2 to 5 percent slopes (19.3%), Troup fine sand, 5 to 10 percent slopes (9.2%) and Rains loamy sand (0.9 %). Of these, only Dothan loamy sand, 2 to 5 percent slopes is considered prime farmland. Land use in the site vicinity is a mixture of residential, commercial, industrial and institutional developments.]

Soil Erosion Susceptibility

The NRCS considers none of the soils mapped on the site as having a severe to very severe erosion potential.

e. Vegetation and Wildlife Resources

Flora and Fauna:

The US EPA has mapped areas of generally similar spatial landscape and biological patterns as ecoregions. North America has been divided into 15 broad, level I ecological regions. These highlight major ecological areas and provide the broad backdrop to the ecological mosaic of the continent, putting it in context at global or intercontinental scales. Level III ecoregions Level II ecological regions are useful for national and subcontinental overviews of ecological patterns. Level III mapping describes smaller ecological areas nested within level II regions. Because level III regions are smaller, they allow locally defining characteristics to be identified, and more specifically oriented management strategies to be formulated. Level IV ecoregions are nested within a Level II ecoregion, and offer the finest-grained habitat attributes.

[The project site is in the Sand Hills Level IV ecoregion, which is a component of the Southeastern Plains. Level III ecoregion. Native vegetation in the Sand Hills depends on position in the landscape, soils and water availability. On higher, dry sites, drought tolerant vegetation, such as turkey oak, longleaf pine and wiregrass dominate an undisturbed landscape. Oak and loblolly pine forest is native to more mesic uplands. Stream valleys and seepage slopes are dominated by trees such as black gum, red maple and sweetgum.

Historical aerial images show that as early as 1937 and as late as 1977 the project area was cleared and likely used for agricultural production. From 1977 through 1993, the project site appears to have undergone succession from open land to mostly pine dominated woodland. Most of the project site is currently wooded with pine being the dominant canopy trees. Understory vegetation has not been surveyed, but is likely comprised of species that inhabit secondary growth woods, such as cat brier, poison ivy, wood oats, and sow thistle.]

The United States Fish and Wildlife Service on-line Information for Planning and Conservation (IPaC) database and [Georgia DNR biodiversity portal] were queried to identify federally and state protected plants and animals that may inhabit the project area. Findings of these two databases and assessment of the likelihood that the proposed project will adversely affect protected species that may be present is attached. Due to proximity of the project site to

industrial, commercial and residential development, prolonged use of the project site for agricultural purposes, and current pine-dominated cover, it is unlikely that the proposed project will adversely impact federally or state protected flora and fauna.

(b) (4) [redacted]

Wetlands

The National Wetland inventory does not map any wetland resources on the project site. The nearest wetland feature is a linear, riverine wetland that borders the site location to the south. This is the drainage feature described above. As the project site is located on high ground, a field reconnaissance of the site to identify aquatic resources was not conducted.

Flood Plains

The project site is on high ground and there are no waterways with floodplains on or adjacent to the site.

Ecologically sensitive terrain

[Historical aerial photographs show that from at least 1937 until 1977 the project site was used for agriculture. From 1977 through 1993 land cover changed from open land to mostly wooded land, with a dominance of pines. Between 2014 and 2015, the eastern fourth of the site was developed as a truck and trailer parking area. (b) (4) [redacted]

f. Socioeconomic Conditions

[The proposed project will be located in Augusta-Richmond County, Georgia, a consolidated city-county on the Georgia-South Carolina border. The principal city of Augusta anchors the Augusta-Richmond County, GA-SC Metropolitan Statistical Area (MSA).[4] As defined by the Federal Office of Management and Budget, the MSA includes the counties presented in the population table below. **]**

[4] An MSA consists of one or more counties that contain a city with a population of 50,000 or more. Counties containing the principal concentration of population—the largest city and surrounding densely settled area—are components of the MSA. Additional counties qualify to be included by meeting a specified level of commuting to the counties containing the population concentration and by meeting certain other requirements of metropolitan character.

[County	2021 Population
Georgia Counties	
Augusta-Richmond County	205,673
Columbia County	159,639
Burke County	24,310
McDuffie County	21,633
Lincoln County	7,749
South Carolina Counties	
Aiken County	170,776
Edgefield County	26,153
Total MSA Population	**608,184**
Source: US Census Bureau, Population Estimates Program]	

As shown, [the seven-county MSA was estimated to have a total population in excess of 600,000 residents in 2021. The population of the MSA constitutes a large labor pool from which qualified workers may be drawn. As shown, the MSA's labor force boasts approximately 268,000 workers. Of these, more than 84,300 are in Augusta-Richmond County, in close proximity to the Facility. Additional information from the Bureau of Labor Statistics (BLS) Local Area Unemployment Statistics Program is presented below.

Civilian Labor Force March 2022	**Augusta-Richmond County**	**Augusta-Richmond County MSA**
Labor Force	84,337	268,003
Employment	80,460	258,465
Unemployment	3,877	9,622
Unemployment Rate	4.6%	3.6%
Source: US Census Bureau, Local Area Unemployment Statistics **Note:** The civilian labor force data presented includes residents with wage and salary jobs, business owners, the self-employed, private household workers, and unpaid family workers.]		

The BLS Quarterly Census of Employment and Wages Program compiles industry-level detail on private industry employment, which provides information on the wage and salary workers in the region. These data do not include business owners, the self-employed, private household workers, or unpaid family workers. Thus, totals from this Program cannot be directly compared with the labor data presented above.

[High Level Industry, Employees, December 2022	Augusta-Richmond County	Augusta-Richmond County MSA
Private Industry		
Goods-Producing		
1011 Natural resources and mining	111	1,705
1012 Construction	3,443	17,448
1013 Manufacturing	8,195	23,984
Total, Goods-Producing	**11,749**	**43,137**
Service-Producing		
1021 Trade, transportation, and utilities	17,426	41,659
1022 Information	1,138	1,842
1023 Financial activities	2,790	5,883
1024 Professional and business services	13,483	30,780
1025 Education and health services	20,187	34,002
1026 Leisure and hospitality	11,664	24,813
1027 Other services	2,521	5,649
1029 Unclassified	182	382
Total, Goods-Producing	**69,391**	**145,109**
Total, Private Industry	**81,140**	**188,246**
Non-Private (State, Federal) Industry	**22,132**	**40,275**
Total Industry	**103,272**	**228,521]**

Source: US Bureau of Labor Statistics, Quarterly Census of Employment and Wages, March 2022.
Notes:
Columns may not sum to totals shown because of the suppression of data.
Excludes business owners, the self-employed, unpaid family workers, and private household workers.

MSA-level occupational employment data are available from BLS through the Occupational Employment and Wage Statistics Program. Data by major occupational groups are presented below.

[Occupation Code	Occupation	Employment
11-0000	Management	11,680
13-0000	Business and Financial Operations	9,900
15-0000	Computer and Mathematical	3,490
17-0000	Architecture and Engineering	4,540
19-0000	Life, Physical, and Social Science	2,140
21-0000	Community and Social Service	2,460
23-0000	Legal	1,060
25-0000	Educational Instruction and Library	13,490
27-0000	Arts, Design, Entertainment, Sports, and Media	1,800
29-0000	Healthcare Practitioners and Technical	18,280
31-0000	Healthcare Support	9,440
33-0000	Protective Service	6,750
35-0000	Food Preparation and Serving Related	19,670
37-0000	Building and Grounds Cleaning and Maintenance	6,080
39-0000	Personal Care and Service	3,980
41-0000	Sales and Related	21,140
43-0000	Office and Administrative Support	26,040
45-0000	Farming, Fishing, and Forestry	450
47-0000	Construction and Extraction	13,530
49-0000	Installation, Maintenance, and Repair	9,540
51-0000	Production	17,110
53-0000	Transportation and Material Moving	20,860
00-0000	All Occupations	223,420]

Source: US Bureau of Labor Statistics, Occupational Employment and Wage Statistics, May 2021.
Note:
Excludes business owners, the self-employed, unpaid family workers, and private household workers.

g. Historic/Cultural Resources

The first step in conducting the desktop review was an examination of the [Georgia Natural, Archaeological and Historic Resources GIS database (GNAHRGIS).] The database was consulted in order to identify archaeological and historic resources that have previously been recorded that are Listed or eligible or may be eligible for the National Register of Historic Places (NRHP).

There are no previously recorded archaeological sites within the boundaries of the project area and none within a 1-km radius (Exhibit 3.g.1).

Background review identified [61 historic structures within a 1-km radius of the project area. All structures are associated with the Gracewood State School and Hospital, now known as East Central Regional Hospital, Gracewood Campus. The Gracewood campus was formed in 1919 as a training school for individuals with mental disorders. The campus expanded in the 1920's by purchasing an adjacent orphanage. The campus expanded again in the 1950's to include surrounding farmland.

Most of the historic structures associated with the Gracewood Campus have been recorded, including the 51 identified in the table below. However, there has been no formal recommendation of the individual structures or the campus as an historic district. Three of the structures within 1-kilometer of the project area were recorded as having characteristics the appear to meet the eligibility criteria for inclusion in the NRHP.

Cultural Resources within a 1.0-km radius of the project tract.

Resource No.	Description	Date	Nation Register Eligibility
55890	Administration Building	1939	Appears to meet NRHP criteria
55891	House/Georgian Cottage	1850	Appears to meet NRHP criteria
55892	House/Vernacular	1874	Unassessed
55893	House/Folk Victorian	1890	Appears to meet NRHP criteria
55894	House/Craftsman	1919	Appears to meet NRHP criteria
56001	Original Orphanage	1912	Unassessed
56002	House/Vernacular	1912	Unassessed
56003	Client Housing	1912	Unassessed]

[56004	Hospital Building/Colonial Revival	1912	Unassessed
56005	House/Vernacular	1912	Unassessed
56006	Barn/Agricultural Building	1912	Unassessed
56020	Staff Housing Volunteer Services	1950	Unassessed
56021	Barn/Agricultural Building	1949	Unassessed
56023	Dormitory	1950	Unassessed
56024	Dormitory	1946	Unassessed
56025	Vocational Rehab Bldg.	1912	Unassessed
56026	Dormitory	1944	Unassessed
56028	Staff Housing-	1950	Unassessed
56029	Staff Housing-Apparel Shop	1950	Unassessed
56030	Staff Housing	1950	Unassessed
56031	Staff Housing	1950	Unassessed
56032	Staff Housing	1956	Unassessed
56033	Staff Housing	1958	Unassessed
56034	Staff Housing	1954	Unassessed
56036	Staff Housing	1958	Unassessed
56037	Greenhouse	1958	Unassessed
56038	Staff Housing-Archives	1958	Unassessed
56039	Infirmary Training Center	1953	Unassessed
56040	Medical Office	1968	Unassessed
56041	Warehouse	1956	Unassessed
56042	Storage Building	1956	Unassessed
56043	Pole Barn	1956	Unassessed
56045	Laundry Building	1956	Unassessed
56046	Firehouse	1954	Unassessed
56047	Maintenance Shop	1954	Unassessed
56048	Dining Hall/Admin Building	1953	Unassessed
56049	Staff Housing	1953	Unassessed
56050	Staff Housing	1958	Unassessed
56051	Restroom Facilities	1965	Unassessed
56052	Water tank	1940	Unassessed
56053	School	1955	Unassessed
56054	Kitchen/Dining Hall	1970	Unassessed]

[56055	Client Housing	1956	Unassessed
56056	Dormitory	1953	Unassessed
56061	Staff Training Center	1960	Unassessed
56064	Steam Plant	1956	Unassessed
56065	Cemetery	1933	Unassessed
56067	Print Shop	1954	Unassessed
56068	Hay Barn	1955	Unassessed
56069	Staff Housing	1935	Unassessed
56070	Storage Building	1945	Unassessed]

h. Visual Resources

[The Richmond County on-line GIS database] was examined for information regarding land-use, and parcel information in the project area, and a web search was conducted for information regarding recorded cemeteries in the vicinity.

[Parcel information indicates there are at least two houses over 50-years old immediately north of the project area along Tobacco Road and south of the project area along Clanton Road. These houses are at an age where they could be eligible for the NRHP. They have not been surveyed. [redacted]

Historic maps and aerial photographs were also consulted to document past land-use and assess the viewshed impacts that may result from the proposed project. (b) (4) [redacted]

[The 1922 Hephzibah topographic map identifies the project area as undeveloped with structures present to the north and south (Exhibit 3.h.1). A cemetery, identified in the Richmond County Parcel database as the Clanton Cemetery, is shown immediately east of the project area.

The 1950 Hephzibah topographic map identifies an historic church immediately north of project area but does not indicate the presence of the Clanton Cemetery (Exhibit 3.h.2). The 1950 map shows the expansion of the Gracewood Campus to the west of the project area.

The 1981 Hephzibah topographic map shows the project area and its surroundings as still largely rural (see Exhibit 3.g.1). The Clanton Cemetery is located south of the project area on this map. It is uncertain if this is a mapping error or if the Clanton Cemetery was moved from its former location due to modern development.]

[Exhibits 3.h.3-3.h.4 are aerial photographs showing the historic viewshed from the mid-twentieth century, to the modern-day industrial facilities that are adjacent to the project area.]

i. Health and Safety Factors

(b) (4) [redacted]

B. ENVIRONMENTAL IMPACTS OF THE WORK TO BE PERFORMED

1. Land Use

Solvay will remove concrete currently in place at the proposed location and grade the site. These operations will be authorized by [the Augusta-Richmond County Consolidated Government in coordination with GA EPD.] The removed debris may be recycled for use on site, reused offsite or disposed of in accordance with the applicable requirements for waste. The extent of the project will require construction of stormwater control measures for sediment and erosion control including pond(s). A sediment and erosion and control plan will be required to mitigate releases from construction activities. Upon commencement of operations, management practices will be implemented to prevent release of chemicals to surface and ground waters. These include secondary containment, retention ponds, and other spill control prevention and response measures.

2. Atmospheric Conditions/Air Quality

The construction and operation of the facility will result in an increase in air emissions and will be subject to certain State and Federal air quality requirements. Compliance with these requirements will ensure that emissions do not interfere with the attainment or maintenance of any State or Federal Standard.

Fugitive dust could result from land clearing, grading, and excavation. US EPA provides an emission factor of 1.2 tons/acre-month[5] for construction operations. The total area of

[5] AP-42, CH 13.2.3: Heavy Construction Operations, https://www.epa.gov/sites/default/files/2020-10/documents/13.2.3_heavy_construction_operations.pdf

disturbance is (b) (4) [redacted]

The following table summarizes projected potential emissions for the facility which will occur on a normal, routine basis after construction.

(b) (4) [redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]

(b) (4) [redacted]

For this project, our plan to address potential environmental impacts includes the following:

- (b) (4) [redacted]

3. Hydrologic Conditions/Water Quality

Solvay does not anticipate changes to water quality. **The proposed project will neither require diversion of existing waterways nor groundwater or surface water withdrawals.** Solvay will implement sediment and erosion control procedures and design during the construction phase. During the operational phase, chemicals will be stored in above ground tanks with secondary containment. Accumulated material in the secondary containment such as stormwater will be

tested and either diverted back to the process or shipped offsite for treatment. If the accumulated stormwater is clean, it may be discharged through the permitted stormwater outfall. Storage piles, leachates, and wastewater discharges will not be directed to groundwater or surface water in the vicinity of the facility.

4. Geologic/Soil Conditions

None are expected.

5. Vegetation and Wildlife Resources

The project site is in an area that historically was used for open field agricultural purposes, and that more recently has been developed for industrial, commercial and residential use. As a result, current flora and fauna are dominated by species typical of developed areas. Adverse impacts to state and federally protected species is not anticipated. The project site does not have sensitive habitats, such as [wetlands, or Georgia sandhills or river dunes habitat.]

6. Socioeconomic Conditions

The construction of the facility will temporarily employ [several hundred workers over the course of (b) (4) [redacted]. The proposed project increases permanent labor requirements by approximately 100 full-time staff once operational. (b) (4) [redacted]. The increases in permanent labor are significant but can be absorbed by the local workforce].

7. Historic/Cultural Resources

Background research identified no archaeological sites within or adjacent to the project area. There is the potential for previously unrecorded historic structures along [Tobacco Road and Clanton Road]. Background research identified [the Gracewood Campus approximately 1-km west of the project area. The Gracewood Campus contains a number of historic buildings that may be considered an historic district. Based on the distance to the Gracewood Campus, the modern development around the project area and the vegetation between the project and Campus] it is unlikely that that project will adversely affect any properties listed or eligible for listing on the NRHP. However, Solvay will consider consultation with the State Historic Preservation Office to ensure that additional work is not necessary.

8. Visual Resources

(b) (4) [redacted] A review of current and historical aerial photographs indicates the area to the north and east of the project is characterized by industrial facilities. Mobile homes are present immediately south of the project area. A modern cell tower is present south of the project area which directly impacts the viewshed of the Gracewood Campus. The Gracewood Campus contains a mix of historic and modern structures.] The project property has been farmed in the past but is currently wooded.

9. Health and Safety Factors

Employees working at the facility will have a risk of exposure to hazardous chemicals. Solvay takes precautions to protect its workers from chemical exposure, noise, and heat stress through personal protective equipment, industrial ventilation, process safety management, and training of staff before beginning work.

10. Solid and Hazardous Wastes

(b) (4) [redacted]

11. Impacts on Regional or Local Plans

The proposed project is consistent with zoning requirements for the area and does not create an undue burden on resources, thus the facility is consistent with local plans.

C. POTENTIAL LIABILITY TO DOE OF EXISTING CONDITIONS AT THE SITE(S).

The DOE will not be subjected to previous liability.

D. ABILITY TO MEET COMPLIANCE REQUIREMENTS AT THE SITE(S).

Law / Regulation	Applicable?	Permit/manifest/registration required?
RCRA	Yes	If hazardous wastes are generated a hazardous waste ID number is required and manifesting of wastes is required. Solvay will not be a permitted facility for treatment, storage, or disposal of hazardous or non-hazardous solid wastes. Solvay will manage solid wastes in accordance with applicable state and federal requirements. To the extent practicable, solid wastes will be recycled.
CERCLA	Yes	The property is not a superfund site regulated by CERCLA. However, Solvay will manage chemicals subject to CERCLA release reporting. Solvay will manage chemicals in such a way to prevent releases to soil and groundwater.
EPCRA	Yes	Solvay will be required to submit EPCRA emergency planning, chemical inventory and toxic chemical release reports. No permits will be required for EPCRA compliance.
TSCA	Yes	If required, notifications such as premanufacturing notices will be submitted to EPA. Solvay will submit TSCA Chemical Data Reports, and will comply with TSCA significant new use, import and export notifications, as required.
WPCA	Yes	Wastewater will be discharged to the local POTW under a permit issued by the POTW. Stormwater discharges will be permitted through general permits. Wastewater categorical standards applicable to the facility include 40 CFR 414.
[CAA	Yes	The facility will require a state permit authorizing construction. Operations will be permitted under a Title V permit modification. The existing Solvay facility has a Title V permit. Potentially applicable regulations include: (b) (4) [redacted]

		(b) (4) [redacted]
OSHA	Yes	The facility will be managed in accordance with OSHA regulations. Specifically, the facility will be considered a PSM-regulated facility due to flammable chemical storage (29 CFR 1910.119).

The proposed location is in attainment for all NAAQS pollutants. Solvay will be required to implement maximum achievable control technology (MACT) emission controls, monitoring, and reporting. The thermal oxidizer will be the primary control device for compliance with MACT. The facility will also implement a leak detection and repair (LDAR) program for equipment (pumps, valves, connectors, etc.) in hazardous air pollutant service. Wastewater discharges will also be subject to MACT and federal wastewater categorical standards. Wastes will be categorized and disposed of in accordance with applicable requirements. Stormwater discharges will be managed in accordance with applicable general permits for stormwater discharges. Solvay has experience managing all of these programs [at the existing Augusta, GA facility] as well as multiple other facilities across the USA.

E. EXPERIENCE AND APPROACH TO THE IDENTIFICATION AND RESOLUTION OF ENVIRONMENTAL ISSUES.

1. All directly related education/experience of key project members in each of the following areas:

- **Air quality management**

Solvay has engaged [TRC] to support air quality permitting for the proposed project. [TRC has offices in Georgia and adjacent states with experience working in the Augusta area and the relevant air quality permitting agencies. A TRC air permitting team will be led by (b) (6) [redacted] years of experience in air permitting. He leads TRC's southeast air quality resources. (b) (6) [redacted] responsibilities include preparation of air permit applications for industrial sources of pollutants such as pulp and paper mills, chemical plants, metal refineries, and other heavy industries. He has worked to support various Solvay companies projects for over 20 years.]

- **Surface water and groundwater management**

Solvay will work with [TRC and rely primarily on (b) (6) [redacted] years of experience with environmental projects of all types including surface and groundwater protection.]

- **Solid and liquid waste management and disposal practices**

(b) (4) [redacted] (b) (6) [redacted] and has more than 10 years of experience with solid and hazardous waste characterization, handling, and disposal. Solvay may also rely on outsourced support from waste vendors and companies such as TRC for waste management.

- **Noise, land use, ecological resources, archaeological, cultural, and historical resources management**

(b) (6) [redacted] and has more than 20 years of experience with cultural resources management in the southeast. He has conducted over 100 projects in Georgia, the Carolinas and Tennessee.]

- **Environmental permit applications, amendments, and renewals**

In addition to the experience summarized in the air quality section, Solvay will also work with [(b) (6) [redacted] to support wastewater permitting, (b) (6) [redacted] for TSCA and Wetlands, and other staff as needed to support the project. (b) (6) [redacted] has more than 20 years of experience with wastewater permitting and design. (b) (6) [redacted] has more than 35 years of experience with environmental projects of all types.]

2. The offeror's experience in addressing and resolving environmental concerns during the performance of past projects of similar size and complexity including the obtaining of necessary permits.

(b) (4) [redacted]

3. Any of the offeror's existing written environmental policies, procedures, or plans currently in place and considered essential to the conduct of the offeror's commercial business operation.

(b) (4) [redacted]

(b) (4) [redacted] Solvay is also a Voluntary Protection Programs (VPP) company that recognizes employers and workers in the private industry and federal agencies who have implemented effective safety and health management systems and maintain injury and illness rates below national Bureau of Labor Statistics averages for their respective industries. In VPP, management, labor, and OSHA work cooperatively and proactively to prevent fatalities, injuries, and illnesses through a system focused on: hazard prevention and control; worksite analysis; training; and management commitment and worker involvement.

Attachments

Control Number #2678-1616

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[Proposed Parcel and Surrounding Areas

]

Control Number #2678-1616

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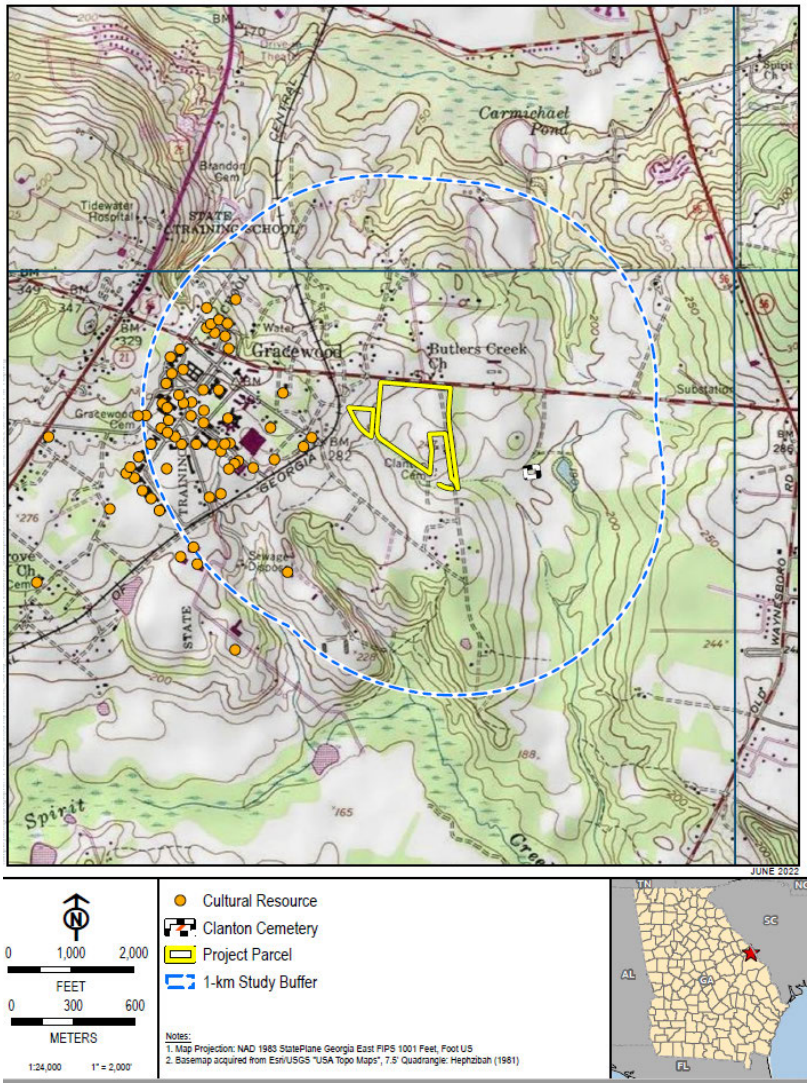
[Previously recorded cultural resources within a 1.0-km radius of the project area.



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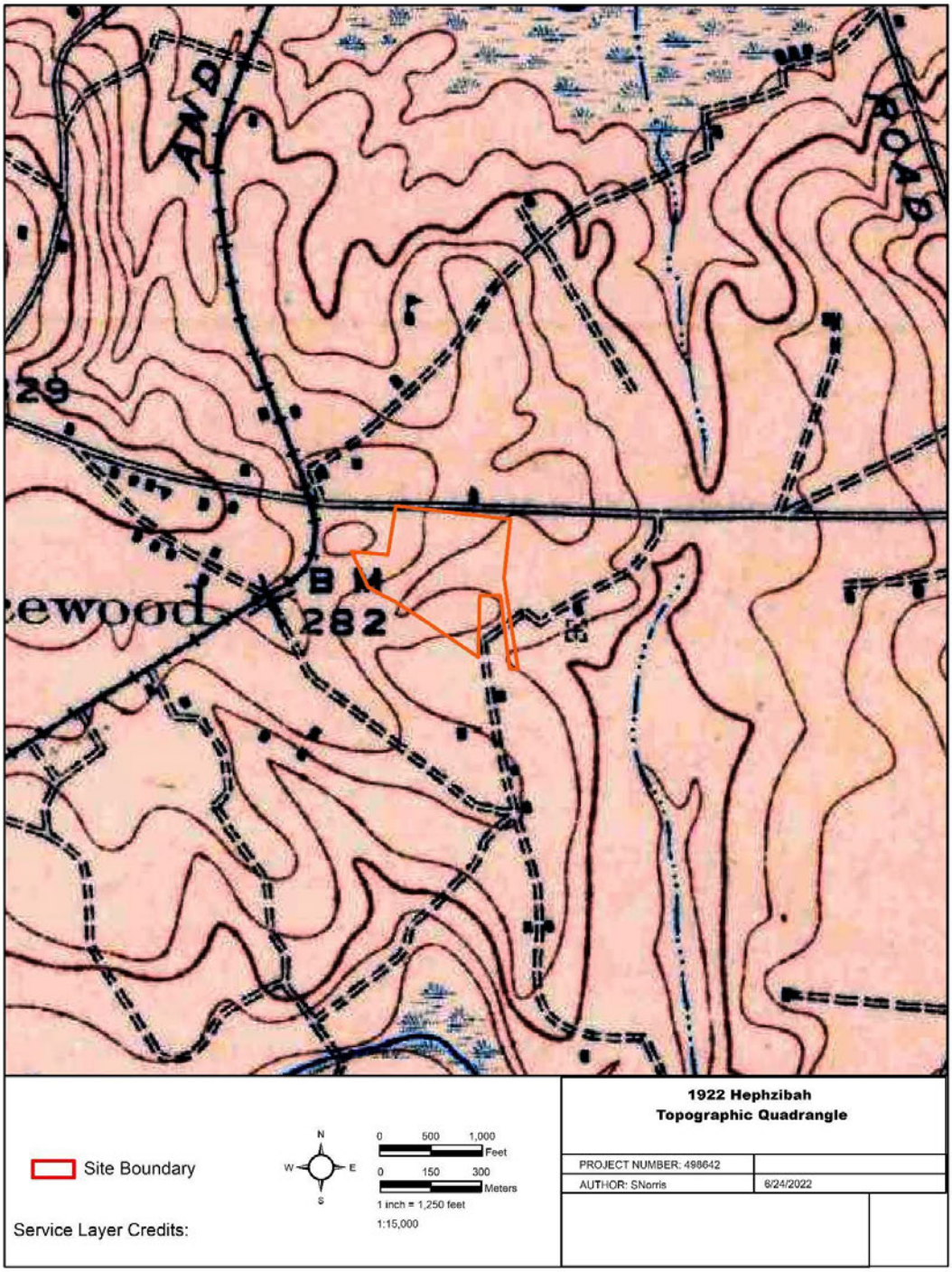
[1922 Hephzibah, GA map showing the historic, rural nature of the project area.



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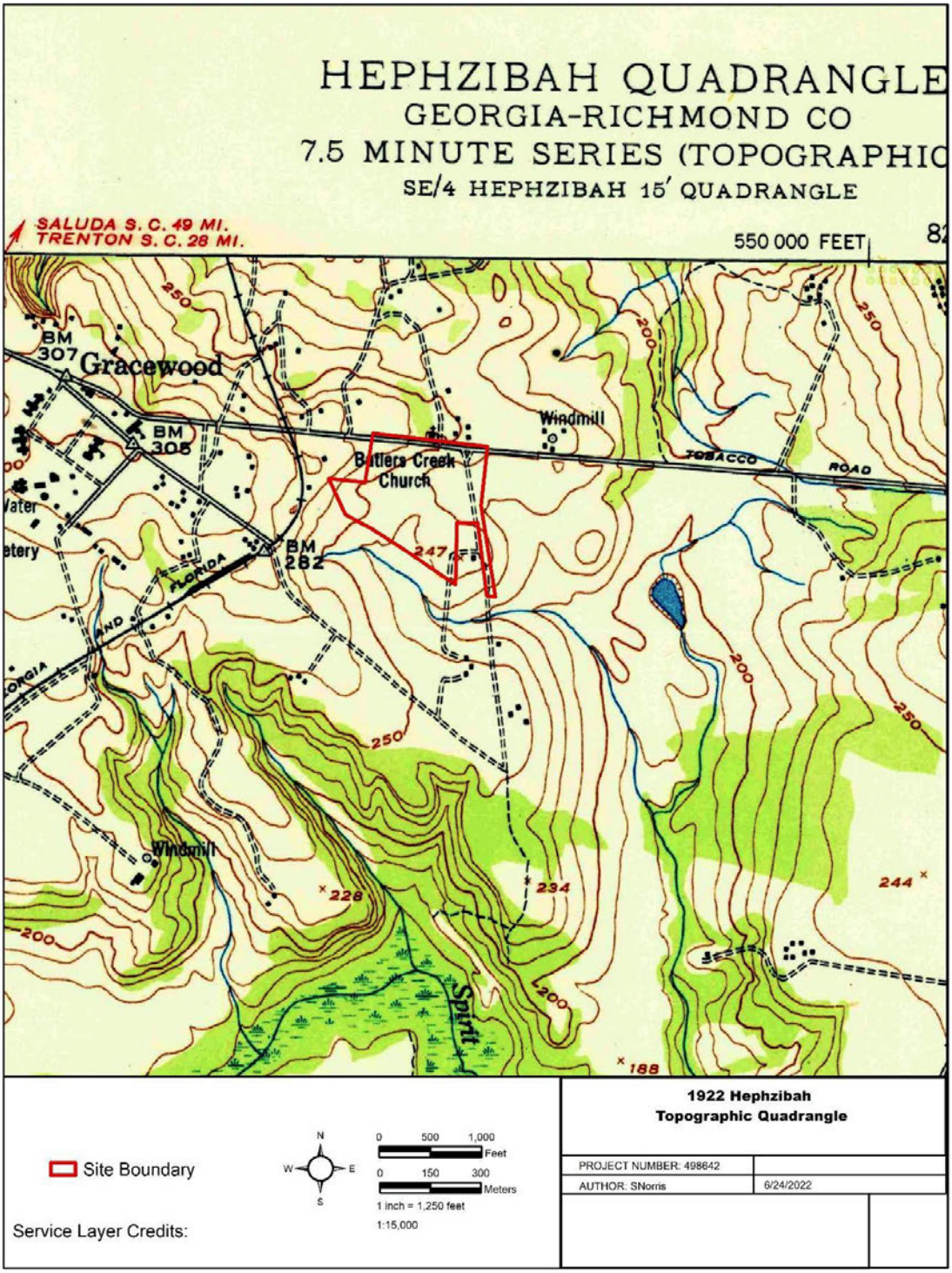
[1950 Hephzibah, GA map showing the historic, rural nature of the project area.



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[1964 Aerial photograph showing the project area as farmland

]

[1993 aerial photograph showing the project area as undeveloped.

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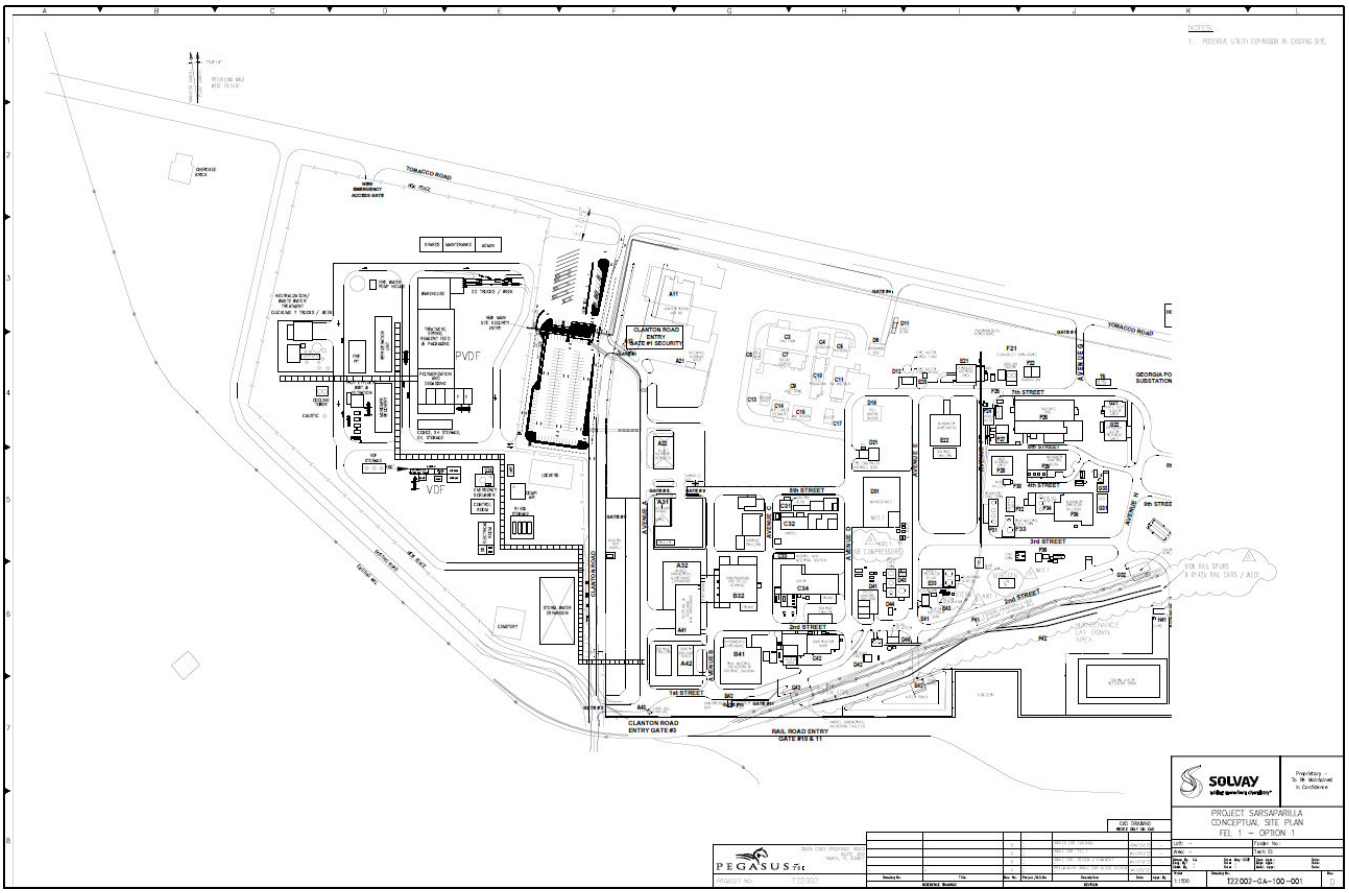
[Site plan



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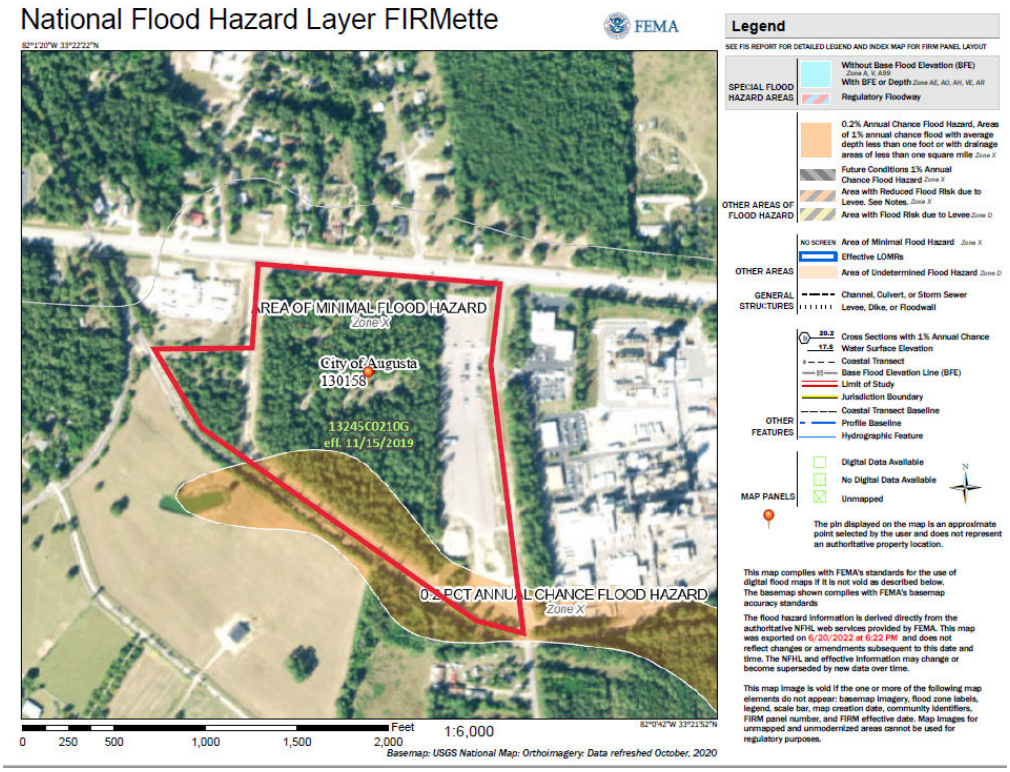

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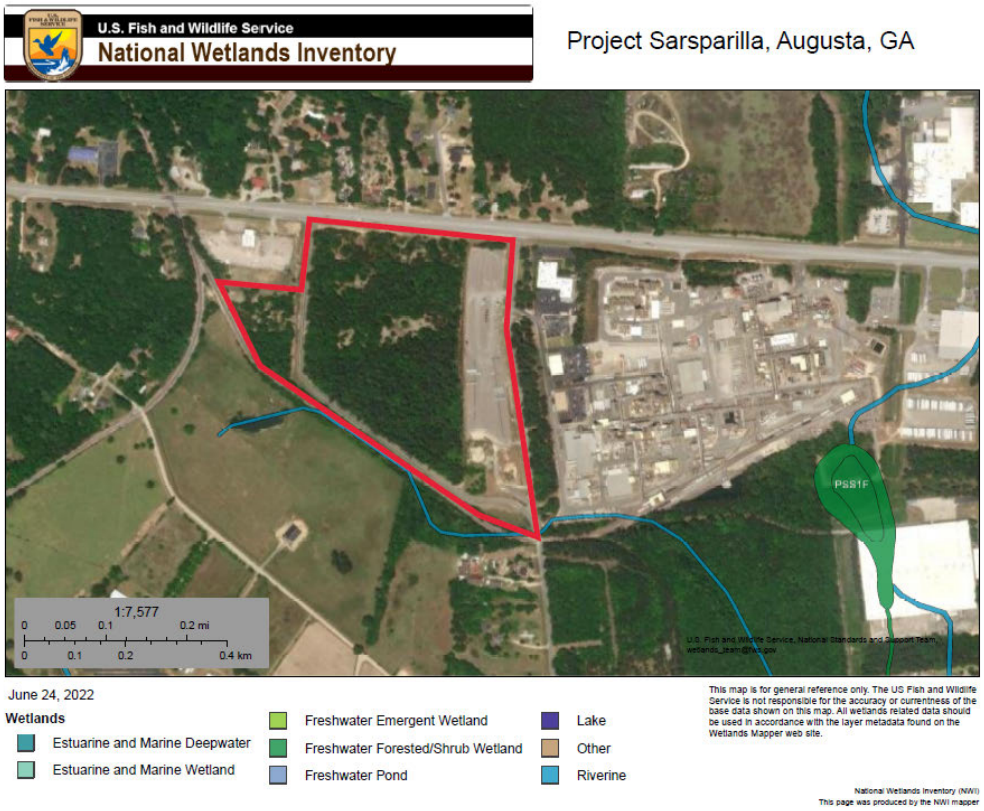

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Control Number #2678-1616

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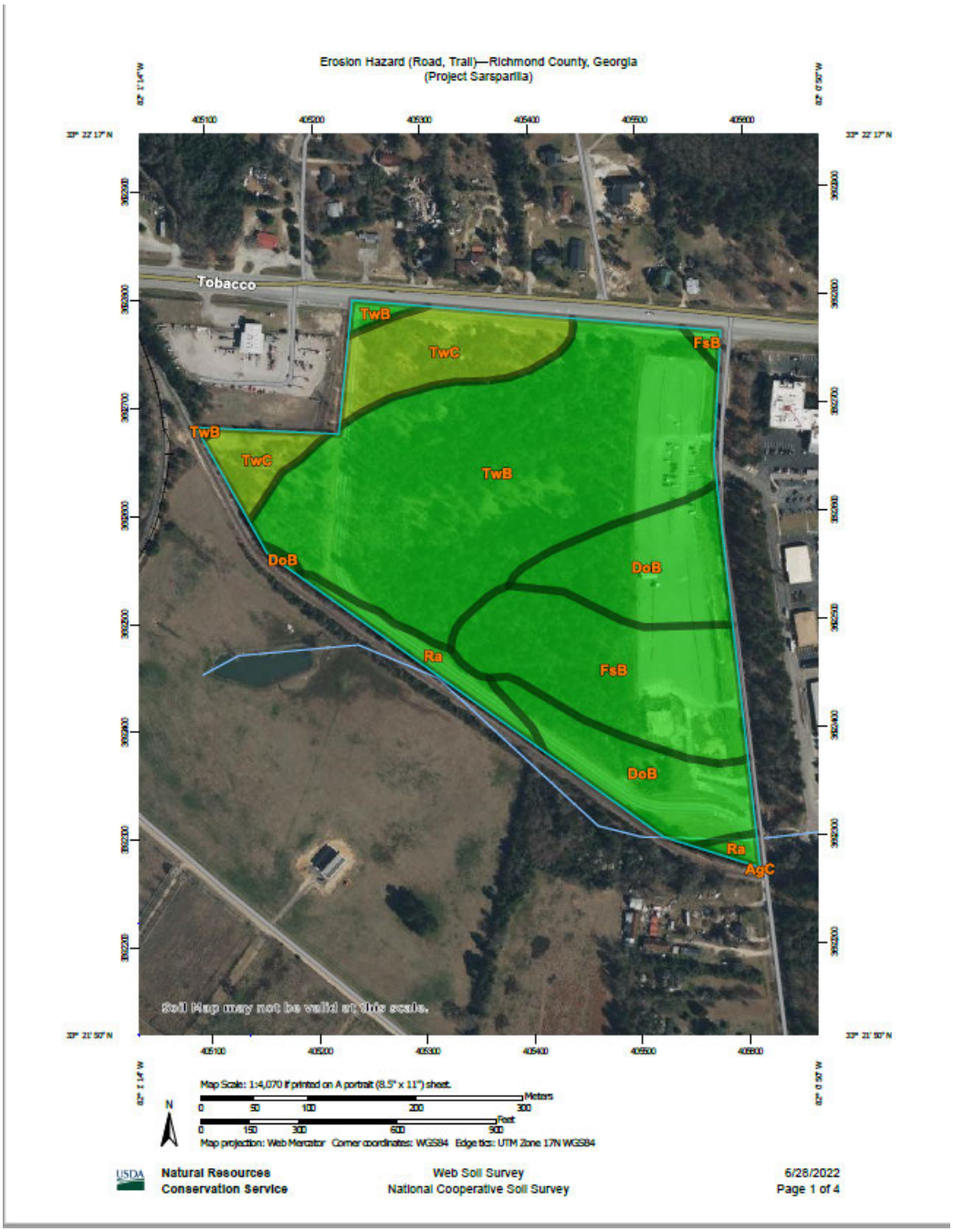

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[

Erosion Hazard (Road, Trail)

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
AgC	Alley loamy sand, 5 to 8 percent slopes	Moderate	Alley (100%)	Slope/erodibility (0.50)	0.0	0.0%
DoB	Dothan loamy sand, 2 to 5 percent slopes	Slight	Dothan (85%)		7.6	19.5%
FsB	Fuquay loamy sand, 1 to 5 percent slopes	Slight	Fuquay (100%)		6.9	17.7%
Ra	Rains loamy sand	Slight	Rains (100%)		1.4	3.5%
TwB	Troup fine sand, 1 to 5 percent slopes	Slight	Troup (100%)		18.6	47.7%
TwC	Troup fine sand, 5 to 10 percent slopes	Moderate	Troup (100%)	Slope/erodibility (0.50)	4.5	11.6%
Totals for Area of Interest					**38.9**	**100.0%**

Rating	Acres in AOI	Percent of AOI
Slight	34.4	88.4%
Moderate	4.5	11.6%
Totals for Area of Interest	**38.9**	**100.0%**

]

[Project Sarsparilla Protected Biological Resources Review[1]					
Group	Scientific Name	Common Name	GA Status	US Status	Georgia Habitat Summary
Mammal	Corynorhinus rafinesquii	Rafinesque's Big-eared Bat	Rare	Not Listed	Pine forests; hardwood forests; caves; abandoned buildings; bridges; bottomland hardwood forests and cypress-gum swamps The project site may provide suitable foraging habitat, but likely does not provide suitable breeding habitat for this species.
Mammal	Geomys pinetis	Southeastern Pocket Gopher	Threatened	Not Listed	Sandy well-drained soils in open pine woodlands with grassy or herbaceous groundcover; fields and grassy roadsides The project site likely does not provide suitable habitat for this species.
Bird	Haliaeetus leucocephalus	Bald Eagle	Threatened	Not Listed	Edges of lakes and large rivers; seacoasts The project site does not provide suitable habitat for this species.
Bird	Mycteria americana	Wood Stork	Not Listed	Listed Threatened	Feed in shallow, open water and nest in flooded, wooded wetlands. The project site does not provide suitable habitat for this species.
Animal	Picoides borealis	Red-cockaded Woodpecker	Endangered	Listed Endangered	Open pine woods; pine savannas The project site does not provide suitable habitat for this species.
Reptile	Clemmys guttata	Spotted Turtle	Uncommon	Not Listed	Heavily vegetated swamps, marshes, bogs, small ponds, and tidally influence freshwater wetlands; nest and possibly hibernate in surrounding uplands The project site does not provide suitable habitat for this species.
	Gopherus polyphemus	Gopher Tortoise	Threatened	Candidate	Sandhills; dry hammocks; longleaf pine-turkey oak woods; old fields
Reptile	Heterodon simus	Southern Hognose Snake	Threatened	Not Listed	Sandhills; fallow fields; longleaf pine-turkey oak. The project site may provide suitable foraging habitat for this species. Not likely to be present on the project site due to prior agricultural use and land management.]

[Amphibian	Lithobates capito	Gopher Frog	Rare	Not Listed	Sandhills; dry pine flatwoods; breed in isolated wetlands The project site does not provide suitable habitat for this species.
Fish	Acipenser oxyrinchus oxyrinchus	Atlantic Sturgeon	Endangered	Listed Endangered	Estuaries; lower end of large rivers in deep pools with soft substrates; spawn as far inland as Macon, GA on the Ocmulgee The project site does not provide suitable habitat for this species.
Fish	Acipenser brevirostrum	Shortnose Sturgeon	Endangered	Listed Endangered	Estuaries; lower end of large rivers in deep pools with soft substrates The project site does not provide suitable habitat for this species.
Fish	Elassoma okatie	Bluebarred Pygmy Sunfish	Endangered	Not Listed	Temporary ponds and stream backwaters with dense aquatic vegetation The project site does not provide suitable habitat for this species.
Fish	Moxostoma robustum	Robust Redhorse	Endangered	Not Listed	Medium to large rivers, shallow riffles to deep flowing water; moderately swift current The project site does not provide suitable habitat for this species.
Freshwater Mussel	Elliptio arctata	Delicate Spike	Endangered	Not Listed	Creeks and rivers with moderate current; mainly in crevices and under large rocks in silt deposits The project site does not provide suitable habitat for this species.
Freshwater Mussel	Fusconaia masoni	Atlantic Pigtoe	Endangered	Listed Threatened	Medium sized streams to large rivers from the Ogeechee River northward; coarse sand and gravel at downstream edge of riffles; fast flowing and well oxygenated water The project site does not provide suitable habitat for this species.
Freshwater Mussel	Toxolasma pullus	Savannah Lilliput	Threatened	Not Listed	Large rivers to small creeks, oxbows, and sloughs; found in silty sand and sand in shallow water along banks to about 1 foot deep in some lakes, ponds, streams, and big rivers The project site does not provide suitable habitat for this species.]

[Insect	Danaus plexippus	Monarch Butterfly	Not Listed	Candidate	This species is not protected. The project site does not provide suitable habitat for this species.
Plant	Astragalus michauxii	Sandhill Milkvetch	Threatened	Not Listed	Longleaf pine-wiregrass savannas; turkey oak scrub. The project site may provide suitable habitat for this species. Not likely to be present on the project site due to prior agricultural use and land management.
Plant	Berberis canadensis	American Barberry	Endangered	Not Listed	Cherty, thinly wooded slopes The project site does not provide suitable habitat for this species.
Plant	Ceratiola ericoides	Rosemary	Threatened	Not Listed	Ohoopee Dunes; deep sand ridges The project site does not provide suitable habitat for this species.
Plant	Chamaecyparis thyoides	Atlantic White-cedar	Rare	Not Listed	Clearwater stream swamps in fall line sandhills The project site does not provide suitable habitat for this species.
Plant	Cypripedium acaule	Pink Ladyslipper	Uncommon	Not Listed	Upland oak-hickory-pine forests; piney woods The project site may provide suitable habitat for this species. Not likely to be present on the project site due to prior agricultural use and land management.
Plant	Hymenocallis coronaria	Shoals Spiderlily	Threatened	Not Listed	Rocky shoals of broad, open rivers The project site does not provide suitable habitat for this species.
Plant	Macbridea caroliniana	Carolina Bogmint	Rare	Not Listed	Bogs; marshes; alluvial woods The project site does not provide suitable habitat for this species.
Plant	Nestronia umbellula	Indian Olive	Rare	Not Listed	Mixed with dwarf shrubby heaths in oak-hickory-pine woods; often in transition areas between flatwoods and uplands The project site may provide suitable habitat for this species. Not likely to be present on the project site due to prior agricultural use and land management.]

[Plant	Sarracenia rubra ssp. gulfensis	Gulf Sweet Pitcherplant	Threatened	Not Listed	Fall Line sandhill bogs; whitecedar swamps The project site does not provide suitable habitat for this species.
Plant	Scutellaria ocmulgee	Ocmulgee Skullcap	Threatened	Not Listed	Mesic hardwood forests; bluff forests The project site does not provide suitable habitat for this species.
Plant	Stewartia malacodendron	Silky Camellia	Rare	Not Listed	Along streams on lower slopes of beech-magnolia or beech-basswood-Florida maple forests The project site does not provide suitable habitat for this species.
Plant	Stylisma pickeringii var. pickeringii	Pickering's Morning-glory	Threatened	Not Listed	Open, dry, oak scrub of sandhills The project site does not provide suitable habitat for this species.
Plant	Symphyotrichum georgianum	Georgia Aster	Threatened	Not Listed	Upland oak-hickory-pine forests and openings; sometimes with Echinacea laevigata or over amphibolite. Not likely to be present on the project site due to prior agricultural use and land management.
Plant	Trillium reliquum	Relict Trillium	Not Listed	LE	The USDA Plants database has no records of this species from Richmond County. Not likely to be present on the project site due to prior agricultural use and land management.

Notes:

1. Sources, United States Fish and Wildlife Service Information for Planning and Conservation, and Georgia Department of Natural Resources Biodiversity Portal.]

DOE F 540
(04-2017)

OMB Number 1910-5175
Exp. 11/30/2020

OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY

ENVIRONMENTAL QUESTIONNAIRE

SECTION I. PROJECT SUMMARY	
Control Number:	2678-1616
Project Title:	PVDF Production Plant
Applicant:	Solvay USA
Other Participants (Subrecipients, Contractors, etc.):	
FOA Number:	DE-FOA-0002678
FOA Title: Bipartisan Infrastructure Law (BIL) Battery Materials Processing and Battery Manufacturing	

SECTION II. BACKGROUND AND INSTRUCTIONS

Pursuant to the U.S. Department of Energy's National Environmental Policy Act (NEPA) implementing regulations (10 C.F.R. Part 1021), the Office of Energy Efficiency and Renewable Energy (EERE) is required to evaluate the potential environmental impact of projects that it is considering for funding. EERE must determine at the earliest possible time whether any proposed project qualifies for a categorical exclusion under 10 C.F.R.§ 1021.410 or will require further environmental review within an environmental assessment or an environmental impact statement.

You are required to answer the questions below for the project as a whole, including all work to be performed by the Recipient, its subrecipients and contractors, including any work outside of the United States. You may not limit your responses to work performed by the Recipient only unless instructed to do so by EERE. In completing this questionnaire, you must provide specific information regarding the nature of your proposed project, including information on its size, operations, and the types and quantities of air emissions, wastewater discharges, solid wastes, land disturbances, etc. You should identify the location(s) of the proposed project and describe the activities that would occur at each location.

The form should be completed and signed by the Principal Investigator for the project or another member of your organization who has sufficient knowledge of the project to answer the questions truthfully and accurately.

Failure to fully and adequately complete this form will delay EERE's environmental review of your proposed project. Please note that false statements or misrepresentations may result in civil and/or criminal penalties under 18 U.S.C. § 1001.

BURDEN DISCLOSURE STATEMENT
Public reporting burden for this collection of information is estimated to average 60 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Office of Information Resources Management Policy, Plans, and Oversight, AD-241-2-GTN, Paperwork Reduction Project (1910-1800), U.S. Department of Energy, 1000 Independence Avenue S.W., Washington, D.C. 20585; and to the Office of Management and Budget (OMB), Paperwork Reduction Project (1910-1800), Washington, D.C. 20503.

SECTION III. PROJECT EVALUATION

1a. In the box below, please provide a brief summary of the proposed project activities. Describe physical activities, not goals and objectives. Specify if this project is part of a larger project or connected to another project.

Example: The proposed project activities include the design, development, fabrication, and field testing of advanced biomass harvesting equipment. Design, development, and fabrication activities would occur at our research and development facility adjacent to our manufacturing plant in Dearborn, Michigan. Equipment testing would occur in various agricultural fields in the surrounding area over a two-year period.

Explanation:
The proposed project activities include the design, equipment procurement and construction of a Polyvinylidene Fluoride (PVDF) production plant. Engineering & Design will occur in the home office of the selected Engineering, Procurement & Construction Management (EPCM) Contractor, and most likely in the S.E. USA region. Procurement of equipment will be significant, and at multiple USA supplier facilities for tanks, vessels, pumps, heat exchangers, furnaces and other related industrial equipment.

The front end design would be in Budget Period 1 (year 1), at the home office of the selected EPCM Contractor, detailed design and procurement and field construction mobilization in Budget Period 2 (year 2) at the home office of the selected EPCM Contractor and at the proposed site adjacent to our Solvay Specialty Polymers USA, LLC (Solvay) Augusta, GA, site , and the primary construction in Budget Period 3 (year 3), at the proposed side adjacent to our Solvay Augusta GA, site.

1b. Is there other Federal government involvement outside of EERE in any aspect of this project (e.g., funding, permitting, technical assistance, project located on Federally administered land)?

Yes ☐ | **No** ■

If you checked "Yes," please list the agency, describe the nature of its involvement, and provide a point of contact at the agency, if known.

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Explanation:

1c. Is the proposed project limited exclusively to intellectual, academic, or analytical activities?

Intellectual, academic, and analytical activities include, but are not limited to:

- Literature searches and information gathering
- Data analysis
- Computer modeling
- Analytical reviews
- Conceptual design
- Feasibility studies
- Document preparation
- Data dissemination
- Paper studies

You must answer "No" to this question if the proposed project involves any laboratory research and/or development, physical experiments, pilot-scale projects, demonstration projects, field tests, land-disturbance, construction, or similar activities.

Yes | [redacted]

If you checked "Yes," proceed directly to Section IV (Certification) and complete the information and signatures as requested. If you checkned "NO" you must complete the entire questionnaire.

Explanation:

If you checked "Yes," proceed directly to Section IV (Certification) and complete the information and signatures as requested. If you checked "No," you must complete the entire questionnaire.

2a. Is the project fully defined at this point (i.e., all sites and activities are known)?

Yes ☐ | **No** ■

If you checked "No," please describe those sites and/or activities/tasks that are yet to be defined and complete the remainder of the questionnaire to the best of your knowledge.

Explanation:
The location is firm at the Solvay Augusta, GA, facility. The following list is those items to reach the fully defined status with regard funding and appropriate definition for funding.

Sites to be confirmed:
Final location and footprint of the facility within the Solvay facility at Augusta, GA
Location of fabrication of all equipment and materials in the USA

Activities to be defined:
Front End Engineering, Schedule, and Funding grade capital cost estimate (+/-10% Accuracy)
Environmental permitting plans and application requirements
Budgetary cost estimates for critical equipment

2b. In the chart below, please describe the following four types of identifying information concerning project activities to be performed:

(1) each location where work would be performed, including address or coordinates, names of facilities, and whether this is a Recipient, Subrecipient, or Contractor location;
(2) the nature of the location (e.g., urban, industrial, suburban, agricultural, university campus, manufacturing facility) and the current condition and/or use of the site;
(3) the types of activities to be conducted at that location;
(4) land administration (e.g., BLM, USFWS, DOD, state, private).

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(1) ***List all Locations Where Project Activities Would Occur (Facility Name and Address or Coordinates) and Indicate Recipient, Subrecipient, or Contractor***	*(2)* ***Nature of Location and Current Condition/Use***	*(3)* ***Activities to be Performed at Each Location***	*(4)* ***Land Administration***
Engineering, Procurement and Construction Management (EPCM) Company Contractor – Company to be selected for the start of Budget Period 1	Suburban Office Complex. Engineering and design offices	Complete the engineering and design deliverables to support procurement packages for equipment selection and purchase. Complete construction scope of work packages to bid and award construction to qualified regional construction contractors. Perform Project Controls support for Solvay in cost and schedule management for all Budget Periods.	Private – Owned or leased office space by EPCM Contractor
TRC Companies 50 International Drive Suite 150 Greenville, SC 29615 (864) 281-0030 Contractor	Suburban Office Complex. Environmental Planning	Complete environmental planning and execution for: • Environmental Risk Assessments • Environmental Site Assessment • Permitting Planning & Strategy • Permitting Application Packages	Private – Owned or leased office space
Solvay Specialty Polymers USA, LLC 3702 Clanton Rd, Augusta, GA 30906 Recipient	Industrial manufacturing facility for specialty polymers	The Solvay location will be the construction site for the new project. Activities will be: Site clearing and grading Primary foundations installation Steel, equipment and piping installation Electrical and Controls installation Commissioning, testing and start-up/handover to operations team	Private – Solvay owned property

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2c. In the box below, please identify and describe: (1) any known or potential health and safety hazards to the public or project workers that may result from or are associated with your proposed project; and (2) any efforts that would be taken to mitigate these hazards. <u>Describe individually for each site discussed in Question 2b.</u>

Example (Hazards): The project would involve the use and handling of various hazardous materials, including metals and industrial solvents. All such handling would occur in-lab, and our organization is dedicated to proper hazardous material handling and disposal practices, so the project activities that involve these materials would pose no risk to the public. All hazardous materials would be managed in accordance with Federal, state, and local environmental regulations.

Example (Mitigation): Existing corporate health and safety policies and procedures would be followed, including employee training, proper protective equipment, engineering controls, monitoring, and internal assessments. Additional policies and procedures would be implemented as necessary as new health and safety risks are identified. This would help ensure compliance with applicable health and safety regulations, and minimize health and safety risks to employees and the public.

Explanation:

Solvay Specialty Polymers USA, LLC:

No known existing or potential site location hazards.

Typical construction hazards would be potential in that phase, however mitigated by safe work practices, work permits, safety management and training.

2d. In the box below, please identify and describe any of the following that would be associated with the proposed project. <u>Describe individually for each site discussed in Question 2b.</u>

(1) any physical modification of existing facilities or construction of new facilities (this does NOT include modification to equipment, only facilities);
(2) ground disturbing activities;
(3) any change in the use, mission, or operation of existing facilities;
(4) installation or deployment of equipment outdoors including the area of disturbance, what currently exists at the site, the dimensions of the installation, any associated infrastructure, etc.

Example 1: Physical modification of existing facilities and ground disturbing activities -To accommodate testing facilities necessary for the project, the current testing facility would have to be expanded by approximately 4,500 square feet.

Example 2: Change in use of existing facility - A room within our facility that has served as a dedicated wind tunnel would be modified to serve as an environmental test chamber. This would require the adaptation of the chamber's construction to partition off part of the room and seal it to allow generated environmental fluctuations within.

Example 3: Installation of equipment outdoors and ground disturbing activities - The proposed turbine location is on school property located in a previously disturbed area south of the existing school building and near the high school athletic facilities and fields. East of the school are two golf courses; south and north are single family residential neighborhoods; and to the west are two public park properties. There are wooded areas located on the school property to the south and west. The foundation of the wind turbine would be approximately 25 square feet with an additional 5 square feet of disturbance during construction. The foundation would be approximately 10-15 feet in depth. There would be a minor, temporary land disturbance adjacent to the proposed site for crane work and the tower staging area. Existing roads would be used to access the project location.

Explanation:

1. Solvay Specialty Polymers USA, LLC, Augusta, GA: Physical modification of existing open plot space facilities and ground disturbing activities to accommodate a new production plant with an approximate area of 30 acres.

2. (b) (4) [redacted]

2e. In the box below, please identify and describe any existing, modifications to, or new permits, licenses, or authorizations that would be required to perform project activities (such as environmental permits, operating permits, or drilling permits). <u>Describe individually for each site discussed in Question 2b.</u>

Example 1: The project would generate small amounts of effluent waste which will be discharged into the Potomac River, requiring our organization to secure the requisite discharge permit pursuant to state and Federal regulations.

Example 2: The project activities would be conducted for the next three years. We would be required to replace our current solid waste disposal permit with an updated permit that may alter the nature of what and how we are permitted to dispose of solid waste.

Example 3: The project activities would take place in marine navigable waters and would require permits from the U.S. Coast Guard and the U.S. Army Corps of Engineers.

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Explanation:
Site: Solvay Specialty Polymers USA, LLC, Augusta, GA
The project would require new permits in the following areas, to be further defined and developed in the Project Permitting Plan.

- Land disturbance Permits - County permit and soil and erosion protection plans
- Air Emissions Permit - Flue gas emission from boiler and gas treatment unit
- Stormwater construction permit and Stormwater Management Plan - Update to address land disturbance areas and change in pervious land area
- NPDES Permit Update - Dilute brine wastewater to be sent to Municipal WWTP
- County Building Permits - General occupied buildings and structures
- Solid Waste Disposal Authorization

2f. In the box below, please list the estimated quantities of materials to be used (e.g., feedstock, chemicals, water) and produced by the project (e.g., biofuel). <u>Describe individually for each site discussed in Question 2b.</u>

Explanation:
Site: Solvay Specialty Polymers USA, LLC, Augusta, GA

(b) (4) [redacted]

(2) In addition, the following chemicals and materials will be used to support the main production process:

(b) (4) [redacted]

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2g. In the box below, please quantify, to the extent possible, all emissions into the ambient air resulting from project activities. Indicate if the project site is within an attainment or non-attainment area. <u>Describe air emissions individually for each site discussed in Question 2b.</u>

Note: Potential emissions include, but are not limited to, greenhouse gas emissions, particulate matter, and airborne pollutants. Sources of emissions can include stationary sources, such as boilers, process heaters, generators, and/or solvent usage, or mobile sources such as vehicles. It is presumed that every project would result in some emissions being released into the ambient air, so applicants answering "none" must explain why no emissions would be released. Non-attainment areas are designated parts of the country where air pollution levels persistently exceed the national ambient air quality standards. See 42 U.S.C. 7501(2).

Potential emissions from the site are as follows:

(b) (4) [redacted]

(b) (4) [redacted]

(b) (4) [redacted]

(b) (4) [redacted]

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2h. In the box below, please describe: (1) all non-hazardous wastes that would be generated by the proposed project including recycled materials, and (2) the method of their disposal. Describe individually for each site discussed in Question 2b.

Note: It is presumed that every project would generate solid wastes, so applicants answering "none" must explain why no waste would be generated. Non-hazardous waste is any garbage, refuse or trash, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities. See 40 C.F.R. § 261.2.

Explanation:
Site: Solvay Specialty Polymers USA, LLC, Augusta, GA

(b) (4) [redacted]

(b) (4) [redacted]

(b) (4) [redacted]

General garbage – packaging materials, maintenance and offices (TBD)

3. Is the proposed project near, or does it involve, any of the following resources? Please indicate below any and all resources that could be affected by any project activities. (See Attachment 1 to the Environmental Questionnaire for resource definitions.)

- [x] a. Historical, archeological, or cultural resources (includes listed and eligible resources over 50 years old or of cultural significance)
- [ ] b. Threatened or endangered species (whether proposed or listed by state or Federal governments), including their habitat
- [ ] c. Marine mammals or essential fish habitat
- [ ] d. Floodplains or wetlands
- [ ] e. Tribal lands or resources of Tribal interest/sensitivity
- [ ] f. Ocean resources (e.g., coral reefs)
- [ ] g. Land resources (e.g., tundra, rainforests)
- [ ] h. Coastal zones
- [ ] i. Migratory birds, or Golden or Bald Eagles
- [ ] j. Areas having a special designation (e.g., Federal and state designated wilderness areas, national parks, national natural landmarks, wild and scenic rivers, state and Federal wildlife refuges, and marine sanctuaries)
- [ ] k. Prime farmland, unique farmland, or other farmland of statewide or local importance
- [ ] l. Special sources of water (e.g., sole source aquifer

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If you checked any boxes above, provide a detailed description of: (1) the resources that could be affected, and (2) how project activities may affect those resources.

Explanation:
There are several houses on Clanton Road that are more than 50 years old. These houses will not be disturbed; the new facility may be visible from these structures.

A portion of the Gracewood complex is located within a one 1 mile radius (to the west) is listed in Georgia's historic register and includes a hospital and school but is not currently listed in the National Register of Historic Places. The proposed project will not utilize any of this land or structures.

4. **Does the proposed project involve any of the following activities or areas of concern? Please indicate below any and all activities or areas of concern that exist in the vicinity of your project, are required for your project, or could affect your project.** (See Attachment 1 for definitions of each activity or area of concern.)

- ■ a. Clearing or excavation
- ☐ b. Dredge and/or fill
- ☐ c. Pre-existing contamination
- ☐ d. Pesticide use
- ☐ e. Asbestos or lead-based paint
- ☐ f. Polychlorinated biphenyls (PCBs)
- ■ g. Navigable air space
- ☐ h. Underground storage tanks
- ☐ i. Underground extraction/injection
- ☐ j. Use of a non-renewable resource

If you checked any boxes above, provide a detailed description of: (1) each activity or area of concern, and (2) the effects of each activity or area of concern on your project and/or the surrounding area.

Explanation:
1. Clearing and Excavation of existing property to support construction activity, and final grading
2. (b) (4) [redacted]

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5. **Would the proposed project have the potential to result in impacts to the surrounding community? Please indicate below all areas of concern that exist in the vicinity of your project, are required for your project, or could affect your project.**

- [x] a. Visual impacts
- [ ] b. Populations of low income or minorities (Environmental Justice)
- [x] c. Changes in local employment
- [ ] d. Changes in local traffic patterns or density
- [ ] e. New transportation access
- [ ] f. New utility lines or right-of-ways
- [ ] g. Other impacts

If you checked any boxes above, please provide a detailed description of: (1) the communities affected, and (2) what effects the project would have.

Explanation:

(b) (4) [redacted]

b: Changes in Employment - Positive creating significant new jobs in the community and area

6. **Would the proposed project use, result in, or require the management, storage, transport, or disposal of radioactive, toxic, or hazardous chemicals, waste, or other materials that require special handling?**

Note: Hazardous chemicals and materials include those which, because of their quantity, concentration, or physical, chemical, or infectious characteristics, may increase the risk of mortality or pose a substantial threat to human health or the environment when improperly stored, transported, disposed of, or otherwise managed.

Yes [x] | **No** [ ]

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If you checked "Yes," please provide a detailed description of: (1) the materials; (2) approximate quantity of each; (3) their role in the project; and (4) storage, transport, and disposal procedures for each material.

Explanation:

The following chemicals

- [redacted]

(b) (4)

7. **Would the proposed project involve the use or development of recombinant DNA or genetically engineered microorganisms, plants, animals, or similar technologies?**

Yes ☐ | **No** ■

If you checked "Yes," please provide a detailed description of: (1) the genetic modifications, (2) the safety procedures in place for their handling and use over the course of the project, and (3) how they would be disposed of at the project's conclusion.

Explanation:

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8. Does the project involve the use of any nanoscale materials or nanotechnology?

Note: Nanotechnology is defined as research and technology development at the atomic, molecular, or macromolecular levels using a length scale of approximately one to one hundred nanometers in any dimension; the creation and use of structures, devices and systems that have novel properties and functions because of their small size; or the ability to control or manipulate matter on an atomic scale.

Yes ☐ | **No** ■

If you checked "Yes," please describe: (1) the nanoscale materials used, (2) potential risks those materials may pose, and (3) how they would be disposed of.

Explanation:

9. Is there any public opposition concerning any of the project activities?

Yes ☐ | **No** ■

If you checked "Yes," please describe the nature of the opposition and any actions you may have taken or plan to take to address it.

Explanation:

10. Would the project involve activities or deployments into marine/freshwater aquatic environments?

Yes ☐ | **No** ■

If you checked "Yes," please provide a detailed description of: (1) the proposed activities or deployment, (2) where and when these activities would occur, and (3) what permit/authorizations have been or would be acquired for this activity.

Explanation:

11. Would the proposed project result in a discharge of any type of wastewater, pollutant, or contaminant, including thermal discharges, to a sewer system, stormwater system, soils, retention ponds, or any water resources (e.g., surface water, including lakes, rivers, creeks, and wetlands; and ground water)?

Note: Under Federal law, the term "pollutant" means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. See 33 U.S.C. § 1362(6). The term "contaminant" means any physical, chemical, biological, or radiological substance or matter in water. See 42 U.S.C. § 300f(6).

Yes ■ | **No** ☐

If you checked "Yes", please quantify and characterize the wastewater or pollutants and provide a detailed description of the: (1) wastewater, pollutants, or contaminants to be released; and (2) the water resources that may be affected.

Explanation:

(b) (4) [redacted]

(b) (4) [redacted]

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12. Would the proposed project have the potential to generate noise impacts to adjacent communities, employees working at the project site, wildlife, and/or sensitive receptors including hospitals, schools, daycare facilities, and elderly housing?

Yes ☐ | **No** ■

If you checked "Yes", please provide a description of: (1) the receptors that may be impacted and their estimated distance from the project activities, (2) the level of noise generated (in A-weighted decibels (dbA)) to each receptor, and (3) anticipated duration.

Explanation:

13. Please provide a detailed description of how the project would be decommissioned, including the disposition of equipment and materials.

Explanation:

SECTION IV. CERTIFICATION

I hereby certify that I am authorized to submit, and I do so hereby submit, the information in this questionnaire on behalf of the Recipient named below. I certify that the information provided herein is accurate and complete as of the date shown below. I understand that false statements or misrepresentations may result in civil and/or criminal penalties under 18 U.S.C. § 1001. If I receive any information that would indicate that any of the above-referenced answers are no longer correct or complete, I agree to notify EERE immediately. If it is necessary for EERE to modify the information I provide, EERE will request that I recertify the revised form.

Name	(b) (6) [redacted]
Title	Principle Investigator
Applicant	Solvay Specialty Polymers USA, LLC
Signature	(b) (6) [redacted]
Date	June 28, 2022

EERE ENVIRONMENTAL QUESTIONNAIRE
ATTACHMENT 1

Definitions for Question 3 –Resources*

Historical, Archeological, or Cultural Resources. The National Historic Preservation Act; the Historic Sites, Buildings and Antiquities Act; the American Indian Religious Freedom Act; and the Archeological Recovery Act provide for the preservation of sites, buildings, structures, or objects of historic, archeological, or architectural significance designated by Indian, Federal, state, or local governments or listed or eligible for listing on the National Register of Historic Places. The Archeological Resources Protection Act, Antiquities Act, and Native American Graves Protection and Repatriation Act also apply if the proposed project is on Federal and tribal land. This item should be checked "yes" if a proposed project is in an area that meets any of the above, or if an archeological survey has not been performed. Provide documentation of any consultation or State Historic Preservation Officer determination letters if available. If this information is not available or a survey has not been conducted recently, DOE may require such a survey to be conducted prior to any proposed project implementation.

Threatened/Endangered (T/E) Species and/or Critical Habitat. The Endangered Species Act provides for protection of animals, birds, fish, plants, and other living organisms that are in danger of extinction. A list of T/E species is provided in 50 C.F.R. Part 17. Consultations with the U.S. Department of Interior Fish and Wildlife Service (FWS), National Marine Fisheries Services (NMFS), and the corresponding state agency should be documented. This item should be checked "yes" if any state- or Federally-listed or proposed threatened or endangered species or critical habitat is located in the proposed project area, or could be indirectly affected by the proposed project. If the status of T/E species at the proposed project location is unknown, please contact the local or state office of the FWS or NMFS to obtain a listing of potential species and habitats found in the area.

Floodplains. Floodplains are lowlands adjoining inland and coastal waters with a 1 percent or greater chance of inundation in any given year. Indicate "yes" if the proposed project location is in or adjacent to a floodplain area. If documentation is available noting the floodplain boundaries, please provide a copy. Appropriate documentation of the 100 year floodplain [or 500 year floodplain for critical actions**] boundaries include: Flood Insurance Rate Maps or Flood Hazard Boundary Maps prepared by the Federal Emergency Management Agency (FEMA) of the U.S. Department of Homeland Security. Executive Order 11988 Floodplain Management requires Federal agencies to avoid incompatible development in floodplains, and consider the conformance of the proposed project to floodplain standards, potential effects of the proposed projects on floodplains, and potential effects of floodplain modifications on other local properties and improvements.

** Critical actions as defined in the Implementing Guidelines to Executive Order 11988 are activities for which chance of flooding is too great.

Wetlands. Wetlands are areas inundated by surface or groundwater with a frequency sufficient to support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction, [10 C.F.R. 1022.4]. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflow, mudflats, and natural ponds. Man-made ponds can qualify as wetlands if invasion of appropriate flora or fauna has occurred. Appropriate documentation of presence or absence of wetlands within the area of project effect includes: FWS National Wetlands Inventory; U.S. Department of Agriculture Soil Conservation Service Local Identification Maps; U.S. Geological Service (USGS) Local Identification Maps; USGS Topographic Maps; state wetland inventories; and regional or local government sponsored wetland and land use inventories. Executive Order 11990 Protection of Wetlands requires Federal agencies to consider the effects of proposed projects on wetlands, and to avoid, to the extent possible, destruction and modification of wetlands. If the status of land in or around the proposed project location is unknown, please contact the state or local U.S. Army Corps of Engineer's office.

Coastal Zones. Coastal zones are the coastal waters and adjacent shore lands of the Great Lakes, and the Atlantic, Pacific, and Arctic Oceans, Gulf of Mexico, and Long Island Sound. The term "coastal state" includes the states bordering on those bodies, plus Puerto Rico, the Virgin Islands, Guam, the Commonwealth of Northern Mariana Islands, and the Trust Territories of the Pacific Islands and American Samoa. Coastal states have authority regarding actions, which directly affect coastal zones, in accordance with the Department of Commerce regulations promulgated under the Coastal Zone Management Act. Federal activities and Federal development projects must be consistent with state coastal zone management (CZM) programs to the maximum extent possible. Federal activities are those performed by or on behalf of a Federal agency in the exercise of its statutory responsibilities. Indicate "yes" if the proposed project is located in a coastal zone State or is in the vicinity of a coastal zone State. If a consistency determination has been obtained, or a written "negative determination" (indicating that a consistency determination is not required) please provide a copy. See 15 C.F.R. 930.

Migratory Birds, Golden or Bald Eagles. Other Federal and state laws that protect wildlife species include the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. Examples of protected migratory birds include Canadian geese and great blue herons. This item should be checked "yes" if the proposed project may directly or indirectly impact any of these species or their habitats. If the status of other protected species is unknown in the proposed project location, please contact the local or state office of the FWS to obtain a listing of potential species and habitats found in the area.

Areas Having a Special Designation. Various Federal laws restrict the ability of Federal agencies to aid developments affecting national wilderness areas, national memorial parks, national parks, national monuments, national primitive areas, national preserves, national recreational areas, national wild and scenic rivers, national grasslands, national wildlife refuges, national forests, national lakeshore or seashore, and national trails. Indicate "yes" if any of these areas of special environmental or natural significance is located in close proximity to the proposed project location and describe the specific special designation.

Prime Farmland, Unique Farmland, or Other Farmland of Statewide or Local Importance. The Farmland Protection Policy Act requires Federal agencies to consider ways to lessen the effects of proposed projects that convert or adversely affect prime farmland which is not currently classified or designated for future urban development or water storage. Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, fiber, forage, oilseed, and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and labor, and without intolerable soil erosion. Prime farmland also includes land that possesses the above characteristics, but is being used currently to produce livestock and timber. Prime farmland does not include lands designated for future urban development, such as land that has been identified for commercial, industrial, or residential development by zoning code, ordinance, or a comprehensive land use plan [7 U.S.C. 4201(c)(1)]. The U.S. Department of Agriculture Natural Resource Conservation Service (NRCS) field office serving the area can provide assistance in determining whether a proposed location or site meets the definition of prime farmland. Form AD 1006, the Farmland Conversion Impact Rating Form, available at NRCS offices, should be used for this purpose.

Special Sources of Water. Through the Safe Drinking Water Act, EPA and states designate Critical Aquifer Protection Areas and Sole or Principal Source Aquifers, and State-Designated Wellhead Protection Areas in accordance with 42 U.S.C. 300h-6(b), 42 U.S.C. 300h-3(e), and 42 U.S.C. 300h-7(e), respectively. Such areas are accorded special protection to assure the quality and availability of public water supplies. Indicate "yes" if the proposed project is located in an area designated for protection (e.g., is included in an area wide groundwater quality protection plan), or would constitute a potential source of contamination within an existing or expected wellhead protection area serving a public water supply. If aquifer designations are not known for the proposed project area, contact the environmental protection office for the State.

* Definitions and requirements are subject to regulatory changes.

Definitions for Question 4 – Activities or Areas of Concern*

Clearing or Excavation. Clearing or excavation refers to the removal of vegetation, soil, sediments, or disturbance of land surfaces and subsurface including cutting, burning, digging, grading, filling, or blasting. Provide the estimated area to be affected, the quantity of material to be added or removed, and the planned disposition of spoils. Describe the potential for runoff or erosion, any control techniques to be employed, and the distance to nearby surface water bodies, including wetlands.

Dredge and/or Fill. Dredge and/or fill are the excavation of material from waters of the United States. Filling is the discharge of material into waters of the United States to change the bottom elevation. Waters of the United States are all interstate waters, and intrastate lakes, rivers, streams, mudflats, wetlands, sloughs, plays, or natural ponds. These activities include "ocean dumping" as regulated under Sections 102 and 103 of the Clean Water Act, construction of dams, dikes, piers, or others that could alter the course of waters of the United States. Also included is any shore activity with the potential for runoff to waters of the United States. If available, include documentation of appropriate consultation(s), e.g., with the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act or Sections 9 and 10 of the Rivers and Harbors Act; and with EPA [40 C.F.R. Parts 220-233].

Pre-Existing Contamination. Indicate if the proposed project will disturb hazardous substances, pollutants, contaminants, or Comprehensive Environmental Response and Liability Act (CERCLA)-excluded petroleum and natural gas products that pre-exist in the environment. Quantify and characterize such pre-existing substances, including whether they are present above background or regulatory levels. Also quantify the volume of contaminated materials (e.g. soil, sediment, groundwater, debris, etc.) which would require transport to a properly permitted treatment, storage, or disposal facility as the result of the proposed project.

Pesticide Use. A pesticide is a substance intended for preventing, destroying, repelling, or mitigating any type of pest including insects, rodent, nematode, fungus, or weed, and any substance intended for use as a plant regulator, defoliant, or desiccant. While the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) imposes no requirements on private applicators, commercial pesticide applicators must be certified by the state or U.S. EPA. Additionally, FIFRA requires that certain pesticides known as "restricted use pesticides" (listed in 40 C.F.R. 152.175) to only be applied by certified applicators. If either commercial or private pesticide application or the utilization of restricted use pesticides is anticipated, indicate "yes". If a private application is anticipated, document measures to be undertaken to assure safe storage, use, and disposal.

Asbestos. If the proposed project includes demolition or renovation of an existing building, you must determine if asbestos is present. Common asbestos-containing building materials may include but are not limited to floor tile, mastics, wall board, joint compound, acoustic ceiling tiles, thermal insulation, spray-on fire proofing, glazing, caulking, roof flashing, and felts. Demolition and renovation activities that may impact asbestos containing building materials are regulated by the U.S. Occupational Health and Safety Administration (OSHA) through the Asbestos in Construction Standard and asbestos air emissions from asbestos abatements are regulated by the EPA as a hazardous air pollutant under the Clean Air Act (CAA). Include a description of measures to be undertaken to comply with asbestos removal requirements of 29 C.F.R. 1926.1100 and 40 C.F.R. 61 (Subpart M).

Polychlorinated Biphenyls (PCBs). PCBs are a family of man-made organic chemicals that were domestically manufactured from 1929 until banned in 1979 due to their toxicity and persistence in the environment. Given their non-flammability, chemical stability, high boiling point, and electrical insulating properties, PCBs were largely used as dielectric and coolant fluids in transformers, capacitors, electric motors, etc. Manufacture, processing, transport, use, marking, storage, and disposal of PCBs are regulated by EPA [40 C.F.R. Part 761] in accordance with the Toxic Substances Control Act. Some states also regulate PCBs as hazardous waste. If the proposed project involves replacement or removal of capacitors, transformers, voltage regulators, circuit breakers, switches, cables, electromagnets, or other electrical equipment, presence or absence of PCBs should be ascertained. A "yes" indication

should be supported with information on the anticipated concentration and quantity of PCB oil, and the intended method/location of disposal.

Navigable Air Space. The U.S. Department of Transportation Federal Aviation Administration (FAA) regulates objects which invade navigable air space or otherwise constitute an obstruction to air navigation, and determines whether such activities constitute a navigation hazard. Indicate "yes" if the proposed project involves construction or alteration more than 200 feet above ground level, any construction or alteration in instrument approach areas, and other construction or alteration identified in 14 C.F.R. 77.13. Document notification of the appropriate Manager, Air Traffic Division, of the FAA Regional Office for the area within which the construction or alteration will be located. Copies of FAA Form 7460-1 Notice of Proposed Construction or Alteration may be obtained from the regional FAA office or electronically through FAA's website.

Underground Storage Tanks. Indicate "yes" if 10 percent or more of tank volume (including the volume of underground pipes) will be beneath surface of the ground. Indicate if installation, use, or removal of underground storage tanks is anticipated, and whether tank use is/was for storage/collection of hazardous waste, heating oil, other petroleum or petroleum-based substances, stormwater, or wastewater. Describe any leak detection/monitoring methods to be used for storage of hazardous waste or regulated petroleum products like gasoline or diesel.

Underground Extraction/Injection. Underground extraction/injection is the subsurface emplacement of fluids through a bored, drilled, or driven well, or through a dug well where the depth of the well is greater than the largest surface dimension. If the proposed project involves construction or use of an injection well, indicate "yes," and describe the class of the well as defined in 40 C.F.R. 146.5, the type and quantity of contaminants (e.g., waste disposal, hydrocarbon or mineral extraction) and whether the injection involves an exempt aquifer as defined in 40 C.F.R. 146.4.

Use of a Non-Renewable Resource. Non-renewable resources are naturally occurring substances (e.g., metals, minerals, fossil fuels) that are in limited supply and cannot be replaced or regenerated. The exhaustion or threatened exhaustion of such resources could have significant ramifications. Indicate "yes" if the proposed project would involve a resource that is in limited supply.

* Definitions and requirements are subject to regulatory changes.

SOLVAY BATTERY-GRADE PVDF MANUFACTURING FACILITY EQUITY PLAN

Notice of Restriction on Disclosure and Use of Data: Pages 1-8, and 11-19 of this document may contain trade secrets or commercial information that is privileged or confidential, and is exempt from public disclosure. Such information shall be used or disclosed only for evaluation purposes or in accordance with a financial assistance or loan agreement between the submitter and the Government. The Government may use or disclose any information that is not appropriately marked or otherwise restricted, regardless of source. Confidential information is enclosed within brackets []. [End of Notice]

COMMUNITY ENGAGEMENT

Solvay's proposed Solef® PVDF facility will be located [Augusta, Georgia], a location (census tract [#13245010706 and adjacent communities) that has been designated as "disadvantaged" by the Council on Environmental Quality's Climate and Economic Justice Screening Tool (CEJST).]

Solvay attaches great importance to having a regular and trustful dialogue with the communities neighboring its sites. For this purpose, the company is developing a dialogue policy that takes into account local laws, regulations and practices. Furthermore, Solvay is committed to partnering with professional associations, academic institutions and relevant local stakeholders to ensure that we attract, develop and retain diverse talent from the communities we serve.

Solvay [already operates a production site in Augusta, Georgia, across the street from the planned site for this proposal. (b) (4) [redacted]

Solvay is committed to maintain and seek to improve the existing local and global societal engagement of its employees, on a voluntary basis. [In Augusta, Solvay and its employees are dedicated to giving back to the community by partnering in local initiatives like: the United Way; youth sport teams and educational organizations; the Giving Your Best program (promoting volunteerism); and by giving their time and financial and non financial donations to associations and individuals working to make the community a better place for all. The Solvay Team also works with the closest schools to promote education and science in particular.]

JOB QUALITY AND SKILLED WORKFORCE

Creation and/or retention of high quality, good-paying jobs

The proposed project will support over [500] construction and [100] skilled production jobs[1] for the [Augusta] community. According to the Bureau of Labor Statistics (BLS), the [seven-county Augusta Metro Area] was estimated to have a total population in excess of [600,000] residents in 2021, constituting a large labor pool from which qualified workers may be drawn. The metro area labor force boasts approximately [268,000] workers. Of these, more than [84,300] are located in [Augusta-Richmond County], in close proximity to the proposed facility.

Solvay is committed to cultivating an equitable and inclusive work environment that embraces diversity by addressing structural inequality and providing equitable access to opportunities and pay regardless of age, disability, gender, race, religion or belief, sexual orientation, or any other distinction. We hold ourselves accountable for attracting, hiring, and retaining employees from diverse backgrounds. Our aim is to widen the pool of talent so that we have access to the greatest number of superior performers. We focus on developing employees - regardless of background - in order to promote career advancement that fulfills both personal aspirations and organizational objectives. Our professional development practices are regularly reviewed and challenged to ensure that Diversity, Equity and Inclusion (DEI) are embraced throughout the process.

Solvay favors the direct employment of people under open-ended work contracts and ensures that its employees are covered by welfare protection schemes that provide benefits in the event of illness, disability, maternity, paternity, death, or after their retirement, in compliance with local laws, regulations and practices, and develops whenever needed its own complementary benefit plans. Solvay is committed to set up the Solvay Cares program which aims to provide at least the same minimum health standard to all employees worldwide.[2]

Solvay undertakes to apply a fair wage policy comparable with good standards in the profession. The [existing Solvay Augusta site has been a reliable employer for more than 37 years, providing excellent benefits and (b) (4) [redacted] in the region for qualified employees in a safe working environment based on high safety standards.]

The [Augusta site currently employs (b) (4) [redacted] supporting all types of activities: Hygiene, Safety and Environment Expertise; Production; Quality Control Laboratories; Maintenance, Engineering /Construction; Technology; Logistics/Supply Chain; and other Administration Services. Additionally, [the Augusta facility also employs degreed engineers]. Depending on their area of expertise, some employees hold specific certifications.

---

[1] According to the American Chemistry Council, each job in the chemical industry generates approximately 6.8 jobs in other sectors of the economy. These indirect jobs are calculated using the IMPLAN model with inputs from the Bureau of the Census, Bureau of Labor Statistics, Bureau of Economic Analysis, and the Internal Revenue Service.
[2] https://www.solvay.com/en/article/taking-care-global-universal-minimum-benefits-all

The site has had several FFF engineers in the past but does not have any FFF engineers currently on staff.

Based on an excellent reputation and records, the site has been very successful in attracting new talents with, on average, (b) (4) [redacted]

The proposed Solef® PVDF facility hourly jobs will work on a day and a rotating shift schedule paying (b) (4) [redacted] per hour, depending on job classification. These positions would be permanent and with full benefits including: medical, dental, vision, and life insurance; 401-k; and the option to purchase additional supplemental benefits and paid vacation. All positions will also be eligible for a company performance based bonus. The new production unit would also bring new permanent salaried positions to include support staff and engineering. These positions would have the same benefit and a similar bonus structure with compensation ranging from (b) (4) [redacted].

Figure 1 shows a preliminary breakdown of the new permanent jobs to be created for the proposed [Augusta] Solef® PVDF facility.

[

(b) (4)

Solvay

Figure 1. New Solef® PVDF plant operations organization chart (preliminary)]

Global Framework Agreement on social responsibility and sustainable development

Solvay respects the right of its employees to form or join any trade union of their choice. Solvay will remain neutral concerning employee preference to join, remain with, transfer, or abandon their relationship with a trade union of their choice, as part of its culture of respect for free choice of its employees. Solvay will refrain from any unfair communication with its employees to influence their decision on trade union representation and will ensure all communications with its employees are factual and non-hostile toward the trade union seeking organization. Solvay pledges not to practice any discrimination due to trade union/employee representatives activities either when hiring or when managing employees's careers.

All Solvay employees are committed and responsible for complying with the law and with the company's undertakings and rules of conduct. They may alert their supervisors, managers, trade union/employees representatives to violations and may also refer matters to the local representative of the Human Resources, Legal department or to the Compliance Officer in charge. Solvay has set up a special mechanism that ensures employees' concerns are heard in the event that the usual means of dialogue are not functioning properly.

Solvay insists on a spirit of responsibility in its dealings with employees, customers, suppliers, shareholders, communities, residents living near its sites, the environment and natural resources. The Solvay One Planet[3] approach feeds into this development model which combines operational performance with high standards of behavior for ever greater responsibility towards all stakeholders. This responsibility requires considerable involvement on the part of employees, which is why Solvay's desire to maintain a rich, balanced dialogue between management and employee representatives is central to Solvay's values and identity.

Solvay is committed to respecting the international social standards defined by the International Labour Organisation[4] (ILO) and the principles of the UN Global Compact[5], including in countries that have not ratified it. We are also committed to the Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises.[6]

Solvay and IndustriALL Global Union,[7] which organizes chemical industry employees worldwide, have created a structure for information and dialogue and affirming their joint commitment to good industrial and labor practices wherever in the world Solvay operates.[8] The Global Framework Agreement (GFA) on Social Responsibility and Sustainable Development confirms

[3] https://www.solvay.com/en/one-planet
[4] https://www.ilo.org/global/lang--en/index.htm
[5] https://www.unglobalcompact.org/what-is-gc/mission/principles
[6] https://www.oecd.org/corporate/mne/
[7] https://www.industriall-union.org/
[8] https://one.solvay.com/en/corporate-news-center/solvay-renews-solvay-global-forum-and-global-framework-agreements-industriall

Solvay's commitments in the areas of health, including mental health, and safety at work, the fight against discrimination, the promotion of diversity and respect for the environment, and it allows us to suspend contracts with any suppliers that fail to remedy human rights and environmental abuses. Solvay expects its suppliers, contractors and sub-contractors to comply with the principles in the GFA.

Additionally, Solvay has signed a Memorandum of Understanding (MOU) for Labor Relations in the United States of America[9] with the primary objective of developing the existing constructive Labor Relations at the local as well as the national level on the basis of fundamental rights and principles included in the GFA. Furthermore, Solvay is an important actor in the global supply chain for batteries in electric vehicles, where IndustriALL Global Union conducts focused supply chain work. Solvay and IndustriALL will apply special attention to this supply chain, with the aim of ensuring ethical conditions along it.

Plan to attract, train, and retain skilled workers

At the (b) (4) [redacted]

The staff will onboard for the project eighteen months before the planned mechanical execution, to develop the planning documents and training packages, and prepare for the execution phase, to ensure the reliable, timely and safe facility start-up, and approach to "Beneficial Production" of the PVDF product, according to the preliminary schedule shown in Table 1.

Table 1. Preliminary onboarding and training schedule for the new Solef® PVDF facility

Onboarding and training	Positions
(b) (4) [redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]

9 http://www.usw.org/news/media-center/articles/2022/june/MOU-Agreement-between-Solvay-IndustriALL-signed-copy-31-March-202261.pdf

	(b) (4) [redacted]
[redacted]	[redacted]
[redacted]	[redacted]

The manufacturing world is undergoing a process of significant transformation, with major changes in digitalisation, connectivity, and artificial intelligence. The world of work will continue to change with these new technologies affecting research, manufacturing, logistics and sales of products. Solvay's commitment to its employees and its industrial relations is key in this period of transformation, so that employees can identify and acquire the competences that are indispensable for the development of their job and their employability. This requires attentive management of skills and competences, and strong union/employee representatives involvement.

Solvay provides its employees with opportunities to grow professionally, personally and financially, in their careers, as they develop their skills and knowledge of our activities in a very dynamic and innovative company. We also believe that the autonomy and responsibility of each of its employees play a key role in the company's performance. For that reason, the company encourages internal mobility, both geographic and for career advancement, to increase the employability of its personnel.

Solvay strive to provide employees with the following services throughout their career at the company:

- Information about available jobs
- Knowledge and skills development to prepare employees for new positions and new technologies

Solvay supports employee voluntary mobility through coordinated management of its occupational families, at global level for exempt and at regional and national level for other employees with an expectation from its employees to be open for such mobility offers.

Solvay strives to maintain a balanced age distribution among its workforce and pays particular attention to the working and performance conditions of senior employees. Solvay facilitates the transmission of knowledge and skills within teams and across the generations, day by day, and, more particularly, when new members join the team, or before an employee moves to another department or leaves the Group.

Solvay reviews and reports annually on the following KPIs for employee and social and societal dialogue:

- Number of employees (total headcount, per country and per site)
- Employment structure (direct employment, temporary employment)
- Group policy regarding subcontracting
- Existing social protection schemes and number or category of employees covered
- Mobility: number of jobs filled by internal candidates versus number of jobs filled by external candidates
- Job training
- Existing social dialogue structures
- Societal actions

Standards of workplace safety and health

The (b) (4) [redacted]

For this proposed Solef® PVDF facility, our HSE commitment is evidenced by the first project end goal:

> Health, Safety and Environmental goals achieved to baseline Key Performance Indicators (KPIs): ZERO Lost Time Accidents and ZERO Environmental Incidents.

The health and physical and mental safety of its employees is the main value and a priority for Solvay. Ensuring good working conditions and managing risk are daily concerns for the company. Solvay has enacted demanding internal policies, including work-life balance, and insists on their stringent application. Its goal is to continually improve safety performance and regularly monitor assessment indicators for its own employees and the employees of subcontractors, contractors and suppliers.

Solvay is committed to creating healthy working conditions for all personnel, regardless of the job they perform and its related risks. Solvay pledges that right from the outset, investment projects shall not compromise the health and safety of personnel or nearby residents. In addition, Solvay supports solutions likely to improve existing situations.

Solvay is committed to safeguard people and the environment by continuously improving its Health, Safety and Environmental (HSE) performance, the security of facilities, processes and technologies, and chemical product safety and stewardship throughout the supply chain, in line with Solvay's signature of the International Council of Chemical Associations's (ICCA)

[10] https://www.osha.gov/vpp

Responsible Care Global Charter.[11] As part of Solvay's Responsible Care Policy,[12] we are committed to:

- Ensuring our facilities are built, operated and maintained to protect the health and safety of our employees and contractors, the surrounding communities and the environment, with the ultimate goals of no one hurt and no harm to the environment and biodiversity.
- Promoting a comprehensive approach to Chemical Management and Sustainability in all aspects of our products' life cycle including design, manufacturing, distribution, use, recycle and disposal activities.
- Aiming to continuously reduce emissions, waste generation, and the consumption of energy, raw materials, water and other natural resources, promoting a circular economy, and addressing climate change.
- Ensuring adequate protection of people, property, products, plants, transport, information and information systems against security threats: criminal, malicious and cyber acts.
- Listening, engaging and working with stakeholders to understand and address their concerns and expectations and cooperating with governments and organizations to target continuous improvement.
- Openly communicating on our activities and products, encouraging dialogue and reporting progress on our health, safety, and environmental performance.

To realize these commitments, we strive to implement effective processes:

- Conducting activities in a manner which is consistent with our Procedures and Guidelines on Occupational Safety, Industrial Hygiene, Occupational Health, Process Safety, Transport Safety, Environment, Product Safety, and Security.
- Ensuring that manufacturing and Research & Innovation (R&I) sites have an HSE Management System consistent with our corporate requirements.
- Applying our Product Stewardship Management System, including the systematic assessment of safer alternatives for hazardous substances of concern and promotion of their substitution when possible.
- Continuously enhancing security using a threat- and risk-based approach to identify, assess and address vulnerabilities, enhance response capabilities and maintain and improve relationships with key stakeholders based on the Responsible Care Security Code.
- Continuously improving our HSE and distribution processes through: regular HSE compliance audits, the systematic identification of priority risks, the monitoring of well-defined performance indicators and self-assessments along the "Solvay Way" framework.
- Pursuing performance improvement in high materiality issues (environmental impacts, climate change, people safety) along targets defined within our sustainability strategy.
- Increasing the use of renewable energy, reducing our conventional energy consumption and limiting Greenhouse Gasses released by our operations, in the framework of our Energy Efficiency and Energy transition programs in industrial sites.

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[11] https://icca-chem.org/resources/responsible-care-global-charter/
[12] https://www.solvay.com/en/sustainability/responsible-care-policy

- Externally benchmarking our sustainability management and performance through assessments by selected externally recognized agencies.

Solvay reviews and reports annually on the following HSE KPIs:

- Percentage of sites audited in terms of HSE over the past three years, in accordance with the company's internal requirements.
- RIIR: Injury and illness (based on OSHA definition) frequency rate expressed in terms of number of incidents per 200,000 hours worked (includes contractors)
- LTIIR: injury and illness (based on OSHA definition) frequency rate with lost working time, expressed in terms of number of incidents per 200,000 hours worked (includes contractors)
- Employee coverage of occupational exposure (chemicals, noise....)
- Employee coverage of medical surveillance
- Identification and support of sites requiring attention on well-being at work (mainly based on Solvay employee survey)
- Impact on the environment and natural resources:
    - Water
    - Air (CO_2 emissions)
    - Energy consumption
    - Waste management

DIVERSITY, EQUITY, INCLUSION AND ACCESSIBILITY

Solvay rejects any form of discrimination and is committed to respecting diversity and promoting equality of opportunity. The company transforms the provisions of ILO Convention 111 into company policy which rejects any alteration of equal opportunity or fair treatment in employment on the basis of race, sex, skin color, religion, political or union opinion, national extraction or social origin. Solvay is particularly supportive of its employees with family responsibilities and conforms with the provisions of ILO Convention 156. This approach includes specific efforts to promote employee diversity.

As a global company with 23,000 employees working collaboratively across 64 different countries, Solvay knows firsthand the benefits from investing in a diverse workforce. Solvay's reputation as a leader in innovation owes much to the intrinsic diversity of thought, experience, and strengths contained in our multinational workforce. To help fulfill our purpose and promise to bond people, ideas, and elements to reinvent progress, Solvay launched the One Dignity[13] program to achieve nine concrete Diversity, Equity, and Inclusion (DEI) targets by 2025. Under One Dignity, each pillar of DEI carries three tangible objectives. By 2025 Solvay is committed to:

1. Accelerate gender parity at mid and senior levels,
2. Make our workplace optimal for people with disabilities,
3. Develop resource groups to encourage employees to bring their "whole self" to work,

[13] https://www.solvay.com/en/our-company/diversity-equity-and-inclusion

4. Assess the company for undesired pay gaps and close them,
5. Ensure fair recruitment to level the playing field for all applicants,
6. Ensure equitable access to career opportunities and development,
7. Build an inclusive experience that ensures a real sense of belonging for all colleagues,
8. Successfully manage an assessment and development program for Solvay leaders to grow and nurture an inclusive mindset, and
9. Build a culture in which individuals feel empowered to speak out or speak up when they experience or witness non-inclusive behaviors.

Solvay recognizes our social responsibility to the communities in which we operate across the world. As a major employer and key economic driver in many locations, it is imperative to lead as a champion for DEI at all levels of the value chain. Reiterating our purpose to "reinvent progress," we are committed to applying our scientific expertise to build a data-driven, DEI-first approach to the proposed facility, unleashing the nexus between science, progress, and social accountability.

Commitment to a diverse workforce

If the DOE grants Solvay an award for our Solef® PVDF project, Solvay has set a minimum target of recruiting (b) (4) [redacted]

Understanding DEI programs are but one way to address the long term discrepancy in access to education and opportunity, Solvay is already funding scholarship commitments through the Future of Stem Scholars Initiative (FOSSI).[15] Launched in 2020, FOSSI is a collaboration between the American Institute of Chemical Engineers (AIChE), the American Chemistry Council (ACC), and the Historically Black Colleges and Universities (HBCUs) Week Foundation. FOSSI is aimed at creating pathways for more underrepresented groups to enter and succeed in STEM careers within the chemical industries. FOSSI's programming goes further than simply providing scholarships by connecting scholars to leadership development, mentoring, and internship opportunities at supporting companies. Importantly, after exceeding its inaugural goal of funding 150 scholars in 2021, FOSSI set an objective to support 1,000 scholars through 2025.

[14] [For example, once at full employment of 100 total jobs, if the site only employs 20 minority employees, Solvay will fund ten (10) 4-year STEM scholarships at accredited institutions to make up for the short fall.]
[15] https://futureofstemscholars.org/fossi

As a proud participant in FOSSI,[(b) (4)]

Milestones:

- (b) (4)

Partnership with (b) (4)

Furthering our commitments to cultivate our future diverse workforce, Solvay is partnering with state and local education institutions in meaningful ways to increase access and opportunity. If the DOE grants Solvay an award for our project, Solvay will commit (b) (4)

(b) (4) [redacted]

Milestones:

- (b) (4) [redacted]

Partnership with (b) (4) [redacted] and (b) (4) [redacted]

Solvay believes in a holistic approach to shifting resources and investment in historically underserved communities in order to provide long term pathways to economic opportunity. As matriculation rates for minority students (specifically amongst African American students) grow, there remains a significant difference in graduation rates between white students and minority students. National data indicates that white students at public colleges are two and a half times more likely to graduate than Black students, and 60 percent more likely to graduate than Latino students. Many facets of the college experience contribute to the difference in graduation rates, including the financial burden of tuition and discrepancies in college preparation.

Just as we pride ourselves on our scientific nimbleness, Solvay is committed to furthering DEI through innovative measures. To that end, Solvay is partnering with (b) (4) [redacted]

[redacted]

(b) (4) [redacted]

[redacted]

[redacted]

Milestones:

- (b) (4) [redacted]

Summary of Solvay's Workforce Development Investment

As Solvay strives to meet the ambitions set out in One Diversity across our entire global footprint, we are focused on ensuring our approaches to improve DEI are tailored to areas and communities in which we operate. By [expanding our presence in Augusta] with our PVDF project, Solvay believes this mixture of investments addresses multiple areas of need in our community. In addition to continuing to diversify our workforce and invest in minority students

majoring in STEM fields, Solvay is excited by the possibility of our growing state and local partnerships. By partnering with academic institutions that serve our immediate community and graduate STEM leaders of tomorrow, Solvay believes we are putting resources where they will have the greatest impact. To truly attain the goals set out by DEI, Solvay feels it is not enough to commit to hiring quotas, we feel investment across the educational spectrum will help build a highly-skilled workforce and more equitable community of the future. A summary of the plan highlighted in this section is presented below in Table 2.

Table 2. Solvay's DEIA commitments to workforce development for the proposed facility

Budget Period	Partnering Institutions	Project	Solvay Commitment
1	[redacted]	(b) (4) [redacted]	[redacted]
2	[redacted]	(b) (4) [redacted]	[redacted]
	[redacted]	(b) (4) [redacted]	[redacted]
3	TBD	(b) (4) [redacted]	TBD

JUSTICE40 INITIATIVE PLAN

DACs to which the anticipated project benefits will flow

The proposed project will be located in [Augusta-Richmond County, Georgia, a consolidated city-county on the Georgia-South Carolina border]. The principal city of [Augusta anchors the]

[Augusta-Richmond County, GA-SC Metropolitan Statistical Area (MSA)[16]] and has been designated [as "disadvantaged" by the CEJST as shown in Figure 2]. The communities in this area have been identified as disadvantaged in the categories of: climate change, clean energy and efficiency, sustainable housing, legacy pollution, health burdens, and workforce development. [Table 3 summarizes the DACs in the Augusta Metro Area.

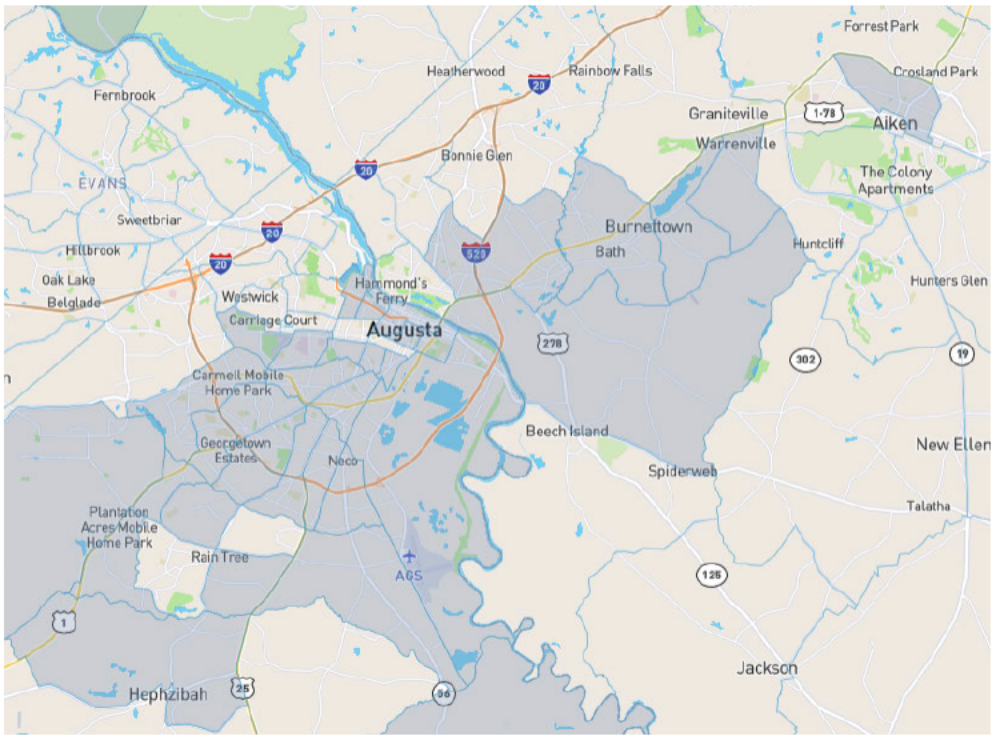

Figure 2. DACs (in gray) in the Augusta] Metro Area][17]

Table 3. [DACs in the Augusta Metro] Area

County	Census tract
[Georgia Counties]	
[Augusta-Richmond County]	[13245000200, 13245000300, 13245000700, 13245001200, 13245001300, 13245001400, 13245001500, 13245001601, 13245010300, 13245010400, 13245010504, 13245010506, 13245010507, 13245010508, 13245010509, 13245010510,]

[16] An MSA consists of one or more counties that contain a city with a population of 50,000 or more. Counties containing the principal concentration of population—the largest city and surrounding densely settled area—are components of the MSA. Additional counties qualify to be included by meeting a specified level of commuting to the counties containing the population concentration and by meeting certain other requirements of metropolitan character.

[17] https://screeningtool.geoplatform.gov/

	[13245010511, 13245010512, 13245010513, 13245010600, 13245010706, 13245010707, 13245010708, 13245010710, 13245010711, 13245010800, 13245010904, 13245011000]
[Burke County]	[13033950200, 13033950400, 13033950500, 13033950700]
[McDuffie County]	[13189950200, 13189950400]
[South Carolina Counties]	
[Aiken County]	[45003020702, 45003020902, 45003021001, 45003021002, 45003021101, 45003021102, 45003021400, 45003021700, 45003021800]
[Edgefield County]	[45037970300, 45037970400]

Applicable Benefits

The following benefits will flow directly to the [DACs shown in Figure 2 and Table 3].

Decrease in environmental exposure

Solvay [Augusta] is very focused on minimizing and optimizing the usage of resources. The environmental footprint of operations is mitigated by:

- (b) (4) [redacted]

[18] However if that is not possible, another US location will be chosen
[19] https://www.aar.org/wp-content/uploads/2020/06/AAR-Sustainability-Fact-Sheet.pdf

Increase in job creation and job training

Solvay is committed to fostering the creation of well-paying jobs, including a free and fair chance to join a union and collectively bargain. The increases in permanent labor due to this proposal are significant but can be absorbed by the local workforce. The direct benefits for job creation and training in this project include:

- Creating approximately [500] temporary construction workers over the course of (b) (4) [redacted] for the construction of the facility.
- Creating approximately [100] full-time permanent jobs once fully operational. The annual mean wage associated with the facility (b) (4) [redacted]
- Participating in (b) (4) [redacted]

Anticipated Negative Impacts on DACs and mitigations

The proposed facility will result in air and water emissions as well as generation of non-hazardous wastes. The air emissions will be subject to State air permitting requirements as well as State and Federal air control requirements. The wastewater will be discharged to the local Public Owned Treatment Works (POTW) after pretreatment to meet categorical standards for wastewater and returned to the same surface water source. The waste generated can be disposed of in accordance with applicable regulations; Solvay has significant experience in reusing and recycling waste materials generated by processes and will strive to do so with the waste from this process. These topics are addressed in more detail in the Environmental Information Volume.

EQUITY MILESTONES

Budget Period 1: 2023 Engineering and Design

Milestone	Description
[redacted]	(b) (4) [redacted]

Budget Period 2: 2024 Field Construction – Site Civil and Buildings

Milestone	Description
Meet HSE KPIs	ZERO Lost Time Accidents and ZERO Environmental Incidents
Form commissioning team	Commence hiring and onboarding of the commissioning team
(b) (4) [redacted]	[redacted]

Budget Period 3: 2025 Mechanical Construction and Completion

Milestone	Description
Meet HSE KPIs	ZERO Lost Time Accidents and ZERO Environmental Incidents
[redacted]	(b) (4) [redacted]
[redacted]	[redacted]