Community Air Monitoring
in and near the Calumet Neighborhood in East Chicago, Indiana

Application for EPA-OAR-OAQPS-22-01

March 25, 2022

Community Based Organization Documentation

ECCC-CAG is a group made up of community members and open to all residents impacted by the negative environmental realities of East Chicago,

ECCC-CAG formed more than five years ago to advance community goals for the USS Lead Superfund Site, the former DuPont chemicals site, both located in East Chicago. Their original mission statement is as follows: To demand protection of the health, safety, and human rights, civil rights, and other legal rights of the diverse communities and individuals living within the U.S.S. Lead Superfund Site; to raise up the local community's voice and concerns to EPA, the Federal Offices, State of Indiana and the City of East Chicago; and to share information widely with the community when EPA, the State of Indiana, and the City of East Chicago provide updates or documents for community input.

ECCC-CAG is also dedicated to general environmental concerns of the City of East Chicago, while monitoring the progress of the cleanup at the USS Lead and DuPont sites. ECCC-CAG actively participated in the public hearings concerning the Proposed Record of Decision process and subsequent Amendment procedures for the USS Lead Superfund site, advocating for the highest cleanup standards.

East Chicago is a recognized Environmental Justice community by EPA's standards, and its residents are particularly vulnerable to increased air pollution and toxics exposure due to the heavy industry that is prevalent in the area.

EPA KEY CONTACTS FORM

OMB Number: 2030-0020
Expiration Date: 06/30/2024

Authorized Representative: *Original awards and amendments will be sent to this individual for review and acceptance, unless otherwise indicated.*

Name: Prefix: Ms. First Name: Akeeshea Middle Name:
Last Name: Daniels Suffix:

Title: Co-Chair

Complete Address:

Street1: 4719 Carey Street
Street2:
City: East Chicago State: IN: Indiana
Zip / Postal Code: 46312 Country: USA: UNITED STATES

Phone Number: 219-588-1051 **Fax Number:**

E-mail Address: msatd1@att.net

Payee: *Individual authorized to accept payments.*

Name: Prefix: Ms. First Name: Lori Middle Name:
Last Name: Locklear Suffix:

Title:

Complete Address:

Street1: 4717 Ivy Street
Street2:
City: East Chicago State: IN: Indiana
Zip / Postal Code: 46312 Country: USA: UNITED STATES

Phone Number: 219-614-8913 **Fax Number:**

E-mail Address: lalocklear@aol.com

Administrative Contact: *Individual from Sponsored Programs Office to contact concerning administrative matters (i.e., indirect cost rate computation, rebudgeting requests etc).*

Name: Prefix: Ms. First Name: Maritza Middle Name:
Last Name: Lopez Suffix:

Title: Co-chair

Complete Address:

Street1: 4928 Euclid Ave.
Street2:
City: East Chicago State: IN: Indiana
Zip / Postal Code: 46312 Country: USA: UNITED STATES

Phone Number: 219-398-0632 **Fax Number:**

E-mail Address: mari.ml798@gmail.com

EPA Form 5700-54 (Rev 4-02)

EPA KEY CONTACTS FORM

Project Manager: *Individual responsible for the technical completion of the proposed work.*

Name: **Prefix:** Ms. **First Name:** Lori **Middle Name:**

Last Name: Locklear **Suffix:**

Title:

Complete Address:

Street1: 4717 Ivy Street

Street2:

City: East Chicago **State:** IN: Indiana

Zip / Postal Code: 46312 **Country:** USA: UNITED STATES

Phone Number: 219-614-8913 **Fax Number:**

E-mail Address: lalocklear@aol.com

EPA Form 5700-54 (Rev 4-02)

OMB Number: 2030-0020
Expiration Date: 06/30/2024

Preaward Compliance Review Report for All Applicants and Recipients Requesting EPA Financial Assistance

Note: Read Instructions before completing form.

I. A. Applicant/Recipient (Name, Address, City, State, Zip Code)

Name: East Chicago Calumet Coalition Community Advisory Group, Inc

Address: 4928 Euclid Ave.

City: East Chicago

State: IN: Indiana Zip Code: 46312-2321

B. DUNS No. 081106066

II. Is the applicant currently receiving EPA Assistance? ☐ Yes ☒ No

III. List all civil rights lawsuits and administrative complaints pending against the applicant/recipient that allege discrimination based on race, color, national origin, sex, age, or disability. (Do not include employment complaints not covered by 40 C.F.R. Parts 5 and 7.)

None

IV. List all civil rights lawsuits and administrative complaints decided against the applicant/recipient within the last year that allege discrimination based on race, color, national origin, sex, age, or disability and enclose a copy of all decisions. Please describe all corrective actions taken. (Do not include employment complaints not covered by 40 C.F.R. Parts 5 and 7.)

None

V. List all civil rights compliance reviews of the applicant/recipient conducted by any agency within the last two years and enclose a copy of the review and any decisions, orders, or agreements based on the review. Please describe any corrective action taken. (40 C.F.R. § 7.80(c)(3))

None

VI. Is the applicant requesting EPA assistance for new construction? If no, proceed to VII; if yes, answer (a) and/or (b) below.

☐ Yes ☒ No

a. If the grant is for new construction, will all new facilities or alterations to existing facilities be designed and constructed to be readily accessible to and usable by persons with disabilities? If yes, proceed to VII; if no, proceed to VI(b).

☐ Yes ☐ No

b. If the grant is for new construction and the new facilities or alterations to existing facilities will not be readily accessible to and usable by persons with disabilities, explain how a regulatory exception (40 C.F.R. 7.70) applies.

VII. Does the applicant/recipient provide initial and continuing notice that it does not discriminate on the basis of race, color, national origin, sex, age, or disability in its program or activities? (40 C.F.R 5.140 and 7.95) ☒ Yes ☐ No

a. Do the methods of notice accommodate those with impaired vision or hearing? ☒ Yes ☐ No

b. Is the notice posted in a prominent place in the applicant's offices or facilities or, for education programs and activities, in appropriate periodicals and other written communications? ☒ Yes ☐ No

c. Does the notice identify a designated civil rights coordinator? ☒ Yes ☐ No

VIII. Does the applicant/recipient maintain demographic data on the race, color, national origin, sex, age, or handicap of the population it serves? (40 C.F.R. 7.85(a)) ☒ Yes ☐ No

IX. Does the applicant/recipient have a policy/procedure for providing access to services for persons with limited English proficiency? (40 C.F.R. Part 7, E.O. 13166) ☒ Yes ☐ No

X. If the applicant is an education program or activity, or has 15 or more employees, has it designated an employee to coordinate its compliance with 40 C.F.R. Parts 5 and 7? Provide the name, title, position, mailing address, e-mail address, fax number, and telephone number of the designated coordinator.

XI. If the applicant is an education program or activity, or has 15 or more employees, has it adopted grievance procedures that assure the prompt and fair resolution of complaints that allege a violation of 40 C.F.R. Parts 5 and 7? Provide a legal citation or Internet Address for, or a copy of, the procedures.

For the Applicant/Recipient

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law. I assure that I will fully comply with all applicable civil rights statutes and EPA regulations.

A. Signature of Authorized Official	B. Title of Authorized Official	C. Date
Akeeshea Daniels	Co-chair	03/25/2022

For the U.S. Environmental Protection Agency

I have reviewed the information provided by the applicant/recipient and hereby certify that the applicant/recipient has submitted all preaward compliance information required by 40 C.F.R. Parts 5 and 7; that based on the information submitted, this application satisfies the preaward provisions of 40 C.F.R. Parts 5 and 7; and that the applicant has given assurance that it will fully comply with all applicable civil rights statures and EPA regulations.

A. *Signature of Authorized EPA Official	B. Title of Authorized Official	C. Date

*** See Instructions**

Instructions for EPA FORM 4700-4 (Rev. 06/2014)

General. Recipients of Federal financial assistance from the U.S. Environmental Protection Agency must comply with the following statutes and regulations.
Title VI of the Civil Rights Acts of 1964 provides that no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. The Act goes on to explain that the statute shall not be construed to authorize action with respect to any employment practice of any employer, employment agency, or labor organization (except where the primary objective of the Federal financial assistance is to provide employment). Section 13 of the 1972 Amendments to the Federal Water Pollution Control Act provides that no person in the United States shall on the ground of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under the Federal Water Pollution Control Act, as amended. Employment discrimination on the basis of sex is prohibited in all such programs or activities. Section 504 of the Rehabilitation Act of 1973 provides that no otherwise qualified individual with a disability in the United States shall solely by reason of disability be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. Employment discrimination on the basis of disability is prohibited in all such programs or activities. The Age Discrimination Act of 1975 provides that no person on the basis of age shall be excluded from participation under any program or activity receiving Federal financial assistance. Employment discrimination is not covered. Age discrimination in employment is prohibited by the Age Discrimination in Employment Act administered by the Equal Employment Opportunity Commission. Title IX of the Education Amendments of 1972 provides that no person in the United States on the basis of sex shall be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance. Employment discrimination on the basis of sex is prohibited in all such education programs or activities. Note: an education program or activity is not limited to only those conducted by a formal institution. 40 C.F.R. Part 5 implements Title IX of the Education Amendments of 1972. 40 C.F.R. Part 7 implements Title VI of the Civil Rights Act of 1964, Section 13 of the 1972 Amendments to the Federal Water Pollution Control Act, and Section 504 of The Rehabilitation Act of 1973. The Executive Order 13166 (E.O. 13166) entitled; "Improving Access to Services for Persons with Limited English Proficiency" requires Federal agencies work to ensure that recipients of Federal financial assistance provide meaningful access to their LEP applicants and beneficiaries.

Items “Applicant” means any entity that files an application or unsolicited proposal or otherwise requests EPA assistance. 40 C.F.R. §§ 5.105, 7.25. “Recipient” means any entity, other than applicant, which will actually receive EPA assistance. 40 C.F.R. §§ 5.105, 7.25. “Civil rights lawsuits and administrative complaints” means any lawsuit or administrative complaint alleging discrimination on the basis of race, color, national origin, sex, age, or disability pending or decided against the applicant and/or entity which actually benefits from the grant, but excluding employment complaints not covered by 40 C.F.R. Parts 5 and 7. For example, if a city is the named applicant but the grant will actually benefit the Department of Sewage, civil rights lawsuits involving both the city and the Department of Sewage should be listed. “Civil rights compliance review” means any review assessing the applicant’s and/or recipient’s compliance with laws prohibiting discrimination on the basis of race, color, national origin, sex, age, or disability. Submit this form with the original and required copies of applications, requests for extensions, requests for increase of funds, etc. Updates of information are all that are required after the initial application submission. If any item is not relevant to the project for which assistance is requested, write “NA” for “Not Applicable.” In the event applicant is uncertain about how to answer any questions, EPA program officials should be contacted for clarification. * Note: Signature appears in the Approval Section of the EPA Comprehensive Administrative Review For Grants/Cooperative Agreements & Continuation/Supplemental Awards form.

BUDGET INFORMATION - Non-Construction Programs

OMB Number: 4040-0006
Expiration Date: 02/28/2022

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. Air monitoring		$ 0.00	$ 0.00	$ 200,000.00	$ 0.00	$ 200,000.00
2.						
3.						
4.						
5. Totals		$ 0.00	$ 0.00	$ 200,000.00	$ 0.00	$ 200,000.00

Standard Form 424A (Rev. 7- 97)
Prescribed by OMB (Circular A -102) Page 1

SECTION B - BUDGET CATEGORIES

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY (1) Air monitoring	(2)	(3)	(4)	Total (5)
a. Personnel	$ 0.00	$	$	$	$ 0.00
b. Fringe Benefits	0.00				0.00
c. Travel	15,000.00				15,000.00
d. Equipment	30,000.00				30,000.00
e. Supplies	15,000.00				15,000.00
f. Contractual	60,000.00				60,000.00
g. Construction	0.00				0.00
h. Other	80,000.00				80,000.00
i. Total Direct Charges (sum of 6a-6h)	200,000.00				$ 200,000.00
j. Indirect Charges					$
k. TOTALS (sum of 6i and 6j)	$ 200,000.00	$	$	$	$ 200,000.00
7. Program Income	$	$	$	$	$

Authorized for Local Reproduction

Standard Form 424A (Rev. 7- 97)
Prescribed by OMB (Circular A -102) Page 1A

SECTION C - NON-FEDERAL RESOURCES

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e)TOTALS
8. Air monitoring	$ 0.00	$ 0.00	$ 0.00	$ 0.00
9.				
10.				
11.				
12. TOTAL (sum of lines 8-11)	$ 0.00	$ 0.00	$ 0.00	$ 0.00

SECTION D - FORECASTED CASH NEEDS

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	$ 130,000.00	$ 30,000.00	$ 30,000.00	$ 35,000.00	$ 35,000.00
14. Non-Federal	$				
15. TOTAL (sum of lines 13 and 14)	$ 130,000.00	$ 30,000.00	$ 30,000.00	$ 35,000.00	$ 35,000.00

SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT

(a) Grant Program	FUTURE FUNDING PERIODS (YEARS)			
	(b)First	(c) Second	(d) Third	(e) Fourth
16. Air monitoring	$ 130,000.00	$ 70,000.00	$ 0.00	$ 0.00
17.				
18.				
19.				
20. TOTAL (sum of lines 16 - 19)	$ 130,000.00	$ 70,000.00	$ 0.00	$ 0.00

SECTION F - OTHER BUDGET INFORMATION

21. Direct Charges: 200,000.00

22. Indirect Charges: 0.00

23. Remarks: Total Requested Budget is for $200,000 as described in the proposal. Phase A = $30,000; Project Management = $30,000; Phases B and C - $140,000. Costs as broken down above. "Other" category includes laboratory analysis costs.

Project Narrative File(s)

*** Mandatory Project Narrative File Filename:** 1234-ECCC-CAG East Chicago Air Monitoring Proposal 3.2

Add Mandatory Project Narrative File | Delete Mandatory Project Narrative File | View Mandatory Project Narrative File

To add more Project Narrative File attachments, please use the attachment buttons below.

Add Optional Project Narrative File | Delete Optional Project Narrative File | View Optional Project Narrative File

Other Attachment File(s)

*** Mandatory Other Attachment Filename:** 1235-ECCC-CAG Quality Assurance.pdf

Add Mandatory Other Attachment | Delete Mandatory Other Attachment | View Mandatory Other Attachment

To add more "Other Attachment" attachments, please use the attachment buttons below.

Add Optional Other Attachment | Delete Optional Other Attachment | View Optional Other Attachment

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

Application for Federal Assistance SF-424

* 1. Type of Submission:	* 2. Type of Application:	* If Revision, select appropriate letter(s):
☐ Preapplication	☒ New	
☒ Application	☐ Continuation	* Other (Specify):
☐ Changed/Corrected Application	☐ Revision	

* 3. Date Received:	4. Applicant Identifier:
03/25/2022	

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: East Chicago Calumet Coalition Community Advisory Group, Inc

* b. Employer/Taxpayer Identification Number (EIN/TIN):	* c. Organizational DUNS:
82-0998386	0811060660000

d. Address:

* Street1:	4928 Euclid Ave.
Street2:	
* City:	East Chicago
County/Parish:	
* State:	IN: Indiana
Province:	
* Country:	USA: UNITED STATES
* Zip / Postal Code:	46312-2321

e. Organizational Unit:

Department Name:	Division Name:

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

Prefix:	Ms.	* First Name:	Akeeshea
Middle Name:			
* Last Name:	Daniels		
Suffix:			

Title: Co-chair

Organizational Affiliation:

* Telephone Number:	219-588-1051	Fax Number:	

* Email: msatd1@att.net

Application for Federal Assistance SF-424

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

M: Nonprofit with 501C3 IRS Status (Other than Institution of Higher Education)

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

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

Environmental Protection Agency

11. Catalog of Federal Domestic Assistance Number:

66.034

CFDA Title:

Surveys, Studies, Research, Investigations, Demonstrations, and Special Purpose Activities Relating to the Clean Air Act

*** 12. Funding Opportunity Number:**

EPA-OAR-OAQPS-22-01

* Title:

Enhanced Air Quality Monitoring for Communities

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:**

East Chicago Calumet Coalition Community Advisory Group, Inc. (ECCC-CAG) application for community air monitoring grant funds

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 IN-001 * b. Program/Project IN-001

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

Add Attachment | Delete Attachment | View Attachment

17. Proposed Project:

* a. Start Date: 07/01/2022 * b. End Date: 12/31/2023

18. Estimated Funding ($):

* a. Federal	200,000.00
* b. Applicant	0.00
* c. State	0.00
* d. Local	0.00
* e. Other	0.00
* f. Program Income	0.00
* g. TOTAL	200,000.00

*** 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: Ms. * First Name: Akeeshea

Middle Name:

* Last Name: Daniels

Suffix:

* Title: Co-chair

* Telephone Number: 219-588-1051 Fax Number:

* Email: msatd1@att.net

* Signature of Authorized Representative: Akeeshea Daniels * Date Signed: 03/25/2022

RANAJIT (RON) SAHU, Ph.D, QEP, CEM (Nevada)

CONSULTANT, ENVIRONMENTAL AND ENERGY ISSUES

Ex. 6 Personal Privacy (PP)

EXPERIENCE SUMMARY

Dr. Sahu has over thirty one years of experience in the fields of environmental, mechanical, and chemical engineering including: program and project management services; design and specification of pollution control equipment for a wide range of emissions sources including stationary and mobile sources; soils and groundwater remediation including landfills as remedy; combustion engineering evaluations; energy studies; multimedia environmental regulatory compliance (involving statutes and regulations such as the Federal CAA and its Amendments, Clean Water Act, TSCA, RCRA, CERCLA, SARA, OSHA, NEPA as well as various related state statutes); transportation air quality impact analysis; multimedia compliance audits; multimedia permitting (including air quality NSR/PSD permitting, Title V permitting, NPDES permitting for industrial and storm water discharges, RCRA permitting, etc.), multimedia/multi-pathway human health risk assessments for toxics; air dispersion modeling; and regulatory strategy development and support including negotiation of consent agreements and orders.

He has over twenty eight years of project management experience and has successfully managed and executed numerous projects in this time period. This includes basic and applied research projects, design projects, regulatory compliance projects, permitting projects, energy studies, risk assessment projects, and projects involving the communication of environmental data and information to the public.

He has provided consulting services to numerous private sector, public sector and public interest group clients. His major clients over the past twenty six years include various trade associations as well as individual companies such as steel mills, petroleum refineries, chemical plants, cement manufacturers, aerospace companies, power generation facilities, lawn and garden equipment manufacturers, spa manufacturers, chemical distribution facilities, land development companies, and various entities in the public sector including EPA, the US Dept. of Justice, several states (including Oregon, New Mexico, Pennsylvania, and others), various agencies such as the California DTSC, and various municipalities. Dr. Sahu has performed projects in all 50 states, numerous local jurisdictions and internationally.

In addition to consulting, for approximately twenty years, Dr. Sahu taught numerous courses in several Southern California universities including UCLA (air pollution), UC Riverside (air pollution, process hazard analysis), and Loyola Marymount University (air pollution, risk assessment, hazardous waste management). He also taught at Caltech, his alma mater (various engineering courses), at the University of Southern California (air pollution controls) and at California State University, Fullerton (transportation and air quality).

Dr. Sahu has and continues to provide expert witness services in a number of environmental areas discussed above in both state and Federal courts as well as before administrative bodies (please see Annex A).

EXPERIENCE RECORD

2000-present **Independent Consultant.** Providing a variety of private sector (industrial companies, land development companies, law firms, etc.), public sector (such as the US Department of Justice), and public interest group clients with project management, environmental consulting, project management, as well as regulatory and engineering support consulting services.

1995-2000 Parsons ES, **Associate, Senior Project Manager and Department Manager for** Air Quality/Geosciences/Hazardous Waste Groups, Pasadena. Responsible for the management of a

group of approximately 24 air quality and environmental professionals, 15 geoscience, and 10 hazardous waste professionals providing full-service consulting, project management, regulatory compliance and A/E design assistance in all areas.

Parsons ES, **Manager for Air Source Testing Services**. Responsible for the management of 8 individuals in the area of air source testing and air regulatory permitting projects located in Bakersfield, California.

1992-1995 Engineering-Science, Inc. **Principal Engineer and Senior Project Manager** in the air quality department. Responsibilities included multimedia regulatory compliance and permitting (including hazardous and nuclear materials), air pollution engineering (emissions from stationary and mobile sources, control of criteria and air toxics, dispersion modeling, risk assessment, visibility analysis, odor analysis), supervisory functions and project management.

1990-1992 Engineering-Science, Inc. **Principal Engineer and Project Manager** in the air quality department. Responsibilities included permitting, tracking regulatory issues, technical analysis, and supervisory functions on numerous air, water, and hazardous waste projects. Responsibilities also include client and agency interfacing, project cost and schedule control, and reporting to internal and external upper management regarding project status.

1989-1990 Kinetics Technology International, Corp. **Development Engineer.** Involved in thermal engineering R&D and project work related to low-NOx ceramic radiant burners, fired heater NOx reduction, SCR design, and fired heater retrofitting.

1988-1989 Heat Transfer Research, Inc. **Research Engineer**. Involved in the design of fired heaters, heat exchangers, air coolers, and other non-fired equipment. Also did research in the area of heat exchanger tube vibrations.

EDUCATION

1984-1988 Ph.D., Mechanical Engineering, California Institute of Technology (Caltech), Pasadena, CA.

1984 M. S., Mechanical Engineering, California Institute of Technology (Caltech), Pasadena, CA.

1978-1983 B. Tech (Honors), Mechanical Engineering, Indian Institute of Technology (IIT) Kharagpur, India

PROFESSIONAL AFFILIATIONS AND HONORS

President of India Gold Medal, IIT Kharagpur, India, 1983.

Member of the Alternatives Assessment Committee of the Grand Canyon Visibility Transport Commission, established by the Clean Air Act Amendments of 1990, 1992.

American Society of Mechanical Engineers: Los Angeles Section Executive Committee, Heat Transfer Division, and Fuels and Combustion Technology Division, 1987-mid-1990s.

Air and Waste Management Association, West Coast Section, 1989-mid-2000s.

PROFESSIONAL CERTIFICATIONS

EIT, California (#XE088305), 1993.

REA I, California (#07438), 2000.

Certified Permitting Professional, South Coast AQMD (#C8320), since 1993.

QEP, Institute of Professional Environmental Practice, since 2000.

CEM, State of Nevada (#EM-1699). Expiration 10/07/2021.

INTERNAL REVENUE SERVICE
P. O. BOX 2508
CINCINNATI, OH 45201

DEPARTMENT OF THE TREASURY

Date: JUN 2 1 2017

EAST CHICAGO CALUMET COALITION
COMMUNITY ADVISORY GROUP
PO BOX 2321
EAST CHICAGO, IN 46312-2321

Employer Identification Number:
82-0998386
DLN:
17053150341007
Contact Person:
ROGER W VANCE ID# 31173
Contact Telephone Number:
(877) 829-5500
Accounting Period Ending:
December 31
Public Charity Status:
170(b)(1)(A)(vi)
Form 990/990-EZ/990-N Required:
Yes
Effective Date of Exemption:
April 5, 2017
Contribution Deductibility:
Yes
Addendum Applies:
No

Dear Applicant:

We're pleased to tell you we determined you're exempt from federal income tax under Internal Revenue Code (IRC) Section 501(c)(3). Donors can deduct contributions they make to you under IRC Section 170. You're also qualified to receive tax deductible bequests, devises, transfers or gifts under Section 2055, 2106, or 2522. This letter could help resolve questions on your exempt status. Please keep it for your records.

Organizations exempt under IRC Section 501(c)(3) are further classified as either public charities or private foundations. We determined you're a public charity under the IRC Section listed at the top of this letter.

If we indicated at the top of this letter that you're required to file Form 990/990-EZ/990-N, our records show you're required to file an annual information return (Form 990 or Form 990-EZ) or electronic notice (Form 990-N, the e-Postcard). If you don't file a required return or notice for three consecutive years, your exempt status will be automatically revoked.

If we indicated at the top of this letter that an addendum applies, the enclosed addendum is an integral part of this letter.

For important information about your responsibilities as a tax-exempt organization, go to www.irs.gov/charities. Enter "4221-PC" in the search bar to view Publication 4221-PC, Compliance Guide for 501(c)(3) Public Charities, which describes your recordkeeping, reporting, and disclosure requirements.

Manifest for Grant Application # GRANT13580203

Grant Application XML file (total 1):

1. GrantApplication.xml. (size 26346 bytes)

Forms Included in Zip File(total 6):

1. Form ProjectNarrativeAttachments_1_2-V1.2.pdf (size 16040 bytes)

2. Form SF424_3_0-V3.0.pdf (size 24124 bytes)

3. Form SF424A-V1.0.pdf (size 22998 bytes)

4. Form EPA4700_4_3_0-V3.0.pdf (size 22599 bytes)

5. Form OtherNarrativeAttachments_1_2-V1.2.pdf (size 16001 bytes)

6. Form EPA_KeyContacts_2_0-V2.0.pdf (size 37240 bytes)

Attachments Included in Zip File (total 6):

1. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1235-ECCC-CAG Quality Assurance.pdf application/pdf (size 292564 bytes)

2. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1236-ECCC-CAG Nonprofit letter 05242017.pdf application/pdf (size 281194 bytes)

3. ProjectNarrativeAttachments_1_2 ProjectNarrativeAttachments_1_2-Attachments-1234-ECCC-CAG East Chicago Air Monitoring Proposal 3.25.22.pdf application/pdf (size 1052903 bytes)

4. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1238-ECCC-CAG partnership letters.pdf application/pdf (size 1073485 bytes)

5. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1237-ECCC-CAG Community Based Organization Documentation.pdf application/pdf (size 369949 bytes)

6. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1239-Sahu Resume two pages.pdf application/pdf (size 224631 bytes)

Community Air Monitoring
in and near the Calumet Neighborhood in East Chicago, Indiana
Application for EPA-OAR-OAQPS-22-01
March 25, 2022

Quality Assurance

The goal of the monitoring program is to collect the maximum quantity of valid data so as to maximize the use of resources – i.e., collect high quality data consistently. While any ambient monitoring program, especially one that is likely to last 2-3 years will entail occasional data loss, this will be minimized to the maximum extent possible. With regards to quality assurance, upon award the project manager will develop and submit to the EPA a written Quality Assurance Project Plan (QAPP), following the EPA guidance provided in its "*Guide to Writing Quality Assurance Project Plans for Ambient Air Monitoring Networks*," EPA-454/B-18-006, August 2018, *EPA Requirements for Quality Assurance Project Plans* (EPA QA/R-5), *EPA Quality Assurance Handbook for Air Pollution Measurement Systems Volume II* (January 2017), and additional regulatory requirements as discussed in 40 CFR Parts 50, 53, and 58. This QAPP[1] will address all of the typical elements in such QAPPs including grouped by functionality.

For all instruments that will be used in the sampling as well as sampling methods we will follow EPA monitoring guidance and use Federal Reference or Federal Equivalent Methods.

As such, the QAPP will describe the overall plan for the monitoring project (i.e., project management). It will describe how the plan will be implemented – i.e., how the data will be generated and acquired. It will describe how the project will be assessed and at what frequency and it will describe how the resulting data will be evaluated, i.e., data validation and usability. Elements of the QAPP that will be included are as follows:

A. Project Management

- Problem Definition/Background
- Project/Task Organization
- Project/Task Description
- Quality Objectives and Criteria
- Training
- Documentation and Records

B. Data Generation/Acquisition

- Network Description (for the 2 Fixed Sites in Phase B) and Sampling Process Design
- Sampling Method Requirements
- Sample Handling and Custody

[1] While not necessarily expected to be a Category 1 QAPP with all 24 elements as needed for monitoring projects used to directly support EPA rulemaking, enforcement, regulatory, or policy decisions, this simplified QAPP will contain all of the essential elements to assure collection of valid data. On behalf of the ECCC-CAG, the Technical Advisor and Project Lead will work with EPA to ensure that the Quality Assurance plan meets EPA's requirements.

ED_013931A_00001078-00001

- Analytical Methods
- Quality Control Requirements
- Testing, Inspection, and Maintenance of Equipment
- Instrument Calibration and Frequency
- Inspection/Acceptance Requirements for Supplies, as Needed
- Data Management

C. Assessment

- Response Actions for Unanticipated Events, as Needed
- Reporting to the Community and to EPA

D. Data Validation and Usability

- Data Review
- Data Verification
- Data Validation
- Data Usability

Importantly, among other requirements the QAPP will define the usual monitoring data quality indicators such as precision, bias, accuracy, completeness, and sensitivity.

ED_013931A_00001078-00002

NAACP

To Whom It May Concern:

I am writing to offer the support of the Indiana State Conference and its Environmental Climate Justice Program for the East Chicago Calumet Coalition-Community Advisory Group (ECCC-CAG) in their efforts to secure funding for air monitoring through the American Rescue Plan.

For decades, the East Chicago-Calumet area has faced ongoing air, water, and soil pollution from a number of nearby facilities. These facilities stand directly adjacent to residential areas populated primarily by low-income communities of color, whose members face the disproportionate burdens of constant pollution. In particular, the air emissions from these facilities continue to contribute to severe health impacts on community members.

The Indiana State Conference of the NAACP deeply values and supports community-led efforts for environmental justice. We believe that this funding will facilitate the collection of crucial air quality data to help achieve environmental equity for ECCC-CAG members and their community. If this funding is granted, our organization is willing to support ECCC-CAG by holding webinars, providing outreach and engagement, disseminating the information collected and engaging in ongoing partnership.

Sincerely,

Barbara Bolling-Williams

Barbara Bolling Williams, Esq.
President
Indiana State Conference of the NAACP

Hoosier Environmental COUNCIL

3951 N. Meridian St., Ste. 100, Indianapolis, IN 46208
P 317.685.8800 F 317.688.4794
WWW.HECWEB.ORG

23 March, 2022

Office of Air Quality Planning & Standards
U.S. Environmental Protection Agency

RE: East Chicago Calumet Coalition - Community Advisory Group's application for "Enhanced Air Quality Monitoring for Communities" (RFA#: EPA-OAR-OAQPS-22-01)

Dear Sir or Madam;

I am writing to express the Hoosier Environmental Council's support for the air monitoring project being proposed by East Chicago Calumet Coalition - Community Advisory Group (ECCC-CAG).

Founded in 1983, the Hoosier Environmental Council (HEC) is the largest statewide environmental policy organization in Indiana. HEC aims to advance solutions that are good for the economy and good for the environment. More on the organization and our work is available on our website at HECweb.org.

East Chicago suffers from the cumulative impact of multiple sources of air pollution, both criteria pollutants and hazardous air pollutants. Air pollution sources in East Chicago include steel production, refining, waste processing, gas manufacturing, tank farms, industrial coke production, and others. They are concentrated in the area and in close proximity to residential neighborhoods. The ECCC-CAG is made up of community members living in the midst of these polluting sources and living with the health implications for themselves and their families.

HEC enthusiastically supports the ECCC-CAG's application for an assistance agreement from the EPA's funding opportunity "Enhanced Air Quality Monitoring for Communities" (RFA#: EPA-OAR-OAQPS-22-01). HEC has been providing support and advice for several months during the grant writing process, and we will continue to serve as an advisor if the ECCC-CAG grant is awarded.

In addition, HEC has committed to the ECCC-CAG our willingness to serve as a fiscal agent and provide accounting services, if the grant is awarded. HEC is committed to applying for the role of fiscal agent in a manner consistent with EPA's Subaward Policy and Best Practice Guide for Procurement. HEC has experience as a fiscal agent from our work in that role for a number of Indiana environmental projects in recent years.

I would be happy to provide additional information if it would be helpful in support of this grant application. I can be reached at ifrank@hecweb.org.

Sincerely,

Indra N. Frank, MD, MPH
Environmental Health and Water Policy Director
Hoosier Environmental Council

SIERRA CLUB
HOOSIER CHAPTER

Amanda Shepherd, Chapter Director
Sierra Club Hoosier Chapter
1100 W. 42nd Street, Suite 215
Indianapolis, IN 46208
317-822-3750 (office)

To Whom It May Concern:

I am writing to offer the Sierra Club Hoosier Chapter's support to East Chicago Calumet Coalition-Community Advisory Group's (ECCC-CAG) grant application to secure funding for air monitoring through the American Rescue Plan.

The East Chicago-Calumet area is one that is disproportionately burdened by pollution and is a community that is largely composed of low-income people of color. The impacts of environmental negligence on the part of many industries in the area have led - and continue to contribute - to significant health impacts on those who are already overwhelmingly marginalized.

As an organization deeply committed to addressing environmental injustice, the Sierra Club Hoosier Chapter is hopeful that the implementation of funding through this grant will allow ECCC-CAG and its partners to better quantify the air quality issues facing the East Chicago-Calumet area in order to address the pervasive pollution that impacts the health of so many and advocate for remedial action from the EPA and IDEM. If this funding is granted, we at the Hoosier Chapter intend to support efforts in the region through disseminating messages and acting as a conduit of information to the general public.

Sincerely,

Amanda Shepherd
Sierra Club Hoosier Chapter Director

THE UNIVERSITY OF CHICAGO
ABRAMS ENVIRONMENTAL LAW CLINIC AT THE UNIVERSITY OF CHICAGO LAW SCHOOL

March 24, 2022

To Whom It May Concern:

We are writing on behalf of the Abrams Environmental Law Clinic at the University of Chicago Law School and the Environmental Advocacy Center at Northwestern Pritzker School of Law to express support for the East Chicago Calumet Coalition-Community Advisory Group (ECCC-CAG) in their efforts to secure funding for air monitoring through the American Rescue Plan.

For over five years, our organizations have provided legal and policy support to the ECCC-CAG as they have sought a safe and healthy environment for their community. The low-income residents of color in the East Chicago-Calumet area have faced severe and ongoing pollution from multiple facilities that border homes, schools, and community centers. The air emissions from these facilities frequently lead to serious health impacts.

Our organizations are committed to supporting the community-led efforts for environmental equity in the East Chicago-Calumet area. We believe that this funding will equip ECCC-CAG members with the necessary data to ensure clean air and community health. We intend to continue supporting the ECCC-CAG in their air monitoring efforts by regularly communicating with ECCC-CAG members, promoting and disseminating air quality information, and connecting ECCC-CAG members with other supportive organizations and experts.

Sincerely,

Mark N. Templeton
Clinical Professor of Law
Director, Abrams Environmental Law Clinic
University of Chicago Law School
In support of ECCC-CAG

/s/ Nancy C. Loeb
Nancy C. Loeb
Environmental Advocacy Center, Bluhm Legal Clinic, Northwestern Pritzker School of Law
In support of ECCC-CAG

THE ARTHUR O. KANE CENTER FOR CLINICAL LEGAL EDUCATION
6020 SOUTH UNIVERSITY AVENUE / CHICAGO, ILLINOIS 60637-2786
(773) 702-9611 / FAX: (773) 702-2063 / www.law.uchicago.edu/mandel

ED_013931A_00001079-00005

/s/ Leah M. Song
Environmental Advocacy Center, Bluhm Legal Clinic, Northwestern Pritzker School of Law
In support of ECCC-CAG

THE ARTHUR O. KANE CENTER FOR CLINICAL LEGAL EDUCATION
6020 SOUTH UNIVERSITY AVENUE / CHICAGO, ILLINOIS 60637-2786
(773) 702-9611 / FAX: (773) 702-2063 / www.law.uchicago.edu/mandel

ED_013931A_00001079-00006

From: Lengerich, Steve <SLENGERI@idem.IN.gov>
Sent: Friday, March 25, 2022 8:41 AM
To: Mark Templeton <templeton@uchicago.edu>
Subject: RE: Connecting about air monitoring in East Chicago

That should be OK.

Steve

From: Mark Templeton <templeton@uchicago.edu>
Sent: Friday, March 25, 2022 9:37 AM
To: Lengerich, Steve <SLENGERI@idem.IN.gov>
Subject: RE: Connecting about air monitoring in East Chicago

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

Steve – This is very helpful feedback. Would you be comfortable with me including it as part of the grant application? I think it would mean a lot to US EPA in its evaluation of the grant application. I appreciate the feedback greatly, and I'm hopeful that EPA will support this effort and give the ECCC-CAG and IDEM the opportunity to collaborate on this important work. Thank you, Mark

Mark N. Templeton * templeton@uchicago.edu * 773-702-6998 * The preceding email message may be confidential or protected by the attorney-client, attorney work-product, or common-interest privilege. It is not intended for transmission to, or receipt by, any unauthorized persons.

From: Lengerich, Steve <SLENGERI@idem.IN.gov>
Sent: Friday, March 25, 2022 8:22 AM
To: Mark Templeton <templeton@uchicago.edu>
Subject: RE: Connecting about air monitoring in East Chicago

Mark,

We just had a couple thoughts regarding the grant proposal. What you have looks good. Let me know if you need anything else.

Steve

Comments regarding East Chicago Monitoring Proposal

Overall, the project looks good. It has a very good explanation of the area and why you wish to monitor. From the writeup, it sounds like you plan to either have a person in charge of the project who is familiar with air monitoring run the project or have a consultant hired to run the project. There are definitely some qualified people and firms out there who can help you out. I presume they will be either doing the analysis of samples or sending to a lab.

A couple of questions. What is the quality of the data you want to produce? Do you plan to share summary reports of data only or the raw data as well? Will you share it with IDEM as well as EPA? Are you planning to enter the data into AQS? What you want to do with the data will determine how detailed you are with your monitoring plan.

IDEM can offer assistance on some items. We can review your monitoring plan and QAPP. We can assist in evaluating the sites you choose for meeting siting criteria. An annual performance audit of the site operations can be conducted.

You mentioned that you would take a sample weekly. I would suggest that you adopt EPA's 6-day sampling schedule. That way you have all days of the week covered on a regular basis and your data can be compared to other intermittent sites which would collect data on those days as well.

Putting in an on-site met tower is a good idea. There is also a met tower at our EC Marina site. The data are available online and could be used in conjunction with yours.

We also have a continuous PM2.5 (FEM) instrument ordered to be installed at our East Chicago Franklin (Washington Elementary) site. That should be operational in 2023.

Community Air Monitoring
in and near the Calumet Neighborhood in East Chicago, Indiana

Application for EPA-OAR-OAQPS-22-01

March 25, 2022

Applicant Information: East Chicago Calumet Coalition Community Advisory Group, Inc. (ECCC-CAG), 4928 Euclid Ave., East Chicago, IN 46312-2321; Ms. Akeeshea Daniels, Co-Chair, 219-588-1051, msatd1@att.net; UEI CAKUHKTABBH4; DUNS 081106066

Set-Aside: Community-Based Organization Set-Aside (in and near the Calumet Neighborhood in East Chicago, Indiana)

Description of Applicant Organization: ECCC-CAG is a 501(c)(3) community group that formed more than five years ago to represent residents living on the U.S.S. Lead Superfund Site. To this day, its members continue to engage with federal, state and local officials, community members and the media about pollution and public health in their neighborhood, city, and region.

Project Partner(s): (1) NAACP Indiana Conference (Denise Abdul-Rahman), (2) the Hoosier Environmental Council (Dr. Indra Frank), (3) the Hoosier Chapter of the Sierra Club (Amanda Shepherd), (4) the Northwestern University Pritzker Law School Environmental Advocacy Clinic (Prof. Nancy Loeb and Leah Song), and (5) the Abrams Environmental Law Clinic at the University of Chicago (Prof. Mark Templeton). Steve Lengerich, Chief of Air Monitoring for the Indiana Department of Environmental Management (IDEM), supports the proposal and is willing to work with ECCC-CAG on implementation.

Project Location: The Calumet Community (Community) is located in the southern portion of East Chicago, Indiana. Approximately 2,000 people reside in the area, surrounded by industrial emitters.

Air Pollutant Scope: Total suspended particulates, which will be speciated into a range of metals, including lead; PM2.5; total VOCs; and speciated VOCs.

Budget Summary:

EPA Funding Requested	Total Project Cost
$200,000	$200,000

Project Period: Approximately 18 months after award, from approximately July 1, 2022 to December 31, 2023

Short Project Description: The Community in East Chicago, IN is located and immediately encircled by a the U.S.S. Lead Superfund site, a DuPont RCRA remediation site, an operating W. R. Grace chemical plant, a massive CITGO petroleum and organic tank farm, a hazardous materials recycler, a rail yard, an air separation plant, numerous scrap yards, truck and auto refurbishing operations, countless small supporting industrial uses, and adjacent major roads and railways in the Northwest Indiana transportation corridor. Implementing this project in the phased approach described below will provide a data-supported picture of air pollutants affecting the Community across spatial and time scales including routine impacts from episodic events. Summary and raw data—which will be shared with community members, the public, the City of East Chicago and Lake County government, IDEM and EPA—will help identify and attribute pollution to sources and provide a basis for any future actions that may be required to reduce pollution affecting the Community, including through advocacy from the ECCC-CAG and community members, supported by partners.

ED_013931A_00001087-00001

Section 1 – Project Summary and Significance

1.1 Project Summary

The Calumet Community (Community) in East Chicago, IN is subject to a complex set of daily air pollution, both routine and episodic. This Community is located and immediately encircled by a lead superfund site, an ex-DuPont RCRA remediation site, an operating W. R. Grace chemical plant, a large CITGO petroleum and organic tank farm, a hazardous materials recycler, a rail yard, an air separation plant, numerous scrap yards, truck and auto refurbishing operations, countless small supporting industrial uses, and adjacent major roads and railways. Within a few miles there are even more industrial operations including major steel mills and supporting facilities along the shores of Lake Michigan to the north. East Chicago also sits in the middle of the adjacent major roads and railways in the Northwest Indiana transportation corridor

Based on project location, mix of surrounding industries, and current lack of monitoring, the Community is impacted by a wide variety of pollutants including a range of particulate metals and volatile toxic pollutants. Therefore, this grant application requests funding for monitoring total suspended particulates, which will be speciated into a range of metals, including lead; PM2.5; total VOCs; and speciated VOCs. The application proposes a phased approach; the initial exploratory mobile monitoring will identify and narrow the specific metals and VOCs, which will then be monitored along with PM2.5 at at least one fixed site for the duration of the project.

The project will enable the Community and regulators to first, in Phase A, identify the specific types of major pollutants affecting the Community on a routine basis. The project will then focus on those identified pollutants with at least one fixed monitor in Phase B. Community members will be trained to deploy sampling devices to capture episodic pollution during Phase C, which will be concurrent with Phases A and B. These episodes, while not long lasting, are often significant adverse events as a result of malfunctions in operations at one or more of the surrounding industrial operations and are difficult to assess at present – such as via complaints to agencies.

It is expected that implementing this project will provide a data-supported picture of air pollutants affecting the Community across spatial and time scales including routine impacts from episodic events. These data likely will clarify pollutant source attribution and possibly identify sources. The data will contribute to any future actions that may be required to reduce pollution affecting the Community.

Since there is no current air monitoring data in this Community, the first phase of the effort is mobile monitoring to identify and confirm sources and pollutants. The monitoring in future phases will be dictated by the combination of three vectors—number of monitoring locations (X), number and type of instruments

ED_013931A_00001087-00002

(Y) at each location, and duration (Z). We propose a phased approach to set X, Y, and Z optimally as described in more detail below. The specific equipment in mind is described in Section 7. Budget.

We propose a phased monitoring program, discussed below. Some of these phases will be concurrent. This program will respond to the Community's exposure to all of the many sources that surround the community and emit a wide range of pollutants, and correct the current lack of monitoring data within the Community.

Collected data in raw and summary form will be shared with the community, the City of East Chicago, Lake County government, IDEM and EPA. As appropriate, and in consultation with and under the guidance and direction of IDEM and EPA, data of sufficient quality will be available for entry into AQS.

Phase A – Exploratory Monitoring

We will first conduct a round of exploratory monitoring, using mobile monitoring for PM2.5 and total organic compounds (or appropriate surrogates, based on further discussions with laboratory chemists and monitoring specialists). Community members will drive around the Community while collecting representative data, ideally in a range of weather conditions. We will collect some batch sampling data such as for VOCs via Summa Canisters or similar technologies for speciated laboratory analysis.

The purpose of this exploratory monitoring will be to assess: (i) the general level of monitored pollutants in the Community; and (ii) the spatial variability of emissions within the Community.

We expect the duration of Phase A, including planning, monitoring, and obtaining and analyzing data, to last between 3 and 6 months, our goal being to complete Phase A as soon as possible.

Phase B – Fixed Monitoring

The results of Phase A exploratory monitoring will guide and define the scope of Phase B. Two key decisions will be made:

(a) It is expected that at least one fixed location will be selected to represent both Zones 2 and Zone 3. The location will be selected based on typical EPA siting criteria to ensure collection of representative data (i.e., away from obstructions, etc.), availability of power, access, and security. This selection process will begin during Phase A, so that this location will have been identified when Phase B commences.

(b) What pollutants will be monitored at the fixed monitoring location(s). We expect to include monitoring for Total Suspended Particulate (TSP), PM2.5, and total VOCs, and to assess the need for including additional pollutants such as H2S, ammonia, diesel particulate matter, and others. We expect TSP data to be collected one day out of six days for a 24-hour average period. We would also collect the total VOC data in Summa Cannisters on a similar basis. We expect to use a continuous PM2.5 monitor.

These decisions will depend (in part) on the relative cost and usefulness of additional data. We believe that final determinations of the pollutants to be monitored and the instruments and approach used cannot be made until Phase A is complete. We will also coordinate with IDEM to make sure that we are using these resources efficiently if and as IDEM deploys additional monitors. We expect Phase B to last for approximately one additional year.

ED_013931A_00001087-00003

Phase C – Opportunistic Monitoring

We will enable selected Community members to conduct opportunistic monitoring. The Community is often impacted by short-duration but high-impact air pollution episodes, such as significant odors or dust events from sources surrounding the Community. While members try to determine the odor's source and call IDEM's complaint lines, events often cease by the time IDEM inspectors arrive, and no meaningful action is possible.

Phase C would last for the Project's approximate 1.5-year duration. Our goals for Phase C are to:

(a) Train selected Community members to install and operate Summa Cannisters to collect VOC samples for analysis for individual species of VOCs during high-impact events;

(b) Deploy small PM2.5 monitors such as the Purple Air II (or similar) at selected Community members' locations for selected time periods, to obtain PM2.5 data for various lengths of time such as during specific dry-season or summer months.

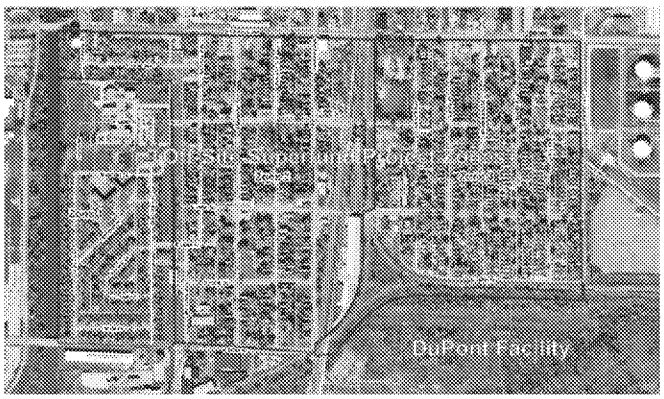
This phased approach would maintain flexibility in the use of available resources, to obtain the maximum amount of data for the pollutants that most seriously impact the community.

1.2 Project Significance

First, we describe the location of the Community and the surrounding area, including the locations of large and small sources of air pollution, to establish the necessity for the range of monitoring instruments that will be considered based on emissions and types of emission sources. We note that the exhaust emissions from local roadways and mobile source traffic also impact residents.

1.2.A Location of the Community and Surrounding Emissions Sources

The figure below shows the location of the Community, which consists of residents who live in houses in Zones 2 and 3 below.

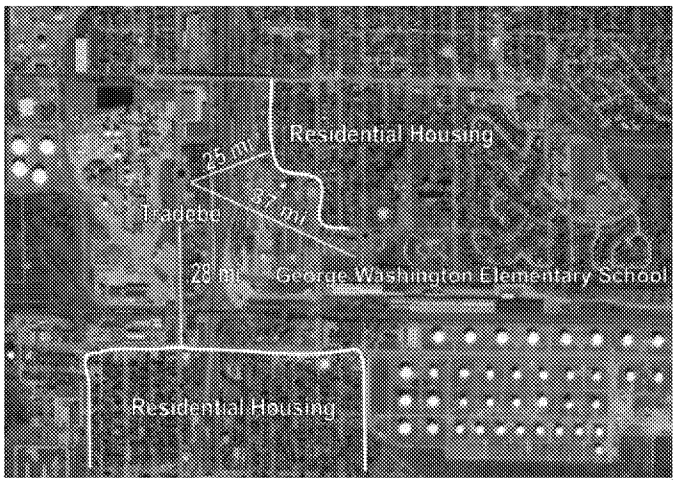


The housing in Zone 1, shown above, recently was demolished as part of the USS Lead Superfund Site remediation. Soils in Zone 1 location contain containing significantly elevated lead levels and have not yet been remediated. Remediation likely will result in fugitive emissions. Zone 1 is immediately west of and adjacent to the Community (Zones 2 and 3).

Next, the figures below show the area immediately to the north of the Community, labeled "Residential Housing"—in particular the TRADEBE waste treatment and recycling facility. This facility began operations in 1986 and expanded in 2004. It includes a 164,714-gallon tank farm, a lab pack/de-pack facility, a drum consolidation and handling building, recycling units, and a non-hazardous processing building with over 40,000 gallons of bulk treatment capacity. In July 2004, TRADEBE added a Solid Distillation System to process and recycle waste materials on-site. TRADEBE also operates three Liquid Distillation Units at this site. A flare operates continuously, combusting waste gases. TRADEBE can store 11,000 drums of hazardous waste.

ED_013931A_00001087-00004

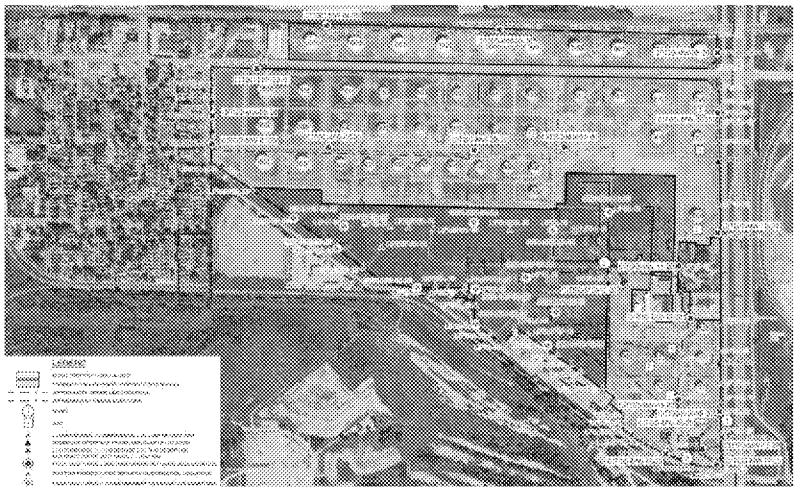
Proximity of Tradebe to residential areas



TRADEBE's neighbors include a large commercial gas manufacturer which emits significant quantities of ammonia, a rail-yard with switching locomotives, and a vacant aluminum smelting facility. Farther north of the Community are significant additional large industrial operations, including the Cleveland-Cliffs (previously Arcelor Mittal) steel mills and the BP Whiting refinery.

To the east of the Community there is a large CITGO tank farm, shown in the figure below. This area is under active remediation, as shown in the figure.

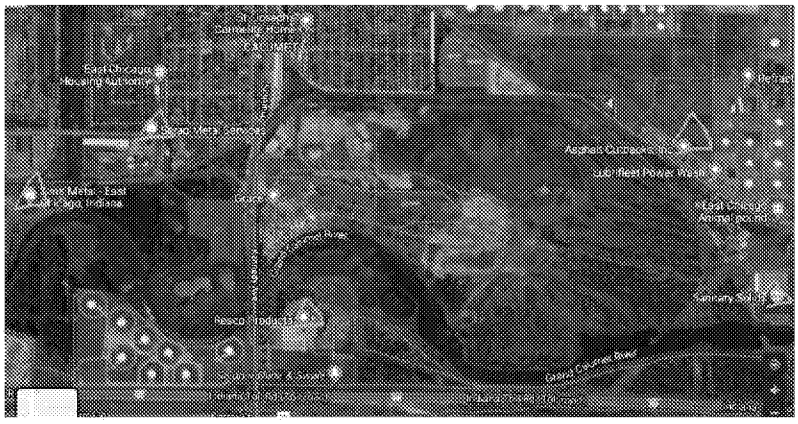
Next, moving clockwise to the southeast of the Community, there is a large ex-DuPont RCRA remediation site under active remediation, as shown in the figure on page 2 above. Per EPA, based on years of previous sampling, studies, and risk assessments, primary soil contaminants at this site (from about 0 to 10 feet below ground surface) are arsenic, lead, zinc, and cadmium.



Finally, south of the Community and extending to the border with Hammond, there are additional pollutant sources, including a W. R. Grace manufacturing facility which makes various products including colloidal silica. The Community is also bordered immediately to its south by railroad tracks. Residents note that trains park on these tracks for long periods of time, often transporting petroleum coke (among other products). Complaints of H2S emissions have been noted.

Last, the figure below shows additional industrial operations in the general vicinity of the Community such as a scrap metal processing facilities and a locomotive maintenance facility (not shown) and various truck repair shops (not shown).

ED_013931A_00001087-00005



An EPA TRI search for East Chicago shows 16 TRI Facilities, with 41.8 million pounds of Total Production-Related Waste Managed and 11.0 million pounds of Total On-site and Off-site disposal or Other Releases. 808.1 thousand pounds of Total On-Site Releases were recorded, 632.2 thousand pounds into air and 175.9 thousand pounds into water. The remaining 10.1 million pounds amounted to the Total Off-site releases. The facilities specifically discussed above, which encircle the Community, are noted in the TRI. In addition, the TRI search identifies Safety-Kleen Systems, the Indiana Harbor Coke facility, East Chicago Tin, US Gypsum, and various supporting operations such as slag processors.

1.2.B Pollutants

Because of the wide variety of emission sources noted above, a wide variety of pollutants is present in the area. They include gaseous pollutants including all criteria pollutants, namely lead, as well as a wide range of particulate (i.e., metals) and gaseous VOC air toxics and inorganic pollutants (such as ammonia, hydrogen sulfide, various acid gases, etc.). These are due to operating sources, remediation activities, and mobile sources.

The TRI search shows the following pollutants: ammonia, barium and its compounds, benzene, chromium compounds, copper compounds, cyanide compounds, diethanolamine, epichlorohydrin, formaldehyde, hydrochloric acid, hydrogen fluoride, hydrogen sulfide, lead compounds, manganese compounds, mercury compounds, methanol, hexane, nickel and compounds, phenols, poly aromatic hydrogen compounds, styrene, sulfuric acid, toluene, vinyl acetate, and others.

1.2.C Existing Monitoring

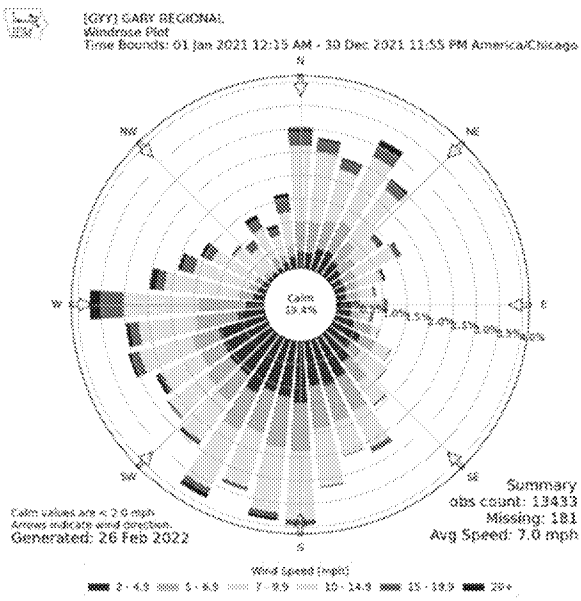
There is no ambient monitoring in the Community. The closest monitoring is an IDEM station near Lake Michigan, located at the East Chicago Water Filtration Plant from 2006-2012 and the East Chicago Marina since 2013. As shown below, IDEM has reported results of monitoring from these locations, including significant concentrations for carcinogens such as 1,3 butadiene, benzene, carbon tetrachloride, chloroform and ethylbenzene, shown below.

Chemical	Monitor	Years	Average Concentration	Cancer Risk (in one million)
1,3-Butadiene	East Chicago Water Filtration Plant	2006-2012	0.19	5.7
1,3 Butadiene	East Chicago Marina	2013-2015	0.35	10.5
Benzene	East Chicago Water Filtration Plant	2006-2012	0.85	6.63
Benzene	East Chicago Marina	2013-2015	0.71	5.54
Carbon Tetrachloride	East Chicago Water Filtration Plant	2006-2012	0.54	3.24
Carbon Tetrachloride	East Chicago Marina	2013-2015	0.61	3.66

ED_013931A_00001087-00006

Chloroform	East Chicago Water Filtration Plant	2006-2012	0.23	5.29
Chloroform	East Chicago Marina	2013-2015	0.16	3.68
Ethylbenzene	East Chicago Water Filtration Plant	2006-2012	0.28	0.70
Ethylbenzene	East Chicago Marina	2013-2015	0.21	0.53

1.2.D Meteorological Data



The Community has no meteorological station at present. However, the Gary airport is located fairly close east of the Community. A 2021 wind rose below demonstrates significant stagnation conditions (or "calms") in the area, which would enable pollutant concentrations to become and remain higher in the area; and highly variable winds. Thus, the Community is "downwind" and impact by the emissions from all of the sources discussed above at various times of day.

Section 2 – Community Involvement

2.1 Community Partnerships

ECCC-CAG has formed partnerships with the following organizations to strengthen their ability to leverage the air quality data they collected into action. ECCC-CAG has not made any awards and, as required, will comply with the Contacts and Subawards in the EPA Solicitation Clauses.

NAACP: The NAACP's Environmental and Climate Justice Program seeks to end environmental injustice through litigation and advocacy to strengthen development, monitoring, and enforcement of regulations at federal, state, and local levels. ECCC-CAG has received support from the NAACP Indiana Conference to mobilize the data collected from this project to specifically take on an active advocacy role. The NAACP Indiana Conference and ECCC-CAG will work together to advocate for stricter regulations in order to ensure that communities of color are not unjustly impacted by polluted air and other environmental burdens that put community health and well-being at risk.

Hoosier Environmental Council: The Hoosier Environmental Council (HEC) is Indiana's largest environmental education and advocacy organization. HEC engages in significant policy advocacy on the state level in Indiana. The ECCC-CAG hopes to leverage these connections to most effectively use the air quality data they collect to push for stronger air quality regulations and state laws specifically targeting the environmental concerns of Northwest Indiana. HEC and ECCC-CAG will jointly advocate for positive environmental change in East Chicago and across the Northwest Indiana region.

Sierra Club Hoosier Chapter: The ECCC-CAG has received the support of the Hoosier Chapter of the Sierra Club, in collaboration with experts from the Sierra Club's National Clean Air Team, to provide technical advice on the ideal location of air monitors and best advocacy strategies to leverage the data that the ECCC-CAG collects. Like HEC, the Sierra Club Hoosier Chapter is focusing on strengthening partnerships with Northwest Indiana organizations, thus providing ECCC-CAG another organizational

ED_013931A_00001087-00007

partnership to allow the Hoosier Chapter to see through their goals into the future. The Sierra Club Hoosier Chapter is also engaged in state-level education in Indiana and has agreed to use its education capacities to mobilize the ECCC-CAG's air quality data to push for mutually agreed upon policy change.

Northwestern Pritzker Law School's Environmental Advocacy Center and University of Chicago Law School's Abrams Environmental Law Clinic: For more than five years, attorneys and law student clerks at these two clinics have supported ECCC-CAG on legal, technical, and policy matters. The clinics intend to continue supporting the ECCC-CAG, including in these proposed air monitoring efforts, by regularly communicating with ECCC-CAG members, promoting and disseminating air quality information, and connecting ECCC-CAG members with other supportive organizations and experts.

Indiana Department of Environmental Management: Steve Lengerich, Chief of Air Monitoring for the Indiana Department of Environmental Management (IDEM), has indicated support for the proposal and a willingness to work with the ECCC-CAG on this. In his feedback on the proposal, which is attached, he indicated that "[o]verall, the project looks good" and "IDEM can offer assistance on some items."

2.2 Community Engagement

As it has since its inception shortly after the public became aware of significant contamination in Zone 1 in the summer of 2016, ECCC-CAG plans to engage community members throughout all phases of this project. ECCC-CAG will promote the project to the public, explaining its benefits. During Phase A, the plan is to engage community members in assisting with the mobile monitoring. At the end of Phase A, ECCC-CAG will publicize the results of its initial findings. ECCC-CAG has strong relationships with local print and broadcast media to facilitate this dissemination. ECCC-CAG will similarly disseminate the results of its findings in Phase B.

In addition, ECCC-CAG will select community members, as described in Phase C of our project plan, to install and operate Summa Cannisters during high-impact pollution episodes, and also to deploy small PM2.5 monitors such as the Purple Air II (or similar) at selected Community member locations for selected time periods in order to obtain PM2.5 data.

ECCC-CAG, a group made up of community members and open to all residents impacted by the negative environmental realities of East Chicago, will use the monitoring data community members collect to inform their advocacy strategy. Community partners like Hoosier Environmental Council, the NAACP Indiana conference, and the Sierra Club Hoosier Chapter will assist in this advocacy.

2.3 Community-Based Organization Set-Aside

ECCC-CAG formed to advance community goals for the USS Lead Superfund Site, the former DuPont chemicals site, both located in East Chicago. Their original mission statement is as follows: To demand protection of the health, safety, and human rights, civil rights, and other legal rights of the diverse communities and individuals living within the U.S.S. Lead Superfund Site; to raise up the local community's voice and concerns to EPA, the Federal Offices, State of Indiana and the City of East Chicago; and to share information widely with the community when EPA, the State of Indiana, and the City of East Chicago provide updates or documents for community input.

ECCC-CAG is also dedicated to general environmental concerns of the City of East Chicago, while monitoring the progress of the cleanup at the USS Lead and DuPont sites. ECCC-CAG actively participated in the public hearings concerning the Proposed Record of Decision process and subsequent Amendment procedures for the USS Lead Superfund site, advocating for the highest cleanup standards.

ECCC-CAG has been working closely with the environmental law clinics at the University of Chicago Law School and Northwestern University Pritzker School of Law to advocate for various environmental

ED_013931A_00001087-00008

improvements in the city. East Chicago is a recognized Environmental Justice community by EPA's standards, and its residents are particularly vulnerable to increased air pollution and toxics exposure due to the heavy industry that is prevalent in the area.

Section 3 – Environmental Justice (EJ) and Underserved Communities

Demographic information in U.S. EPA's Enforcement and Compliance History Online ("ECHO") database indicates that 58,387 people, 83% people of color, live within a three-mile radius of TRADEBE's toxic waste disposal and recycling facility and among the other facilities discussed above, which are located immediately adjacent to the Community. Fifty-four percent of the population in that radius are low-income individuals, and 19,499 households contain residents younger than 18. Residential communities within this radius—East Chicago, Calumet City, and Hammond—score above 80% in eleven categories assessed by U.S. EPA's EJ screening tool: Particulate Matter ("PM") 2.5, ozone, diesel PM, National Air Toxics Assessment ("NATA") air toxics cancer risk, NATA respiratory hazard index, traffic proximity, lead paint indicator, Superfund site proximity, risk management plan proximity, hazardous waste proximity and wastewater discharge proximity. The majority of these chemicals are known carcinogens or have other long-term health impacts.

This Community exemplifies why environmental justice is needed. U.S. EPA's Toxic Release Program ("TRI") indicates that in 2019 alone, 16 top polluting facilities in East Chicago released—on-site—632,200 pounds of toxic chemicals into the air and 175,900 pounds into the water. Within Indiana (the leading state for toxic chemical releases), East Chicago's Lake County has the highest- or among the highest-quantity toxic releases of any county. TRI reports that many facilities near or in East Chicago are in violation of their permits.

Section 4 – Environmental Results

4.1 Expected Project Outputs and Outcomes

The following outputs are expected from the project. They include potentially all of the outcomes listed in the short-term, intermediate-term, and long-term areas identified in the grant RFP:

- Confirmation and additional identification of the major air pollutants affecting the Community;
- The assessment of the air pollution data over time, for a period of 1.5 years; which will properly capture the variability of the air pollution problem in the community. There is no current monitoring at the Community, which is underserved by any definition;
- Ability to capture and characterize episodic pollution, a particular problem at the Community;
- Availability of data for other communities and stakeholders including researchers and regulators;
- Promotion of partnerships and community involvement through various activities and information exchanges.
- The following outcomes are expected from the project. They include potentially all of the outcomes listed in the short-term, intermediate-term, and long-term areas identified in the RFP:
- Short-term Outcomes (*i.e.*, a change in knowledge)
    - Problem identification, of major pollutants affecting the community
    - Increased community awareness, through various activities and information exchanges. Increased access to information and tools that increase understanding and reduction of environmental and human health risks.
- Intermediate Outcomes (*i.e.*, a change in behavior)
    - State or local policy action(s), by making data available for other community stakeholders including researchers and regulators.

ED_013931A_00001087-00009

    - Mitigation action(s) from parties responsible for certain air pollution.
    - Community action to mitigate certain air pollutant(s), such as through the ability to capture and characterize episodic pollution.
- Long-term Outcomes (*i.e.*, a change in conditions)
    - Reduction of certain air pollutant emissions, through assessment of air pollution data over a period of 1.5 years, which will properly capture the variability of the air pollution in the Community.
    - Reduction of ambient concentrations of certain air pollutant(s).
    - Reduction of human exposure to certain air pollutant(s).

4.2 Performance Measures and Plan

Upon receipt of the grant, ECCC-CAG will issue an RFP to hire a Technical Advisor and Project Lead to assist ECCC-CAG with the oversight and implementation of this program. This may be an organization or an individual with a proven track record of successfully managing such projects. The individual or entity selected will:

- Manage all technical aspects of the project, including transitioning from the initial exploratory Phase A to the longer-term Phase B.
- Oversee all contractors or vendors;
- Track and report project progress on expenditures and purchases;
  Track, measure, and report accomplishments, timelines, and milestones.

In Phase A, the short-term goal will be to efficiently identify the types of pollutants affecting the community and the spatial extent of the pollution. In Phase B, the goal will be to ensure that the highest quantity of valid data is collected for the duration of the project.

4.3 Timelines and Milestones

The following milestones and timelines are noted:

- Project Award/Kickoff.
- Selection of Technical Advisor and Project Lead, under the direction of the Project Manager— ~30 days
- Selection of Phase A mobile monitoring contractor and scope— ~30 days after "Selection of Project Manager" above.
- Implementation and Completion of Phase A—No more than 6 months after Project Award. It includes data gathering, analysis, and identification of pollutants for Phase B.
- Training community members for Phase C episodic sampling, expected within 90 days from Project Award.
- Identification of fixed location site(s) for Phase B, expected within 90 days of Project Award.
- Procurement of Equipment for Phase B, expected to begin 5 months after Project Award and completed in 60 days.
- Implementation of Phase B, for the duration of the Project based on available funds, expected to be one year, or slightly longer depending on funds availability.

Project reporting milestones are not listed above and are discussed below in Section 6.2 below. In sum, with the assistance of the Technical Advisor and Project Lead, ECCC-CAG will submit quarterly progress reports for Phases A and B. ECCC-CAG will submit a final Project Report upon the conclusion of the Phase B Report and will contain results of all sampling conducted as part of episodic sampling in

ED_013931A_00001087-00010

Phase C. ECCC-CAG will make both raw and summary data available to the community, IDEM and EPA.

Section 5 – Quality Assurance

See attachment. Note also that IDEM stated in its attached review of the project that "IDEM can offer assistance on some items. We can review your monitoring plan and QAPP. We can assist in evaluating the sites you choose for meeting siting criteria. An annual performance audit of the site operations can be conducted." ECCC-CAG welcomes this offer and looks forward to working with IDEM on these.

Section 6 – Programmatic Capability and Past Performance

6.1 Past Performance

ECCC-CAG previously received and administered EPA Technical Assistance Grant 00E02352. ECCC-CAG is drawing on the lessons learned from that experience. For example, ECCC-CAG has already been in discussions with Dr. Ron Sahu, an expert who has helped to design community air monitoring networks in the past and who could serve in the role of Technical Advisor and Project Lead. ECCC-CAG has also been in discussions with Hoosier Environmental Council about providing support with fiscal reports. ECCC-CAG will comply with all legal requirements. ECCC-CAG has not made any awards and will comply with the Contacts and Subawards in the EPA Solicitation Clauses.

6.2 Reporting Requirements

With the assistance of the Technical Advisor and Project Lead, ECCC-CAG will submit quarterly progress reports for Phases A and B. The ECCC-CAG will submit a final Project Report upon the conclusion of the Phase B Report and will contain results of all sampling conducted as part of episodic sampling in Phase C.

The quarterly reports will summarize technical progress, planned activities for the next quarter, and a summary of expenditures. EPA will be consulted as to the timing and content of these reports.

With the assistance of the Technical Advisor and Project Lead, ECCC-CAG will the final Project Report will be submitted to EPA within 120 calendar days of the Project's completion or within such time period as EPA requires. The final Project Report will include summary of the Project or activity and advances achieved and costs of the Project or activity. The final Project Report will also discuss the problems, successes, and lessons learned from the project or activity that could help overcome structural, organizational, or technical obstacles to implementing a similar project elsewhere.

6.3 Staff Expertise

Upon receipt of the grant, ECCC-CAG will issue an RFP to hire a Technical Advisor and Project Lead to assist ECCC-CAG with the oversight and implementation of this program. The ECCC-CAG anticipates hiring someone with similar qualifications to Dr. Ron Sahu, whose resume we have attached. ECCC-CAG has not made any awards and will comply with the Contacts and Subawards in the EPA Solicitation Clauses. The Project Manager is Lori Locklear, an ECCC-CAG member and Community resident, who has eleven years of experience as an accountant at Brookfield Properties and studied at California State University—East Bay. ECCC-CAG co-chairs Akeeshea Daniels and Martiza Lopez, long-time residents of the Community and East Chicago, will provide meaningful input and oversight.

Section 7 – Budget

ED_013931A_00001087-00011

Please see Form 424A attached. The overall budget requested is $200,000.

To this point the following costs have been identified. Given the phased approach, exact estimates of exactly how the funds will be expended cannot be estimated. Available resources will be used in the most efficient manner, and ECCC-CAG and Technical Advisor and Project Lead would coordinate with IDEM to ensure that there is not needlessly duplication of any incremental air monitoring efforts that IDEM may be adding in the near future.

(a) Planning, Project Management, and Final Reporting Costs: Every effort will be made to keep these costs to a minimum so that the vast majority of the available resources can be deployed for actual data collection. It is expected that these costs will not exceed 15% of the overall program costs.

(b) Phase A – Exploratory Monitoring Cost: It is expected that this effort will cost approximately $30,000. The result will be a thorough analysis of the wide range of pollutants and their spatial distribution, which will guide Phase B and also include the training of Community members as to the use of Phase C sampling devices and monitors.

(c) Phases B & C – Fixed Monitoring Costs: It is expected that VOC Summa Canisters/Tedlar bags can address the VOC/BTEX, sulfur compounds, and hydrocarbons while a FRM total particulate filter sampler can address metals. We estimate the following unit equipment (and, in a few instances, laboratory) costs:

- VOC SUMMA canisters: can be scheduled to run, used as a grab sample when someone opens the valve or can be triggered remotely using a datalogger. The expected cost is about $300/can plus shipping. We would send the canisters for a wide range of analyses and thus actual laboratory costs will vary.
- FRM TSP filter sampler for metals (X-Ray Fluorescence): can be rented for approximately $1,000 per month. Each filter analysis is expected to cost around $150.

In addition, it is contemplated that a meteorological station at the fixed monitoring site(s) in Phase B may be installed based on discussions with EPA and IDEM after project award. That cost would be approximately $10,000-12,000 per installation. As in the attached letter from IDEM, IDEM thinks such an installation would be valuable.

Finally, given the large CITGO tank farm adjacent to the Community to the east, it is also contemplated to lease a FLIR camera and train members of the Community on its use so that it can be used during VOC/odor episodes to determine if fugitive emissions from the tank farm are a source of such episodes.

Given the multiple uncertainties associated with the monitoring program and the intended flexibility to maximize the value of the collected data, our cost proposal does not arrive at a total cost per se. However, if, for example, we are successful in obtaining a grant for $200,000, we will use: (1) $30,000 for the Phase A effort; (2) allocate no more than $30,000 for the project management and planning costs; and (3) use the rest of the grant in a combination of Phase B and Phase C for as long as the funds last.

ED_013931A_00001087-00012