Long Island Science Center Air Quality Monitoring Project

Quality Assurance Project Plan

Draft submitted: ____May 18, 2023_____

LONG ISLAND SCIENCE CENTER

401 TANGER MALL DR, RIVERHEAD, NY 11901

1. TITLE AND APPROVAL PAGE

APPROVAL PAGE 1.2

Project Manager	Cailin Kaller Signature/Date
Assistant Project Manager	Judy Rentas Signature/Date
Project QA Manager	Anna Lando Signature/Date
EPA Region 2 Project Officer	Tasha Frazier Signature/Date
EPA Region 2 QA Manager	Brian Hulme Signature/Date

Cailin A Kaller 5/22/23

Judy Rentas 5/22/23

Anna Lando 5/22/23

Tasha Frazier 5/22/23

BRIAN HULME Digitally signed by BRIAN HULME Date: 2023.05.22 11:36:02 -04'00'

2 QAPP UPDATE LOG

Prepared/Revised By:	Date:	Revision Number:	Summary of Changes:
Anna Lando	12/20/23	0	Original Draft
Anna Lando	4/12/13	1	Updates to content
Cailin Kaller	4/12/23	1	Final Draft
Cailin Kaller	5/5/23	3	Revisions to draft

No substantive changes include updating references, correcting typographical errors, and clarifying certain language to make the document more useful and effective.

This QAPP will be approved by the EPA before work commences.

Table of Contents

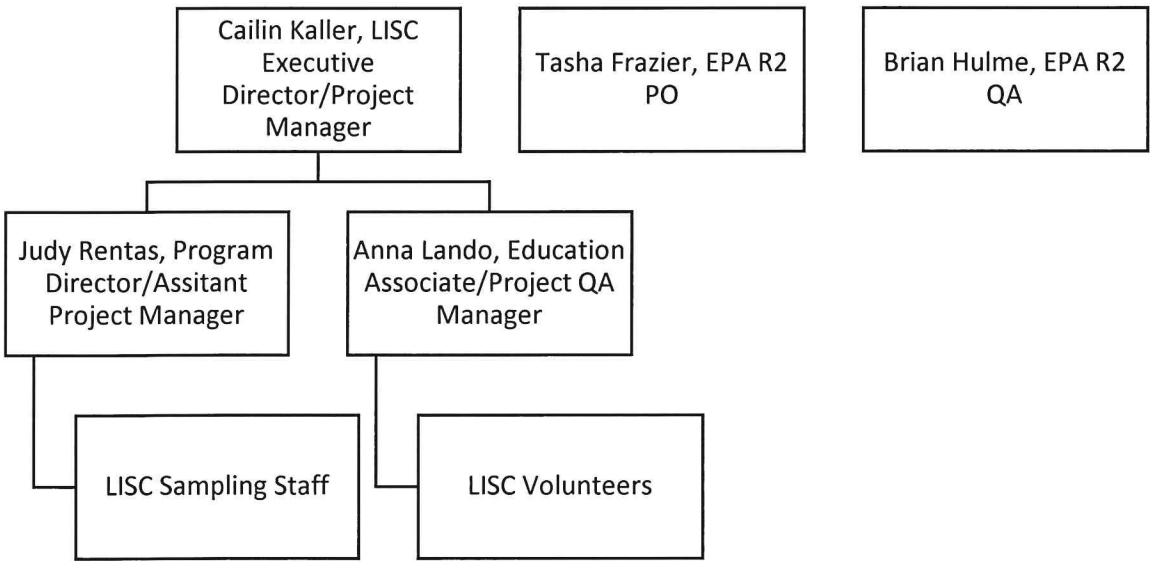
3.0 DISTRIBUTION LIST

Individual		Position/Affiliation
Cailin Kaller	cailin@sciencecenterli.org, 631-849-6502	LISC Project Manager
Judy Rentas	judy@sciencecenterli.org, 631-849-6503	LISC Assistant Project Manager
Anna Lando	anna@sciencecenterli.org, 631-846-6500	LISC On-Site Project Manager
Volunteer		Citizen Science Volunteer
LISC Sampling Staff		Seasonal Staff
Tasha Frazier	Frazier.tasha@epa.gov, 212-637-3861	EPA R2 Project Officer
Brian Hulme	Hulme.brian@epa.gov, 732-321-6744	EPA R2 Quality Assurance Officer

3.1 PROJECT RESPONSIBILITIES

Individual	Responsibilities
Cailin Kaller	Oversees the overall Program QM
Judy Rentas	Assists the Project Manager in Overseeing QM
Anna Lando	Community Outreach, technical and written support, data collection management and assessments, volunteer management and training.
Volunteer	Analysis and research support, data collection and entry, and project assistance.
LISC Sampling Staff	Conducts daily and weekly sample collection. Records data.

3.2 PROJECT ORGANIZATIONAL CHART



4 PROJECT DEFINITION/OBJECTIVES

4.1 PROJECT DEFINITION

With recent developments in the switch to solar power across Long Island, marked by an increase in the instalment of residential solar panels, local communities anticipate improved air quality because of drastic changes in local energy sources. Additionally, recent developments in low cost, multi-pollutant, citizen-science friendly air sampling methods present a new opportunity for community members to bring awareness to their local air quality and be effective advocates for ensuring a healthy environment at their residences. Currently there are limitations to the existing information on the temporal and spatial distribution of pollutants from city and state monitoring programs in the 11901 zipcode. Based on the AirNow website, there are two air monitoring stations within drivable proximity to us that monitor Ozone and Particulate Matter. One is on Sound Avenue in Baiting Hollow, NY (in Riverhead Township, cross street is Horton Ave). The other is in Holtsville off Nicholls Rd (north of the Long Island Expressway, nearest cross street is Division St.) We can compare our results to these monitoring stations. To check the accuracy of the data, we will visit one of these air monitoring stations every 4 weeks to check the results of our equipment against the data generated by the NowCast AQI data available online. Currently the station closest to us does not record PM2.5 but the one in Holtsville does. Poor air quality affects humans in ways that many people are not aware. Particulate Matter and Ozone can cause respiratory irritation and exacerbate various medical conditions. Prolonged exposure to toxins and elevated levels of particulate

matter can increase risk of chronic conditions and disease. By educating the local community on monitoring and reporting of high Ozone levels we can reduce exposure of vulnerable populations to unhealthy conditions resulting in asthma attacks and difficulty breathing. These types of respiratory ailments make vulnerable individuals more susceptible to COVID complications as well.

4.2 PROJECT OBJECTIVE

Our project seeks to drive equitable social development opportunities through environmental education, engagement, and awareness. We also offer bilingual programming that is accessible to our diverse local community. By creating low-cost, low-barrier, multilingual and inclusive programming, we can develop a Green Job Pipeline responsive to the needs and priorities of underserved and vulnerable populations in the 11901-zip code. Our goals are to engage and educate lower income students and people of color in deeper understanding of the health of their environment while providing them with important STEM workforce skillsets (data collection and analysis, reporting impacts, long term regional planning, advocacy and scientific method problem solving). We seek to provide long-term STEM engagement opportunities and meaningful employment to youth and families by creating access to government, educational partners, and scientific networks (equipment, mentors, federal and international research institutions, etc.) that will open new long-term STEM career opportunities that may not have been an option without exposure. Furthermore, we seek to educate the larger public about their local environment and will work with our community capacity partners to allow low-income diverse populations to make more informed decisions and to understand how to become policy decision makers. The expected results will also strive to reduce adverse health events for residents and decrease degraded air quality. We will do so by:

1. Testing and analyzing air samples data from specific public access locations across local regions surrounding Riverhead.
2. Engaging Citizen scientists to actively help with sampling.
3. Record results a web page with information to the public about what this local air quality means for health conditions.
4. Actively hold public educational sessions with local families to help develop a deeper understanding of environmental factors on health and prevention and mitigation practices.

4.3 DATA USERS

The data collected from this project will be used by the Long Island Science Center for the purpose of involving community members in health and environmental concerns in their community. Additionally, this project is to educate and inform community members about the air quality of their local residences. The data we collect will be available to the public.

5 BACKGROUND AND HISTORY

5.1 BACKGROUND

There is an identified need for more quality job opportunities in our region. By providing STEM education opportunities for our diverse underserved community, we also provide ladders to success. We need STEM education to develop the next generation of innovators and to train our future workforce. According to the Bureau of Labor Statistics, STEM jobs are experiencing 5x faster growth than other types of roles. STEM jobs garner 30% higher wages. The national average wage for all STEM occupations was $87,570, nearly double the national average wage for non-STEM occupations ($45,700). Ninety-three out of 100 STEM occupations had wages significantly above the national average wage for all occupations of $48,320. Employment in STEM occupations grew by 10.5%, or 817,260 jobs, between May 2009 and May 2015, compared to 5.2% growth in non-STEM occupations. Our programs are fun, engaging and provide workforce skills that can lead to jobs.

5.2 HISTORY

Long Island Science Center has been in Riverhead since 1995. Our nonprofit was formed because of grassroots and community efforts. Our ties to the community are deep and we continue to rely on the involvement and participation of our community to thrive. Our primary focus is providing educational, STEAM based programs to students in prek-12th grade in both English and Spanish. We also are a resource for traditional community-based programming like scout and library programs. Our learning museum is a resource for families to visit providing free equal access visitation through the library system and via free visitation to residents in family shelters. Over the past several years we have worked with a coalition of social service and some of the most economically disadvantaged populations on Long Island. We have a more than 20-year history in delivering science programs that address ecosystems and water quality. This is our first project aimed at student and community education related to environmental issues. The air quality investigation will be new as well, but we felt it is an essential educational need in our area particularly with our proximity to large agricultural facilities. Many of the New Americans of Hispanic descent work in the open-air farm fields all day. Summer months are the busiest farming season and the lowest air quality due to ozone. Our program director, Judy Isbitiren, is Hispanic and bilingual. Judy has conducted community outreach efforts with many of the Spanish language groups in our area. A major identified issue is education and outreach to the local community. Many of the students in the connected area have parents who have only a partial elementary level education or no education at all with limited English skills. Understanding the reverse role that students have in educating their parents helped inspired this program. We are looking to first and foremost engage students and plan on using their excitement and involvement to help engage the larger community. Additionally, we have worked with contacts in the school system on this concept to inform our

decision making. Their feedback and enthusiasm for this unique to our area program has helped us with our current project plan. On the larger scale we have several community driven planning documents that engaged stakeholders on a meaningful level that specifically identified a community interest in more programming for children and families including the Town of Riverhead Brownfield Opportunity Area study, the Riverhead Urban Renewal Plan, the Riverside Urban Renewal Plan, and the Riverside Brownfield Opportunity Area Study. A key strategy of the Riverside Revitalization Action Plan (RRAP) adopted by the Southampton Town Board with Suffolk County support and intended to yield significant socioeconomic benefits (placemaking, jobs, tax revenue) by capitalizing on access to downtown Riverhead's resources. RRAP seeks to develop education programs and interactive exhibitions with various institutional partners to provide more opportunities for area youth.

6 PROJECT LOCATION

The Science Center is physically located in the 11901-zip code (Downtown Riverhead & Riverside), an economically distressed area with a diverse low-income underserved demographic. NYS Health data show black/African American populations on Long Island have a disproportionately high rate of positive Covid cases. For the 11901-zip code (both Riverside and Riverhead) total population was 28,387 with 71.4% White, 17.2% Black/African American, 1.7% Asian, 6.2% some other race: and 28.9% Hispanic/Latino. (2019 ACS 5-Year Estimates).3 Riverside elementary school is: 75% Hispanic; 12% white; 9% black/Africa American; 3% multi-racial; 1% Asian. 54% are English Language Learners. 4% (20 students) are homeless. 78% are economically disadvantaged. Riverhead Central School District is: 55% Hispanic; 33% white; 9% Black/African American. 31% are English Language Learners. 3% (197 students) are homeless. 60% are economically disadvantaged. New York State has recognized the area as a federal Opportunity Zone and NYS has designated three Urban Renewal Areas within the 11901zip code. Riverside hamlet is a severely economically disadvantaged community. NYS DEC maps several census tracts in the area as "Potential Environmental Justice Areas." NYS Department of State (DOS) designated the Peconic River Corridor in downtown Riverhead a Brownfield Opportunity Area (BOA) which consists of a 452-acre area along the Peconic River (one of 18 federally designated estuaries of national significance) characterized by 18 potential brownfield (hazardous substance and/or petroleum contamination) and vacant sites. A 468-acre portion of Riverside received NYS designation as a Brownfield Opportunity Area (BOA) in August 2016 and identified 20 brownfield sites as well as underutilized and vacant properties that contribute to disinvestment in the community and blight conditions. The Riverside brownfield sites are proximal to residences and disrupt neighborhood connectivity and general well-being. Their presence, combined with crime prevalence, negatively impacts accessibility, safety, quality housing, recreation access and social capital. Congested roads in the immediate area have 14,000-2100+ Average Annual Daily Traffic counts generating substantial emissions. Suffolk County is a nonattainment county for EPA 8-hour ozone. Incidence of lung cancer is higher

than expected and there is a documented concentration of Petroleum Bulk Storage facilities that pose potential health risks.

6.1 SITE MAP

We have selected locations that are publicly accessible and have safe access in order to include public participation. These locations have also been identified as potential Ozone issue areas through EPA EJ Screen.

6.2 SAMPLING SITE LOCATIONS

Location	ID	GPS Coordinates	EJ Ozone Index (percentile)	Cross Street	Parameters	Frequency
Long Island Science Center	LISC-01	40.92237, -72.71236	Less than 50	Tanger Mall Dr	Ozone, PM, Field Parameters	52
John Lombardi Memorial Park	JLMP-02	40.91786, -72.66224	90-95	Roanoke Ave & 1st St	Ozone, PM, Field Parameters	21
Grangebel Park	GBP-03	40.91578, -72.66408	90-95	Peconic Ave & Route 25	Ozone, PM, Field Parameters	21

Wildwood Lake	**WWL-04**	**40.895969, -72.66408**	**80-95**	**Lake Ave**	**Ozone, PM, Field Parameters**	**21**
Indian Island County Park	**IICP-05**	**40-92637, -72.62787**	**70-80**	**Indian Point Rd & Dredging Point R**	**Ozone, PM, Field Parameters**	**21**
Suffolk County Complex	**SCC-06**	**40.91244, -72.66856**	**90-95**	**Center Dr & Center Dr South**		**21**

7 PROJECT SCHEDULE

Task	Start Date	Completion Date
Work plan		April 2021
Final QAPP		May 2023
Equipment Purchase	May 2023	May 2023
Training	May 2023	Ongoing as needed
Sample Collection Begins	Mid-May 2023	Mid-October
Education content development and school outreach	May 2023	October 2023
Community Recruitment	May 2023	July 2023
Interns Hired	May 2023	May 2023
Field Classes Begin	June 2023	October 2023
Monthly Reports Begin	June 2023	February 2024

GIS Map Creation	August 2023	November 2023
Data Analysis	November 2023	December 2023
Participant meeting to review data collected	November 2023	November 2023
Community engagement activities related to the data results	December 2023	February 2024
Invitations and prep for student symposium	January 2024	January 2024
Student symposium	February 2024	February 2024
Data Reports	February 2024	February 2024
Final Reports	February 2024	March 2024

8 QUALITY OBJECTIVES

8.1 REPRESENTATIVENESS

Field data: We will be sampling the areas immediately surrounding the Science Center, as well as local residential areas on Long Island. We have chosen locations for several reasons. Several of the locations were chosen because of their proximity to high traffic areas. Others were chosen on natural preserve areas because of their public access and potential to show differentiation of data in local areas. We will be conducting sampling in one area and the others from May through October to include 3 of the 4 seasons in the data. We recognize that our two-pronged sampling approach will not cover the winter months or the entirety of the spring and fall months, and therefore would not be representative of those months. Existing Data: Depending on the locations selected for air quality monitoring, the data that was collected may not adequately represent our areas of interest. Our area of interest is a rural area that is a combination of farmland and high traffic corridors.

8.2 COMPARABILITY

Field Data: We are using recognized air monitoring equipment for both particulate 2.5micrometers and Ozone sampling standard methods which should be comparable to other

studies. We will collect data at the approved site in Riverhead to compare data and confirm the accuracy of our selected equipment.

8.3 COMPLETENESS

Field Data: We will collect and analyze 100% of air quality samples, with 2 or 3 duplicates. We will collect approximately 2-3 samples each sampling phase. The data will be collected at intervals based on a set schedule. Ideally, we will create an initial schedule that will explore quality variation by time of day and weather.

9 DATA COLLECTION METHODS

9.1 SAMPLING DESIGN

We plan on sampling the air quality of specific locations in the neighborhoods/communities of Long Island. All the sampling locations will be pre-established locations based on the LISC's educational programs with local students and citizen scientists. Volunteers will also be given the opportunity to sample outside pre-established locations based on the volunteer's proximity to the location or individual interest. If any issues with equipment occur in the field, the samplers should contact Cailin Kaller, the Program Manager. If there is an emergency in the field, samplers should dial 911 and then notify any staff member that answers the front desk line at 631-849-6500.

Sampling will occur once a week in each of the locations from mid-May to mid-October. In sample location LISC-01 samples will be taken weekly year-round. and, in the phases described in the project schedule, the frequency of the sampling will be determined by specific equipment requirements. During the months of these phases' volunteers will be sampling specific locations with portable handheld air quality monitors and record PM2 and Ozone. We are purchasing the Aeroqual Portable Handheld Air Quality Monitor.

Samples will be collected weekly, and approximately 2-3 samples will be taken during each sampling event. The results will be in real time and recorded. We will be recording Ozone and Particulate Matter 2.5 micrometers on field data sheets and then downloaded to a PC back in the Science Center when sampling is complete. Field data sheets will be entered into a spreadsheet. No samples will be stored. Additionally, we will hold events where the public can come and try the equipment themselves while we go through the field process and see what the data means.

At every sampling location the wind, temperature and weather conditions will be recorded. Each sampler will take a Field Data sheet and every time they place a piece of equipment and/or go to collect data they will record the temperature, wind, and weather conditions at

that time. Volunteers will be using local weather forecast from apps found on phones or tablets, news, or radio. Additionally, the volunteer can simply record weather conditions as: cloudy or sunny, or overcast, however they would describe the weather at that time. We ask that the volunteers use their own observations to detail weather conditions.

All sample data will be recorded on the template designed for this specific project (see Sec. 12 Field Datasheet). The project on-site manager, assistant manager, and manager will be responsible for an assessment of the data entry.

9.2 EQUIPMENT LIST AND INSTRUMENT CALIBRATION

We will use the Aeroqual Portable Handheld Air Quality Monitors as well as the WEATHERmeter by WeatherFlow to record the field data at the time of sampling. The Weatherflow WEATHERmeter is a miniature weather device used with your smartphone to measure wind, temperature, humidity, and pressure readings. You can record data in a variety of compatible apps including the free Wind & Weather Meter app and share reports instantly via email, SMS, Twitter, Instagram, and more. The Aeroqual Portable Air Quality Monitor allows you to monitor particulates (dust – sizes PM10 and PM2.5) or gas compounds (Ozone) in real-time using interchangeable sensor heads.

All equipment calibration will be done in accordance with the manufacturer's recommended schedule and procedures.

10 ANALYTICAL METHODS

Matrix	Analytical group/parameter	Equipment	Minimum Detection limit	Detection Range	Accuracy	Analytical Preparation & Method SOP Reference
Air	Particulate 2.5mm	Aeroqual S500 with PM2.5/10 sensor head	0.001 mg /m3	0.001-1.000 mg /m3	+/-.005 mg/m^3 +15%	EPA Standards NAAQS standard current level of 12.0 µg/m3
Air	Ozone	Aeroqual S500 with Ozone sensor head	0.001 ppm	0-0.15 ppm	+/-.002 ppm	EPA Standards NAAQS 0.070 parts per million (ppm)
Air	Wind Speed	Weatherflow Weathermeter	.5 mph	.5-125 mph	+/- 0.5%	
Air	Wind Direction	Weatherflow Weathermeter	0°	0°-360°	Position dependent	
Air	Humidity	Weatherflow Weathermeter	0	0-95%	+/-3% up to 85%	
Air	Atmospheric Pressure	Weatherflow Weathermeter	8.9	8.9 to 32.5 inHg	+/- 0.03 inHg, 1mbar	
Air	Temperature	Weatherflow Weathermeter	-10°	-10° to 140° Fahrenheit	+/- 0.7° Fahrenheit	

11 FIELD DATA SHEET

Date_____ (MM/DD/YYYY)
Sampler/Volunteer_____
Location_____ (GPS coordinates/street or neighborhood name)
Weather Conditions Notes_____
Monitoring Equipment ID_____

Sample	Ozone (ppm)	PM 2.5 (mg/m^3)	Temp (F)	Wind Speed (mph) /Direction	Humidity (%)	Pressure (inHg)
Start Time **End Time**						
Start Time **End Time**						
Start Time **End Time**						
Comments/Notes						

12 TRAINING AND SPECIALIZED EXPERIENCE

12.1 TRAINING

For volunteers training will consist of the use of equipment as well as data collection protocols. The volunteers are expected to follow all established protocols and instructions. This includes but does is not limited to: SOP based on manufacturers best practices for the pieces of equipment, established datasheets and proper way to fill them out, any volunteer attendance

and check out sheets. Training will be continuous however the initial training will be about four hours. Volunteers will sign in daily for training and these sign-ins will be kept at the LISC.

12.2 TRAINING DESCRIPTION AND FREQUENCY

Personnel/Groups to be Trained	Description of Training	Frequency of Training
LISC Sampling Staff/ Community Volunteers	Volunteers will be trained in the use of each piece of equipment. They will be trained in how to use them, ideal places to keep them for sampling, and how to store them to preserve sampling data. Additionally, volunteers will be trained in how to fill out and maintain datasheets. Volunteers will be given a hands-on training session for each piece of equipment.	Training will occur upon approval of the QAPP. Volunteers and staff will need to attend two (2) meetings before using equipment. There will be monthly meetings with the volunteers. If necessary, retraining will be done. We understand there may be attrition in volunteers. New volunteers will also be trained as necessary.
LISC Project Managers	The LISC team will be trained to use all pieces of equipment. The Intern will also be trained in data collection and data management	Training will occur upon the approval of the QAPP. As well at any other point seemed fit.

12.3 VOLUNTEER EQUIPMENT USE SHEET

Citizen Science Volunteer Equipment Use

	Volunteer Name	Equipment	Date	Duration	Date Returned	Phone	Signature
1.							
2.							
3.							
4.							

5.							
6.							
7.							

12.4 SPECIALIZED EXPERIENCE

No specialized experience will be needed nor required for the equipment. The use of all other equipment will be demonstrated by the LISC project managers.

13 ASSESSMENTS AND OVERSIGHTS

Assessment Type	**Frequency**	**What**	**Oversight**	**How it is Addressed**
Data checks	1/Month after Each data collection	Field entries into datasheets	Cailin Kaller Judy Rentas Anna Lando	Confirm accuracy
Equipment Use Field/Data Collection	Every 4th Thursday of the Month	Volunteer's understanding how to use the equipment	Cailin Kaller Judy Rentas Anna Lando	Retrain in use of the equipment and how to collect data
Data Entry	1/Month after Each data collection	Intern's Data Entry is it equal to the field work	Cailin Kaller Judy Rentas Anna Lando	Go over process, goals, and expectations

14 DATA MANAGEMENT

14.1 FIELD DATA

All data from the field will be recorded/documented on pre-printed datasheets. At the end of each monitoring schedule, either based on our own procedure or the SOP that is required with the equipment, the datasheets will be collected and entered excel in spreadsheets. This input data will be compiled for later use on a GIS webpage. The data will be checked regularly for accuracy at every change of step. The field datasheets and other required paperwork are necessary for accurate data collection and analysis. All original datasheets will be stored in the

LISC office for five years after the completion of the project. Existing Air monitoring data will be obtained from the AirNow NowCast AQI and Concentration data available online in Baiting Hollow, NY and Holtsville, NY. The Baiting hollow location collects Ozone only and the Holtsville station collects Ozone and PM. The main limitation is the distance from our sampling areas with the closest monitor being about 4 miles away from our closest sampling location and the Holtsville monitor being more than 21 miles away. This data will be reviewed and added for a comparison. The spreadsheet data will be stored in LISC cloud data as well as within our secured server with the files backed up each evening.

15 DATA REVIEW AND USABILITY

15.1 DATA REVIEW

Data Quality Checks: Field Lab	Data Quality Checks: Data Management
Assess monitoring performed in comparison to SOP or QAPP field lab procedures	Check data entry sheet for any missing data
Assess calibrations performed on equipment	Check calibration sheets for any errors
Assess and determine that the data meets acceptance criteria	Check data collections and entry for any errors
Record the procedure for supplementation or correction of incomplete or inconclusive data	Record the entries with insufficient data and the procedure for supplementation or correction of incomplete or inconclusive data. Relocate any irreparable or unusable datasets to a folder separate from the veritable data

Volunteers are expected to follow training instructions, failure to do so will result in skewed data that cannot be used in analysis for the final report. In the chance of skewed data, the sample would have to be retaken under similar conditions. This resampled data would be used in the report with a note that it was a repeat sample. All data issues identified will be discussed and reviewed between the PM(s), QAM, and the LISC staff. This discussion will include whether the data can still be used for the general purpose of the project. If such data is still included, it will be added to any reports or discussion distributed throughout the community with limitations expressed.

16 REPORTING

The Project Manager is responsible for submitting the semi-annual and final report to EPA as per their requirements. Additionally, the Program Assistant is responsible for submitting monthly reports to the Project Managers. Below is the criteria to be included in the report. The Project Managers will be discussing and reporting to the LISC board current progress, future objectives, and options for recommendations and questions.

16.1 MONTHLY REPORT

Current Progress: Include: Data trends, Sampling incidents, Trends and variances in sampling time and conditions, Equipment updates and quality checks, Data quality checks and corrective actions, and any additional information relevant to the study	Response:
Future Objectives Include: Plans and procedure for any upcoming sampling events, and any novel data that will be incorporated into the study and collected for the remainder of the study	Response:
Future Recommendations Include: Recommendations for any adjustments to the study to be incorporated the next time it is repeated including novel testing parameters, testing sites, methods, equipment, or other criteria for the experimental design	Response:
	Report Prepared By: Date Submitted:

17 APPENDIX

17.1 SOP

We will use the operating procedures outlined in the user manual for taking the Ozone and PM 2.5 samples. The manual can be found here on our website: https://static1.squarespace.com/static/5a032784fe54efc8a2b5b858/t/646278770800077e6a4607ea/1684174968907/Aeroqual+Portable+Air+Quality+Monitor+User+Guide+%282%29.pdf.

Sampling Staff will first confirm they are in the correct GPS location, then measure the weather conditions using the WEATHERmeter. The fan simply needs to be plugged into a device that has the app downloaded and the measurements are recorded in the app.

Step for taking the sample:

1) Find the GPS locations designated for the sample. Verify you are in the correct spot and check your surroundings to ensure safe sampling. One staff member should sample and the other should record the data.
2) Take the weather measurements with the WEATHERmeter and record the data on the provided sheet.
3) Follow the instructions for the Aeroqual S500 and take the measurements for Ozone and PM 2.5. You should repeat the test two additional times and record those results.
4) Ensure all data has been properly entered onto the sheets.
5) Repack your equipment fully into the cases and move to the next sample site.