DOCKETED	
Docket Number:	20-RENEW-01
Project Title:	School Energy Efficiency Stimulus Program
TN #:	236674
Document Title:	Coalition for Adequate School Housing (CASH) Comments - School Energy Efficiency Stimulus Program
Description:	N/A
Filer:	System
Organization:	Coalition for Adequate School Housing (CASH)
Submitter Role:	Applicant Consultant
Submission Date:	2/5/2021 2:29:12 PM
Docketed Date:	2/5/2021

Comment Received From: Coalition for Adequate School Housing (CASH)
Submitted On: 2/5/2021
Docket Number: 20-RENEW-01

School Energy Efficiency Stimulus Program

Additional submitted attachment is included below.

CALIFORNIA'S
COALITION
for ADEQUATE
SCHOOL HOUSING℠

February 5, 2021

Docket #: 20-RENEW-01
Project Title: School Energy Efficiency Stimulus Program

Dear Commissioners and Energy Commission Staff:

The Coalition for Adequate School Housing (CASH) and the CASH Maintenance Network (CMN) strongly supported AB 841 (Ting) in the Legislature and were pleased when the Governor signed it into law because we believe that healthy air, water and energy efficiency and resiliency are critical components of a healthy learning environment and reopening schools. The SRVEVR and SNPFA programs can help K-12 schools achieve these critical objectives. CASH and the CMN would like to work with you to ensure that schools can access this program in a timely manner to conduct assessments, replace filters, make repairs, install CO^2 monitors, and access funding for larger system replacements if it is available in later funding rounds. We appreciate the opportunity to outline our priorities, express our concerns, and offer our expertise in K-12 school facilities and maintenance as the programs are developed.

In addition, although the focus of this letter is SRVEVR program due to time constraints, CASH believes the SNPFA program is important and allows K-12 schools to ensure clean drinking water by providing funding to upgrade out of code plumbing fixtures. CASH has been a leader in water use policy in educational environments, and was involved in AB 746 and subsequent legislative and state agency efforts to improve water quality for K-12 schools. We offer our expertise in school water policy as the Guidelines are developed.

<u>General K-12 School Concerns</u>
Following the intent of the bill, CASH believes there is wide agreement among stakeholders and the public to get projects going as soon as possible – creating a program that provides incentives and resources, rather than rigid mandates, will help provide this flexibility. In addition, we believe it is critical to make the rules of reimbursements very clear as soon as possible. AB 841 states that qualifying projects can be reimbursed back to August 1, 2020, and schools are ready to assess, repair and upgrade their HVAC systems as necessary, but uncertainty about the details of qualifying projects and reimbursements causes schools to hesitate to initiate projects.

More broadly, K-12 schools concerned about ending up in a situation where they have assessed and identified the deficiencies with their current HVAC infrastructure, but do not have access to sufficient funds to make the necessary upgrades. In addition, schools are concerned about applying new state standards to very old, inadequate and

often nonexistent HVAC infrastructure. Finally, schools are concerned about the potential for a complicated application process and unanticipated costs. In plain terms, if the final program presents schools with too many liabilities and not enough resources, many will hesitate to participate.

Specific Concerns and Recommendations

The following are concerns and recommendations from our school district members. While it is not an exhaustive list, it is the most current information from school districts:

- CO^2 Monitors - CO^2 monitors in all classrooms is a new requirement for K-12 schools and will be a challenge. Paying for and installing monitors is one challenge; knowing how to manage the data is another. *Our school facility and M&O experts can assist you with the technical aspects of this provision which will be critical*.
- Replacement of old systems will improve Indoor Air Quality (IAQ) but will likely use more energy - this needs to be taken into account as the program is developed.
- Allow funding to be used to hire consultants.
- Clarify that procurement for services can be done by competitive selection.
- Clarify that districts who receive service from one or more of the service providers are eligible for participation even if they receive some services from municipal utilities.
- Estimate the total cost for assessment if all eligible school districts apply.
- Clarify how program will work for portable classrooms on land that is leased or otherwise not owned by the districts.

Technical Assistance

K-12 schools are the users for this program and we can assist the CEC on technical matters related to these and other school-specific issues. In addition, attached for your reference is a letter from Rex Wang (LEAF Engineering) that provides more detailed technical comments including a mark-up for your reference.

- K-12 school bidding and RFP process, contractor estimates, etc. – Don't reinvent the wheel.
- Access to K-12 school facility and maintenance experts who have installed and are currently monitoring CO^2 levels in all classrooms in advance of the requirement.
- Is the phased approach for project eligibility a barrier to retrofit projects?
- Could the application tiers discourage large LEAs from including all schools?

- What is the estimated cost for the HVAC assessment and maintenance required by the SRVERV program?
- What are methods for verifying contractor estimates?
- Cost vs Benefit analysis of different CO^2 monitoring systems.
- CAN SRVERV projects be started/completed in the next 12-18 months?
- How much time will an LEA need to develop an application based on the information needed (contractor estimates, all sites in one application?)

Thank you for the opportunity to comment on the SRVEVR and SNPFA programs. We propose a Zoom meeting with your staff to assist you as the Guidelines are developed.

Sincerely,

Ian Padilla
CASH Legislative Advocate

cc: David Hochschild, Chair, California Energy Commission
Janea A. Scott, Vice Chair, California Energy Commission
Karen Douglas, Commissioner, California Energy Commission
J. Andrew McAllister, Ph.D., Commissioner, California Energy Commission
Patty Monahan, Commissioner, California Energy Commission
Ida Clair, Acting State Architect, Department of the State Architect
Juan Mireles, Director of School Facilities & Transportation Services Division, Department of Education
Kazukiyo Kumagai, FRSPH, Ph.D., MPH, Meng, Chief, Indoor Air Quality Program, Department of Public Health
Sophia Kwong, COS, Assembly Member Patrick O'Donnell
Rex Wang, LEAF Engineers

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Ontario, CA 91761
Phone: 909-390-3111
leafengineers.com

February 5, 2021

RE: School Reopening Ventilation and Energy Efficiency Verification and Repair Program (SRVEVR) – California Energy Commission Draft Guidelines

California Energy Commission,

Thank you for allowing LEAF Engineers to provide comment on the AB841 School Reopening Ventilation and Energy Efficiency Verification and Repair Program (SRVEVR) Draft Guidelines.

School safety is of upmost importance and with the recent COVID-19 concerns, building Heating Ventilation and Air Conditioning plays a critical role. LEAF Engineers commends the Commission for expediting the development of these guidelines.

Please find attached a markup of various sections. These comments are derived from the perspective of a Consulting Engineer and Project Owner (District). Although the guidelines are very thorough and detailed, there are some major concerns about logistics/implementation and value to the district.

Overall, concerns are encompassed around the two major factors.

1. Can the guideline be properly implemented as stated?
    a. Example: Chapter 2-A-2 “Ventilation” requires qualified testing personnel to verify air flow rates. The section is very detailed and may result in a very lengthy scope of work (similar to performing TAB on an entire new school). With the anticipated schedule of implementation and overall size of scope, there may be a challenge with available qualified agencies.
2. Will the report from this assessment/guideline be properly interpreted by the community?
    a. Example: Chapter 2-A-1 “Filtration” requires MERV13 filters but later in section 2-A-1-a allows the engineer to determine the highest MERV filtration. If the initial statement is not meet by a facility but the second statement is met, the guideline is satisfied. However, the public may interpret that as a “failure.”

Please reference the attachments for more detailed comments.

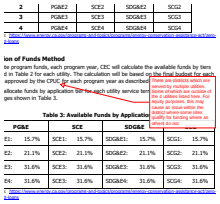
LEAF Engineers thanks you for the amazing opportunity to collaborate with the Commission and welcome a productive discussion regarding the Assembly Bill 841 Guidelines.

Sincerely,

Rex Wang, P.E., LEED AP
Director, LEAF Engineers

cc: *Roy Montalbano, PBK-WLC*
Don Richards, III, P.E., CxA, LEAF Engineers
Garen Lencioni, P.E., F.P.E, CPD, LEED AP, LEAF Engineers

rwang (13)



Subject: Callout
Page Label: 17
Status:
Author: rwang
Date: 2/5/2021 11:52:29 AM
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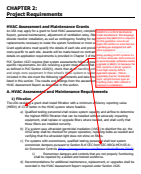
There are districts which are served by multiple utilities. Some of which are outside of the 4 utilities listed here. For equity purposes, this may cause an issue within the district where some sites qualify for funding where as others do not.



Subject: Callout
Page Label: 20
Status:
Author: rwang
Date: 2/5/2021 11:09:56 AM
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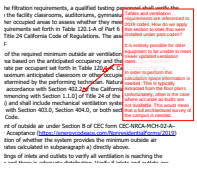
MERV13 is a 2019 Mechanical Code requirement. The language appears that MERV13 is required for this guideline. How do we apply this section to sites that are operating as-designed but with older equipment.

Many existing HVAC systems do not have adequate static pressure to accommodate a filtration media upgrade to MERV 13 because the filter sections in those systems have high velocity airflow approach speeds. This is especially true for 'residential style' upright furnace-type air handling units, often utilized in classroom installations.



Subject: Callout
Page Label: 21
Status:
Author: rwang
Date: 2/5/2021 11:09:37 AM
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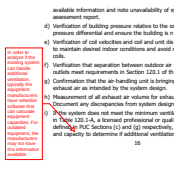
Tables and ventilation requirements are referenced to 2019 codes. How do we apply this section to sites that were installed under past codes?

It is entirely possible for older equipment to be unable to meet newer updated ventilation rates.

In order to perform this calculation space information is needed. This is typically extracted from the floor plans. Unfortunately, often is the case where accurate as-builts are not available. This would mean that a full architectural survey of the campus is needed.



Subject: Callout
Page Label: 21
Status:
Author: rwang
Date: 2/5/2021 12:27:38 PM
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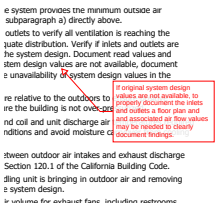
In order to analyze if the existing system can handle additional ventilation, typically the equipment manufacturers have selection software that can calculate equipment capacities. For outdated equipment, the manufacturers may not have this information available.



Subject: Callout
Page Label: 21
Status:
Author: rwang
Date: 2/5/2021 11:14:48 AM
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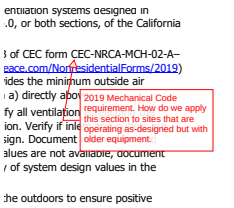
If original system design values are not available, to properly document the inlets and outlets a floor plan and and associated air flow values may be needed to clearly document findings.



Subject: Callout
Page Label: 21
Status:
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Date: 2/5/2021 12:26:07 PM
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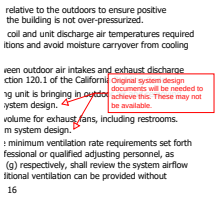
2019 Mechanical Code requirement. How do we apply this section to sites that are operating as-designed but with older equipment.

Subject: Callout
Page Label: 21
Status:
Author: rwang
Date: 2/5/2021 11:31:11 AM
Color:

These sections appear to need a Test Adjust and Balance contractor to perform a full scope of work similar to the construction of a new school.

This is a significant amount of work and will likely carry a large portion of the budget.

The additional challenge of this is the availability of qualified TAB agencies and their backlog. This may drive the cost of TAB services higher.



Subject: Callout
Page Label: 21
Status:
Author: rwang
Date: 2/5/2021 11:18:59 AM
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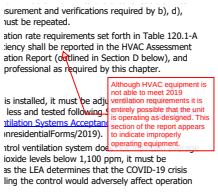
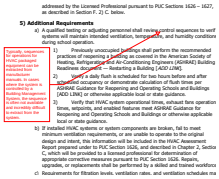
Original system design documents will be needed to achieve this. These may not be available.



Subject: Callout
Page Label: 22
Status:
Author: rwang
Date: 2/5/2021 11:21:49 AM
Color:

Although HVAC equipment is not able to meet 2019 ventilation requirements it is entirely possible that the unit is operating as-designed. This section of the report appears to indicate improperly operating equipment.



Subject: Callout
Page Label: 23
Status:
Author: rwang
Date: 2/5/2021 11:36:53 AM
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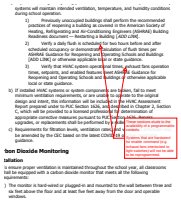
Typically, sequences for operations for HVAC packaged equipment can be extracted from manufacturer manuals. In cases where the system is controlled by a Building Management System, the sequence is often not available and incredibly difficult to extract from the system.



Subject: Callout
Page Label: 23
Status:
Author: rwang
Date: 2/5/2021 11:42:01 AM
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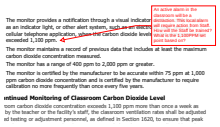
These sections elude to the availability of a programmable controls.

Systems that are hardwired for enable command (e.g. exhaust fans interlocked to light switches) will not be able to be reprogrammed.



Subject: Callout
Page Label: 24
Status:
Author: rwang
Date: 2/5/2021 11:47:15 AM
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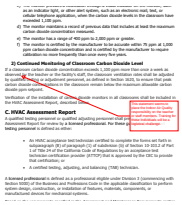
An active alarm in the classroom will be a distraction. This local alarm will require action from Staff. How will the Staff be trained? What is the 1,100PPM set point based on?



Subject: Callout
Page Label: 24
Status:
Author: rwang
Date: 2/5/2021 11:49:46 AM
Color:

This statement seems to place the Indoor Air Quality responsibility on the teacher or staff members. Training for these individuals will be a logistical challenge.

DOCKETED	
Docket Number:	20-RENEW-01
Project Title:	School Energy Efficiency Stimulus Program
TN #:	236369
Document Title:	SRVEVR Program Draft Guidelines
Description:	SRVEVR Program Draft Guidelines for Discussion at January 22, 2021 Workshop
Filer:	Theresa Daniels
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	1/20/2021 12:33:26 PM
Docketed Date:	1/20/2021

CALIFORNIA ENERGY COMMISSION

California Energy Commission

STAFF DRAFT GUIDELINES -
FOR DISCUSSION AT JANUARY 22, 2021 WORKSHOP

School Reopening Ventilation and Energy Efficiency Verification and Repair Program Guidelines

First Edition – Effective xx-xx-2021

Gavin Newsom, Governor
January 2021 | CEC-XXX-XXXX-XXX

LEAF ENGINEERS
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ABSTRACT

The School Reopening Ventilation and Energy Efficiency Verification and Repair (SRVEVR) Program is one of the two grant programs under the School Energy Efficiency Stimulus Program, established by Assembly Bill 841 (Ting, Chapter 372, Statutes of 2020). The SRVEVR Program authorizes funding to local education agencies for assessing, maintaining, and repairing or upgrading school ventilation systems to ensure that systems meet current classroom ventilation requirements. These guidelines provide requirements for program participation including eligible applicants and projects, the application process, funding awards and distribution, as well as project documentation and reporting requirements. The California Energy Commission envisions rolling out the SRVEVR Program in phases to ensure prioritization of schools in underserved communities. The first edition of these guidelines addresses the initial phase of program awards, which are limited to projects for schools in an underserved community. Additional eligibility under the School Reopening Ventilation and Energy Efficiency Verification and Repair Program Guidelines may be addressed in update(s) to these guidelines as necessary.

Keywords: School Energy Efficiency Stimulus, SEES, School Reopening Ventilation and Energy Efficiency Verification and Repair Program, grant, energy efficiency, school, local education agency, underserved community, HVAC, ventilation, assessment

Please use the following citation for this report:

Bennet, O'Shea, Theresa Daniels, and Ryan Kastigar. 2021. *School Reopening Ventilation and Energy Efficiency Verification and Repair Program Guidelines*. California Energy Commission. Publication Number: CEC-XXX-2021-XXX.

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CHAPTER 1:
Program Overview

A. Introduction

The School Energy Efficiency Stimulus (SEES) Program, established by Assembly Bill (AB) 841 (Ting, Chapter 372, Statutes of 2020) provides grants to local educational agencies (LEAs), as defined in Table 1 below, to assess, maintain, adjust, repair, or upgrade heating, ventilation, and air conditioning (HVAC) systems in schools. The SEES Program also provides grants to LEAs and California state agencies to replace noncompliant plumbing fixtures and appliances. AB 841 requires the California Energy Commission (CEC) as program administrator to design, administer, and implement the program in collaboration with the utilities funding for the program. The SEES Program consists of the School Reopening Ventilation and Energy Efficiency Verification and Repair (SRVEVR) Program and the School Noncompliant Plumbing Fixture and Appliance (SNPFA) Program. These guidelines describe the program design, application process, and reporting requirements for the SRVEVR Program. The program requirements of the SNPFA Program are provided in separate guidelines.

These SRVEVR Program Guidelines provide potential applicants with information on how the program will be structured, who is eligible to apply for funding, and program requirements. All grants applicants and recipients are required to follow all program requirements including those outlined in Public Utilities Code (PUC) Division 1, Part 1, Chapter 8.7 and further program requirements as outlined in these guidelines.

The SEES program is established as part of each of the utilities' energy efficiency portfolios as a joint program among all the participating utilities that and shall be consistent across the utility territories. The SRVEVR and SNPFA are separate programs, and grant awards will be made specific to each program.

The CEC envisions rolling out the SRVEVR Program in phases to ensure prioritization of schools in underserved communities, as defined in Table 1 below. These guidelines currently address initial program awards, which are limited to projects for schools identified as being in an underserved community. The CEC will continually evaluate the effectiveness of the SRVEVR Program Guidelines in achieving the purpose of AB 841 and publish new editions to update eligibility and prioritization as funding is available. These evaluations will include updates necessary to address schools with a boundary within 500 feet of the edge of the closest traffic lane of freeway or other busy traffic corridor or within 1,000 feet of a Clean Air Act (42 U.S.C. Section 7661 et seq.) Title V permit facility and schools outside underserved communities. Furthermore, the first edition only addresses HVAC Assessment and Maintenance Grants to perform assessments, assessment reports, general maintenance, adjustments of ventilation rates, filter replacements, carbon dioxide monitor replacement, and an additional 20 percent of the requested amount is earmarked for repairs, upgrades, or replacements necessary to make the systems functional or more energy efficient. The continual evaluation of SRVEVR Program Guidelines will include examining updates necessary to address recommended repairs, upgrades, or replacements that are greater than the contingency amount provided in the

HVAC Assessment and Maintenance Grants. Grants for work in excess of the 20 percent contingency are referred to as HVAC Upgrade and Repair Grants.

B. Keywords/Terms

Table 1 identifies the key words or terms used in the SRVEVR Guidelines.

Table 1: Key Words and Terms

Word/Term	Definition
AB	Assembly Bill
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers
ATTCP	Acceptance Test Technician Certification Provider. The ATTCP program was developed to support the California Building Energy Efficiency Standards. The requirements for ATTCPs can be found on the ATTCP webpage: https://www.energy.ca.gov/programs-and-topics/programs/acceptance-test-technician-certification-provider-program
CEC	California Energy Commission
CEQA	The California Environmental Quality Act found in California Public Resources Code § 21000 et seq., and the CEQA Guidelines, promulgated by the California Resources Agency, California Code of Regulations Title 14, Section 15000 et seq. CEQA generally requires state and local government agencies to inform decision makers and the public about the potential environmental impacts of proposed projects, and to reduce those environmental impacts to the extent feasible.
Certified TAB Technician	A technician certified to perform testing, adjusting, and balancing of HVAC systems by the Associated Air Balance Council (AABC), the National Environmental Balancing Bureau (NEBB), or the Testing, Adjusting and Balancing Bureau (TABB).
CPUC	California Public Utilities Commission
DIR	California Department of Industrial Relations
SRVEVR Program Guidelines	School Reopening Ventilation and Energy Efficiency Verification and Repair Program Guidelines
HVAC	Heating, ventilation, and air conditioning
HVAC Assessment and Maintenance Grant	A grant provided as part of the SRVEVR Program to perform HVAC assessments, completion of an HVAC assessment report, general maintenance, adjustments of ventilation rates, filter replacements, carbon dioxide monitor installation. This grant includes contingency funding of an additional 20 percent of the requested amount for

Word/Term	Definition
	repairs, upgrades, or replacements necessary to make the systems functional or more energy efficient.
HVAC assessment report	A report prepared by a qualified testing personnel or qualified adjusting personnel as described in Chapter 2.C. of these guidelines for review by a licensed professional. The HVAC assessment report must be submitted to the CEC as part of the final document package as specified in Chapter 4.A of these guidelines.
HVAC verification report	A report prepared by an LEA upon completion of all work funded by a SRVEVR grant as described in Chapter 2.D. of these guidelines. The HVAC Verification Report must be submitted to the CEC as part of the final document package as specified in Chapter 4.A of these guidelines.
LEA	Local educational agency. A school district as defined in Section 41302.5 of the Education Code or a charter school that has been granted a charter pursuant to Part 26.8 (commencing with Section 47600) of Division 4 of Title 2 of the Education Code.
Licensed professional	A professional eligible under Division 3 (commencing with Section 5000) of the Business and Professions Code in the applicable classification to perform system design, construction, or installation of features, materials, components, or manufactured devices for mechanical systems.
MERV	Minimum efficiency reporting value
Notice of award	CEC staff will notify the local educational agency following approval of a grant application.
Notice of funding availability	A notice issued by the CEC to identify anticipated funding that will be made available in each round of School Energy Efficiency Stimulus Program grants. The notice will provide relevant application dates and any funding restrictions applicable to that round of funding.
PPM	Parts per million
Project	"Project" refers to all HVAC assessments, general maintenance, adjustments of ventilation rates, filter replacements, carbon dioxide monitor installations, repairs, upgrades, and replacements that are funded by an HVAC Assessment and Maintenance Grant.
PUC	Public Utilities Code
Qualified adjusting personnel	Means either of the following: (1) A certified testing, adjusting, and balancing (TAB) technician. (2) A skilled and trained workforce under the supervision of a TAB Technician.

Word/Term	Definition
Qualified testing personnel	Means either of the following: (1) An HVAC acceptance test technician certified to complete the forms set forth in subparagraph (B) of paragraph (1) of subdivision (b) of Section 10-103.2 of Part 1 of Title 24 of the California Code of Regulations by an Acceptance Test Technician Certification Provider (ATTCP) that is approved by the Energy Commission to provide that certification. (2) A certified testing, adjusting, and balancing (TAB) technician.
SEES Program	School Energy Efficiency Stimulus Program established pursuant to Section 1610 of Chapter 8.7 Article 1 of the PUC.
Service territory requirements	School sites must be located in a utility's service territory to receive a School Energy Efficiency Stimulus Program grant. PUC Section 1615(c) requires that the CEC ensures that moneys from each utility for the School Energy Efficiency Stimulus Program are used for projects located in the service territory of that utility from which the moneys are received.
Skilled and trained workforce	Has the same meaning as set forth in Section 2601 of the Public Contract Code.
SNPFA Program	School Noncompliant Plumbing Fixture and Appliance Program as specified in Article 4 of Chapter 8.7 commencing with Section 1630 of the PUC.
SRVEVR Program	School Reopening Ventilation and Energy Efficiency Verification and Repair Program as specified in Article 3 of Chapter 8.7 commencing with Section 1620 of the PUC.
TAB	Testing, adjusting, and balancing
Underserved community	A community that meets one of the following criteria: (1) Is a "disadvantaged community" as defined by subdivision (g) of Section 75005 of the Public Resources Code. (2) Is included within the definition of "low-income communities" as defined by paragraph (2) of subdivision (d) of Section 39713 of Health and Safety Code. (3) Is within an area identified as among the most disadvantaged 25 percent in the state according to the California Environmental Protection Agency and based on the most recent California Communities Environmental Health Screening Tool, also known as CalEnviroScreen.

Word/Term	Definition
	(4) Is a community in which at least 75 percent of public school students in the project area are eligible to receive free or reduced-price meals under the National School Lunch Program. (5) Is a community located on lands belonging to a federally recognized California Indian tribe.
HVAC Upgrade and Repair Grant	A grant provided as part of the SRVEVR Program for repairs, upgrades, or replacements if the cost is greater than the 20 percent contingency amount provided in the Assessment and Maintenance Grant.
Utility or utilities	Means both of the following: (1) An electrical corporation with 250,000 or more customer accounts within the state. (2) A gas corporation with 400,000 or more customer accounts within the state. This currently includes Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), San Diego Gas & Electric Company (SDG&E), and Southern California Gas Company (SCG).
UVGI	Ultraviolet germicidal irradiation is an established means of disinfection and can be used to prevent the spread of certain infectious diseases. Low-pressure mercury (Hg) discharge lamps are commonly used in UVGI applications and emit shortwave ultraviolet-C radiation.

C. Budget

Funding for the SEES Program comes from the energy efficiency budgets of California's large electric and gas investor-owned utilities, specifically electrical corporations with 250,000 or more customer accounts within the state and gas corporations with 400,000 or more customer accounts within the state as determined by the California Public Utilities Commission. These utilities include Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), San Diego Gas & Electric Company (SDG&E), and Southern California Gas Company (SCG).

The SEES Program accumulates funding in 2021, 2022, and 2023. The annual funding for the SEES Program is derived from a combination of current year available funds and prior year unspent and uncommitted funds as described in PUC Section 1615(a). Each year, from 2021 through 2023, the utilities will prepare a joint advice letter detailing that year's budget for California Public Utilities Commission (CPUC) approval. CEC will provide notices of annual budget accrual, total program funding, and available funds at least once per year. Funds are allocated to the two grant programs, with 75 percent to SRVEVR and 25 percent to SNPFA.

Funding awards must be distributed proportionally to each utility area based on the proportion of program funds contributed by that utility and used for projects located in the utility's service territory. All projects, reporting, and reconciliation must be completed, and any unused funds returned to the CEC. Future guideline updates will include instructions and encumbrance deadlines for LEAs to return unused funds to the CEC. Following PUC Section 1615(e), all unused funds must be returned to each utility by December 1, 2026.

D. SRVEVR Program Eligibility

Eligible Applicants

California LEAs are the eligible applicants for grants. An LEA is defined as either:

- A school district as defined in Section 41302.5 of the Education Code, which includes:
    - County boards of education.
    - County superintendents of schools.
    - Direct elementary and secondary level instructional services provided by the state, including the Diagnostic Schools for Neurologically Handicapped Children as established under Article 1 (commencing with Section 59200) of Chapter 3 of Part 32 of the Education Code.
- A charter school that has been granted a charter following Part 26.8 (commencing with Section 47600) of Division 4 of Title 2 of the Education Code.

California LEAs may apply for funding to be used for projects at schools that are located in the service territory of utilities. LEAs must demonstrate that each site meets service territory requirements. CEC staff will verify submitted information as needed to ensure compliance with the service territory requirements.

Third parties may complete applications on behalf of LEAs but may not sign or enter into agreements on behalf of LEAs. No funding will be provided for the costs of completing an application for funding or for third-party consultant fees for implementing programs.

Utilities Service Territories and Application Tiers

PUC Section 1615(c) states that CEC shall ensure that funds from each utility are used for projects located in the service territory from which the money is received; for example, the funds collected from PG&E will be distributed in PG&E territory.

For implementing the SRVEVR Program, CEC is using an approach developed for the CEC's Energy Conservation Assistance Act — Education Subaccount (ECAA-Ed) Competitive Loan Program to ensure that program funds are available to a range of LEAs within each utility's service territories across the state. LEAs in each service territory are divided into four tiers based on LEA student enrollment. LEA size tiers are detailed below in Table 1.

Table 1: LEA Tier by Enrollment Numbers

Tier	Number of Students
1	Less than 1,000
2	Between 1,000 and 2,000
3	Between 2,001 and 10,000
4	More than 10,000

Source: https://www.energy.ca.gov/programs-and-topics/programs/energy-conservation-assistance-act/zero-interest-loans

LEAs will be included in one of the application tiers as detailed in Table 2 corresponding to a utility's service territory and the size of the LEA.

Table 2: LEA Application Tiers

Tier	PG&E	SCE	SDG&E	SCG
1	PG&E1	SCE1	SDG&E1	SCG1
2	PG&E2	SCE2	SDG&E2	SCG2
3	PG&E3	SCE3	SDG&E3	SCG3
4	PG&E4	SCE4	SDG&E4	SCG4

Source: https://www.energy.ca.gov/programs-and-topics/programs/energy-conservation-assistance-act/zero-interest-loans

Allocation of Funds Method

To allocate program funds, each program year, CEC will calculate the available funds by tiers presented in Table 2 for each utility. The calculation will be based on the final budget for each utility as approved by the CPUC for each program year as described in PUC 1615(a)(1)(A).

CEC will allocate funds by application tier for each utility service territory using the percentages shown in Table 3.

There are districts which are served by multiple utilities. Some of which are outside of the 4 utilities listed here. For equity purposes, this may cause an issue within the district where some sites qualify for funding where as others do not.

Table 3: Available Funds by Application Tier

Tier	PG&E		SCE		SDG&E		SCG	
1	PG&E1:	15.7%	SCE1:	15.7%	SDG&E1:	15.7%	SCG1:	15.7%
2	PG&E2:	21.1%	SCE2:	21.1%	SDG&E2:	21.1%	SCG2:	21.1%
3	PG&E3:	31.6%	SCE3:	31.6%	SDG&E3:	31.6%	SCG3:	31.6%
4	PG&E4:	31.6%	SCE3:	31.6%	SDG&E4:	31.6%	SCG4:	31.6%

Source: https://www.energy.ca.gov/programs-and-topics/programs/energy-conservation-assistance-act/zero-interest-loans

CEC will provide the amount of funds available for each utility's service territory and the funds available in each application tier in the notice of funding availability as described in Chapter 3.A, which will be issued for each funding round.

Funds Not Used in an Application Tier

In a funding round where CEC does not fully disburse funds for an application tier, at the end of the funding round the CEC will evaluate projected program participation in the relevant tier and either hold the funds over or equally reallocate those undisbursed funds to other application tiers in the same utility service territory.

Eligible Schools

LEAs may apply for grants to conduct activities at schools that the LEA:

- Owns.
- Leases from a school district.
- Has a lease for a duration exceeding the useful life of the improvements.

LEAs must provide proof of ownership or complying leases.

Number of Applications

An LEA may submit only one application for SRVEVR funds in each funding round. All sites to be addressed in the applicable round of funding must be included in one application, and for the initial round of funding, only sites meeting one or more of the definitions for underserved communities may be included.

Relationship to SNPFA Applications and Awards

CEC staff anticipates that SRVEVR and SNPFA grant awards will be awarded under separate processes. LEAs may choose to participate in the SRVEVR program only, the SNPFA program only, both programs, or neither program. Each LEA may separately submit one application for SRVEVR funds and an application for SNPFA funds in each funding round.

Multiple Sources of Funding

Other sources of funds separate from the SRVEVR Program may be available or may become available for projects that seek to improve indoor air quality in schools throughout California. Participation in another program does not prevent participation in SRVEVR. However, an LEA may not receive funds to cover the same scope of work from more than one program. As part of the grant award, an LEA receiving SRVEVR funds must certify that the SRVEVR funds will be used for distinct, eligible costs as described in these guidelines and that no other funds will be received or used for the same costs from another funding source. CEC reserves the right to review and audit all grant and funding award documents to ensure compliance with this requirement.

E. Priority Awards

PUC Section 1612 requires that SRVEVR program offer funds to schools that are in an underserved community before those schools that are not in an underserved community. The SRVEVR Program defines an underserved community as meeting one of the following criteria:

A. Is a "disadvantaged community" as defined by Public Resources Code Section 75005(g)[1]

1 Public Resources Code Section 75005(g) currently defines "disadvantaged community" as a community with a median household income less than 80 percent of the statewide average.

B. Is included within the definition of "low-income communities" as defined by Health and Safety Code Section 39713(d)(2)[2]

C. Is within an area identified as among the most disadvantaged 25 percent in the state according to the California Environmental Protection Agency and based on the most recent California Communities Environmental Health Screening Tool, also known as CalEnviroScreen

D. Is a community in which at least 75 percent of public school students in the project area are eligible to receive free or reduced-price meals under the National School Lunch Program

E. Is a community located on lands belonging to a federally recognized California Indian tribe

PUC Section 1612 requires that at least 25 percent of SRVEVR projects be in underserved communities.

In addition to the underserved communities listed above, the SRVEVR Program prioritizes schools that have a boundary that is within 500 feet of the edge of the closest traffic lane of a freeway or other busy traffic corridor or within 1,000 feet of a facility holding a permit under Title V of the Clean Air Act (42 U.S.C. Section 7661 et seq.). For this priority, "freeway or other busy traffic corridor" has the same meaning as defined in Education Code Section 17213(d)(9).3

To meet the statutory requirement that schools meeting one or more underserved community criteria be offered funding before other schools, CEC is limiting applications and awards for the initial funding round of HVAC Assessment and Maintenance Grant Awards to schools meeting one or more of the Underserved Community criteria referenced in PUC Section 1601(e) and described in these guidelines.

These guidelines may be updated and additional notice provided as necessary to address additional eligibility.

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2 Health and Safety Code Section 39713(d)(2) defines "low-income communities" as census tracts with median household incomes at or below 80 percent of the statewide median income or with median household incomes at or below the threshold designated as low income by the Department of Housing and Community Development's list of state income limits adopted under Health and Safety Code Section 50093.

3 Education Code Section 17213(d)(9) defines "freeway or other busy traffic corridor" as those roadways that, on an average day, have traffic in excess of 50,000 vehicles in a rural area as defined in Health and Safety Code Section 50101 and 100,000 vehicles in an urban area, as defined in Health and Safety Code Section 50104.7.

CHAPTER 2: Project Requirements

HVAC Assessment and Maintenance Grants

An LEA may apply for a grant to fund HVAC assessment, completion of an HVAC Assessment Report, general maintenance, adjustment of ventilation rates, filter replacement, and carbon dioxide monitor installation, as well as contingency funding for repairs, upgrades, or replacements necessary to make the system functional or more energy efficient.

Grant applications must specify the details of each site and provide contractor estimates for costs specific to each site. Awards will be made based on contractor's estimates. Additional details on application requirements is provided in Chapter 3 of these guidelines.

PUC Section 1623 requires that system assessments follow a prescriptive process and meet specific requirements. An LEA receiving a grant must ensure that qualified testing personnel, as defined in PUC Section 1620(h), check that all air-handling units, rooftop units and unitary and single zone equipment in that school's HVAC system or systems of the HVAC systems included in the site meet the following requirements and take the specified actions for each, as listed in this section. The results and findings from the assessment must be recorded in the HVAC Assessment Report as described in this section.

MERV13 is a 2019 Mechanical Code requirement. The language appears that MERV13 is required for this guideline. How do we apply this section to sites that are operating as-designed but with older equipment.

Many existing HVAC systems do not have adequate static pressure to accommodate a filtration media upgrade to MERV 13 because the filter sections in those systems have high velocity airflow approach speeds. This is especially true for 'residential style' upright furnace-type air handling units, often utilized in classroom installations.

A. HVAC Assessment and Maintenance Requirements

1) Filtration

The LEA receiving a grant shall install filtration with a minimum efficiency reporting value (MERV) of 13 or better in the HVAC system where feasible.

a) Qualified testing personnel shall review system capacity and airflow to determine the highest MERV filtration that can be installed without adversely impacting equipment, shall replace or upgrade filters where needed, and shall verify that those filters are installed correctly.

b) If a system uses ultraviolet germicidal irradiation (UVGI) to disinfect the air, the UVGI lamp shall be checked for proper operation, replacing bulbs as needed and verifying that the ultraviolet light does not shine on filters.

c) For systems with economizers, qualified testing personnel shall test system economizer dampers pursuant to Section B of CEC form CEC-NRCA-MCH-05-A– Air Economizer Controls (https://energycodeace.com/NonresidentialForms/2019).

   1) Economizer dampers and controls that are not properly functioning shall be repaired by a skilled and trained workforce.

d) Recommendations for additional maintenance, replacement, or upgrades shall be recorded in the HVAC Assessment Report required under Section 1626.

2) Ventilation

After completing the filtration requirements, a qualified testing personnel shall verify the ventilation rates in the facility classrooms, auditoriums, gymnasiu restrooms, and other occupied areas to assess whether they meet quirements set forth in Table 120.1-A of Part 6 (Title 24 California Code of Regulations. The asse :

a) Calculation of the required minimum outside air ventilation occupied a ea based on the anticipated occupancy and the ventilation rate per occupant set forth in Table 120.1-A. Ca aximum anticipated classroom or other occupie etermined by the performing technician. Natura accordance with Section 402.2 of the California Part 4 [co ncing with Section 1.1.0] of Title 24 of the) and shall include mechanical ventilation syste with Section 403.0, Section 404.0, or both sect Mechanical Code.

b) Measurement of outside air under Section B of CEC form CEC-NRCA-MCH-02-A– Outdoor Air Acceptance (https://energycodeace.com/NonresidentialForms/2019) and verification of whether the system provides the minimum outside air ventilation rates calculated in subparagraph a) directly abov

c) Survey readings of inlets and outlets to verify all ventilation served zone and there is adequate distribution. Verify if inle balanced within tolerance of the system design. Document deficiencies. If the original system design values are not available, document available information and note unavailability of system design values in the assessment report.

d) Verification of building pressure relative to the outdoors to pressure differential and ensure the building is not over-pre

e) Verification of coil velocities and coil and unit discharge air to maintain desired indoor conditions and avoid moisture ca coils.

f) Verification that separation between outdoor air intakes and exhaust discharge outlets meet requirements in Section 120.1 of the California

g) Confirmation that the air-handling unit is bringing in outdoo exhaust air as intended by the system design.

h) Measurement of all exhaust air volume for exhaust fans, including restrooms. Document any discrepancies from system design.

i) If the system does not meet the minimum ventilation rate requirements set forth in Table 120.1-A, a licensed professional or qualified adjusting personnel, as defined in PUC Sections (c) and (g) respectively, shall review the system airflow and capacity to determine if additional ventilation can be provided without

These sections appear to need a Test Adjust and Balance contractor to perform a full scope of work similar to the construction of a new school.

This is a significant amount of work and will likely carry a large portion of the budget.

The additional challenge of this is the availability of qualified TAB agencies and their backlog. This may drive the cost of TAB services higher.

Tables and ventilation requirements are referenced to 2019 codes. How do we apply this section to sites that were installed under past codes?

It is entirely possible for older equipment to be unable to meet newer updated ventilation rates.

In order to perform this calculation space information is needed. This is typically extracted from the floor plans. Unfortunately, often is the case where accurate as-builts are not available. This would mean that a full architectural survey of the campus is needed.

2019 Mechanical Code requirement. How do we apply this section to sites that are operating as-designed but with older equipment.

If original system design values are not available, to properly document the inlets and outlets a floor plan and and associated air flow values may be needed to clearly document findings.

Original system design documents will be needed to achieve this. These may not be available.

In order to analyze if the existing system can handle additional ventilation, typically the equipment manufacturers have selection software that can calculate equipment capacities. For outdated equipment, the manufacturers may not have this information available.

adversely impacting equipment performance and building indoor environmental quality.

1) If additional ventilation can be provided, a qualified adjusting personnel must adjust ventilation rates to meet the minimum ventilation rate requirements set forth in Table 120.1-A to the extent feasible. After the adjustment, the measurement and verifications required by b), d), and e), directly above, must be repeated.

2) If minimum ventilation rate requirements set forth in Table 120.1-A cannot be met, this deficiency shall be reported in the HVAC Assessment Report, the HVAC Verification Report (outlined in Section D below), and addressed by a licensed professional as required by this chapter.

Although HVAC equipment is not able to meet 2019 ventilation requirements it is entirely possible that the unit is operating as-designed. This section of the report appears to indicate improperly operating equipment.

3) Demand Control Ventilation

a) If a demand control ventilation is installed, it must be adju[illegible] dioxide set point of 800 ppm or less and tested following [illegible] MCH-06-A–Demand Control Ventilation Systems Acceptanc[illegible] (https://energycodeace.com/NonresidentialForms/2019).

1) If the demand control ventilation system does not maintain average daily maximum carbon dioxide levels below 1,100 ppm, it must be disabled until such time as the LEA determines that the COVID-19 crisis has passed, unless disabling the control would adversely affect operation of the overall system.

2) When disabling a demand control ventilation system, the system must be configured to meet the minimum ventilation rate requirements and tested and adjusted to provide a notification through a visual indicator on the monitor, such as an indicator light, or other alert system, such as an electronic mail, text, or cellular telephone application, when the carbon dioxide levels in the classroom have exceeded 1,100 ppm.

b) Recommendations for additional maintenance, replacement or upgrades shall be recorded in the HVAC Assessment Report, described in Chapter 2, Section C below.

4) Coil Condition

a) A qualified testing personnel or a skilled and trained workforce shall verify:

1) Coil condition.

2) Condensate drainage.

3) Cooling coil air temperature differentials (entering and leaving dry bulb).

4) Heat exchanger operation.

5) Drive assembly.

b) If repairs, replacement, or upgrades are necessary, these deficiencies shall be reported in the HVAC Assessment Report and the HVAC Verification Report and

addressed by the Licensed Professional pursuant to PUC Sections 1626 – 1627, as described in Section F. 2) C. below.

5) Additional Requirements

a) A qualified testing or adjusting personnel shall review control sequences to verify systems will maintain intended ventilation, temperature, and humidity conditions during school operation.

Typically, sequences for operations for HVAC packaged equipment can be extracted from manufacturer manuals. In cases where the system is controlled by a Building Management System, the sequence is often not available and incredibly difficult to extract from the system.

1) Previously unoccupied buildings shall perform the recommended practices of reopening a building as covered in the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Building Readiness document — Restarting a Building [*ADD LINK*].

2) Verify a daily flush is scheduled for two hours before and after scheduled occupancy or demonstrate calculation of flush times per ASHRAE Guidance for Reopening and Operating Schools and Buildings [ADD LINK] or otherwise applicable local or state guidance.

3) Verify that HVAC system operational times, exhaust fans operation times, setpoints, and enabled features meet ASHRAE Guidance for Reopening and Operating Schools and Buildings or otherwise applicable local or state guidance.

b) If installed HVAC systems or system components are broken, fail to meet minimum ventilation requirements, or are unable to operate to the original design and intent, this information will be included in the HVAC Assessment Report prepared under to PUC Section 1626, and described in Chapter 2, Section C, which will be provided to a licensed professional for determination of appropriate corrective measures pursuant to PUC Section 1626. Repairs, upgrades, or replacements shall be performed by a skilled and trained workforce.

These sections elude to the availability of a programmable controls.

Systems that are hardwired for enable command (e.g. exhaust fans interlocked to light switches) will not be able to be reprogrammed.

c) Requirements for filtration levels, ventilation rates, and ventilation schedules may be amended by the CEC based on the latest COVID-19 or other applicable guidance.

B. Carbon Dioxide Monitoring

1) Installation

To ensure proper ventilation is maintained throughout the school year, all classrooms shall be equipped with a carbon dioxide monitor that meets all the following requirements:

a) The monitor is hard-wired or plugged-in and mounted to the wall between three and six feet above the floor and at least five feet away from the door and operable windows.

b) The monitor displays the carbon dioxide readings to the teacher through a display on the device or other means such as a web-based application or cellular phone application.

c) The monitor provides a notification through a visual indicator, such as an indicator light, or other alert system, such as an electronic mail, text, or cellular telephone application, when the carbon dioxide levels exceeded 1,100 ppm.

An active alarm in the classroom will be a distraction. This local alarm will require action from Staff. How will the Staff be trained? What is the 1,100PPM set point based on?

d) The monitor maintains a record of previous data that includes at least the maximum carbon dioxide concentration measured.

e) The monitor has a range of 400 ppm to 2,000 ppm or greater.

f) The monitor is certified by the manufacturer to be accurate within 75 ppm at 1,000 ppm carbon dioxide concentration and is certified by the manufacturer to require calibration no more frequently than once every five years.

2) Continued Monitoring of Classroom Carbon Dioxide Level

If a classroom carbon dioxide concentration exceeds 1,100 ppm more than once a week as observed by the teacher or the facility's staff, the classroom ventilation rates shall be adjusted by qualified testing or adjustment personnel, as defined in Section 1620, to ensure that peak carbon dioxide concentrations in the classroom remain below the maximum allowable carbon dioxide ppm setpoint.

Verification of the installation of carbon dioxide monitors in all classrooms shall be included in the HVAC Assessment Report, described below.

This statement seems to place the Indoor Air Quality responsibility on the teacher or staff members. Training for these individuals will be a logistical challenge.

C. HVAC Assessment Report

A qualified testing personnel or qualified adjusting personnel shall prepare an HVAC Assessment Report for review by a licensed professional. For these qualified testing personnel is defined as either:

- An HVAC acceptance test technician certified to complete the forms set forth in subparagraph (B) of paragraph (1) of subdivision (b) of Section 10-103.2 of Part 1 of Title 24 of the California Code of Regulations by an acceptance test technician certification provider (ATTCP) that is approved by the CEC to provide that certification; or
- A certified testing, adjusting, and balancing (TAB) technician.

A licensed professional is defined as a professional eligible under Division 3 (commencing with Section 5000) of the Business and Professions Code in the applicable classification to perform system design, construction, or installation of features, materials, components, or manufactured devices for mechanical systems.

Based on the requirements specified in the Assessment and Maintenance Requirements section above. The HVAC Assessment Report shall include all the following information:

1. Name and address of school facility and person or contractor preparing and certifying HVAC Assessment Report.

2. Documentation of HVAC equipment model number, serial number, general condition of unit, and any additional information that could be used to assess replacement and repair options given potential for increased energy efficiency benefits.
3. Either verification that MERV 13 filters have been installed or verification that the maximum MERV-rated filter that the system is able to effectively handle has been installed and what that MERV rating is.
4. The verified ventilation rates for facility classrooms, auditoriums, gymnasiums, nurses' offices, restrooms, offices, and other occupied areas, and whether those rates meet the requirements set forth in Table 120.1-A.
    a. If ventilation rates do not meet applicable requirements, then an explanation for why the current system is unable to meet those rates shall be provided.
5. The verified exhaust for facility classrooms, auditoriums, gymnasiums, nurses' offices, restrooms, and other occupied areas and whether those rates meet the requirements set forth in the design intent.
6. Documentation of system deficiencies and recommendations for additional maintenance, replacement, or upgrades to improve energy efficiency, safety, or performance.

1) Review of HVAC Assessment Report

The licensed professional shall review the HVAC Assessment Report and:

a. Determine what, if any, additional adjustments or repairs would be necessary to meet the minimum ventilation and filtration requirements.
b. Determine whether any cost-effective energy efficiency upgrades or replacements are warranted or recommended.
c. Provide an estimated cost for all identified work.

If the cost of recommended repairs, upgrades, or replacements are greater than the 20 percent contingency amount provided in the grant, then the licensed professional and the LEA may apply for additional funding through an HVAC Upgrade and Repair Grant should funding become available for such purposes.

The provision of any additional funding for repairs, upgrades, or replacements shall be conditioned on the applicant ensuring that all construction work funded, in whole or in part, by the additional funding is performed by a skilled and trained workforce.

D. HVAC Verification Report

Upon completion of all work funded by a SRVEVR grant, the LEA shall prepare an HVAC Verification Report for each school included in the grant. The HVAC Verification Report must include all the following information:

1. Name and address of school facility and person or contractor preparing and certifying report.

2. Description of assessment, maintenance, adjustment, repair, upgrade, and replacement activities and outcomes.
3. Verification that the LEA has complied with all requirements of Article 3 of Chapter 8.7 starting with Section 1620 of the PUC and any additional requirements in these guidelines.
4. Verification that either MERV 13 filters have been installed or verification that the maximum MERV-rated filter that the system is able to effectively handle has been installed and what that MERV rating is.
5. The verified ventilation rates for facility classrooms, auditoriums, gymnasiums, nurses' offices, restrooms, offices and other occupied areas and whether those rates meet the requirements set forth in Table 120.1-A.
    a. If ventilation rates do not meet applicable guidance, then an explanation for why the current system is unable to meet those rates shall be provided.
6. The verified exhaust for facility classrooms, auditoriums, gymnasiums, nurses' offices, restrooms, and other occupied areas and whether those rates meet the requirements set forth in the design intent.
7. Documentation of system deficiencies and recommendations for additional maintenance, replacement, or upgrades to improve energy efficiency, safety, or performance.
8. Documentation of initial operating verifications, adjustments, and final operating verifications, and document any adjustments or repairs performed.
9. Verification of installation of carbon dioxide monitors, including make and model of monitors.
10. Verification that all work has been performed by qualified personnel, including the provision of the contractor's name and license; acceptance test technician name and certification number, where applicable; TAB technician name and certification number, where applicable; and verification that all construction work has been performed by a skilled and trained workforce.

The LEA must maintain a copy of the HVAC Verification Report for three years from the grant award date and make it available to any member of the public or the CEC upon request.

HVAC Verification Reports submitted following the completion of an HVAC Assessment and Maintenance Grant project will form the basis for submitting an application for an HVAC Upgrade and Repairs Grant when funding becomes available and program requirements are established through an update to these guidelines.

E. Reimbursement of Work Already Performed

Under PUC Section 1621(c)(3), LEAs may submit grant applications for reimbursement of Assessment and Maintenance Projects where the work was **contracted and performed** after August 1, 2020, and the project meets the requirements of PUC Section 1622 to 1627, inclusive. Any projects seeking reimbursement must also meet all requirements as outlined in

these guidelines. A grant application must be submitted indicating any work already completed as previously described.

The LEA must also provide documentation or a certification that the work was **contracted and performed** after August 1, 2020, and provide a description of the documentation supporting this certification. CEC retains the right to request copies of all referenced documentation. The Legislature wrote PUC Section 1621(c)(3) to require both contract and performance after August 1, 2020. If the LEA contracted for the work **before** August 1, 2020, but the work was performed after August 1, 2020, it is not eligible for funding.

Grant applications for work already completed must also include all final reporting information as described in Chapter 4. All estimates, assessment, and verification reports must be dated and indicate that all work was completed after August 1, 2020.

The applicant must provide the required documentation confirming that all work was done by licensed professionals and a skilled and trained workforce as described in these guidelines.

F. Skilled and Trained Workforce Requirement

All repair, upgrade, or replacement work completed with SRVEVR grant funding must be performed by a skilled and trained workforce, which has the same meaning as in Section 2601 of the Public Contract Code.

G. Grant Budget

The budget for each LEA grant award will be equal to the sum of approved individual site budgets for all sites included in the LEA grant application. CEC program staff will determine the approved individual site budget based on program requirements, including eligible cost requirements. Each site budget will be equal to amount of the contractors estimate for work to be completed at that site plus a 20 percent contingency fee for repairs, upgrades, or replacements. Approved budgets are site specific, and the 20 percent contingency funds must be spent at the site for which the funds assigned. The 20 percent contingency may not be used to complete work at another site.

The applicant shall ensure, to the extent applicable, the budget considers the payment of prevailing wages. These grants may be subject to public works requirements (Labor Code Section 1720 et seq.), a requirement of which is to pay prevailing wages. Applicants are responsible for complying with all applicable laws, which can include public works requirements. Applicants shall explain in their applications if their proposed projects are public works and, if so, how they have included the appropriate budgets for prevailing wage.

Only the California Department of Industrial Relations (DIR) and courts of competent jurisdiction may issue legally binding determinations that a particular project is or is not a public works. If the applicant is unsure whether its proposed projects would be a "public works" as defined in the California Labor Code, it may wish to seek a timely determination from DIR or an appropriate court. As such processes can be time consuming, please plan accordingly given the application deadline.

H. Project Term

Each HVAC Assessment and Maintenance Grant project will have a maximum of 18 months to complete all work and an additional 3 months to submit final reporting documentation as detailed in the Chapter 4, Project Completion and Reporting in these guidelines.

CHAPTER 3:
Grant Applications and Awards

This chapter provides information needed for participation in the initial phase of grant awards including the application process, required application forms and supporting documentation, a description of the process used by the CEC to evaluate applications and determine grant awards, payment of funds, and project and reporting requirements.

As previously described, PUC Section 1612 requires that schools in underserved communities be offered funding before schools that are not in an underserved community. Moreover, schools with a boundary that is within 500 feet of the edge of the closest traffic lane of a freeway or other busy traffic corridor, as defined, or within 1,000 feet of a facility holding a permit under Title V of the Clean Air Act (42 U.S.C. Section 7661 et seq.) be prioritized for funding. Consistent with the statute and anticipated funding availability, CEC will offer funding in the initial phase only for projects that address HVAC assessment, completion of an HVAC Assessment Report, general maintenance, adjustment of ventilation rates, filter replacement, and carbon dioxide monitor installation, referred to as HVAC Assessment and Maintenance Grants. The funding award amounts will be made based on a contractor's site-specific estimate for this work plus an additional 20 percent contingency fund for repairs, upgrades, or replacements necessary to make the HVAC system functional or more energy-efficient. CEC will not award funds for upgrade, repair or replacement costs above the 20 percent contingency amount in the initial phase of grant awards.

CEC anticipates that in subsequent phases of program implementation, LEAs may be able to submit applications for grants addressing upgrade, repair, or replacement costs above the 20 percent contingency amount, referred to as HVAC Upgrade and Repair Grants. These guidelines will be updated to address additional program requirements specific to these awards when appropriate.

CEC will issue a notice of funding availability identifying the anticipated funding to be made available in each round of grants. The notice of funding availability will identify any relevant application dates including the first and last date applications that can be submitted and any funding restrictions applicable to that round of funding. Dates may be adjusted by the CEC through the issuance of a notice updating information.

A. Application Process

The application process has been designed to simplify the submission of an initial application and to provide access to funding for projects that have been contracted and performed after August 1, 2020 and are seeking reimbursement and projects that are planned. For planned projects, upon request by an LEA and pursuant to the program requirements, CEC will also provide an option for the LEA to receive a portion of funds in advance of work being completed.

The application and award process generally follows the following steps.

1) CEC issues a notice of funding availability with details of the total funding available and the breakdown of funds by service territory and by tier based on LEA total enrollment and the deadline date for applying.
2) LEAs submit grant applications electronically as required in the notice of funding availability.
3) CEC will begin to review applications and make awards in the order complete and accurate applications are received. CEC will begin its review process upon receipt of applications to determine funding awards.
    a) CEC staff will accept and review all applications submitted by the posted deadline.

       At any time, should the CEC determine that all funds in a single service territory and Tier have been reserved, the CEC will provide public notification of that determination but will continue to accept applications and identify LEAs that may be funded should additional funding become available.
4) CEC will make funding awards for complete grant applications, at which time funds will be reserved for the LEA for approved projects.
5) Incomplete applications and applications deemed not to have met the application requirements (collectively referred to as "non-compliant" applications) will not be considered.
    a) CEC will notify applicants if an application is noncompliant, and the applicant may reapply during the open application period. Depending on the volume and timing of applications received, the CEC may not always be able to review and notify applicants of noncompliant applications during the open application period. Accordingly, applicants are encouraged to apply as early in the process as possible.
6) The successful LEA will be notified of a funding reservation and provided directions as to how to complete the funding award package – this is anticipated to include additional application details necessary for project tracking and to create a grant agreement and in some cases invoicing documents. The funding reservation will hold the applicant's place in the review queue but does not guarantee funding.
7) If the project has already been contracted and performed after August 1, 2020 and the LEA is seeking reimbursement, the LEA will be instructed on how to complete and submit final project reporting and invoicing for review and payment.
8) If requested by an LEA, advanced funding is available up to 50 percent of the overall grant award. The LEA will include the request for advance funding in the Assessment and Maintenance Application.
9) All planned projects will also receive additional guidance on project completion, reporting and invoice submittal.
10) All projects must adhere to the Technical Requirements provided in these Guidelines and must use all required forms to receive a grant award and funding.

B. Application Package

Eligible applicants must submit a complete application package for an HVAC Assessment and Maintenance Grant using the electronic submission process and system identified in the notice of funding availability issued by the CEC. The application package must include the following information in the required form or formats. The required application form is provided in Appendix B of these guidelines and all forms will be made publicly available for use in developing the application package.

- Applicant Details (SRVEVR-1): LEA information including official name, address, responsible parties, contact information, description of LEA territory, and schools.
- Overall Grant Request Summary (SRVEVR-2): Grant site and budget summary page and status of all site-specific work including start date and projected end date. Identification whether the grant application is seeking reimbursement for work contracted for **and** completed after August 1, 2020, or for work planned to be completed. The status will be entered individually for each site. Only applications with all sites completed are considered reimbursement grants.
- Site-Specific Details (SRVEVR-3): Detailed information identifying all sites to be addressed by the grant, general site information, identification of the number and type of HVAC units on site, number of buildings for carbon dioxide monitoring, project completion status, and total site-specific estimate for assessment and maintenance project.
- Certification and Attestations for Application Accuracy and Completeness
- Supporting Documentation
    - Site specific contractor estimate supporting each site-specific amount requested
        - To be deemed complete, a contractor estimate must be itemized and include all required details.
    - An authorizing document from the governing body, such as a resolution authorizing acceptance of the award and entering award agreement.

C. Contractor Estimates

Each site-specific budget must include information regarding the number and type of all HVAC systems at the site and include line item estimates for materials, labor, and other costs. Any amount included in other costs must include a brief narrative explaining the use of these funds.

Applicants must provide documentation that all costs are reasonable for the work to be completed. As the projects to be completed with HVAC Assessment and Maintenance Grants must complete the same general range of tasks and documentation, for initial awards, CEC will establish a range of reasonable costs applicable to each region of the state consistent with industry accepted areas and variation in labor rates. If an estimate exceeds the CEC established range of rates, an explanation of the reason for the higher estimate must be

provided by the contractor and LEA in the grant application package. Additional information may be required to complete the grant agreement after notification of the grant award.

The contractor estimate must include specific information as required by industry standards and requirements.

As noted above, grants can be provided on a reimbursement basis for work **contracted for and completed** after August 1, 2020. Any contractor estimates provided in support of reimbursement grant must indicate that the estimate was completed after the August 1, 2020, date. Projects that have completed an estimate prior to August 1, 2020, will still be eligible to apply for an award, but funding will cover only work completed after that date.

D. Application Review

Applications will only be accepted electronically, and all applications submitted will be identified by the date and time received. Any applications received after the noticed deadline will not be accepted, and a notice of rejection will be sent to the applicant.

The CEC will review each submitted application package to ensure all the required information has been provided. If an application is incomplete, the application will be rejected. The LEA may resubmit an application during the open application period.

An application with minor errors that do not affect the completeness of the package may be considered, but the date and time for submission will be updated to reflect the date and time a corrected, final application resolving any minor inconsistencies is received. If there are minor errors within the application, applicants will be notified via email of the errors and given up to 10 calendar days or until the application deadline, whichever is shorter, to resolve any errors or inconsistencies. If the applicant does not resolve the errors or inconsistencies in the allowed timeframe, the application will not be approved for funding during the current round of awards. The LEA may resubmit an application during the open application period.

CEC staff will rank all approved applications by the date and time the final approved application was received. Grant applications will be processed until all available funds within each service territory and tier are awarded. Any approved grant applications received that exceed the amount of funds available in the current round of funding for the utility service territory and application tier will be placed in order of date and time received on a priority list for funding when funds become available.

Notice of Award and Completion of Grant Agreement

Following approval of a grant application, CEC staff will notify the successful applicant and provide additional information necessary to complete the award. CEC staff anticipates that the additional information may include:

- Additional details of all HVAC units on each site and additional data required to assess baseline energy use.

- Payee Data Record (STD-204): Required for grant award payment, all details **must** match the applicant information in other documents.
- Final Budget Page Identifying Grant Awards by Site (estimated cost, 20 percent contingency and total per site award calculations).

Grantees may request advance payment of no more than 50 percent of the total grant award at the time the grant agreement is completed and received by the CEC. CEC staff will provide additional information in the notice of award on the invoicing process for grantees to request these funds.

For grants seeking reimbursement for projects started after August 1, 2020, the grantee will first need to complete the final grant agreement and can then provide the final required project reporting and invoicing documentation to receive payment of the full grant award. Additional information on project reporting and invoicing is provided in these guidelines and further guidance will be made available to grantees.

E. Payment of Grant Funds

CEC expects to receive funding for the SRVEVR program from participating utilities quarterly. Payment to grantees depends on CEC receipt of funding.

CEC will issue an email notice to all approved grant applicants identifying the amount of the award. As noted above, the LEA will be awarded the amount requested, which must equal the total of each site specific estimate plus a contingency fund of an additional 20 percent of the amount in the contractors' estimate or a lesser amount as determined by the CEC based on program requirements, including eligible cost requirements. The 20 percent contingency funds can only be used for repairs, upgrades, or replacements necessary to make the HVAC system functional or more energy efficient. Although not required to be included in the estimate of work to be done, after the project is completed the LEA will be required to provide documentation demonstrating how the contingency funds were spent. At the conclusion of the project, all unspent funds including any unspent contingency funds will be returned to the CEC.

Contingency Funds Eligible Costs

Only costs required to complete work identified in the HVAC Assessment and Verification Reports as necessary to make the system functional or more energy efficient will be deemed eligible costs for purposes of expending the 20 percent contingency funds. Funds must be used on the site for which they were awarded and cannot be transferred to another site. In documenting the appropriate use of the funds during final reporting, the LEA will be required to identify specifically where in the HVAC Assessment Report the identified repairs or upgrades are called for and the related expenditures using the contingency funds.

F. Timing of Payment

For projects that have not been completed at time of application, upon request by the LEA, the CEC may issue a portion of funds in advance equal to up to 50 percent of the overall grant award. Upon approval of an award, the grantee will receive a Notice of Award from CEC and must complete a grant agreement. At the time the final grant agreement is received by the CEC, the LEA may submit an invoice to CEC for up to 50 percent of the overall award for all sites represented in the grant agreement. Following receipt of a properly executed grant agreement, invoice and payee data record, CEC will approve payment of advance funds to be issued by the State Controller's Office. CEC expects to be able to issue 50 percent advance payments within four weeks of receipt of LEA request.

The remaining 50 percent of the grant funds will be issued upon receipt and review of all final required reporting including complete reporting of how contingency funds were spent on a site-specific level of detail. The LEA shall provide the CEC with additional documentation, as specified in the Reporting Section of these guidelines, demonstrating how contingency funds were used.

For grants issued for reimbursement of expenses, CEC staff will **only issue payment once for the final invoice and only when all final reporting is submitted and approved by CEC staff.**

G. Additional Funding for Repair or Replacement

A licensed professional must review the HVAC Assessment Report and determine what, if any, additional adjustments or repairs would be necessary to meet the minimum ventilation and filtration requirements; determine whether any cost-effective energy efficiency upgrades or replacements are warranted or recommended; and provide an estimated cost for this work. If a licensed professional identifies cost-effective energy efficiency upgrades or repairs that would exceed the 20 percent contingency amount awarded those repairs must be documented as described in the HVAC Assessment Report and HVAC Verification Report sections of these guidelines. The ability for LEAs to apply for additional funding for these additionally identified upgrades or a portion thereof will be determined in future program and funding phases as appropriate.

CHAPTER 4:
Project Completion and Reporting

Completion of Projects

As noted previously, grant recipients will have 18 months to complete all assessment and maintenance work plus an additional 3 months to complete final reporting requirements. Although the CEC may issue a reminder of the project deadline, it is the grant recipients' responsibility to monitor project completion and meet all required reporting and invoicing deadlines.

LEAs shall submit final reporting electronically using the system or process required by the CEC at the time the reporting is due. CEC will provide all forms, formats and guidance needed to assist in reporting on the SEES Program webpage prior to the issuance of grant awards.

Reporting

PUC Section 1618 states that the reduction in greenhouse gases and energy savings attributed to a project funded by the SEES Program shall be attributed to the utility that provided those funds. The baseline for determining reductions in emissions of greenhouse gases and energy savings from the SRVEVR Program shall be the energy demand and emissions of greenhouse gases that would have occurred if ventilation and filtration recommendations for reopening schools were met without the assessment, adjustment, maintenance, repairs, and efficiency upgrades funded under the program.

For the CEC to determine and properly attribute these benefits, the following information will be required in the final document package to supplement the information included in the HVAC Assessment and HVAC Verification Reports:

[*The additional reporting detail referenced in A.6. Below will be developed in coordination with the CPUC and IOUs following the workshop.*]

A. Final Reporting and Invoice for Remaining Funds

After the Assessment and Maintenance project has been completed, the applicant will submit a final document package to the CEC. This package will include:

1. HVAC Assessment Report, as specified in Chapter 2.C.
2. HVAC Verification Report as specified in Chapter 2.D.
3. Site-specific project summary detailing the use of all contingency funding.
4. Documentation demonstrating how the contingency funds were spent.
5. Final invoice and any supporting documentation for any remaining expended funds up to the original grant award amount.
6. Additional reporting detail as required to calculate or confirm energy savings or reduction in greenhouse gas emissions resulting from the project.

B. Time Extension Requests

Grant recipients may request one-time extension to complete final reporting. The extension will be no more than six months and is not to exceed the final date of program reporting.

CHAPTER 5: Administration

A. Guidelines Authority

This SRVEVR Program Guidelines are adopted under Public Utilities Code Division 1, Part 1, Chapter 8.7 added by AB 841 (Chap. 372, Stats. 2020), which directs the CEC to implement the SRVEVR Program as part of the SEES Program. Under PUC Section 1614(b), the Administrative Procedure Act (Chapter 3.5 [commencing with Section 11340] of Part 1 of Division 3 of Title 2 of the Government Code) does not apply to the adoption these guidelines.

B. Effective Date of Guidelines

This SRVEVR Program Guidelines is not effective until adopted by the CEC at a publicly noticed business meeting. The CEC will post the adopted SRVEVR Program Guidelines on its website: https://www.energy.ca.gov/programs-and-topics/programs/school-energy-efficiency-stimulus-sees-program-assembly-bill-841.
Applicants may also obtain the SRVEVR Program Guidelines by contacting SEES@energy.ca.gov

C. California Environmental Quality Act

The CEC must comply with the California Environmental Quality Act (CEQA) (Public Resources Code § 21000 et seq.; see also California Code of Regulations Title 14, section 15000 et seq.) which generally requires public agencies to identify and consider potential environmental impacts of proposed projects. Applicants will be required to submit CEQA documentation as part of their application in order to determine CEQA compliance. Please refer to Appendix A: Application and Forms for further information.

D. Enforcement

In addition to any other rights the CEC has, the CEC can take all the following actions necessary to enforce the CEC's rights and program requirements:

Recovery of Overpayment

The CEC may direct its Office of Chief Counsel to commence formal legal action against any applicant, former applicant, or recipient to recover any portion of a payment under a grant agreement that the executive director determines the applicant, former applicant, or recipient was not otherwise entitled to receive, retain (e.g., advanced funds), or spend in the manner it was spent.

Fraud and Misrepresentation

The executive director may initiate an investigation of any applicant that the executive director has reason to believe may have misstated, falsified, or misrepresented information in

submitting an application, payment request, or any reporting or other information required under the program. Based on the results of the investigation, the executive director may take any action deemed appropriate, including, but not limited to, cancellation of the reservation, termination of the award or award agreement, recovery of any overpayment, and, with the concurrence of the CEC, recommending the attorney general initiate an investigation and prosecution under Government Code Section 12650, et seq., or other provisions of law.

Noncompliance With Agreement

The CEC may seek remedies for noncompliance with agreement terms, work scope, and project milestones including, but not limited to stop work, termination, withholding requested payments, recovery of funds, or any other administrative or civil action.

E. Use and Disclosure of Information and Records and Confidentiality

With very few exceptions, all project documents submitted to the CEC or its technical consultant(s), including as part of any audit, are considered public records subject to disclosure under the California Public Records Act. The CEC or other state agencies may also use any of these documents or information for any purpose, including to determine eligibility and compliance with the SEES program, applicable law, or a particular solicitation or guidelines document, or to evaluate related or relevant programs or program elements, or to prepare reports. These documents and information include, but are not limited to, applications for funding, the agreement itself, invoices and any documentation submitted in support of applications, all agreement deliverables, final project report, and documents prepared for other reporting requirements, materials and documents developed as part of technology transfer.

If the CEC requires an applicant or recipient to provide copies of records that the recipient believes contain confidential/proprietary information entitled to protection under the California Public Records Act or other law, the recipient may request that such records be designated confidential according to the CEC's regulations for confidential designation, Title 20, California Code of Regulations, Section 2505.

Applicants considering confidentiality should note that SEES funds are subject to information disclosure requirements to ensure transparency. Information concerning the identity of recipients and the grant amount is public information and will be disclosed according to the California Public Records Act. This information, as well as other public information, may also be disclosed through the CEC's website, another State of California agency website, or through other means.

The CEC can disclose confidential information and records to other governmental entities and policing authorities for civil and criminal investigation and enforcement.

F. Substantive Changes in Guidelines

After adoption, substantive changes to the adopted SRVEVR Program Guidelines may be made with the approval of the CEC at a publicly noticed meeting with no fewer than 15 days public

notice. Unless stated otherwise in the resolution approving substantive changes, such changes shall take effect upon adoption by the CEC. Substantive changes to design or requirements include, but are not limited to:

- Program eligibility.
- Technical requirements.
- Measurement and verification reporting.

G. Nonsubstantive Changes in Guidelines

If the SRVEVR Program Guidelines requires nonsubstantive changes, the CEC will provide a notice of the changes to the SEES list serve (school_ee_stimulus) and post the amended guidelines on the SEES web page.

APPENDIX A:
Application Forms

Assessment and Maintenance Grant Application Form

- Application Information
  - Applicant name
  - Type of Entity/CDS Code
  - Application Region
  - Address
  - Contact information
  - Utility Provider(s)
- Project Information (Table format for multiple projects in LEA's application)
  - Type of project (new or reimbursement)
  - School address
  - School size (classrooms/students)
  - Project description
- Project Schedule
  - Estimated start date
  - Estimated completion date
- Project Budget
- CEQA Compliance
- Application Documents
- Certification

APPENDIX B:
Table 120.1-A

appendix for reference purposes only.

Table 120.1-A – Minimum Ventilation Rates

Occupancy Category	Area Outdoor Air Rate1 Ra	Min Air Rate for DCV2
		fm/ft2
Educational Facilities		
Daycare (through age 4)	0.21	0.15
Daycare sickroom	0.15	3
Classrooms (ages 5-8)	0.38	0.15
Classrooms (age 9 -18)	0.38	0.15
Lecture/postsecondary classroom	0.38	0.15
Lecture hall (fixed seats)	-	0.15
Art classroom	0.15	2
Science laboratories	0.15	2
University/college laboratories	0.15	2
Wood/metal shop	0.15	2
Computer lab	0.15	1
Media center	0.15	1
Music/theater/dance	1.07	0.15
Multiuse assembly	0.50	0.15
Food and Beverage Service		
Restaurant dining rooms	0.50	0.15
Cafeteria/fast-food dining	0.50	0.15
Bars, cocktail lounges	0.50	0.20
Kitchen (cooking)	0.15	2
General		
Break rooms	0.50	0.15
Coffee Stations	0.50	0.15
Conference/meeting	0.50	0.15
Corridors	0.15	1
Occupiable storage rooms for liquids or gels	0.15	2
Hotels, Motels, Resorts, Dormitories		
Bedroom/living room	0.15	1
Barracks sleeping areas	0.15	1
Laundry rooms, central	0.15	2
Laundry rooms within dwelling units	0.15	1
Lobbies/pre-function	0.50	0.15
Multipurpose assembly	0.50	1

APPENDIX C:
HVAC Verification Report Forms*

[*Forms adopted from SMACNA drafts and being converted to digital format and CEC style. Brief outline of forms below.]

- **Overview Form (checklist)**
  - Unit/Model No./Serial No./SEER Rating/Refrigerant
  - Filtration
  - Ventilation Rate
  - Ventilation System Operation
  - Air Distribution
  - Building Pressure
  - General Maintenance
  - Operational Controls
  - CO_2 Monitoring
  - HVAC Assessment Report
  - Energy and Ventilation Upgrades
- **Filtration Form**
  - Existing filter data
  - Installation audit
  - Frame condition
  - Motor and control type
  - MERV 13 verification
- **Ventilation Rate Form**
  - Determine Minimum Required Outside Air
  - Verify Minimum Required Outside Air
  - Increased Outside Air
- **Economizer Operation Form**
  - Verify Economizer Operation
  - Economizer functions as designed Y/N
  - Documentation of adjustments and repairs required
- **Demand Control Ventilation Operation Form**
  - Verify DCV Operation
  - Verify DCV function at setpoint of 800 ppm
  - Document adjustments or repairs required
- **Air Distribution and Building Pressure Form**

    - Supply Outlets measurement
    - Return Inlets measurement
    - Exhaust Inlets measurement
    - Measured Supply Air = Measured Outside Air + Measured Return Air determination
    - Measured Supply Air slightly great than Measured Return Air determination
    - Air Distribution Notes
    - Document Repairs and Adjustments required
- **General Maintenance Form**
    - Verify coil condition
    - Verify condensate drainage
    - Measure and document Temperature Differential
    - Verify condition of drive assembly
    - Document Deficiencies
    - Document required repairs and adjustments
- **Operational Controls Form**
    - Review control sequences – verify systems will maintain intended conditions during operation
    - Ventilation Schedule Operation
    - Document Deficiencies and recommendations for maintenance, replacement or upgrades.
- **CO_2 Monitoring Form**
    - Verify installation or install a CO_2 monitor
    - Verify and document CO_2 monitor meets required capabilities

APPENDIX D:
Additional References

(include information on other bills or statutes referenced – such as Title 24)

Assembly Bill No. 841 Energy: transportation electrification: energy efficiency programs: School Energy Efficiency Stimulus Program. (2019-2020) (Ting)
http://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201920200AB841