

AB 617 Community Air Protection Program Steering Committee Meeting Agenda

ECRMC Community Education Center



Imperial Valley Mall 3451 Dogwood Rd. El Centro, CA 92243

MEETING AGENDA

Wednesday, September 11, 2019

5:30 p.m. - 7:30 p.m.

Facilitator: Amy Ramos & Daniela Flores of Harder Co.

Chair of Meeting: Luis Olmedo (Alternate: Christian Torres)

WELCOME

1. Roll Call/Opening Remarks by CSC Members

• Moment of Silence to Remember 9/11

Co-Chairs

2. PUBLIC COMMENT PERIOD

3. APPROVAL OF MINUTES

August 14, 2019 CSC Meeting Minutes (Attachment: August 14th Minutes)

4. PRESENTATIONS

 Update and Overview of Community Emissions Reduction Program (CERP) Ramboll (Attachment: CERP Update & Overview)
 Q&A on CERP to follow presentation

5. ACTION ITEM

- Committee to Take Vote on Community Air Monitoring Program (CAMP)

 The approval of the CAMP is brought back before the CSC for a procedural vote, per the request of the Co-Chairs. No revisions have been made to the CAMP since the August 28, 2019 CSC meeting. (Attachment: Response to Comments on CAMP)
- Committee to Approve and Adopt the Community Emissions Reduction Program (CERP)

It is recommended for the CSC to approve the CERP as presented. (Attachment: Draft CERP)

6. AGENCY UPDATES

ICAPCD & CCV

7. AGENDA TOPICS FOR NEXT MEETING

Co-Chairs

8. CLOSING REMARKS/ADJOURNMENT



COST William To the Control of

Attachment: August 14, 2019 Minutes

AB 617 Community Air Protection Program Minutes of the Steering Committee Meeting ECRMC Community Education Center El Centro, CA August 14th, 2019

Chair of Meeting: Luis Olmedo (Alternate: Christian Torres)

Facilitator: Amy Ramos & Daniela Flores of Harder Co.

I. Attendance:

Mersedes Martinez, Community Corridor; Matt Dessert, Air Pollution Control District; Luis Olmedo, Comite Civico del Valle; Rene Felix, Community Corridor; Mireya Diaz, Community Corridor; Kristian Salgado, Community Corridor; Sergio Cabañas, Community Corridor; Aide Munguia Fulton, Community Corridor; Mary Salazar, Community Corridor; John Hernandez, Community Corridor; Jose Celaya, Community Corridor; Diahna Garcia - Ruiz, Community Corridor

Alternates: Reyes Romero; Christian Torres; Sandra Mendivil; Michael Moore; Irene Garcia; Juan Villa; Marlene Flores; Rosa Guerrero; Chris Gomez Wong; Diego Gamboa; Irene Garcia;

II. Welcome and Opening Remarks by CSC Members

Amy Ramos welcomed everyone in attendance. She invited them to get some food and also gave a few housekeeping indications. She also pointed out they had interpreting service available for those who needed it.

Luis Olmedo welcomed everyone and said they were going to pass the mike around for giving opening remarks.

Mary Salazar said she wanted to thank both Matt dessert and Gil Rebollar for showing a fine presentation at their Planning Commission in the City of Calexico. She also said people were very impressed and interested in having a workshop to learn more about what they are doing through this program.

Matt Dessert mentioned they are very active and busy behind the scenes at filing documents and meeting requirements set by the State of California for the 617 requirements. He mentioned that the day prior to this meeting they had received a document called the Community Air Protective Incentives Guidelines, which will help put their emission reduction projects and their policies in order and in an acceptable format. He also mentioned that he had been asking to see this draft document for nearly 45 days in order to make sure it provided the safe legal language and harbor that they have all worked so hard to meet. He said it was imperative that they do not only have an open and transparent dialogue with the steering committee members as well as Comite Civico a, but also with the State of California, the California Air Resources Board and any other environmental agency that comes to these meetings to participate in the community. He said the Community Air Protective Incentives Guidelines is a document, which the steering committee has to see and comment on to make sure there is a safe harbor for the projects that they are proposing including the early emission reduction projects, which include an agricultural burning policy, a parking lot paving project in Calexico High School for which the committee agreed to reimburse the Air District 50% of the cost of around \$400,000.00 in order for the committee to get an early taste of the success and the fruit of the funds that are being sent down from the State.

Luis Olmedo added that he thinks they have come a long way and said he wanted to thank all the members of the CSC for their work and time dedicated inside and outside of these meetings. He mentioned that there is an open solicitation for nominations of communities in the northern part of the Imperial Valley to be a part of this program and

that as long as this is legislation is in place they will have an opportunity to compete and participate nominating communities until every community is represented in this Valley.

III. Public Comment

Luis Olmedo encouraged participants to use the comment cards to share their comments or questions as these are posted on their website and may answer other person's questions as well as theirs.

Pete Rodriguez asked **Luis Olmedo** to explain his absence at the Board of Supervisors meeting 2 weeks prior to this meeting. He said that if they are going to monitor the farmers and the ranchers, leadership starts at the top. He said not attending and not sending anyone on his representation sends the wrong message.

Luis Olmedo thanked Pete Rodriguez for his comment and said his comment was noted.

Christopher Velasco, lead contract planner at the City of Calexico said he looks forward to working with them all to create some tangible change in the air quality in the city of Calexico. He said he has a lot of ideas he plans to present to the committee and that he wanted to introduce himself.

Luis Olmedo said at this point he wanted to acknowledge that they had received a letter that they would share with the committee later. He also indicated the submitter of the letter that if they have any comments they wanted to submit, they could do so at this time.

Lilian Garcia from the National Border Patrol Council Local 2554 said they had submitted a letter to the committee members, they had made a few copies to pass around, and that they would be getting in contact with them through email, once they are given their contact information.

Kristian Salgado mentioned she believes there is a vacancy at their committee so for those of them who introduced themselves and showed concern about participating; this might be an opportunity for them to submit an application to become a part of this committee.

Kay Day Pricola, Executive Director of the Coalition of Labor, Agriculture and Business mentioned that after looking at the IVAN network website, she had realized that there are two community monitors that are off line; one of them being in Heber. She said she would like to know why they were down and when they were going to correct this.

Christian from Comite Civico indicated that the monitor in Heber that she mentions was at that time without internet access, but that they were already working on solving the problem by getting their new hot spot as soon as possible. He explained they were waiting on T-mobile to get the model to them and that because they are under a nonprofit rate, it takes a while for them to get them the equipment.

IV. Approval of Minutes

Luis Olmedo said that hoping they had had time to review the minutes from July 10th, he would now ask for a motion to approve those minutes.

Aide Fulton made a motion to approve the minutes from July 10th.

Mireya Diaz seconded the motion.

Luis Olmedo called for a vote and the motion passed with a majority vote.

V. Presentations / Questions and Answers

Update on Community Emissions Reduction Program (CERP); Alec from Ramboll

Ray Askins said that it has been his experience that you cannot filter all gasses from schools if anything; you are just recycling the gasses from outside back into the classroom. He asked if they had given any particular thought to that problem.

Alec from Ramboll said he thinks the purpose of the school air filtration project is to filter particulate matter and not necessarily gasses, but that it was something they could look into.

John Hernandez said that the plan that Ramboll is putting together talks about the different types of emissions and sources and he asked if they were going to identify the hot spots taking into account the input from the committee as part of this plan. He also asked if that was going to be the case for the tier 1 and tier 2 strategies on this plan.

Matt Dessert indicated that the committee is going to participate on the design and scope of this plan. He added that they plan on bringing the dollar cost of this plan so that he committee can see what costs are involved in order to use as cost effectively as possible because they are short of funds and might need additional assistance in order to meet their goals and objectives

Luis Olmedo added that the goal and the metric that is expected to be met are having meaningful engagement both from the audience and also from the member of the committee, who are representing their knowledge, their expertise and their community. He pointed out that there will be other opportunities to come back and weigh in on any gaps that might be identified.

Kristian Salgado asked with regards to this committee participating in the policy and rule development, how they would play that role.

Matt Dessert pointed out that they had already brought forward an agricultural burning policy for which the committee's input had been incorporated into. He said they would do that for every policy, rule or any larger State Implementation Plan the committee works on. He said they would make sure they make sense, and they have some kind of a deliverable emission savings to them.

Kristian Salgado asked if just as they had participated on that agricultural burning policy, there would opportunity to discuss other rules such as the ones that have to do with fugitive dust, emission reduction credits, or mobile sources.

Matt Dessert indicated that **Belen Leon** had pointed out to him that some of those answers would be found in the tear 2 area of that night's presentation. He added that with regards to the emission reduction credits they could comment and have further discussions and explain how those different credits, and their banking systems work. He also explained that normally, mobile sources do not earn emission reduction credits through replacement activities.

Iddy Hartman mentioned that when you talk about government and planning, it is really important that the different agencies from Imperial County and the cities represented in the committee look at the policies of how they site the schools because there is no excuse for schools being surrounded by farmer's fields or at the edge of communities where young people are exposed to pollution.

Luis Olmedo thanked her for comment and said it was a comment that had been brought up several times before so they are looking into it to see that a representative from Land Use and Planning could be a permanent participant at these meetings.

Update on CSC Survey Mitigation Projects; Daniela Flores, Ramboll & Harder Co.

Mireya Diaz mentioned she really liked the format of the survey because it is easy to read. She said she would like to know why the community does not seem interested on the same kind of projects that the committee find important and useful for their communities. However, she said that over all in her opinion the survey was great.

Daniela Flores encouraged everyone to use the comment cards to express their opinions so they could share them with everybody and see where there is opportunity for further discussion.

John Hernandez said he wanted to state for the record that he does not believe that mitigation and reduction are synonymous.

VI. Discussions Items

Q & A on Draft Community Air Monitoring Plan (CAMP)

Kristian Salgado said she would like to propose a community guide book called *Clean Air Requires Everyone* as a model for how they conduct outreach in their communities specifically because one of the comments that the California Air Resources Board made regarding the Community Air Monitoring Plan was that it is important to reduce personal exposure through informed decision making. As far as stablishing roles and responsibilities, she mentioned she is concerned about how they are representing the power dynamics in the organizational chart. She made some specific comments with regards to this chart and suggested some changes to be considered.

Aide Fulton suggested having some kind of standardization for education and outreach purposes.

An Attendee mentioned that their communities are very unique and that she is in favor of using guidelines, but she is not in favor of standardization.

Belen Leon indicated that all comments regarding the Community Air Monitoring Plan should be submitted no later than August 19th in order to be able to provide a final draft for everybody to review at the next meeting to be held on August 28th.

VII. Interactive Survey

Daniela Flores from Harder Co. conducted an interactive poll to gather CSC member input on priority schools for Air Filtration Projects funded by AB 617. At the end of the survey, she asked members of the committee to please review the attached list of schools in the corridor, the copy of the poll they had just completed, and the geographic map displaying schools in the corridor. She explained their aim was for them to arrive to the next meeting prepared to give input on their priorities for each school in the corridor.

Brief introduction of Jonathan London, Associate Professor and Vice Chair: Human Ecology / Community and Regional Development Faculty Director: Center for Regional Change

Jonathan London mentioned he is working on a project under contract with the Air Resources Board as an independent outside evaluator of community engagement in AB 617. At this point, he passed around a document about this study and also said he would be glad to also share it through e-mail to those who were interested. He explained the purpose of the study is to help lift up the learning and the experiences that everyone is having as they go through this bold experiment in AB 617 and to really help them understand as to what are the things they think are working best, what are the things they think are not working well, and what their ideas are as to how the process could be improved. He mentioned that in the handout that was going around there was link to a survey that everyone was welcome to complete. He added that they had been doing some interviews to members of the steering committee. He

finished saying that if anyone had any questions they think he should include in the evaluation he would love to hear any feedback that they may have.

VIII. Agency Updates

Matt Dessert said with regards to emission reduction credits rule 214.2 credits, that it is not an emission reduction by disposing of old cars. It is a special rule to Imperial County where emission reduction credits are stablished and available for paving unpaved roads. He added that his rule is at the core of their first emission reduction project plan at the city of Calexico for paving a high school parking lot.

Kristian Salgado thanked him for the clarification.

IX. Agenda Topics for Next Meeting

Belen Leon said that the discussions of the results from the survey taken at this meeting would be one of the topics for the next meeting. She also said the Community Air Monitoring Plan would be presented for approval, and she reminded everyone to submit any comments regarding this plan no later than August 19th. She said they were going to have an update on the Community Emissions Reduction Program because that approval is due on September 11th. She finished by saying that some presentations would also be set up for the next meeting on August 28th at the Heber Community Center.

X. Closing Remarks / Adjournment

Rene Felix said he was encouraged by the progress that they have been making. He added that he knows that by coming to these meetings they are all being trained and getting an education so they can all be on the same page. Therefore he added that he is also encouraged to come to the next meeting better prepared by reading all the material shared with them ahead of time.

Luis Olmedo said he wanted acknowledge the interpreting services provided at these meetings. He pointed out the importance of having adequate communication and thanked the Air Pollution Control District for making these services available.

Kristian Salgado mentioned she wanted to encourage people to make comments, participate and ask questions so that their voice is heard when making decisions. She also suggested having a mechanism in place in order to address letters submitted to the committee such as the one that had been submitted during this meeting by the National Border Patrol Council.

Mireya Diaz said she also wanted to address the letter submitted today and that she agreed with Kristian Salgado's suggestion.

An Attendee suggested having more data presented to them with regards to the schools they are considering to be a part of the Air Filtration Projects in order to be able to make better decisions as to which schools would benefit the most from these programs.

Belen Leon thanked everyone for their participation and assured that all of their comments are taken into consideration and that all the schools are also taken into consideration.

Luis Olmedo also thanked everyone for their participation, indicated that all comments are always taken into consideration and that the letter received during the meeting would also be addressed.

Meeting Adjourned.

Programa Comunitario de Protección Atmosférica Bajo el Auspicio del Proyecto de Ley AB 617 Minuta de la Reunión del Comité Directivo ECRMC Centro Educativo Comunitario El Centro, CA 14 de agosto de 2019

Preside la Reunión: Luis Olmedo (Suplente: Christian Torres)

Facilitador: Amy Ramos & Daniela Flores de Harder Co.

I. Asistencia:

Mercedes Martinez, Corredor Comunitario; Matt Dessert, Distrito de Control de Contaminación Atmosférica; Luis Olmedo, Comité Cívico del Valle; Rene Felix, Corredor Comunitario; Mireya Diaz, Corredor Comunitario; Kristian Salgado, Corredor Comunitario; Sergio Cabañas, Corredor Comunitario; Aidé Munguía Fulton, Corredor Comunitario; Mary Salazar, Corredor Comunitario; John Hernández, Corredor Comunitario; José Celaya, Corredor Comunitario; Diahna Garcia-Ruiz, Corredor Comunitario; Diahna Garcia-Ruiz, Corredor Comunitario;

Suplentes: Reyes Romero; Christian Torres; Sandra Mendívil; Michael Moore; Irene Garcia; Juan Villa; Marlene Flores; Rosa Guerrero; Chris Gomez Wong; Diego Gamboa; Irene Garcia;

II. Bienvenida y Comentarios Iniciales por Parte de Integrantes del Comité Directivo

Amy Ramos dio la bienvenida todos los ahí presentes. Los invitó a servirse comida mientras daba algunas indicaciones de logística. También señaló que contaban con servicio de interpretación simultánea para aquellos que quisieran utilizarlo.

Luis Olmedo dio la bienvenida a todos e indico que pasarían el micrófono para que tuvieran la oportunidad de compartir sus comentarios iniciales.

Mary Salazar dijo que quería agradecer tanto a Matt Dessert como a Gil Rebollar por haber asistido y ofrecido una excelente presentación en su reunión de Comisión de Planeación de la Ciudad de Calexico. Añadió que la gente se había mostrado muy interesada en participar en un taller para aprender más sobre lo que se estaba haciendo a través de este programa.

Matt Dessert mencionó que se llevaban a cabo muchas actividades tras bambalinas en lo que se refiere a llenado de formatos y documentos y el cumplimiento de los requisitos solicitados por parte del Estado de California en materia del Programa AB 617. Mencionó que un día antes de esta reunión habían recibido un documento llamado Directrices de Incentivos de Protección Atmosférica Comunitaria, los cuales servirían para ordenar sus proyectos de reducción de emisiones y sus políticas en orden y formato aceptables. También mencionó haber estado solicitando dicho documento por alrededor de 45 días para poder asegurar que brindara el lenguaje y provisión necesarios por el que tanto trabajado para lograr. Dijo que era imperativo no solo contar con un diálogo abierto y transparente con los integrantes del comité y Comité Cívico, sino también con el Estado de California, la Junta de Recursos Atmosféricos de California y cualquier otra dependencia ambienta que asista a estas reuniones a fin de participar con la comunidad. Dijo que se trataba de un documento que el comité directivo debe revisar y hacer sus comentarios con respecto a los proyectos que se proponen, incluyendo los proyectos de reducción de emisiones tempranos que incluyen una política de quema agrícola así como un proyecto de pavimentación del estacionamiento de una escuela preparatoria en Calexico para el que el comité estuvo de acuerdo en reembolsar al Distrito Atmosférico el 50% de un costo de alrededor de \$400,000.00 (dólares) para que de esta manera el comité pudiera obtener una muestra temprana del éxito y los frutos provenientes de los fondos que se están obteniendo por parte del Estado.

Luis Olmedo añadió que el piensa que han llegado muy lejos y dijo que quería a gradecer a todos los integrantes del comité directivo por su labor y su tiempo invertido dentro y fuera de estas reuniones. Dijo que había una convocatoria abierta al momento para la nominación de comunidades en la parte norte del del Valle Imperial para convertirse en parte de este programa y que mientras esta legislación se mantenga vigente, seguirán teniendo la oportunidad de competir y participar nominando comunidades hasta que todas y cada una de las comunidades en este Valle se encuentren representadas.

III. Comentario Público

Luis Olmedo exhort a los participantes a compartir sus comentarios o preguntas ya que esta son publicadas y cargadas a su portal de internet y bien podrían estar respondiendo a las preguntas de otras personas así como a las propias.

Pete Rodriguez preguntó a **Luis Olmedo** tola razón por la cual no había estado presente en la reunión de Junta de Supervisores 2 semanas antes de esta reunión. Dijo que si iban a monitorear a trabajadores agrícolas, el liderazgo comienza desde lo más alto. Dijo que el no asistir y no enviar a alguien en su representación envía un mensaje equívoco.

Luis Olmedo agradeció a Pete Rodriguez por su comentario y dijo que había sido tomado en cuenta y anotado.

Christopher Velasco, encargado principal del contrato de planeación de la ciudad de Calexico dijo esperaba colaborar con todos para crear un cambio tangible en la calidad del aire de la ciudad de Calexico. Dijo tener muchas ideas que esperaba poder compartir y planeaba presentar ante el comité y que aprovechaba esta oportunidad para presentarse.

Luis Olmedo dijo que en ese momento quería hacer del conocimiento de todos estar recibiendo una carta que compartirían con el comité más tarde. También le indicó al suscriptor de la misma que si tenía algún comentario que hacer, ahora sería el momento indicado para hacerlo.

Lilian Garcia del Consejo Local de la Patrulla Fronteriza Nacional 2554 dijo que habían presentado una carta dirigida a los integrantes de este comité, que habían ya repartido algunas copias físicas de la misma y que se estarían poniendo en contacto con ellos vía correo electrónico una vez contaran con su información de contacto.

Kristian Salgado mencionó que le parecía que había una vacante disponible en el comité y que para aquellos que habían compartido su inquietud de participar; esta podría ser su oportunidad de hacerlo presentando una solicitud para convertirse en parte de este comité.

Kay Day Pricola, Director Ejecutivo de la Coalición de Trabajo, Agricultura y Negocios mencionó que después de haber visitado el portal de la red de monitoreo IVAN, había notado que dos de los monitores estaban fuera de servicio; uno de ellos en Heber y preguntó a que se debía esto y si ya se estaba haciendo algo al respecto.

Christian de Comité Cívico indicó que el monitor de Heber que ella mencionaba se encontraba en ese momento sin acceso a internet, pero que ya se estaba haciendo algo al respecto al tratar de obtener su *hot spot* lo más pronto posible para su operación. Explicó que estaban a la espera de que T-mobile les hiciera llegar el modelo y que debido a que cuentan con una tarifa para organizaciones sin fines de lucro, les toma un poco de tiempo obtener el equipo.

IV. Aprovación de Minuta

Luis Olmedo dijo que esperando hubieran tenido tiempo de revisar la minuta correspondiente a la reunión del 10 de julio, solicitaba una moción para que esta se aprobara.

Aidé Fulton hizo una moción para aprobar la minuta de la reunión del 10 de julio.

Mireya Diaz secundó la moción.

Luis Olmedo llamó a votación y la minuta se aprobó por mayoría de votos.

V. Presentaciones / Preguntas y Respuestas

Actualización del Programa Comunitario de Reducción de Emisiones (CERP, por sus siglas en inglés); Alec de Ramboll

Ray Askins dijo que de acuerdo a su experiencia no se podían filtrar gases si acaso, solo se estarían reciclando los gases de afuera hacia dentro del salón de clases. Preguntó si ya habían considerado ese problema.

Alec de Ramboll dijo que él estaba bajo el entendido de que el propósito del proyecto de filtración de aire en las escuelas era el de filtrar material particulado y no necesariamente gases, pero que ere algo que podían revisar.

John Hernández dijo que el plan que Ramboll está elaborando habla de los diferentes tipos de emisiones y sus fuentes y preguntó si se iban a identificar los puntos álgidos tomando en cuenta la participación del comité como parte de este plan. Además, preguntó si ese sería el caso con las estrategias de la fase 1 y la fase 2 de este plan.

Matt Dessert indicó que el comité tendría participación en el diseño y el alcance de este plan. Añadió que tenían planeado presentar el presupuesto para este plan para que el comité pueda observar los costos y los fondos se utilicen de la manera más eficaz posible ya que se encuentran cortos de fondos y podrían requerir de asistencia adicional para poder lograr sus metas y objetivos.

Luis Olmedo añadió que la meta y la métrica que se espera alcanzar es la de contar con participación significativa por parte de los integrantes del comité así como por parte de la audiencia en general. Señaló que habría otras oportunidades para regresar y opinar sobre cualquier brecha que se pudiera identificar.

Kristian Salgado preguntó con respecto a la participación de este comité en el desarrollo de políticas y normas, como jugarían ese papel.

Matt Dessert señaló que ya se les había presentado una política en materia de quema agrícola en la que la participación de este comité se había tomado en cuenta y se había incorporado a la política. Dijo que harían lo mismo para cada política, norma o Plan de Implementación Estatal de mayor escala en el que el comité estuviera trabajando. Dijo que se asegurarían de que tuviera sentido y de que contara con alguna actividad de reducción de emisiones.

Kristian Salgado preguntó si así como habían participado en la política en materia de quema agricola, tendrían oportunidad de dialogar con respecto a otras normas tales como aquellas que tienen que ver con polvo fugitivo, créditos por reducción de emisiones o fuentes móviles.

Matt Dessert indicó que Belen Leon le había señalado que algunas de las respuestas a sus preguntas se abordarían como parte de las estrategias de fase 2 en la presentación de esa noche. También dijo con respecto a los créditos por reducción de emisiones, que podrían comentarlo más a detalle explicando cómo funcionan los diferentes sistemas bancarios y de créditos. También mencionó que generalmente las fuentes móviles no califican para créditos por reducción de emisiones a través de actividades de reemplazo.

Iddy Hartman mencionó que cuando se habla de gobierno y planeación, es de suma importancia que las distintas dependencias del condado de Imperial y sus municipios aquí representados en el comité observen las políticas en

materia de ubicación de escuelas porque no hay excusa alguna para ubicar para que las escuelas se encuentren rodeadas de campos agrícolas o a la periferia de comunidades en las que los jóvenes son expuestos a contaminación.

Luis Olmedo le agradeció su comentario y dijo que se trataba de un comentario recurrente por lo que se estaban encargando de que algún representante de Uso de Suelo y Planeación pudiera ser un participante permanente en este tipo de reuniones.

Actualización de la Encuesta sobre Proyectos de Mitigación hecha por los Integrantes del Comité Directivo; Daniela Flores, Ramboll & Harder Co.

Mireya Diaz mencionó que le había gradado mucho el formato dela encuesta porque le había resultado fácil de leer. Dijo que le gustaría saber por qué la comunidad no parecía estar interesada en los temas que para el comité habían resultado útiles y de importancia. Sin embargo, dijo que en general su opinión sobre la encuesta era muy buena.

Daniela Flores exhortó a todos a utilizar las papeletas para expresar sus opiniones para que se compartieran con todos y se identificaran áreas de oportunidad para mayor diálogo.

John Hernández dijo que quería compartir para que quedara registrado que él no cree que mitigación y reducción sean sinónimos.

VI. Puntos a Debatir

Preguntas y Respuestas sobre el Borrador del Plan Comunitario de Monitoreo Atmosférico (CAMP, por sus siglas en inglés)

Kristian Salgado dijo que le gustaría proponer un libro de directrices comunitarias llamado *Clean Air Requires Everyone (El Aire Limpio Requiere de Todos)* como modelo para llevar a cabo la difusión y alcance a las comunidades específicamente porque la Junta de Recursos Atmosféricos incluyó en sus comentarios que era importante reducir la exposición personal a través de la práctica de toma de decisiones informadas. En lo que se refiere a funciones y responsabilidades, mencionó que le preocupa la manera en que se representan las dinámicas de poder en la tabla organizacional. Hizo algunos comentarios específicos al respecto y sugirió se consideraran algunos cambios

Aidé Fulton sugirió contar con alguna especie de directrices estandarizadas para fines de educación y difusión.

Una Asistente mencionó que cada una de sus comunidades es única y muy particular y que estaba de acuerdo en utilizar directrices o pautas, pero que no estaba a favor de la estandarización.

Belen Leon indicó que todos los comentarios con respecto al Plan Comunitario de Monitoreo Atmosférico debían ser presentados a más tardar el 19 de agosto a fin de poder contar con un borrador final que todos pudieran revisar durante su siguiente reunión del 28 de agosto.

VII. Encuesta Interactiva

Daniela Flores de Harder Co. condujo una encuesta interactiva para recolectar información de los integrantes del comité directivo en materia de escuelas de prioridad para los Proyectos de Filtración de Aire Intramuros financiados por AB 617. Al final de la encuesta solicitó a los integrantes del comité que revisaran la lista adjunta de escuelas en el corredor, la copia de la encuesta que acababan de completar y el mapa geográfico que despliega las escuelas en el corredor. Explicó que su propósito era el de llegar a la siguiente reunión preparados para dar retroalimentación en cuanto a sus prioridades con respecto a cada escuela en el corredor.

Breve Presentación de Jonathan London, Profesor Adjunto y Vice Presidente: Ecología Humana / Director de la Facultad de Desarrollo Comunitario y Regional: Centro de Cambio Regional

Jonathan London mencionó estar trabajando en un proyecto bajo contrato con la Junta de Recursos Atmosféricos como evaluador independiente externo de participación comunitaria en el programa AB 617. En ese momento, hizo circular un documento en referencia a su estudio y dijo que con gusto también podría compartirlo vía correo electrónico para aquellos que estuvieran interesados. Explicó que el propósito de su estudio era el de realzar el aprendizaje y las experiencias que todos estaban experimentando a través del programa AB 617, así como ayudar a entender cuáles eran las practicas que mejor funcionaban, cuáles eran las que no funcionaban muy bien, y las ideas que tenían para mejorar el proceso. Mencionó además que en el folleto encontrarían un vínculo para ingresar a una encuesta que les invitaba a completar. Dijo haber estado hacienda entrevistas a algunos integrantes del comité directivo y que si tenían cualquier pregunta o comentario que pudiera ser incluido en su cuestionario, le encantaría que se lo compartieran.

VIII. Actualización por parte de las Dependencias

Matt Dessert dijo en relación a la regla de créditos por reducción de emisiones número 214.2, que la enajenación de vehículos viejos no se considera como reducción de emisiones. Dijo que se trataba de una norma especial para el Condado Imperial a través de la cual créditos por reducción de emisiones pueden ser establecidos por pavimentar vialidades sin pavimentar. Añadió que esta norma se encuentra en el núcleo de su primer proyecto de reducción de emisiones cuyo objetivo es pavimentar el estacionamiento de una escuela preparatoria en la ciudad de Calexico.

Kristian Salgado le agradeció la aclaración.

IX. Temas para la Agenda de la Siguiente Reunión

Belen Leon dijo que un diálogo sobre los resultados dela encuesta que se había llevado a cabo durante esta reunión sería parte de la agenda. También dijo que el Plan Comunitario de Monitoreo Atmosférico se presentaría ante el comité para su aprobación y les record o que cualquier comentario sobre este plan tendría que presentarse a más tardar el 19 de agosto. Dijo que incluirían también una actualización del Programa Comunitario de Reducción de Emisiones ya que el plazo para su aprobación es el 11 de septiembre. Finalizó diciendo que se incluirían también algunas presentaciones para su reunión del 28 de Agosto a celebrarse en el Centro Comunitario de Heber.

X. Comentarios Finales / Cierre

Rene Felix dijo que se sentía muy animado debido al progreso que han logrado. Añadió estar consciente de que el venir a estas reuniones se está capacitando y educando para poder estar todos en la misma página. Por tanto, comentó que le entusiasmaba mucho asistir a las siguientes reuniones mejor preparado y habiendo leído el material que les comparten con antelación a la reunión.

Luis Olmedo dijo que quería reconocer el servicio de interpretación simultánea profesional que se brindaba en todas las reuniones. Señaló la importancia de contar con una comunicación adecuada en estas reuniones y agradeció al Distrito de Control de Contaminación Atmosférica por hacer este servicio posible.

Kristian Salgado dijo que quería exhortar a todos a participar hacienda comentarios y preguntas para que su voz sea escuchada al momento de toma de decisiones. También sugirió contar con un mecanismo establecido para fin de abordar las cartas que se dirijan al comité.

Mireya Diaz dijo estar de acuerdo con el comentario de Kristian Salgado en cuanto a contar con un mecanismo para abordar cartas dirigidas al comité.

Un Asistente sugirió contar con más datos en materia de escuelas a ser consideradas para el Proyecto de Filtración de Aire a fin de poder tomar mejores decisiones al respecto.

Belen Leon agradeció a todos por su participación y les aseguró que todos y cada uno de sus comentarios son tomados en cuenta así como todas y cada una de las escuelas para ese proyecto.

Luis Olmedo también agradeció la participación de todos e indicó que la carta presentada al comité durante esta reunión sería abordada en su momento.

Se levanta la Sesión.

Attachment: CERP Update & Overview

COMMUNITY EMISSION REDUCTION PROGRAM IMPERIAL COUNTY AB 617 UPDATE



Imperial County AB 617 Community Steering Committee Meeting September 11, 2019

RAMBGLL Bright ideas. Sustainable change.



COMMUNITY EMISSION REDUCTION PROGRAM **HISTORY AND STATUS**

- 1st draft of CERP was shared on July 3, 2019
- 2nd draft of CERP was shared on August 22, 2019
- 3rd draft of CERP addressed comments from CARB and was released September 5, 2019
- Last meeting we discussed key parameters for mitigation projects
- Today we will address questions on the draft CERP



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COMMUNITY EMISSION REDUCTION PROGRAM PLAN ELEMENTS

Included in Aug. 2019 Draft:

- Introduction & Background on AB 617
- Health Based Air Quality Objectives
- Community Partnerships and Profile
- Technical Foundation
- Enforcement Plan
- Community-Level Emission Inventory
- Strategy Descriptions and Recommended Metrics/Goals

Included in Sept. 2019 Draft:

- Addition of Chapters 6-8
- Metrics to Track Progress
- CEQA Project Review
- Conclusions and Checklist
- Edits to Chapters 1-8 to address CARB comments
- Inclusion of new Appendix D: Emission Inventory Supplementary Data
- Inclusion of new Appendix H: Community Outreach

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COMMUNITY EMISSION REDUCTION PROGRAM CHAPTER 6: METRICS TO TRACK PROGRESS

Overview:

- CERP must identify and describe how progress on achieving emission reductions will be tracked on an annual basis
- CERP must also track emissions for any pollutant that has an identified emission reduction target

Metrics:

- CERP Table 6.1 identifies metrics to be tracked for each ICAPCD-led strategy
- Section 6.2 provides metrics associated with CARB-led strategies
- Proposed metrics are directly tied to the strategy descriptions presented in Chapters 4 and 5

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COMMUNITY EMISSION REDUCTION PROGRAM APPENDIX H: COMMUNITY FEEDBACK

Overview:

- Appendix includes a matrix of questions/comments and answers for topics that have arisen during Steering Committee meetings
- Includes location for where comments are addressed in the CERP/CAMP, as applicable

Sources:

- ICAPCD AB 617 Community
 Steering Committee Q&A Tracking
 Spreadsheet
- CARB's Enforcement Division
- Harder & Co. Mitigation Projects
 Survey Results
- Harder & Co. Indoor Air Filtration Projects Survey Results
- Community Steering Committee
 Meeting Minutes

Final plan to be discussed and put to a vote at this **NEXT STEPS**

COMMUNITY EMISSION REDUCTION PROGRAM

 CERP will be submitted to the ICAPCD Board in late September 2019

meeting

- CERP will be submitted to CARB in October 2019
- CERP will be considered for approval by CARB in January 2020



QUESTIONS?

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	2			
	2.			
	2			

Attachment: Response to Comments on CAMP

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Response to Comments from Steering Committee Member Kristian Salgado on the August 14, 2019 Draft:

Comment	Response
Elements 1: Form Community Partnerships	
• 2.1 & 2.2	
statements such as, the "community steering committee is used to develop outreach opportunities to ensure that the community is able to participate in the decisionmaking process" and "the Steering Committee was intended to serve as a communication channel with other Community members to gather input from concerned citizens and facilitate ongoing discussion. From my perspective, I don't think these responsibilities were made clear to all CSC members (I know it kind of mentioned in the Charter) as a whole, or if the CSC members participated at this capacity.	The Community Steering Committee (CSC) is intended to be a voice to reflect the greater Community. As laid out in the CSC Charter, the purpose of the CSC is "to support active Community involvement and collaboration in development of the Program by providing a forum for identifying community issues and potential solutions with all relevant parties". These parties include any stakeholder (e.g., Community member) that has an opinion to be shared. This forum was created in the holding of regular CSC meetings and fostered by including time allocated for public comment on the agenda of each meeting. Per the charter, CSC members are also responsible for discussing and providing recommendations pertaining to "approaches for community engagement and outreach." This topic has been discussed at past CSC meetings, but we can continue to push for its inclusion on future meeting agendas if the CSC feels there is need for further input from the Community.
• 2.3	
 APCD has been doing a better job at trying to communicate with the public on air quality concerns. The AB617 Imperial County website and streaming the meetings live on Facebook is a great resource for those that can't attend meeting or do not feel conformable doing so. 	Thank you for sharing the reminder that these resources are available.
Element 2: State the Community-Specific Purpose for Air Monitoring	
3.1 Element 2 Overview	
o I agree with CARB comment "The Plan does not explicitly state how monitoring will be used to identify source impacts." In Element 6, Table 7.1, we are only focusing on hot spot identification and characterization for PM10 and PM2.5. From my perspective it's not identifying source impacts. It well documented that that PM10 and PM2.5 are areas of concern, and reason for non-attainment.	Identifying hotspots can be used as an initial step in understanding what sources are contributing to the overall air quality burden. While it is true that the exact ways the data will be used to identify source impacts have not been designated yet, text in Element 13 offers the CSC the ability to discuss and direct the approach and provides potential analyses to consider. Understanding where impacts occur will be the first step in using this data to make decisions. In the future, the CSC may decide to utilize complementary monitoring to further identify source impacts.

ပြ	Comment	Response
•	3.3 Community Input	
0	I have two thoughts on this section. One, using these surveys as "Community" input is limiting because it only surveyed a small group of people. Two, if we are utilizing this information as "purpose for air community monitoring" than based on figure 3.4 we need to be focusing our monitoring efforts on the International Border and Agriculture. It looks like we are focusing on vulnerable populations, like schools as means of "Education and Information" more than "Hot spot identification and characterization."	In the AB 617 Program, CSCs are intended to represent a broad cross-section of the Community, with the intent that they have been soliciting input from the larger Community throughout this process. In response to your second comment, to further validate where monitoring should occur, the CSC went through a rigorous community air monitor (CAM) location selection process, which took the input from the CSC on multiple occasions to determine where the final locations should be. Final location selections included those adjacent to the international border and other key locations in the corridor, such as near agricultural sources.
•	3.4.2 Community Monitoring	
0 0	Data has been collected since September 2016 from the IVAN community air monitoring. Can we use the community air monitors data (in the corridor) to make preliminary decision on what locations the CSC should be interested in installing more? At this point, I'm not convinced that community air monitoring can do much more for resident than inform them of real-time air quality conditions, so they can respond with simple behavior change (go for a run outdoors or not). How is the IVAN community monitoring data currently analyzed?	Once IVAN monitor data is collected, it is checked for quality and displayed on the Ivan-Imperial website for use by the public (https://ivan-imperial.org/air/map). As you note, the District and Comite Civico del Valle (CCV) has not to date evaluated past IVAN monitor data as part of the AB 617 process. CCV has been in discussions with CARB on potentially leveraging CARB's expertise to perform analyses on past IVAN monitor data. Despite the past data not having been analyzed, the locations of existing IVAN monitors were provided in figures to the CSC during the CAMS exists and where it may be useful. Once new data from the CAMS and location selection process to inform the CSC where coverage by CAMS exists and where it may be useful. Once new data from the CAMS and existing IVAN monitors is collected and analyzed, it will be used to inform Community members on local air quality conditions as described in Section 3.5 of the Community Air Monitoring Plan (CAMP). Additionally, the section describes the importance of increasing the density of CAMs to provide a more complete picture of local air quality conditions. The low-cost sensors used in the CAMs are a relatively new technology and the uses of the data they produce are still evolving. Expanded uses for CAM data as well as from potential complementary monitoring efforts (e.g., the mobile monitoring described in Section 3.5) will be explored in future CSC meetings.

ပိ	Comment	Response
필	Element 3: Identify Scope of Actions	
•	4.2 Community Input	
0	Reflecting on January 30, 2019 meeting's break out session there was limited discussion around the topic of developing a scope of action from my perspective. I don't know that that early on in the AB 617 process the CSC member were self- aware that the discussion that were had were going to shape the direction of the Community Air Monitor Plan. Also, those focus groups were guided and asking very specific questions, such as "where do you know there are hot spot?" and "can you point to the map of these locations?" There was no discussion around upgrading the current regulatory monitors (Chemical Mass Balance and the Positive Matrix Factorization) in addition to adding a few more community air monitory where need.	The knowledge of the CSC and other members of the Community involved in the AB 617 Program was expected to evolve over time, leading to changes in input along the way. The CAMP is intended to be a living document that can be revised through the input and direction of the CSC.
•	4.3.1 Expansion of Existing Monitoring Network	
0	I agree with CARB comment Element 3, comment #2 what is the "desired action resulting from monitoring data collection?" From my perspective, what do we expect to accomplish from monitoring these areas? What will we do with that information in order to make decision about emission reduction? What concerns are we addressing? Is it redundant to monitory PM 10 and PM2.5?	Given that the new CAM data has yet to be collected and analyzed, yet we are expected by CARB to develop emission reduction strategies in Year 1, we have chosen to utilize the comprehensive Technical Assessment in the Community Emissions Reduction Program (CERP) along with the years of experience of the District and CCV and input from the CSC to identify initial emission reduction projects. The District has expertise in identifying emission reduction projects that address key sources of pollution in the Corridor which can be implemented in a short timeframe.
		Regarding PM ₁₀ and PM _{2.5} , it is important to monitor each. Imperial County has nonattainment areas for both sizes of PM, and while some sources overlap, they have other distinct sources and precursor pollutants which need to be addressed via different strategies. More information on these pollutants and their effects on air quality in Imperial can be found in their respective State Implementation Plans (available at: https://ww3.arb.ca.gov/planning/sip/planarea/imperial/imperialsip.htm).

Comment	Response
4.3.3 Education & Outreach	
 I would highly recommend replicating the community guidebook created by Jennifer Lee Saklar (http://humboldt-dspace.calstate.edu/handle/2148/338) because it helps explain to the average resident important information such as, air pollution and the law, and air pollution and the air district. This type of educational approach, "community guidebook" could address CARB's, monitoring plan element 3, comment #1, "Actions supported by the proposed objectives can be identified as reducing personal exposure through informed decision-making" 	We appreciate this information and agree that it looks like a good reference for community outreach. We propose to revise the CAMP to mention that the general outreach approach for the CAMP will be centered on the mechanisms presented in the "Clean Air Requires Everyone" guidebook or similar guidance documents and will be fine-tuned to the needs of the Community. We also propose making this a discussion topic at a future CSC meeting.
4.4 Other Supporting Actions	
o Similar to my comment for 3.4.2 Community Monitoring, in this section it is stated, "additional uses for the data will also be explored in the coming years. For example, as more long-term data is collected, there will be opportunities for data analysis and trend identification using the community monitors, rather than through the regulatory monitors alone." Can we use the current nine community air monitors for trend identification?	Please see response to question pertaining to Section 3.4.2. Past and future data from the nine existing IVAN monitors can be used along with data from the new CAM monitors for trends analysis in the future should that be a priority of the CSC.
Element 4: Define Air Monitoring Objectives	
• 5.2.1 Monitoring Design	
o It is worth the CSC taking the time to have a second public discussion about this topic. I agree with CARB comment, "district may want to consider adding PM speciation to the El Centro station and adopting the Calexico SASS to help differentiate impacts of different source categories on local air quality. CARB presented to the Steering Committee that receptor based source apportionment methodologies1 such as PMF or CMB can be utilized to identify source contributions if adequate speciated data are available." Chemical Mass Balance and the Positive Matrix	We acknowledge that additional analyses (such as Chemical Mass Balance and Positive Matrix Factorization) are potential future options for the CSC to explore. These come with certain cost implications, such as equipment and laboratory services, and may potentially be financed through the AB 617 funds. As the CSC evaluates direction of the complementary monitoring portions of the CAMP, these could be alternatives for consideration.
racconzation can provide the location air district with the technical knowledge that can then be shared with	

Comment	Response
 resident on how to reduce emissions. These profiles can break down the total volatile organic compound (VOC) or particulate matter (PM) emissions from a particular source into the individual compounds (for VOCs) or elements (for PM). 	
• 5.3 Additional Data	
 How does a resident get access to SIP ongoing meteorological "met" data collection? 	The sources for meteorological data in the Imperial County SIPs are publicly available at: • https://www.arb.ca.gov/aqmis2/metselect.php • https://www.ncdc.noaa.gov/cdo-web/
Element 5: Establish Roles and Responsibilities –" meaningful engagement??"	
I have concerns about the representation of figure 6.1: Organizational Chart. – There is clear responsibility, and power differences in this environmental decision-making process. First, AB 617 Community Air Protection Program is not an organization, and therefore should not be included as such. Also, we should include IC Board of Supervisors on this structure. I would suggest a structure illustrated below. Rational—APCD and CCV meeting more regularly and are both actively writing this document. CSC meets monthly and is providing informal feedback at best. AB 617 AB 617 CARB CONTROLL CONTR	We agree with your comments here. We propose to revise the CAMP to include a restructured diagram based on the following mockup: Community Community CSC Community CSC COMMUNITY CSC COMMUNITY CSC COMMUNITY CSC COMMUNITY CSC CARB Board

Comment	Response
Element 6: Define Data Quality Objective	
 7.2 Data Quality Objective for Regulatory Monitors 	
"To evaluate the progress of the Emission Reduction Program, the Steering Committee is proposing to use established regulatory monitors that have been designed to collect data for comparison against the NAAQS." If both regulatory and community monitors are measuring both PM10 and PM2.5 isn't that redundant, and they both currently do that right now, so how is that a "new actions that go beyond existing efforts to further reduce air pollution disparities" (CARB, Blueprint.)	Regulatory monitors provide high-quality, high-accuracy data compared to CAMS, but are few in number due to their high station cost. Conversely, CAMS are less accurate, but are lower cost and can be placed in greater numbers to cover a larger area more densely. In this sense, the two technologies can complement one another. Under this plan, we are proposing to install more CAMS to get a more complete picture of local air quality conditions, while using the regulatory monitor data to track the impacts of the emission reduction program. These are new actions in the Corridor.
 Table 7.1 Data Quality Objectives AB617 Community Monitors The two objectives (education and information & hotspot identification and characterization) are made clearer with the chart and should be made clearer in other sections. 	Section 7 is when the data quality objectives for the CAMs are introduced and discussed, so this is the section where these ideas are made clear.
Element 7: Select Monitoring Methods and Equipment	
 I agree with CARB comment "Operating costs and maintenance requirements should be documented in element 7. I know this information was added, but I think it might be beneficial to create an itemized budget worksheet broken down by year that illustrates the total cost needed to implement. \$2,000 per year from its data management provider to format and transmit regulatory monitoring data to CARB's AQ View platform, as proposed by this Plan. Per CCV, the estimated cost for the installation, maintenance, and operation of the AB 617 Community Monitors is approximately \$160,000. 	A draft budget for the utilization of funds for the Clean Air Protection Program (the AB 617 Program) in the Community is currently still under development by the District and CCV, and will soon be shared with the CSC.
Element 8: Determine Monitoring Areas	
 Table 9.1 I know this section state, "Fifteen locations have been selected as the top choices identified by the Steering Committee members, as well as 10 alternate locations should issues arise with any top choices." Where does 	Thank you for your comment. We propose revising the CAMP to explicitly state that at least 15 new CAMs will be installed in the Corridor.

Comment	Response
it state how many community monitors will be installed total?	
Element 13: Analyze and Interpret Data	343
 14.2 Data Analysis and Considerations for Regulatory Monitors 	
 "While the data analysis from regulatory monitors will not be used to identify individual sources, the information will assist in the characterization of regional trends."—I think regional trends are great, but I still think we need to revisit collecting speciated data that could shed more light on the AQI by the US-Mexico border. The information shared in the section about PM 2.5 was very informative such as, "For example, certain activities typically increase in the winter months, such as residential wood burning and the burning of large outdoor bonfires, a traditional part of holiday celebrations in Mexico. These can contribute increased emissions of PM2.5 and its precursors to the atmosphere. During the summer, certain other sources have more activity, such as agricultural burning. In Imperial County, emissions of PM2.5 from agricultural burning of field crops are typically higher on average summer days compared to the annual daily average." This makes me think that we do have a pretty good grasp on the regional trends of pollutions and might need to consider speciated data. 	Please see response pertaining to question in Section 5.2.1.
 14.3 Data Analysis and Considerations for Community Monitors 	
o The statement was confusing for me, can the CSC have more calcification on this topic. What is expected of us? "Ultimately, the Steering Committee will need to determine which methods and analyses will be utilized to extract useful information from the large amount of monitoring data that will be collected. As more AB 617 Community Monitors go live and begin collecting data, the Steering Committee can evaluate these options for feasibility and determine how best to proceed in order to accomplish the monitoring goals of the Plan."	Future CSC meetings will involve review of data collection methods and analysis techniques. There are many potential options, and we are looking to the District and CCV for technical direction and the CSC for input on other considerations. Some of the potential methods are straightforward, while others are more intensive (e.g., using the data in air dispersion modeling), so there are time and resource implications that need to be considered. A list of options is provided in Section 14.3 of the CAMP. This will be a discussion topic at a future CSC meeting.

ICAPCD

Comment	Response
Element 14 - Communicate Results to Support Action	
This section is very important because it utilizes the research/scientific based information (why we are continuing to monitor air pollution?) to establish a strong argument for action or how CSC will approach the Emission Reduction Program. It unclear to me at this point that the CSC members or "Community" are connecting the dots between monitoring (depending on the monitors type different data will be collected. Also, different data has different value) □ data (what type of information we will have to work with) □ what we can do with that data? □ What knowledge/data is needed justified certain type of action?	Thank you for your comment. Please see response to question in Section 14.3 and proposal to address the topic of how to utilize CAM data at a future CSC meeting. As the potential for complementary monitoring is further evaluated, this can be a key part of that discussion. The CERP is expected to include certain Year 1 emission reduction projects and the Technical Assessment from the CERP and input from the District, CCV, and the CSC has been used to do so. Once CAM data (and potentially complementary monitoring data) has been collected, that data could be used to inform future projects.

Attachment: Draft CERP

THEMINDSTIA THEORY



AIR POLLUTION CONTROL DISTRICT

IMPERIAL COUNTY YEAR 1 COMMUNITY EMISSIONS REDUCTION PROGRAM PLAN FOR THE EL CENTRO-HEBER-CALEXICO CORRIDOR

SEPTEMBER 2019

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DRAFT SEPTEMBER 2019 ICAPCD

IMPERIAL COUNTY YEAR 1 COMMUNITY EMISSIONS REDUCTION PROGRAM PLAN FOR THE EL CENTRO-HEBER-CALEXICO CORRIDOR

Prepared for

Imperial County AB 617 Steering Committee

Prepared by

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SEPTEMBER 2019

Contents

1	Introduction and Background	1-1
1.1	Introduction	
1.2	Background	
1.2.1	Assembly Bill 617	
1.2.2	Community Nomination Overview	
1.2.3	Imperial County Community Nominations	
1.2.4	Community Steering Committee	
1.3	Objective	
1.3.1	Health-Based Air Quality Objectives	
1.4	Document Organization	
2	Community Partnerships and Public Engagement	
2.1	Community Steering Committee	
2.1.1	Community Steering Committee Development Process	
2.1.2	Community Steering Committee Charter	
2.2	Outreach Summary	
3	Understanding the Community	
3.1	Community Profile	
3.2	Technical Foundation	
3.2.1	Existing Cumulative Air Quality Exposure Burden	
3.2.2	Community-Level Emissions Inventory	
3.2.3	Source Attribution Analysis	
3.2.4	Existing Air Quality Policies and Programs	
3.2.5	Sensitive Receptors and Land Use Policy	
3.2.6	Assessment of Compliance	
4	Targets and Strategies	
4.1	Emission Reduction Targets	
4.2	Compliance Goals	4-3
4.3	Proximity-Based Goals	4-3
4.4	Reduction Strategies	4-4
4.4.1	Regulatory Strategies	
4.4.2	Facility Risk Reduction Audits	4-7
4.4.3	Air Quality Permitting	
4.4.4	Enforcement Strategies	4-9
4.4.5	Incentives-Based Strategies	
4.4.6	Land Use Strategies	4-12
4.4.7	Transportation Strategies	4-14
4.4.8	Mitigation Strategies	4-15
5	Enforcement Plan	
5.1	Enforcement Overview	
5.1.1	ICAPCD Enforcement Overview	
5.1.2	CARB Enforcement Overview	
5.2	Three-Year Retrospective Reviews of Enforcement	

5.2.1	ICAPCD Enforcement Review	5-5
5.2.2	CARB Enforcement Review	5-6
5.3	Enforcement Compliance Mechanisms	5-15
5.3.1	Enhanced Enforcement Measures	5-15
6	Metrics to Track Progress	6-1
6.1	ICAPCD Metrics	6-1
6.1.1	Air Quality and Exposure Metrics	6-5
6.2	CARB Metrics	6-5
6.2.1	Metrics Associated with Strategy R-2	6-5
6.2.2	Metrics Associated with Strategy E-10	6-5
7	California Environmental Quality Act Project Review	7-1
8	Conclusion and Checklist	
8.1	Checklist of Community Emissions Reduction Program Criteria and Conclusions	8-1
9	References	
Tables		
Table 1	.1. Community Emissions Reduction Program Planning Elements	1-5
	.1. AB 617 Community Steering Committee Members, 2018-2019	
	.1. CES3 Percentiles for Census Tracts within the El Centro-Heber-Calexico Corridor	
	.2. CES3 Statewide Burden Percentiles for Census Tracts within the El Centro-Heber-Calexic	
	Corridor	
Table 3	.3. Examples of Key Emission Sources in Imperial County and Associated Pollutants	
	.4. Base Year (2017) Community-Level Emissions Inventory – Stationary Source Criteria Air	
	Pollutants	3-19
Table 3	.5. Base Year (2017) Community-Level Emissions Inventory – Stationary Source Toxic Air	
	Contaminants	3-20
Table 3	.6. Base Year (2017) Community-Level Emissions Inventory – Area-Wide Source Criteria Air	
	Pollutants	3-23
Table 3	.7. Base Year (2017) Community-Level Emissions Inventory – Area-Wide Source Toxic Air	.0 20
	Contaminants	3-23
Table 3	.8. Vehicle Class Mapping	
	.9. Base Year (2017) Community-Level Emissions Inventory – On-Road Mobile Source Criteri	
· GIDIO O	Pollutants	
Table 3	.10. Base Year (2017) Community-Level Emissions Inventory – On-Road Mobile Source Toxic	
. 45.0	Contaminants	
Table 3	.11. Base Year (2017) Community-Level Emissions Inventory – Off-Road Mobile Source Crite	
	Air Pollutants	
Table 3	.12. Base Year (2017) Community-Level Emissions Inventory – Off-Road Mobile Source Toxic	
	Contaminants	
Table 3	.13. Imperial County Emission Reductions from Carl Moyer Program Projects	
	.14. Imperial County Estimated Emission Reductions from current FARMER Program Projects	
	.15. Imperial County Emission Reductions from State Reserve Funding	

Table 3.16. Imperial County Emission Reductions from NOx Remediation Measures	3-38
Table 3.17. Imperial County Emission Reductions from GMERP	3-39
Table 3.18. Imperial County Agricultural Burning Emission Reduction Credits Generated	3-42
Table 3.19. Imperial County Emission Reductions from Rule 310 Projects	3-42
Table 4.1. Emission Reduction Targets	4-2
Table 4.2. Proximity-Based Goals	
Table 4.3. Estimated Emission Reductions Associated with CARB/State Strategies	
Table 4.4. AB 2588 Facilities within or directly surrounding the El Centro-Heber-Calexico Corridor	
Table 4.5. Estimated Emission Reductions Associated with Wood Burning Device Grant Program	
Table 4.6. Estimated Emission Reductions Associated with Parking Lot Paving	
Table 4.7. Estimated Emission Reductions Associated with School Bus Replacement	
Table 5.1. Heavy-Duty Vehicle Inspection Program Results	
Table 5.2. Fuels Inspection Program Results	5-9
Table 5.3. Consumer Products Inspection Program Results	
Table 5.4. Settlements for Year 2016	5-11
Table 5.5. Settlements for Year 2017	
Table 6.1. Summary of ICAPCD Annual Implementation Metrics	
Table 8.1. Community Emission Reduction Program Criteria	
Figures	
	2.2
Figure 3.1. El Centro-Heber-Calexico Corridor	3-2
Figure 3.2. Locations of Air Quality Monitors in the El Centro-Heber-Calexico Corridor	3-0
Figure 3.3. Comparison of 8-hour Ozone Design Values at the Calexico and El Centro Monitoring	2 7
Stations to the NAAQS	3-1
Figure 3.4. Comparison of Annual PM _{2.5} Design Values at the Calexico and El Centro Monitoring Sta	SHOIJE O C
to the NAAQS	
Figure 3.5. Comparison of 24-hour PM ₁₀ Concentration Measurements at the Calexico Monitoring S	
to the NAAQS	
Figure 3.6. Comparison of 24-hour PM ₁₀ Concentration Measurements at the El Centro Monitoring S	
to the NAAQS	
Figure 3.7. PM ₁₀ and PM _{2.5} Monitoring Data (µg/m³) from the Calexico-Alvarez Community Monitor.	
Figure 3.8. PM ₁₀ and PM _{2.5} Monitoring Data (µg/m³) from the El Centro-Wilson Community Monitor.	
Figure 3.9. PM ₁₀ and PM _{2.5} Monitoring Data (µg/m³) from the Heber Community Monitor	
Figure 3.10. CES3 Statewide Burden Percentiles for Air Quality-Related Indicators	
Figure 3.11. CES3 Countywide Burden Percentiles for Air Quality-Related Indicators	
Figure 3.12. Stationary Source Locations in the El Centro-Heber-Calexico Corridor	
Figure 3.13. TIGER Census Roadway Map for the El Centro-Heber-Calexico Corridor	3-27
Figure 3.14. Base Year (2017) PM _{2.5} Emission Contribution to Community-Level Inventory Total by	0.00
Source Category	3-32
Figure 3.15. Base Year (2017) PM _{2.5} Emission Contribution to Stationary Source Category Total	
Figure 3.16. Base Year (2017) PM _{2.5} Emission Contribution to Area-wide Source Category Total	3-33
Figure 3.17. Base Year (2017) PM _{2.5} Emission Contribution to On-Road Mobile Source Category	
Total	3-33

Figure 3.18. Base Year (2017) PM _{2.5} Emission Contribution to Off-Road Mobile Source Category	
Total	.3-34
Figure 3.19. Base Year (2017) TAC Emissions Contribution to Cancer Risk Weighted TAC	
Emissions	.3-35
Figure 3.20. Agricultural Acres Burned in Imperial County, 2003-2018	.3-40
Figure 3.21. Agricultural Acres Not Burned in Imperial County and Participating in ABERC Program,	
2014-2018	.3-41
Figure 3.22. Sensitive Receptor Locations in the El Centro-Heber-Calexico Corridor	.3-49
Figure 3.23. Locations of Emission Sources and Sensitive Receptors as Identified at a Steering	
Committee Meeting; Locations of Existing IVAN and Regulatory Monitors	.3-50
Figure 3.24. Proximity of Sensitive Receptors to Industrial Sources in Heber	,3-55
Figure 5.1. Heavy Duty Vehicle Inspection Program Compliance Rate	5-8
Figure 5.2. Fuels Inspection Program Compliance Rate	5-9
Figure 5.3. Consumer Products Program Compliance Rate	.5-10
Figure 5.4. Heavy-Duty Vehicle Inspection Program Enforcement Activities: 2016	.5-12
Figure 5.5. Heavy-Duty Vehicle Inspection Program Enforcement Activities: 2017	.5-12
Figure 5.6. Heavy-Duty Vehicle Inspection Program Enforcement Activities: 2018	5-13
Figure 5.7. Fuel Inspection Program Enforcement Activities: 2016	.5-13
Figure 5.8. Fuel Inspection Program Enforcement Activities: 2017	,5-14
Figure 5.9. Consumer Products Inspection Program Enforcement Activities: 2018	5-14
Appendices	

Appendix A:	Community Steering Committee Meeting Summary
Appendix B:	AB 617 Community Steering Committee Charter
Appendix C:	Community Steering Committee Meeting Materials (electronic)
Appendix D:	Community-Level Emissions Inventory Supplementary Data
Appendix E:	Sensitive Receptors Supporting Information
Appendix F:	Permitting and Enforcement Supporting Information
Appendix G:	Emission Reduction Calculations
Appendix H:	Community Feedback

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Abbreviations and Acronyms

AB assembly bill

ABERC Agricultural Burning Emission Reduction Credit

AER alternative emission reduction
APCO Air Pollution Control Officer

AQS Air Quality System

ATCM airborne toxic control measures

ATV all-terrain vehicle

BACM best available control measures
BACT best available control technology

BARCT best available retrofit control technology CAFO concentrated animal feeding operations

CAL community air quality level

CalEPA California Environmental Protection Agency

CAPP Community Air Protection Program

CAP criteria air pollutant

CARB California Air Resources Board CCV Comite Civico del Valle, Inc.

CEPAM California Emissions Projection Analysis Model

CES3 CalEnviroScreen, Version 3.0

CEQA California Environmental Quality Act

CH₄ methane

CO carbon monoxide

CUPA Certified Unified Program Agency
DMV department of motor vehicles
DPM diesel particulate matter
ECL emission control label
FRC emission reduction credit

FARMER Funding Agricultural Replacement Measures for Emission Reduction

GHG greenhouse gas

GMERP Goods Movement Emission Reduction Program

GPS global positioning system

HDVIP Heavy-Duty Vehicle Inspection Program

HHDV heavy heavy-duty vehicle
HPUD Heber Public Utility District
HSC Health and Safety Code

ICAPCD Imperial County Air Pollution Control District
IVAN Identifying Violations Affecting Neighborhoods

LCFS Low Carbon Fuel Standard

LDV light duty vehicle

LHDV light heavy-duty vehicle MHDV medium heavy-duty vehicle

NAAQS National Ambient Air Quality Standards

NH₃ ammonia

NO₂ nitrogen dioxide NOV notice of violation

NRM NOx Remediation Measure

NSPS New Source Performance Standards

NTC notice to comply

 O_3 ozone

OEHHA Office of Environmental Health Hazard Assessment

OHV off-highway vehicle

Pb lead

PERC Paving Emission Reduction Credit

PERP Portable Equipment Registration Program

PMF positive matrix factorization PM₁₀ respirable particulate matter PM_{2.5} fine particulate matter

RACM reasonably available control measures reasonably available control technology

ROG reactive organic gases
RTP Regional Transportation Plan

SCAG Southern California Association of Governments

SB Senate Bill

SEP Supplemental Environmental Project

SFTP Secure File Transfer Protocol
SIP State Implementation Plan
SMP Smoke Management Program

SO₂ sulfur dioxide

SORE small off-road engines
SPM special purpose monitor
TAC toxic air contaminant

TIGER topologically integrated geographic encoding and referencing

Tpy tons per year

μg/m³ microgram per cubic meter

USEPA United States Environmental Protection Agency

VMT vehicle miles travelled VOC volatile organic compound

1 Introduction and Background

1.1 Introduction

This Year 1 Community Emission Reduction Program Plan ("Emission Reduction Plan" or "Plan") presents objectives and methodologies for the Community Emission Reduction Program in the El Centro-Heber-Calexico Corridor in Imperial County, California ("Community"). This Plan was developed in response to the selection of this Community to implement an emissions reduction program under the California Air Resources Board (CARB) Community Air Protection Program (CAPP), a program established to help implement California Assembly Bill 617 (AB 617). This Plan specifically addresses the planning elements laid out in CARB's Community Air Protection Blueprint ("Blueprint"), a guidance document developed for the CAPP.¹ Each of the planning elements ultimately serve to address two main health-based objectives, which are:

- Maximizing progress on reducing exposure to toxic air contaminants that contribute to cumulative exposure burdens within selected communities; and
- Reducing exposure caused by localized particulate matter less than 2.5 microns in aerodynamic diameter (PM_{2.5}) sources to achieve healthful levels of PM_{2.5} within the community.

This Plan demonstrates how the Community plans to reduce emissions at the local scale by identifying targets and implementing strategies to improve local air quality and ultimately satisfy these health-based objectives.

1.2 Background

1.2.1 Assembly Bill 617

On July 26, 2017, California Governor Jerry Brown signed into law AB 617, an act to amend and add sections regarding air pollution to California's Health and Safety Code. The bill directs CARB and local air districts throughout the state (including the Imperial County Air Pollution Control District [ICAPCD or "District"]) to enact measures to promote public health and welfare by reducing air pollution on a local scale, particularly in communities that are disproportionately burdened by air pollution. AB 617 was designed to accomplish this via the establishment of the CAPP, which puts the emphasis on community-focused actions that go beyond the regional and statewide air quality programs already in place.

California Air Resources Board. 2018. Community Air Protection Blueprint. October. Available at: https://ww2.arb.ca.gov/sites/default/files/2018-10/final_community_air_protection_blueprint_october_2018.pdf. Accessed: August 2019.

AB 617 was designed to specifically improve air quality in communities with increased concentrations of criteria air pollutants² (CAPs) and toxic air contaminants³ (TACs). These improvements are to be accomplished through community emissions reduction programs, community air monitoring, or both. Section 1.2.2 describes the process by which the first round of communities was selected, including the El Centro-Heber-Calexico Corridor in Imperial County.

1.2.2 Community Nomination Overview

As part of the CAPP, CARB's Governing Board selected California communities to participate by implementing a community air monitoring program, a community emissions reduction program, or both. AB 617 stipulated that the first round of communities was to be selected by October 1, 2018 and annually thereafter (i.e., beginning January 1, 2020). Each year, the selection process will involve three steps: Identification, Assessment, and Selection. During the Identification phase, CARB staff will update the running list of potential communities for participation in the CAPP. Input will be collected from air districts across the state and from the Office of Environmental Health Hazard Assessment (OEHHA), as well as internally from CARB's own experience and data resources. Community members will also be able to nominate their own or other communities for consideration. Once this broad list of potential communities has been updated, the next step is to assess the options.

In the Assessment phase, CARB staff will continue to consult with community stakeholders, OEHHA, and the air districts to determine which potential communities are experiencing disproportionate burdens due to cumulative air pollution exposure. The CAPP Blueprint details the factors that are to be evaluated during this phase, which may include concentrations of specific CAPs and TACs, quantified health risk estimates based on modeling, the proximity of sensitive populations to significant sources of air pollution, and socio-economic factors. Once the available and relevant data has been assessed, the final phase, Selection, is initiated.

1.2.3 Imperial County Community Nominations

In anticipation of the selection of communities to participate in the CAPP, both local air districts and citizens alike identified communities and submitted nominations to CARB. Ahead of the first selection due date of October 1, 2018, ICAPCD partnered with a local advocacy and environmental justice group known as Comite Civico del Valle, Inc. ("CCV") to author a report entitled *Imperial County AB 617 Community Nominations*, with the purpose of informing CARB on which communities within Imperial County should be selected to participate in the first year of

DRAFT SEPTEMBER 2019

Includes the six federally regulated air pollutants with National Ambient Air Quality Standards established by the USEPA as a requirement of the Clean Air Act. Additional information available at: https://www.epa.gov/criteria-air-pollutants. Accessed: August 2019.

Defined by the California Health and Safety Code as air pollutants which may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health.

Additional information available at: https://oehha.ca.gov/air/toxic-air-contaminants. Accessed: August 2019.

⁴ Available at: https://ww2.arb.ca.gov/resources/documents/imperial-county-ab617-community-nominations-submitted-partnership-comite-civico. Accessed: August 2019.

the CAPP. This report included relevant data regarding health, socioeconomics, and air quality monitoring for two cities (Calexico and El Centro) and one unincorporated community (Heber) within Imperial County. The geographic proximity of these three areas lent to their being grouped together as a single AB 617-nominated community known as the El Centro-Heber-Calexico Corridor ("Corridor"), which ICAPCD nominated as its first community for participation in the CAPP.

On September 27, 2018, the CARB Board made final its selections for the Year 1 communities to participate in the CAPP.⁵ The El Centro-Heber-Calexico Corridor was chosen for both community air monitoring and a community emissions reduction program.

1.2.4 Community Steering Committee

A hallmark of the CAPP is community-driven action. AB 617 was designed to allow members from within the selected communities to take an active role in the development of their own air monitoring plans and emission reduction programs. Those who live and work in a selected community are both the most familiar with it and the most invested in promoting its environmental quality. Thus, AB 617 places an emphasis on community-driven action achieved under the oversight of groups known as community steering committees. These committees are to be comprised of primarily individuals who live and work within the communities they will represent. The CAPP Blueprint suggests that these committees include "participants from local community-based environmental justice organizations, schools, land use planning agencies, transportation agencies, local health departments (e.g., hospitals, clinics, physical rehabilitation centers, public health counseling services), academic researchers, and labor organizations, as appropriate." 6

In late 2018, ICAPCD in conjunction with CCV assembled a steering committee for the El Centro-Heber-Calexico Corridor. Referred to as the AB 617 Community Steering Committee ("Steering Committee"), this group is intended to be involved with all aspects of the Community Emission Reduction Program and the community air monitoring program, including participant recruitment, identification of key objectives, monitoring site selection, emission reduction strategy selection, and evaluation and dissemination of results. The Steering Committee is also intended to maintain communication with other community members throughout the planning process to gather input from concerned citizens and facilitate ongoing discussion.

1.3 Objective

While the El Centro-Heber-Calexico Corridor was designated as a community to develop both a community air monitoring plan and a community emissions reduction program, this Plan serves to satisfy the requirements of only the latter. It was developed according to the guidelines laid out in the CAPP Blueprint. The goal in developing this Emission Reduction Plan is ultimately to

California Air Resources Board. 2018. Resolution 18-37: Assembly Bill 617 Community Air Protection Program – Community Selection. Available at: https://www.arb.ca.gov/board/res/2018/res18-37.pdf? ga=2.16620022.1778124676.1548719155-1155382275.1462320702. Accessed August 2019.

⁶ California Air Resources Board. 2018. Community Air Protection Blueprint. October. Available at: https://ww2.arb.ca.gov/sites/default/files/2018-10/final community air protection blueprint october 2018.pdf. Accessed: August 2019.

develop local programs that go beyond existing efforts to reduce air pollution. This Plan was designed to be "action oriented", i.e., it includes direction for how the strategies should be implemented and how the emission reductions will be tracked and enforced. Ultimately, these strategies contribute to the overall objective of promoting public health and welfare in the Community through improvements in local air quality.

1.3.1 Health-Based Air Quality Objectives

The overarching goal of community emissions reduction programs is to reduce CAP and TAC emissions in order to mitigate the impacts of exposure. While each of the communities selected to participate in the CAPP faces its own distinct air quality and health challenges, broad objectives provide a framework that emissions reduction programs can be developed around. Accordingly, the CAPP Blueprint specifies the following broad health-based air quality objectives which are mandatory to include in community emission reduction programs:

- Maximizing progress on reducing exposure to TACs that contribute to the cumulative exposure burden.
- Reducing exposure caused by local PM_{2.5} sources to achieve healthful levels of PM_{2.5} within the community.

Toxic air contaminants (TACs) include a long list of pollutants that contribute to the cumulative exposure burden in an area. Relatively common TACs include diesel particulate matter (emitted from diesel-fueled engines), hexavalent chromium, lead, benzene, and toluene. While many statewide programs in California have worked to reduce TAC emissions in recent decades, some communities are currently experiencing disproportionate exposures to them. Health risks associated with exposure to TACs may include acute and/or chronic illnesses, or increased cancer risks.

Communities in California also face air quality issues related to CAPs. Specifically, $PM_{2.5}$ and ozone (O_3) are of particular concern due to their elevated concentrations, which exceed federal standards in many California communities. However, the CAPP Blueprint only incudes a mandatory health-based air quality objective for addressing $PM_{2.5}$. Ozone is not addressed because of the nature of its formation. Ground-level O_3 in the atmosphere is formed over time by the reaction of precursor pollutants rather than being directly emitted by sources. The complex chemical reactions that form O_3 occur on a regional scale, widely dispersed from wherever the precursors were originally emitted. In contrast, particulate matter (and specifically $PM_{2.5}$) in the atmosphere is the result of both regional and localized emissions. Thus, targeted emissions reductions on a local scale can reduce particulate exposure in overburdened areas in a way that reductions of O_3 precursor emissions cannot.

1.4 Document Organization

This Plan was developed and organized following the guidelines laid out in the CAPP Blueprint prepared by CARB. Specifically, each of the subsequent chapters in this Plan addresses one or more planning elements (summarized in Table 1.1 below).

Chapter	Title	Planning Elements Addressed
1	Introduction and Background	
2	Community Partnerships and Public Engagement	Form Community Partnerships
		Public Outreach
3	Understanding the Community	Community Profile
		Technical Foundation
4	Targets and Strategies	Emission Reduction Targets
		Proximity-based Goals
		Emissions and Exposure Reduction Strategies
		Implementation Schedule
5	Enforcement Plan	Three-year Enforcement Review
		Compliance Mechanisms
6	Metrics to Track Progress	Required Metrics
		Recommended Additional Metrics
7	California Environmental Quality Act	California Environmental Quality Act
8	Conclusion and Checklist	

2 Community Partnerships and Public Engagement

2.1 Community Steering Committee

Community members are well suited for providing direct insight on the air quality issues in their community and their input is necessary to ensure effective community-focused strategies. As part of this planning element, a community steering committee must be formed to facilitate communication between community members and the air district, as well as to carry out emission reduction goals and objectives. Additionally, a steering committee is used to develop outreach opportunities to ensure that the community is able to participate in the decision-making process. The Steering Committee formed by the ICAPCD and CCV fulfills the requirements of this planning element.

2.1.1 Community Steering Committee Development Process

The purpose of the Steering Committee is to design goals and objectives, provide information to community members, and support local actions related to emission reductions. The Steering Committee for the El Centro-Heber-Calexico Corridor was convened by a collaborative effort between ICAPCD and CCV, following the selection of the Corridor as a CAPP Year 1 community. Since its formation, the Steering Committee has been involved with all aspects of both this Emission Reduction Plan and the Community Air Monitoring Plan. In the formation of this Plan, Steering Committee activities have included and will continue to include participant recruitment, identification of key objectives, development of strategies for the Emissions Reduction Plan, and evaluation and dissemination of results. Additionally, the Steering Committee was intended to serve as a communication channel with other Community members to gather input from concerned citizens and facilitate ongoing discussion.

On November 1, 2018, the ICAPCD hosted an informational meeting regarding the development of an AB 617 steering committee for the El Centro-Heber-Calexico Corridor. Open to the general public, the purpose of this meeting was to allow Community members to obtain information about the Community's upcoming air monitoring and emission reduction programs. Topics discussed at the meeting included the background of AB 617, the initial efforts of CCV and ICAPCD conducted to that point, plans for upcoming Community projects to be implemented as part of CAPP participation, and development of the Steering Committee.

At the November 1 meeting, emphasis was placed on getting the Steering Committee up and running, with the goal of holding its first meeting on November 14. ICAPCD staff explained that one of the initial objectives would be to develop bylaws for the group. Applications for the Steering Committee were distributed, and a due date was set for November 5. The application form posed specific questions to applicants designed to gauge their level of interest in participating in the Steering Committee, as well as what special knowledge or perspective they could contribute to the group towards ensuring that the larger community is being fairly represented and its wellbeing considered throughout the AB 617 process.

The District and CCV received a large volume of applications during the application period, which they reviewed together over the course of two meetings. The District Air Pollution Control Officer (APCO) and the CCV Executive Director, serving as co-chairpersons of the Steering Committee, then reviewed each application and worked with their respective staff to determine which

applicants were eligible and most aligned with the spirit and objectives of the CAPP Blueprint. Ultimately, the District APCO and CCV Executive Director came to a consensus on the final list of Steering Committee members. Table 2.1 displays the members who were chosen for the first AB 617 Steering Committee for the Community, the majority of which are residents of the El Centro-Heber-Calexico Corridor.

Representing	Members	Alternates
Co-Chair (ICAPCD)	Matt Dessert	Reyes Romero
Co-Chair (CCV)	Luis Olmedo	Christian Torres
Community Corridor	Mersedes Martinez	Rosa Guerrero
Community Corridor	Diahna Garcia-Ruiz	Bob Fischer
Community Corridor	Rene Felix	Tomas Oliva
Community Corridor	Mireya Diaz	Sandra Mendivil
Community Corridor	Kristian Salgado	Chris Gomez Wong
Community Corridor	Blake Plourd	Steven Snow
Community Corridor	Sergio Cabanas	Michael Moore
Community Corridor	Mark Baza	Virginia Mendoza
Community Corridor	Aide Fulton	Diego Gamboa
Community Corridor	Mary Salazar	Irene Garcia
Community Corridor	John Hernandez	Paul Monarrez
Community Corridor	Jose Celaya	VACANT
Community Corridor	VACANT	VACANT

As Table 2.1 displays, the Steering Committee consists of 15 members made up of two *ex-officio* co-chairs (representing ICAPCD and CCV) and 13 Community representatives. Some of these Community representatives are affiliated with various organizations around Heber, El Centro, and Calexico, including school districts, local government commissions, businesses, and non-profit organizations. They were selected to participate in the Steering Committee based on their potential to act as leaders and contribute technical expertise during planning. In the event that any Steering Committee members are unable to perform their duties, alternates were selected to step in.

2.1.2 Community Steering Committee Charter

In January 2019, staff from ICAPCD and CCV developed a draft AB 617 Steering Committee Charter ("draft Charter") for consideration by the Steering Committee. The draft Charter was

discussed and approved by the Steering Committee during the February 13th Steering Committee Meeting. The Charter was then submitted to the ICAPCD Governing Board, comprised of the Imperial County Board of Supervisors. Formally approved by the Board on March 19, 2019, the Charter establishes the authority and purpose of the Steering Committee along with its bylaws, and the intended structure and schedule for regular Steering Committee meetings.⁷

The Steering Committee is responsible for holding regular meetings to discuss topics related to the CAPP and provide recommendations for action to the ICAPCD Board. Topics of discussion can include approaches for community engagement and outreach, sources contributing to the Community's air quality challenges, strategies for developing and implementing the community air monitoring and emissions reduction programs, targets and goals, and metrics to track progress. The Charter specifies that these meetings be held at least once per month, unless there is a lack of agenda topics, in which case a vote may be held to cancel the following month's meeting. Special meetings may also be held as required. A summary of the Steering Committee meetings conducted to date is available in Appendix A. A copy of the Charter is presented as Appendix B.

2.2 Outreach Summary

As part of the commitment to community engagement and outreach, ICAPCD staff operates a website dedicated to AB 617 activity in Imperial County.⁸ The site offers background information on AB 617 and has pages for information on the Steering Committee members, meetings and events (including notes and recordings from past meetings), contact information, and links to important resources such as the CARB home page and websites for local air monitoring networks. Additionally, both District and CCV staff have maintained that they will be available as resources to anyone with questions or just looking to gather more information about CAPP implementation in Imperial County. Information regarding the dedicated District contact person for this Plan is provided below.

Dedicated ICAPCD Contact Person

Belen Leon

Air Pollution Control District Project Manager
Phone: 442-265-1800
Email: belenleon@co.imperial.ca.us

The Steering Committee meetings are open to the public. They are advertised via email notifications, as well as flyers posted to the County's website. For those individuals who are unable to attend the meetings but would still like to view them in real time, the Committee began using Facebook to livestream the meetings in summer 2019. Future meetings will continue to be

⁷ ICAPCD. 2019. AB 617 Community Steering Committee Charter. March 19. Available at: <u>https://docs.wixstatic.com/ugd/99eb03_645f259f6bb44a4f81bedd12dfc98ce6.pdf</u>. Accessed: August 2019.

⁸ ICAPCD. AB 617 Imperial County: Calexico, Heber, El Centro Corridor. Available at: https://www.icab617community.org/. Accessed: August 2019.

livestreamed, as feasible. To enhance public understanding and participation, a professional interpretation service is available at each meeting to provide translation services. In addition, each meeting has a professional facilitator to encourage public and Steering Committee engagement, and to ensure that each agenda item is allocated sufficient time. At each meeting, a specific agenda item is included to allow for the public to issue comments. These comments are either addressed during the meeting or included as a discussion point for future meetings. For agenda items requiring more direct input from the Steering Committee or members of the public in attendance, electronic polling is utilized. Appendix C includes sign-in sheets, agendas, minutes, and invitation flyers for each Steering Committee Meeting. Presentation materials are available at the District's AB 617 website (www.icab617community.org/).

Community input received during the Steering Committee meetings has demonstrated the value of collaborating with members of the Community on both the Emissions Reduction Plan and the Community Air Monitoring Plan. Going forward, the Steering Committee will continue to engage with the public through monthly meetings. The flyer notification system has worked well in terms of spreading the word about meetings and promoting attendance, so it will continue to be utilized.

Finally, the ICAPCD has an established social media presence which they utilize to promote engagement by the Community in matters related to air quality and the AB 617 plans. The District operates a Facebook page⁹ where regular posts are made to notify the public about important items such as high wind advisories, times when burning is and is not permitted, and daily air quality reports that provide summaries of ambient pollutant measurements recorded at regulatory monitoring stations around the County, as well as advertisements for upcoming Steering Committee meetings and photos and videos from past meetings. Similar posts are also made to the District's Instagram¹⁰ and Twitter pages.¹¹

⁹ Available at: https://www.latest.facebook.com/Countyair/. Accessed: August 2019.

¹⁰ Available at: https://www.instagram.com/county_air/. Accessed: August 2019.

¹¹ Available at: https://twitter.com/county_air. Accessed: August 2019.

3 Understanding the Community

3.1 Community Profile

Imperial County is located in a primarily desert region of southern California and shares an international border with Mexico. The Imperial Valley runs approximately north-to-south through the center of the County and extends into Mexico. The portion of the valley just north of the U.S.-Mexican border contains the El Centro-Heber-Calexico Corridor (see Figure 3.1). The population of Imperial County is approximately 170,000, 12 while the population in the Corridor is approximately 58% of that or 100,000. The principal industries in the County overall are farming and retail trade. The Community contains relatively few PM_{2.5} stationary sources, but can experience significant emissions from vehicular traffic, particularly near Calexico and the international ports-of-entry into the United States. Other significant sources of direct PM_{2.5} in the region are unpaved road dust, fugitive windblown dust, farming operations, and managed burning and disposal. The major air pollutant source types affecting the Community are presented in greater detail in Section 3.2.1.2 and Section 3.2.2.

The local air quality is not only affected by the emissions in the area, but also by the degree to which these pollutants become dispersed in the atmosphere following emission or secondary formation (e.g., ozone, PM_{2.5}). One key factor affecting pollutant dispersion in the Imperial Valley is the degree of stability of the local atmosphere. Weather patterns and air currents dictate the degree of atmospheric stability in a region, which regulates the amount of air exchange or "mixing" that can occur in the air basin. Factors like restricted mixing and low wind speeds are associated with higher atmospheric stability. At times, Imperial County can experience a phenomenon known as a "subsidence inversion" which greatly restricts the vertical mixing of air. This leads to highly stable atmospheric conditions which can cause the stagnation of airflow and buildup of pollutants for days at a time, contributing to exceedances of air quality standards.

The Community exists in an area that is designated as nonattainment of the National Ambient Air Quality Standards (NAAQS) for 8-hour O₃, 24-hour particulate matter less than 10 microns in aerodynamic diameter (PM₁₀), and 24-hour and annual PM_{2.5}. The NAAQS are standards established by the United States Environmental Protection Agency (USEPA) to be protective of human health and welfare. Areas designated as nonattainment are required to develop State Implementation Plans (SIPs) to address the underlying air quality issues and advance air quality improvement measures to achieve the NAAQS. As such, the ICAPCD has developed updated SIPs for PM₁₀, ¹³ PM_{2.5}, ¹⁴ and O₃ ¹⁵ within the past several years. While beneficial, these plans are designed to address air quality issues at the regional level for Imperial County. In contrast, this

DRAFT SEPTEMBER 2019

¹² OEHHA. 2018. CalEnviroScreen 3.0. Available at: https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30. Accessed: August 2019.

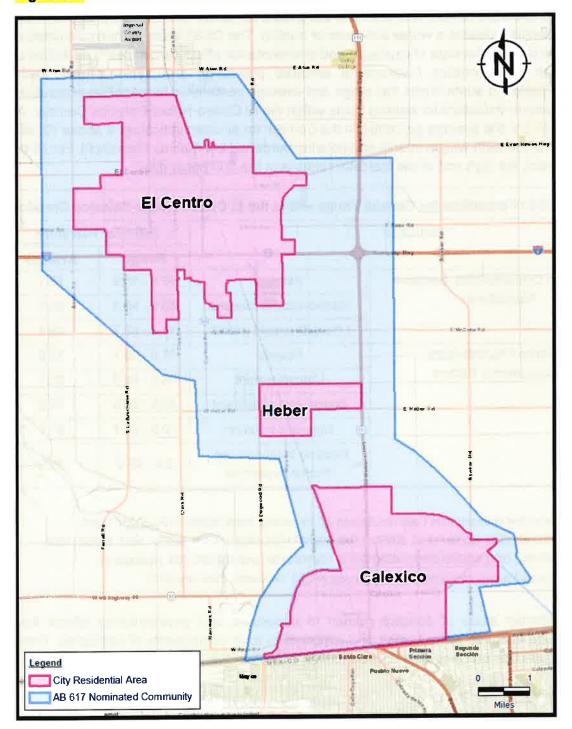
¹³ ICAPCD. 2018. Imperial County 2018 Redesignation Request and Maintenance Plan for Particulate Matter Less Than 10 Microns in Diameter. Available at: https://www.arb.ca.gov/planning/sip/planarea/imperial/sip.pdf.
Accessed: August 2019.

¹⁴ ICAPCD. 2018. Imperial County 2018 Annual Particulate Matter Less Than 2.5 Microns in Diameter State Implementation Plan. Available at: https://www.co.imperial.ca.us/AirPollution/otherpdfs/2018-IC-PM25SIP.pdf. Accessed: August 2019.

¹⁵ ICAPCD. 2017. Imperial County 2017 State Implementation Plan for the 2008 8-hour Ozone Standard. Available at: https://www.arb.ca.gov/planning/sip/planarea/imperial/2017O3sip_final.pdf. Accessed: August 2019.

Plan, prepared in accordance with AB 617, expands upon previous efforts in the SIPs to specifically focus on the El Centro-Heber-Calexico Corridor. A selection of air quality findings pertaining to the Community from the most recent Imperial County SIPs is provided in Section 3.2.1.1.

Figure 3.1. El Centro-Heber-Calexico Corridor



Aside from understanding the direct air quality burden, it is also essential to review the socioeconomic issues facing the Community to inform development of the Plan. Individuals with health ailments and lower socioeconomic status are more vulnerable to health impacts resulting from air pollution. To assess the impacts of environmental and socioeconomic factors on each census tract in the State of California, OEHHA and the California Environmental Protection Agency (CalEPA) developed a mapping tool called CalEnviroScreen, Version 3.0 (CES3). In CES3, census tracts are ranked statewide and assigned a percentile for various indicators. A high indicator percentile indicates a worse exposure or burden. The CES3 score is then calculated as the population burden (average of exposure and environmental effect percentiles¹⁶) multiplied by the population characteristics (average of sensitive population and socioeconomic factor percentiles). Table 3.1 summarizes the range and average percentiles for sensitive populations and socioeconomic indicators for census tracts within the El Centro-Heber-Calexico Corridor. As shown in Table 3.1, the average percentile in the Corridor for all listed indicators is above 70, with the exception of low birth-weight infants and housing burdened low-income household. For all but one census tract, the high end of the indicator range is in the 90th percentile.

Indicator		Indicator Percentile	
		Range	Average
Population Characteristics: Sensitive Populations	Asthma	57.6 - 95.2	79.1
	Cardiovascular disease	63.6 - 96.4	90.7
	Low birth-weight infants	11.3 - 85.7	45.4
Population Characteristics: Socioeconomic Factors	Poverty	17.9 - 99.1	72.5
	Unemployment	38.5 - 99.9	82.1
	Educational attainment	42.6 - 96.5	78.0
	Linguistic isolation	28.6 - 99.7	81.7
	Housing burdened low- income household	0.4 - 92.0	49.2

Notes:

[a] Indicator percentiles obtained from CalEnviroScreen 3.0 for census tracts 6025011100, 6025011201, 6025011202, 6025011300, 6025011400, 6025011500, 6025011600, 6025011700, 6025011801, 6025011802, 6025011803, 6025011900, 6025012001, 6025012002, 6025012100, and 6025012200. Available at: https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30. Accessed: February 2019.

Additional potential areas of concern related to exposures and environmental effects from pollution include impaired water bodies and exposure to toxic components of pesticides. These and other air pollution burdens are explored further in Section 3.2.1.1.

¹⁶ Environmental effects component is weighted one-half when combined with the exposures component.

3.2 Technical Foundation

A strong technical foundation is necessary to understand the sources of air pollution impacting a community and to provide a means of measuring emission reductions. The technical foundation serves to accomplish the following related to an emission reduction program:

- Establish a baseline understanding of the air pollution challenges in the community;
- Identify the key air pollutants and sources for programmatic focus;
- Support the development of targets and strategies; and
- Provide a mechanism to track progress.

These elements of the Plan's technical foundation are explored in the sections that follow.

3.2.1 Existing Cumulative Air Quality Exposure Burden

3.2.1.1 Evaluation of Existing Data

Cumulative air quality exposure burden accounts for exposure to air pollution in combination with the vulnerability of the population. The cumulative air quality exposure burden is evaluated through a set of factors relating to air pollution and socioeconomic status, including:¹⁷

- Concentrations of pollutants from measurements, air quality modeling, or other air pollution quantifier;
- Density of pollution sources and magnitude of emissions within the community;
- Cancer risk estimates within the community;
- Sensitive populations located in close proximity to emission sources;
- Public health data that are representative of the incidence or worsening of disease related to air quality; and
- Socioeconomic factors.

As discussed in Section 3.1, certain areas of the Corridor rank as high as the 99th percentile for socioeconomic factors within the State of California. This section evaluates the existing data from air quality monitors and CES3 indicators for air pollution.

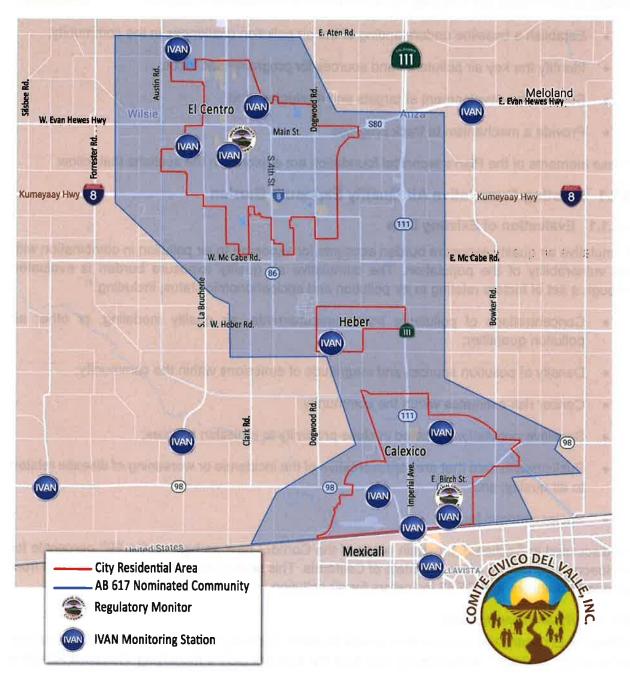
Air Quality Monitoring Data

Within the El Centro-Heber-Calexico Corridor footprint, there are two regulatory monitors and nine community monitors. The community monitors are a part of CCV's Identifying Violations Affecting

¹⁷ CARB. 2019. High Cumulative Exposure Burden. Available at: https://ww2.arb.ca.gov/capp-resource-center/community-assessment/high-cumulative-exposure-burden. Accessed: August 2019.

Neighborhoods (IVAN) network. The locations of all eleven monitors, plus three additional community monitors located adjacent to the Corridor, are presented in Figure 3.2.

Figure 3.2. Locations of Air Quality Monitors in the El Centro-Heber-Calexico Corridor



Regulatory Monitoring

Existing regulatory monitors within the Corridor include the EI Centro monitoring station and the Calexico-Ethel monitoring station. The EI Centro monitoring station was installed in 1986 and is maintained by ICAPCD. It is located at 150 9th Street in EI Centro. The monitoring station is classified as urban and is surrounded by government and commercial buildings, with large agricultural areas to the east and west of the EI Centro city boundaries. The EI Centro monitoring station records measurements for O₃, carbon monoxide (CO), nitrogen dioxide (NO₂), PM_{2.5}, and PM₁₀.

The Calexico-Ethel monitoring station was installed in 1994 and is operated and maintained by CARB. It is located at 1029 Belcher Street in Calexico. This monitoring station is surrounded by a suburban neighborhood and is approximately 0.75 miles north of the United Sates-Mexico border. The Calexico-Ethel station monitors O₃, CO, NO₂, sulfur dioxide (SO₂), PM_{2.5}, PM₁₀, lead (Pb), and toxics.

Data from the El Centro and Calexico-Ethel monitors are validated and used to determine the federal attainment status for Imperial County. Both monitoring stations feature meteorological sensors that measure temperature, humidity, wind direction, and wind speed. Since these monitors are used for regulatory purposes, final data are not immediately available; however, preliminary O₃, PM_{2.5}, and PM₁₀ data are made available to the public through www.imperialvalleyair.org. Additionally, some pollutants are only monitored once every three days or once every six days.

Monitoring data for O_3 , PM_{10} , and $PM_{2.5}$ are shown in Figures 3.3 through 3.9 and provide a snapshot of recent air quality conditions in El Centro and Calexico.

There are three additional regulatory monitoring stations in Imperial County which are located outside of the Corridor. These include the Brawley monitoring station, the Niland monitoring station, and the Westmorland monitoring station.

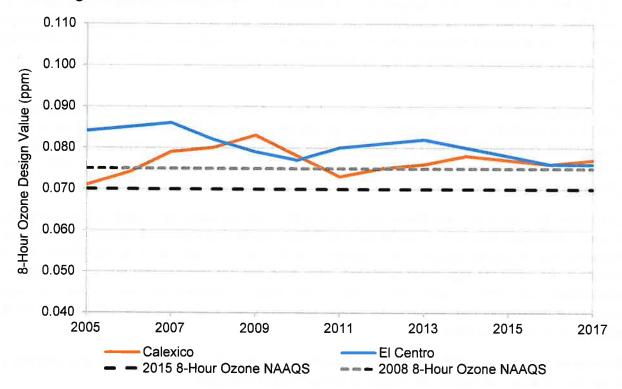


Figure 3.3. Comparison of 8-hour Ozone Design Values at the Calexico and El Centro Monitoring Stations to the NAAQS

Monitoring data for O₃ at the Calexico and El Centro monitoring stations¹⁹ indicate that levels there have remained relatively constant since 2005, with no significant trend upwards or downwards. Furthermore, the 2017 Ozone SIP for Imperial County²⁰ demonstrated how international transport of emissions from Mexico of O₃ precursor pollutants contributes to ambient O₃ levels in Imperial County. This effect is especially pronounced at the regulatory monitors closest to the U.S.-Mexico border (i.e., El Centro and Calexico), and contributes to O₃ measurements exceeding the NAAQS.

DRAFT SEPTEMBER 2019

The design value for the 8-hour Ozone NAAQS is computed as the annual fourth-highest daily maximum 8-hour concentration measured at the monitor, averaged over 3 years.

²⁰ ICAPCD. 2017. Imperial County 2017 State Implementation Plan for the 2008 8-hour Ozone Standard. Available at: https://www.arb.ca.gov/planning/sip/planarea/imperial/2017O3sip final.pdf. Accessed: August 2019.

Figure 3.4. Comparison of Annual PM_{2.5} Design Values at the Calexico and El Centro Monitoring Stations to the NAAQS

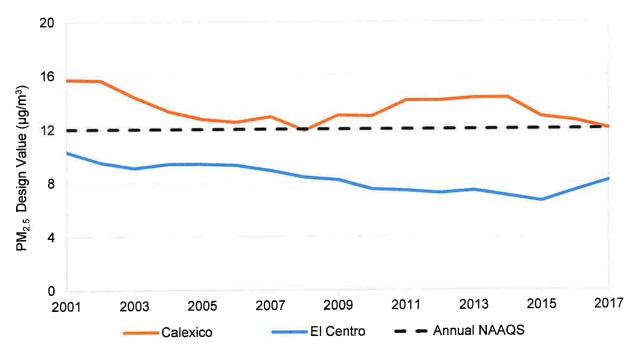


Figure 3.4 displays data for PM_{2.5} at the Calexico and El Centro monitoring stations and indicates that levels have exhibited a slight downward trend since 2001 at both stations. However, the PM_{2.5} design values (i.e., the annual mean values averaged over three years) for 2017 are very close to those for 2008 at both stations, with slight variation in the intermittent decade. For the monitoring station with higher ambient PM_{2.5} concentrations (Calexico), it is important to note the decrease in recent years. In 2014, the annual average concentration at the Calexico monitor was 13.8 μg/m³. By 2016, the annual average concentration at Calexico had decreased 10 percent to 12.5 μg/m³. Additionally, although El Centro's annual average concentration did increase in between 2015 and 2017 from 6.6 μg/m³ to 8.1 μg/m³, respectively, it was still under the NAAQS.²¹ PM_{2.5} emissions at Calexico are impacted by the transport of pollution over the border from Mexicali. Emission sources that contribute to the PM_{2.5} concentrations at Calexico include traffic emissions within the Calexico/Mexicali border area, electrical generation, other industrial sources, unpaved roads, and cultural practices such as bonfires and fireworks. Elevated PM_{2.5} concentrations in this region occur most frequently during the winter months when winds are stagnant.²²

²² ICAPCD. 2018. Imperial County 2018 Annual Particulate Matter Less Than 2.5 Microns in Diameter State Implementation Plan. Available at: https://www.co.imperial.ca.us/AirPollution/otherpdfs/2018-IC-PM25SIP.pdf. Accessed: August 2019.

Accessed. August 2019.

²¹ The design value for the annual PM_{2.5} NAAQS is computed as the annual mean of PM_{2.5} concentrations measured at the monitor, averaged over 3 years. The 2015 design value shown in the plot is 12.9 μg/m³ and does not include data from the Special Purpose Monitor (SPM) that was included in 2015 at Calexico. USEPA's Air Quality System (AQS) includes data from the SPM in quarters 1 and 4 of 2015, which results in a design value of 13.1 μg/m³.

Figure 3.5. Comparison of 24-hour PM₁₀ Concentration Measurements at the Calexico Monitoring Station to the NAAQS

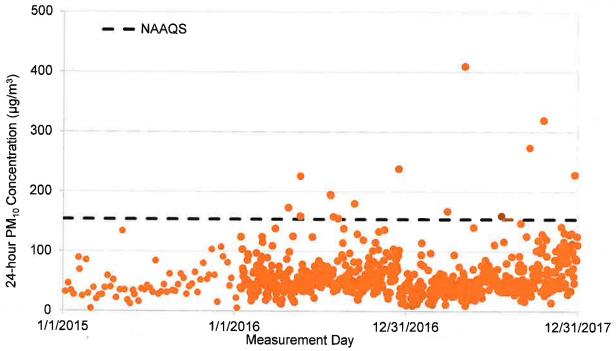
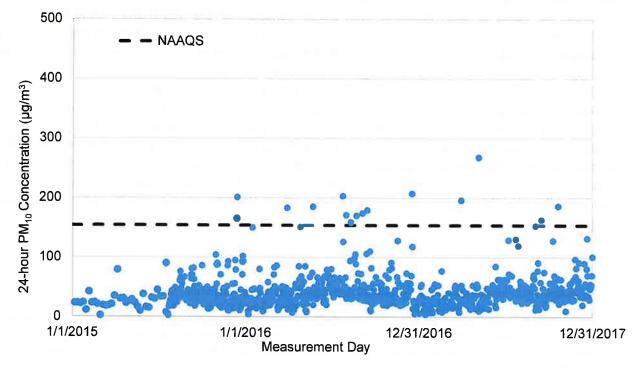


Figure 3.6. Comparison of 24-hour PM₁₀ Concentration Measurements at the El Centro Monitoring Station to the NAAQS



Figures 3.5 and 3.6 present PM₁₀ monitoring data collected at the Calexico and El Centro monitoring stations, respectively. Because the NAAQS for PM₁₀ is evaluated based on daily 24-hour time-averaged measurements,²³ the plots display data points for each 24-hour measurement collected at the sites from 2015 to 2017. The data shows that on most days, PM₁₀ levels are well below the 150 μg/m³ standard. However, the NAAQS is still exceeded somewhat regularly. As discussed in the 2018 PM₁₀ Plan for Imperial County, these exceedances are attributed to occurrences of high wind activity during exceptional events.²⁴

Community Monitoring

The IVAN network is a collection of 40 air quality sensors located throughout the Imperial Valley, nine of which are located within the El Centro-Heber-Calexico Corridor, plus an additional three which are located adjacent to the Corridor.²⁵ The network was developed and is managed by CCV, the California Environmental Health Tracking Program, and the University of Washington School of Public Health. The sensors began collecting data in September 2016 and currently monitor for particulate matter. The collected data is reported in real time to a website that can be viewed by community members directly. The data is also used to calculate community air quality levels (CALs), which describe current air quality and provide health recommendations to the community. Currently, the data from the IVAN network cannot be used to determine attainment status or other air quality requirements.

Monitoring data from a subset of the IVAN community monitors within the Corridor are presented in Figures 3.7 through 3.9.

²³ The 24-hour PM₁₀ NAAQS is 150 µg/m³, which is not to be exceeded more than once per year on average over three years. Measurements for this metric are customarily rounded to the nearest 10 µg/m³. Hence, the NAAQS in Figures 3.5 and 3.6 is shown at 154 µg/m³ as any measurement below this value rounds down to 150 and thus would not exceed the standard.

²⁴ ICAPCD. 2018. Imperial County 2018 Redesignation Request and Maintenance Plan for Particulate Matter Less Than 10 Microns in Diameter. Available at: https://www.arb.ca.gov/planning/sip/planarea/imperial/sip.pdf. Accessed: August 2019.

²⁵ Additional information on the IVAN network can be found at: https://ivanonline.org/. Accessed: August 2019.

Figure 3.7. PM₁₀ and PM_{2.5} Monitoring Data (µg/m³) from the Calexico-Alvarez Community Monitor



Figure 3.8. PM₁₀ and PM_{2.5} Monitoring Data (µg/m³) from the El Centro-Wilson Community Monitor



Figure 3.9. PM₁₀ and PM_{2.5} Monitoring Data (µg/m³) from the Heber Community Monitor



ICAPCD

Air Pollution Burden

Air pollution burden can be used to evaluate the relative impact of pollution sources and emission levels within a community, which is one of the metrics for evaluating cumulative exposure burden. CES3 evaluates seven pollution burden exposure indicators and five pollution burden environmental effects indicators. Air quality-related CES3 indicators that are relevant to the Corridor include O₃, PM_{2.5}, diesel particulate matter (DPM), pesticide use, and toxic releases from facilities. The O₃ and PM_{2.5} indicators are based on existing data from the CARB air monitoring network. The DPM indicator is based on modeled mobile source emissions data from CARB and the San Diego Association of Governments. The pesticide use and toxic release indicators are based on values reported by industrial and agricultural facilities.²⁶ Together, these indicators provide useful information on the existing air quality cumulative exposure burden in a given area.

Figure 3.10 presents the burden percentile for each of the air quality-related indicators, as well as the average of these indicators (i.e., "pollution burden") as compared to the State of California. As seen in this figure, the average pollution burden is highest near Calexico. Exceptions to this are pesticide use, which is highest in the agricultural areas of Imperial County. Toxic release burden is below the 50th percentile for all census tracts in Imperial County.

Figure 3.11 presents the burden percentiles as compared to only census tracts in Imperial County. This figure shows a similar trend to the statewide percentiles, indicating that most of the pollution burden in the County is concentrated close to the US-Mexico border. A few indicators that demonstrate elevated burden away from the border include DPM within the city of El Centro and pesticide use in the agricultural areas. In addition, the O₃ burden is above the 90th percentile in El Centro and Heber and lower in surrounding areas. However, O₃ is created through secondary formation from NO_X and VOC and can show up in areas that are not necessarily in the location of the source. Therefore, O₃ emissions could be influenced by sources south of the US-Mexico border.

OEHHA. 2018. CalEnviroScreen 3.0. Available at: https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30. Accessed: August 2019.

Figure 3.10. CES3 Statewide Burden Percentiles for Air Quality-Related Indicators

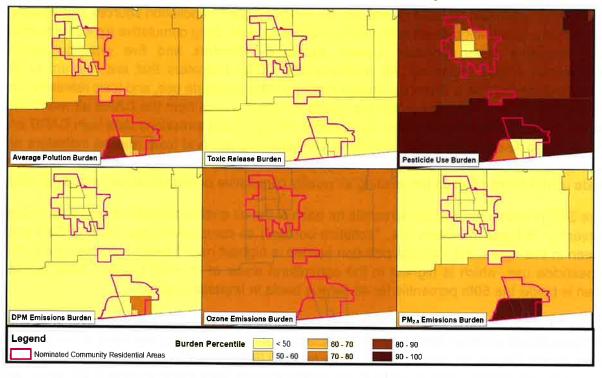


Figure 3.11. CES3 Countywide Burden Percentiles for Air Quality-Related Indicators

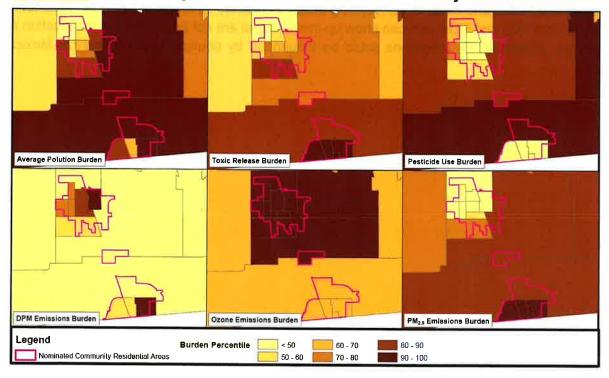


Table 3.2 summarizes the range and average indicator percentile for census tracts within the El Centro-Heber-Calexico Corridor. As shown in Table 3.2, the high end of the indicator range is greater than the 75th percentile for all indicators except for drinking water and toxic releases from facilities.

Indicator		Indicator Percentile	
		Range	Average
Pollution Burden: Exposures	Ozone	73.9 - 77.9	76.4
	PM _{2,5}	17.8 - 94.7	43.5
	DPM	6.4 - 78.0	29.2
	Pesticide use	61.2 - 90.3	79.3
	Traffic	16.2 - 92.6	43.6
	Drinking water	25.6 - 48.0	31.6
	Toxic releases from facilities	13.0 - 49.4	37.3
Pollution Burden: Environmental Effects	Solid waste sites and facilities	10.1 - 98.7	62.8
	Cleanup sites	2.0 - 90.5	34.6
	Groundwater threats	8.9 - 92.8	47.0
	Impaired water bodies	71.6 - 99.4	83.7
	Hazardous waste generators and facilities	43.1 - 94.9	72.7

Notes:

[a] Indicator percentiles obtained from CalEnviroScreen 3.0 for census tracts 6025011100, 6025011201, 6025011202, 6025011300, 6025011400, 6025011500, 6025011600, 6025011700, 6025011801, 6025011802, 6025011803, 6025011900, 6025012001, 6025012002, 6025012100, and 6025012200. Available at:

https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30. Accessed: May 2019.

3.2.1.2 Key Air Pollutants and Associated Sources

The economy in Imperial County is predominantly tied to agriculture. Agricultural operations can result in emissions from land management activities (e.g., tilling, burning), concentrated animal feeding operations (CAFOs), off-road equipment (e.g., tractors and pumps), on-road vehicles, and unpaved roads. In addition to the agricultural economy, Imperial County also has industrial energy sources and a significant amount of off-highway vehicle (OHV) activity in the outlying desert. Due to its proximity to the international border, there is also a large amount of emissions associated with vehicles idling at and traveling through the international ports-of-entry.

In addition to anthropogenic (i.e., "human caused") activities, the area is also susceptible to high wind events, which can lead to elevated concentrations of particulate matter. Table 3.3 below summarizes the types of air pollutants generally associated with the sources discussed. A more thorough discussion of the emissions within the Corridor specifically in the context of an emission inventory is provided in Section 3.2.2.

Emissions Source	Associated Pollutants
Agricultural Activities (tilling)	PM ₁₀ , PM _{2.5}
Agricultural Activities (burning)	PM _{2.5}
Concentrated Animal Feeding Operations	PM ₁₀ , PM _{2.5} , methane (CH ₄), ammonia (NH ₃)
Off-Road Equipment	Combustion By-products ^[a]
On-Road Vehicles	Combustion By-products ^[a]
Unpaved Roads	PM ₁₀ , PM _{2.5}
Industrial Energy Production	Combustion By-products ^[a]
Off-Highway Vehicles	PM ₁₀ , PM _{2.5}
Regional Wind Events	PM ₁₀ , PM _{2.5}

3.2.2 Community-Level Emissions Inventory

A community-level emissions inventory is essential to understanding existing emissions levels in the Corridor and tracking emissions reductions in the future. In addition, an emissions inventory can help determine which sources contribute the most to emissions and the exposure burden in the Community. The community-level emissions inventory for the Corridor was developed by CARB using best available data. The inventory includes estimates of air pollutant emissions from stationary, area-wide, on-road mobile, and off-road mobile sources. The base year for the inventory is 2017. Emission projections were made for 2024 and 2029. The methodology used to develop the base year and forecasted inventories is described in the following sections.

3.2.2.1 Stationary Sources

The stationary source emissions inventory category consists of three subcategories: stationary point sources, stationary aggregate sources, and stationary aggregate point sources. Stationary point sources include facilities that require a permit under ICAPCD regulations. All facility permits are required to include a source description, list of pollutants of concern, and provide emission factors used to evaluate facility emissions. Permitted facilities are also required to submit annual reports to ICAPCD that provide activity data for that year. This community-level emissions

[[]a] Combustion by-products will vary by fuel type but will generally include carbon dioxide, carbon monoxide, sulfur dioxide, nitrogen oxides, particulate matter, and toxics.

inventory uses the reported emission factors from the facility permits and activity data from the 2017 annual emissions reports to quantify CAP and TAC emissions. If emission factors were not available, USEPA AP-42 emission factors were used. Examples of stationary point sources featured in this analysis include: fuel combustion (electric utilities and combustion for industrial and commercial facilities), waste disposal (compost operations and incinerators), industrial processes (concrete, milling, and sandblasting facilities), and petroleum marketing.

When possible, area-wide sources were moved to stationary aggregate point sources using spatial surrogates that had been developed for prior SIP modeling. CARB worked with ICAPCD to quantify emissions using 2017 activity data. Emissions were then allocated based on the locations of activity data, as available. If activity data was not available, emissions for those stationary sources remained as stationary aggregate sources and were distributed evenly using spatial surrogates. Examples of stationary aggregate sources featured in this analysis include: cleaning and surface coatings (autobody shops, dry cleaners, industrial locations, metal parts coating operations, wood furniture coating operations, and other coating operations), fuel combustion (industrial locations), solvent evaporation (hospitals, restaurants, and autobody shops), petroleum marketing (gas stations), waste disposal (publicly owned treatment works), and miscellaneous processes (char broiling).

The stationary source CAP emissions were projected to 2024 and 2029 using the 2016 SIP statewide forecast (California Emissions Projection Analysis Model [CEPAM] version 1.05), with the following exceptions:

- Updated control profiles: CARB made an effort to incorporate control profiles for District rules that have been adopted since CEPAM version 1.05 was originally developed.
- Point source 'no growth' assumption: CARB's SIP growth profiles largely reflect average industry-wide changes in activity. To reflect the inherent uncertainty in forecasting individual facilities that fall with a small community boundary, CARB defaulted to a 'no growth' assumption for stationary point sources. Emission control factors were still applied to these sources.
- Point source 'second look' analysis: To mitigate the uncertainty related to point source community forecasting, CARB conducted supplemental research on the top emitting point source facilities. The facilities that CARB reviewed collectively account for over 90% of all criteria point source emissions within the Community boundary.

A summary of stationary source base year CAP emissions by source category is shown in Table 3.4 and base year toxicity-weighted TAC emissions for all stationary sources are shown in Table 3.5. Forecasted CAP emissions for 2024 and 2029 are shown in Appendix D. Locations of stationary point sources, stationary aggregate sources, and stationary aggregate point sources are shown in Figure 3.12.²⁷

²⁷ Two stationary source facilities located outside of the Community boundary, SFPP, L.P. and Pyramid Construction and Aggregates, Inc., were included in the stationary source emission inventory due to Community concern.

Table 3.4. Base Year (2017) Community-Level Emissions Inventory – Stationary Source Criteria Air Pollutants

	NOx	TOG	ROG	SOx	PM ₁₀	PM _{2.5}	DPM
STATIONARY SOURCES TOTAL ¹	189.76	915.95	255.39	8.10	119.11	48.99	0.14
FUEL COMBUSTION	162.31	29.68	4.93	3.11	16.50	16.47	0.14
ELECTRIC UTILITIES	82.55	25.45	3.04	1.57	14.45	14.42	0.00
MANUFACTURING AND INDUSTRIAL	79.62	3.72	1.81	1.54	2.01	2.00	0.14
SERVICE AND COMMERCIAL	0.14	0.47	0.04	0.01	0.04	0.04	0.00
PETROLEUM REFINING (COMBUSTION)	0.00	0.05	0.04	0.00	0.00	0.00	0.00
WASTE DISPOSAL	23.66	1.18	0.26	4.97	2.24	2.23	0.00
INCINERATORS	23.66	1.09	0.18	4.97	2.19	2.19	0.00
SEWAGE TREATMENT	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OTHER (WASTE DISPOSAL)	0.00	0.09	0.08	0.00	0.05	0.05	0.00
INDUSTRIAL PROCESSES	3.74	2.96	2.35	0.02	17.40	1.34	0.00
MINERAL PROCESSES	3.09	1.02	1.00	0.02	4.01	0.81	0.00
FOOD AND AGRICULTURE	0.66	1.94	1.36	0.00	13.39	0.53	0.00
PETROLEUM PRODUCTION AND MARKETING	0.04	74.31	74.31	0.00	0.00	0.00	0.00
PETROLEUM MARKETING	0.04	74.31	74.31	0.00	0.00	0.00	0.00
SOLVENT EVAPORATION	0.00	23.39	18.01	0.00	0.00	0.00	0.00
CONSUMER PRODUCTS	0.00	23.39	18.01	0.00	0.00	0.00	0.00
CLEANING AND SURFACE COATINGS	0.00	109.23	98.71	0.00	0.00	0.00	0.00
LAUNDERING	0.00	4.31	4.31	0.00	0.00	0.00	0.00
DEGREASING	0.00	61.81	53.80	0.00	0.00	0.00	0.00
ADHESIVES AND SEALANTS	0.00	17.39	15.50	0.00	0.00	0.00	0.00
COATINGS AND RELATED PROCESS SOLVENTS	0.00	25.71	25.11	0.00	0.00	0.00	0.00
MISCELLANEOUS PROCESSES	0.00	675.21	56.82	0.00	82.97	28.95	0.00
FARMING OPERATIONS	0.00	664.84	53.19	0.00	60.98	6.96	0.00
COOKING	0.00	10.37	3.63	0.00	21.99	21.99	0.00

¹ Units are in tons per year.

Table 3.5. Base Year (2017) Community-Level Emissions Inventory – Stationary Source Toxic Air Contaminants

	1.	Toxicity-Weighted Emissions ²						
Toxic Air Contaminant ¹ (Ibs/yr) (Ibs/yr)		Cancer Risk Weighted Emissions	Chronic Non-Cancer Risk Weighted Emissions	Acute Non-Cancer Risk Weighted Emissions				
DPM	280.57	648.12	0.96	0.00				
Benzene	1,823.27	407.14	10.41	11.56				
Nickel	68.59	137.32	83.89	58.73				
Arsenic	4.85	123.23	5.54	4.15				
1,3-Butadiene	77.73	101.75	0.67	0.02				

Notes:

Only the top five TAC based on cancer risk toxicity-weighted emissions are shown. A full list of TAC emissions can be found in Appendix D.

² Toxicity weighted emissions consider the risk posed by the toxic pollutant. They are calculated by multiplying mass emissions by the pollutant's toxicity factor (e.g., cancer unit risk factor) as determined by the Office of Environmental Health Hazard Assessment.

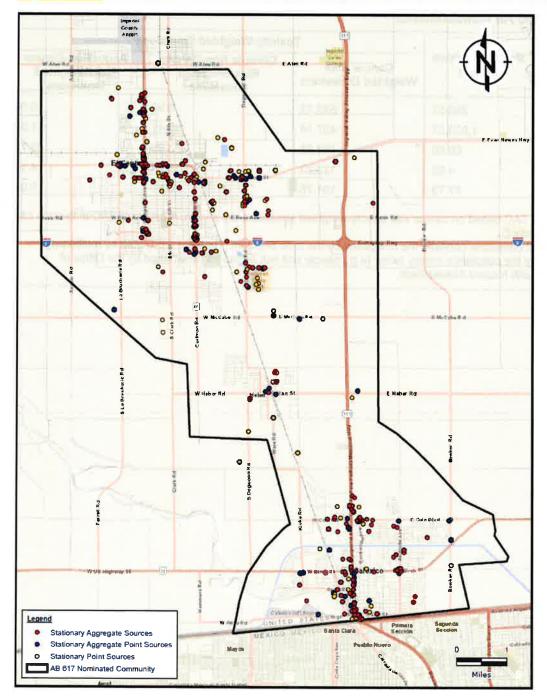


Figure 3.12. Stationary Source Locations in the El Centro-Heber-Calexico Corridor

3.2.2.2 Area-Wide Sources

Area-wide sources are emission sources that occur over a large geographic area. Examples of area-wide sources include: architectural coatings, farming operations, and road dust. The CAP and TAC emission estimates for the area-wide sources are based on the statewide emission

inventory that was developed for the 2016 California SIP, which uses 2012 as a base year. This is the same inventory that was used for the development of the Imperial County SIPs for O_3 and $PM_{2,5}$. The current methodology for each area-wide source category can be found on CARB's Area Source Methodologies page. 31

The emissions for the 2016 California SIP had been allocated to 4-kilometer (km) grids throughout the state using spatial surrogates and area sources found within each grid. For this community-level emissions inventory, the inventory was further refined to 1-km grids. Grid cells located within the Corridor were included in the community-level emissions inventory. For grid cells that were partially within the Corridor boundary, the portion of the emissions within the Community was calculated based on the portion of the grid cell area located within the Corridor. Lastly, area-wide emissions were projected to 2017 using growth and control parameters specific to the Community. Details on the spatial allocation of emissions and baseline/forecasted inventory development are included in the emissions inventory chapters of the ICAPCD O₃ and PM_{2.5} SIPs.

To develop the projected CAP and TAC emissions for 2024 and 2029, CARB staff obtained emissions data for Imperial County from CEPAM version 1.05 and calculated county-level emission scalars between the base year and the two target future years. The calculated emission scalar was then applied to the 2017 community base year inventory to get the 2024 and 2029 future baseline inventories. As possible, growth and control factors were reviewed for stationary and area-wide categories. Year to year trends were compared to similar and past datasets to ensure general consistency. Emissions for specific categories were checked to confirm they reflect the anticipated effects of applicable control measures. Mobile categories were verified with CARB's mobile source staff for consistency with CARB's on-road and off-road emission models.

A summary of the area-wide base year CAP emissions in the Corridor is presented in Table 3.6. Forecasted CAP emissions for 2024 and 2029 are shown in Appendix D. Base year toxicity-weighted emissions for the top five TACs for all area-wide sources are shown in Table 3.7.

²⁸ CARB. 2018. 2016 State Strategy for the State Implementation Plan for Federal Ozone and PM_{2.5} Standards (State SIP Strategy). Available at: https://www3.arb.ca.gov/planning/sip/2016sip/2016sip.htm. Accessed: August 2019

²⁹ ICAPCD. 2017. Imperial County 2017 State Implementation Plan for the 2008 8-hour Ozone Standard, Available at: https://ww3.arb.ca.gov/planning/sip/planarea/imperial/2017o3sip_final.pdf. Accessed: August 2019.

³⁰ ICAPCD. 2018. Imperial County 2018 Annual PM_{2.5} State Implementation Plan, Available at: https://ww3.arb.ca.gov/planning/sip/planarea/imperial/final 2018 ic pm25 sip.pdf. Accessed: August 2019.

³¹ CARB. 2014. Area-Wide Source Methodologies. Available at: https://ww3.arb.ca.gov/ei/areasrc/areameth.htm. Accessed: August 2019.

Table 3.6. Base Year (2017) Community-Level Emissions Inventory – Area-Wide Source Criteria Air Pollutants

	NOx	TOG	ROG	SOx	PM ₁₀	PM _{2.5}	DPM
AREA-WIDE SOURCES TOTAL ¹	160.59	511.20	339.34	1.69	1909.00	271.10	0.03
FUEL COMBUSTION	142.86	11.45	5.08	0.65	14.12	14.09	0.03
SERVICE AND COMMERCIAL	142.24	11.37	5.00	0.64	14.08	14.05	0.00
FOOD AND AGRICULTURAL PROCESSING	0.63	0.09	0.08	0.00	0.03	0.03	0.03
INDUSTRIAL PROCESSES	0.01	0.00	0.00	0.00	2.44	0.70	0.00
FOOD AND AGRICULTURE	0.01	0.00	0.00	0.00	2.44	0.70	0.00
MISCELLANEOUS PROCESSES	17.71	161.93	26.58	1.04	1892.44	256.31	0.00
RESIDENTIAL FUEL COMBUSTION	14.07	11.22	5.10	0.43	5.76	5.59	0.00
MANAGED BURNING AND DISPOSAL	3.53	11.45	10.01	0.62	10.46	9.97	0.00
FIRES	0.12	0.42	0.36	0.00	0.39	0.36	0.00
FARMING OPERATIONS	0.00	138.84	11.11	0.00	59.36	9.67	0.00
PAVED ROAD DUST	0.00	0.00	0.00	0.00	42.35	6.35	0.00
FUGITIVE WINDBLOWN DUST	0.00	0.00	0.00	0.00	1274.04	174.39	0.00
UNPAVED ROAD DUST	0.00	0.00	0.00	0.00	288.75	28.86	0.00
CONSTRUCTION AND DEMOLITION	0.00	0.00	0.00	0.00	211.34	21.12	0.00
OTHER (MISCELLANEOUS PROCESSES)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SOLVENT EVAPORATION	0.00	337.82	307.69	0.00	0.00	0.00	0.00
PESTICIDES/FERTILIZERS	0.00	14.51	14.51	0.00	0.00	0.00	0.00
CONSUMER PRODUCTS	0.00	229.29	201.23	0.00	0.00	0.00	0.00
ARCHITECTURAL COATINGS AND RELATED PROCESS SOLVENTS	0.00	91.03	88.96	0.00	0.00	0.00	0.00
ASPHALT PAVING / ROOFING	0.00	2.99	2.99	0.00	0.00	0.00	0.00

Table 3.7. Base Year (2017) Community-Level Emissions Inventory – Area-Wide Source Toxic Air Contaminants

Toxic Air		Toxicity-Weighted Emissions ²						
Contaminant ¹ (TAC)	Mass Emissions (lbs/yr)	Cancer Risk Weighted Emissions	Chronic Non-Cancer Risk Weighted Emissions	Acute Non-Cancer Risk Weighted Emissions				
Cadmium	145.24	4,697.17	124.35	0.00				
Arsenic	103.09	2,619.58	117.69	88.26				
Nickel	383.12	767.02	468.60	328.02				
p-Dichlorobenzene	5,051.53	427.86	0.11	0.00				
Lead	4,113.33	380.07	0.00	0.00				

¹ Units are in tons per year.

¹ Only the top five TAC based on cancer risk toxicity-weighted emissions are shown. A full list of TAC emissions can be found in Appendix D.

² Toxicity weighted emissions consider the risk posed by the toxic pollutant. They are calculated by multiplying mass emissions by the pollutant's toxicity factor (e.g., cancer unit risk factor) as determined by the Office of Environmental Health Hazard Assessment.

3.2.2.3 On-Road Mobile Sources

On-road mobile sources include vehicles used on roads for the transportation of passengers or freight. Vehicle activity data (base year 2012 projected to 2017) was obtained from the Loaded Transportation network data from the second amendment to the Southern California Association of Governments (SCAG) 2016 Regional Transportation Plan (RTP).32 The SCAG roadway network represents rough approximations of the roadways in the region and provides vehicle activity data in units of ridership miles traveled for buses, and vehicle miles traveled (VMT) for light duty vehicles (LDV), light-heavy duty vehicles (LHDV), medium-heavy duty vehicles (MHDV), and heavy-heavy duty vehicles (HHDV). Community-level ridership miles traveled for buses were converted to VMT using a conversion factor based on county-level VMT data from CARB's onroad emission factor model version 2017 (EMFAC2017) and SCAG bus ridership miles traveled. The SCAG roadway network provides an accurate representation for the non-local roads, but an approximated network for local roads. More accurate roadway links for local roads are provided in the Topologically Integrated Geographic Encoding and Referencing (TIGER) Census roadway segment data. For this community-level emission inventory, VMT for non-local roads was allocated to the SCAG network based on proximity (inverse distance weighted interpolation in GIS) and road type (major roads, major arterials, and minor arterials). VMT data for local roads was directly allocated to specific roadway links in the TIGER Census roadway segment data. The locations of the roadway links in the Community are shown in Figure 3.13.

Emission factors in grams per mile (g/mile) for each vehicle type were obtained from EMFAC2017, CARB's on-road mobile source emission factor model.³³ EMFAC2017 vehicle categories were assigned to SCAG vehicle categories as shown in Table 3.8. Emissions were then calculated based on the VMT on each road link multiplied by the appropriate emission factor. TAC emissions were estimated using CARB speciation profiles for particulate matter and organic gases.

The on-road mobile inventory was forecasted using activity data and CAP emission factor data for future years from EMFAC2017. EMFAC2017 contains forecasted vehicle activity data and criteria pollutant emission factors for each year through 2050. Four new regulations have been adopted since EMFAC2017, and were applied to develop the baseline forecast in 2024 and 2029. The 2024 and 2029 EMFAC2017 county activity data for Imperial County was used to estimate vehicle activity in the Community for those future years. This was done by calculating the growth rate of the EMFAC2017 county activity from the baseline year (2017) to the forecast years (2024).

SCAG. 2017. 2016 RTP/SCS Amendments. July. Available at: http://scagrtpscs.net/Pages/2016RTPSCSAmendments.aspx. Accessed: August 2019.

³³ CARB. 2019. Mobile Source Emissions Inventory. February. Available at: https://ww3.arb.ca.gov/msei/msei.htm. Accessed: August 2019.

and 2029) and applying that growth rate to the baseline on-road mobile activity in the Community. Once the on-road mobile activity for the future years was established in the Community, the CAP emission factors from EMFAC2017 for 2024 and 2029 were applied to the respective on-road activity levels in the Community to get the 2024 and 2029 forecasted on-road mobile criteria pollutant inventories.

A summary of the on-road mobile source base year CAP emissions in the Corridor is presented in Table 3.9. Forecasted CAP emissions for 2024 and 2029 are shown in Appendix D. Base year toxicity-weighted on-road mobile source TAC emissions for the top five TAC are shown in Table 3.10.

SCAG Vehicle Category	EMFAC Vehicle Category			
	LDA	MDV		
LDV	LDT1	MCY		
	LDT2			
LHDV	LHD1	LHD2		
	T6 Ag	T6 instate small		
	T6 CAIRP heavy	T6 OOS heavy		
MHDV	T6 CAIRP small	T6 OOS small		
MUDA	T6 instate construction heavy	T6 Public		
	T6 instate construction small	T6 utility		
	T6 instate heavy	T6TS		
	T7 Ag	T7 POAK		
	T7 CAIRP	T7 POLA		
	T7 CAIRP construction	T7 Public		
	T7 NNOOS	T7 Single		
HHDV	T7 NOOS	T7 single construction		
	T7 other port	T7 SWCV		
	T7 tractor	T7IS		
	T7 tractor construction	PTO		
	T7 utility			
	SBUS	All Other Buses		
Bus	UBUS	MH		
	OBUS	Motor Coach		

Table 3.9. Base Year (2017) Community-Level Emissions Inventory – On-Road Mobile Source Criteria Air Pollutants							
	NOx	TOG	ROG	SOx	PM ₁₀	PM _{2.5}	DPM
ON-ROAD MOBILE SOURCES TOTAL ¹	277.44	166.35	153.38	2.20	30.33	14.44	3.44
BUS	18.04	1.68	1.42	0.06	1.47	0.78	0.29
HHDV	108.22	4.73	4.15	0.29	4.18	2.81	2.18
LDV	107.19	152.81	141.17	1.73	22.28	9.37	0.06
LHDV	18.42	4.37	4.15	0.05	0.75	0.36	0.10
MHDV	25.56	2.76	2.48	0.07	1.65	1.12	0.80

¹ Units are in tons per year.

	Table 3.10 .	Base Year (2017) Community-Level Emissions Inventory – On-Road Mobile
١		Source Toxic Air Contaminants

T A.		Toxicity-Weighted Emissions ²						
Toxic Air Contaminant ¹ (TAC)	Mass Emissions (lbs/yr)	Cancer Risk Weighted Emissions	Chronic Non-Cancer Risk Weighted Emissions	Acute Non-Cancer Risk Weighted Emissions				
DPM	6,874.10	15,879.16	23.54	0.00				
Benzene	7,535.90	1,682.77	43.01	47.79				
1,3-Butadiene	794.13	1,039.51	6.80	0.21				
Formaldehyde	4811.97	222.31	9.16	14.98				
Naphthalene	283.78	74.29	0.54	0.00				

Notes:

¹ Only the top five TAC based on cancer risk toxicity-weighted emissions are shown. A full list of TAC emissions can be found in Appendix D.
² Toxicity weighted emissions consider the risk posed by the toxic pollutant. They are calculated by multiplying mass

² Toxicity weighted emissions consider the risk posed by the toxic pollutant. They are calculated by multiplying mass emissions by the pollutant's toxicity factor (e.g., cancer unit risk factor) as determined by the Office of Environmental Health Hazard Assessment.

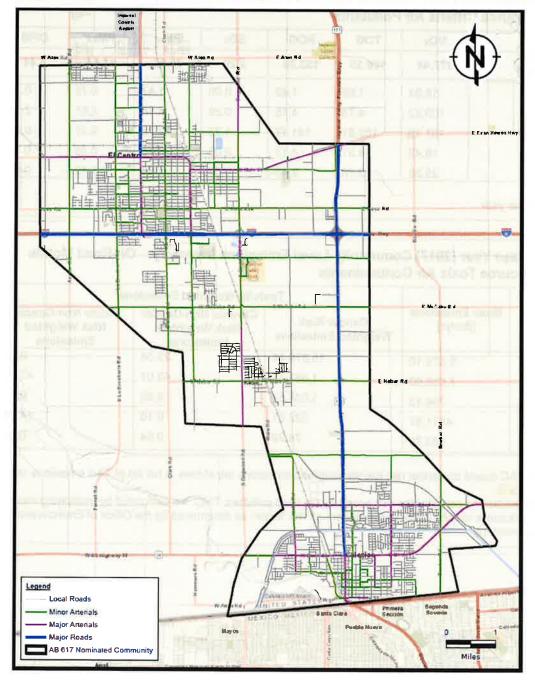


Figure 3.13. TIGER Census Roadway Map for the El Centro-Heber-Calexico Corridor

3.2.2.4 Off-Road Mobile Sources

Types of off-road mobile sources include: aircraft, trains, farm equipment, construction equipment, and boats. The CAP and TAC emission estimates for off-road equipment in this community-level emission inventory are based on the statewide emission inventory developed for the 2016

California SIP.³⁴ Emission estimates vary per vehicle or equipment type. Methodologies for each can be found on CARB's Emission Inventory Documentation page.³⁵

The emissions for the 2016 California SIP had been allocated to 4- km grids throughout the state using spatial surrogates and off-road sources found within each grid. For this community-level emissions inventory, the inventory was further refined to 1-km grids. Grid cells located within the Corridor were included in the community-level emissions inventory. For grid cells that were partially within the Corridor boundary, the portion of the emissions within the Community was calculated based on the portion of the grid cell area located within the Corridor. Lastly, off-road mobile emissions were projected to 2017 using growth and control parameters specific to the Community. Details on the spatial allocation of emissions and baseline/forecasted inventory development are included in the emissions inventory chapters of the ICAPCD O₃ and PM_{2.5} SIPs.

To develop the projected CAP and TAC emissions for 2024 and 2029, CARB staff obtained emissions data for Imperial County from CEPAM version 1.05 and calculated county-level emission scalars between the base year and the two target future years. The calculated emission scalar was then applied to the 2017 community base year inventory to get the 2024 and 2029 future baseline inventories. Year to year trends were compared to similar and past datasets to ensure general consistency. Emissions for specific categories were checked to confirm they reflect the anticipated effects of applicable control measures. Mobile categories were verified with CARB's mobile source staff for consistency with CARB's on-road and off-road emission models.

A summary of the off-road CAP emissions in the Corridor is presented in Table 3.11. Forecasted CAP emissions for 2024 and 2029 are shown in Appendix D. Toxicity-weighted emissions for the top five TACs for off-road sources are shown in Table 3.12.

Table 3.11. Base Year (2017) Community-Level Emissions Inventory – Off-Road Mobile Source Criteria Air Pollutants								
	NOx	TOG	ROG	SOx	PM ₁₀	PM _{2.5}	DPM	
OFF-ROAD MOBILE SOURCES	244.63	158.00	151.98	3.05	13.79	13.01	8.22	
AIRCRAFT	23.54	17.63	17.62	2.73	3.44	3.41	0.00	
JET AIRCRAFT - COMMERCIAL	23.27	15.45	15.45	2.65	3.35	3.32	0.00	
JET AIRCRAFT - CIVIL	0.25	2.07	2.07	0.06	0.09	0.09	0.00	
AGRICULTURAL AIRCRAFT (CROP DUSTING)	0.03	0.11	0.10	0.02	0.01	0.01	0.00	
FARM EQUIPMENT	14.58	2.97	2.60	0.00	0.86	0.79	0.83	
AGRICULTURAL EQUIPMENT	14.58	2.97	2.60	0.00	0.86	0.79	0.83	
FUEL STORAGE AND HANDLING	0.00	12.94	12.94	0.00	0.00	0.00	0.00	
GASOLINE CANS	0.00	12.94	12.94	0.00	0.00	0.00	0.00	

³⁴ CARB. 2018. 2016 State Strategy for the State Implementation Plan for Federal Ozone and PM2.5 Standards (State SIP Strategy). Available at: https://ww3.arb.ca.gov/planning/sip/2016sip/2016sip.htm. Accessed: August 2019

³⁵ CARB. 2017. Emission Inventory Documentation. Available at: https://ww3.arb.ca.gov/ei/documentation.htm.
Accessed: August 2019.

Table 3.11. Base Year (2017) Community-Level Emissions Inventory – Off-Road Mobile Source Criteria Air Pollutants

	NOx	TOG	ROG	SOx	PM ₁₀	PM _{2.5}	DPM
OFF-ROAD EQUIPMENT	206.25	70.56	65.70	0.32	9.45	8.77	7.39
COMMERCIAL (OTHER)	128.50	13.40	11.38	0.22	4.31	3.98	4.20
CONSTRUCTION AND MINING EQUIPMENT	48.49	5.82	4.97	0.05	2.47	2.28	2.33
TRANSPORT REFRIGERATION UNITS	16.07	1.77	1.49	0.00	0.54	0.49	0.54
INDUSTRIAL EQUIPMENT	4.09	0.83	0.68	0.01	0.29	0.27	0.24
COMMERCIAL (COMMERCIAL)	2.19	5.45	5.24	0.01	0.81	0.78	0.00
LAWN AND GARDEN (OTHER)	1.83	0.67	0.64	0.00	0.07	0.07	0.07
COMMERCIAL (RESIDENTIAL)	1.60	4.11	3.96	0.01	0.31	0.30	0.00
LAWN AND GARDEN (COMMERCIAL)	1.57	16.13	15.33	0.01	0.34	0.32	0.00
LAWN AND GARDEN (RESIDENTIAL)	1.04	22.25	21.92	0.01	0.28	0.26	0.00
OTHER	0.86	0.11	0.09	0.00	0.03	0.03	0.03
AIRPORT GROUND SUPPORT EQUIPMENT	0.02	0.00	0.00	0.00	0.00	0.00	0.00
OFF-ROAD RECREATIONAL VEHICLES	0.20	36.78	36.72	0.00	0.03	0.03	0.00
ALL-TERRAIN VEHICLES (ATV'S)	0.10	19.75	19.73	0.00	0.01	0.01	0.00
OFF-ROAD MOTORCYCLES	0.09	16.70	16.66	0.00	0.02	0.02	0.00
SPECIALTY VEHICLES CARTS	0.00	0.24	0.24	0.00	0.00	0.00	0.00
MINIBIKES	0.00	0.09	0.09	0.00	0.00	0.00	0.00
RECREATIONAL BOATS	0.00	17.12	16.40	0.00	0.00	0.00	0.00
RECREATIONAL BOATS	0.00	17.12	16.40	0.00	0.00	0.00	0.00
TRAINS	0.06	0.00	0.00	0.00	0.00	0.00	0.00
PASSENGER TRAINS	0.06	0.00	0.00	0.00	0.00	0.00	0.00

Table 3.12. Base Year (2017) Community-Level Emissions Inventory – Off-Road Mobile Source Toxic Air Contaminants

Toxic Air		Toxicity-Weighted Emissions ²						
Contaminant ¹ (TAC)	Mass Emissions (Ibs/yr)	Cancer Risk Weighted Emissions	Chronic Non-Cancer Risk Weighted Emissions	Acute Non-Cancer Risk Weighted Emissions				
DPM	16,444.85	37,987.61	56.32	0.00				
1,3-Butadiene	1,150.65	1,506.20	9.85	0.30				
Benzene	4,626.90	1,033.19	26.41	29.34				
Formaldehyde	12,634.39	583.71	24.04	39.33				
Acetaldehyde	5,367.35	111.59	0.66	1.96				

¹ Units are in tons per year.

¹ Only the top five TAC based on cancer risk toxicity-weighted emissions are shown. A full list of TAC emissions can be found in Appendix D.

² Toxicity weighted emissions consider the risk posed by the toxic pollutant. They are calculated by multiplying mass emissions by the pollutant's toxicity factor (e.g., cancer unit risk factor) as determined by the Office of Environmental Health Hazard Assessment.

3.2.3 Source Attribution Analysis

The purpose of a source attribution analysis is to assess, identify, and estimate the relative contribution of sources or categories of sources to elevated exposures of air pollution in a community. It can be used to aid in the development of emission reduction targets and strategies and differentiate between pollution originating from sources within a community versus those attributable to regional sources (i.e., background pollution). Source attribution can be performed using a variety of technical approaches, including: community inventory ratios, community-specific air quality modeling, targeted air monitoring/back trajectory/pollution roses/inverse modeling, chemical mass balance, and Positive Matrix Factorization (PMF).

3.2.3.1 Previous Analyses

Certain technical analyses conducted for the ICAPCD 2018 SIP for the Annual PM_{2.5} NAAQS involved a type of source attribution analysis.³⁶ Those analyses were conducted as part of the Clean Air Act Part D Subpart 179(B) Technical Demonstration which showed that the implementation plan would be adequate to attain and maintain the NAAQS but for transport of emissions from Mexico. Specifically, the technical demonstration included an evaluation of the impact of Mexicali emissions on the Calexico PM_{2.5} monitor through an evaluation of monitoring data, meteorological conditions, and emissions in the border region. Additionally, CARB staff analyzed speciated particulate matter data and conducted a source attribution analysis using PMF.

Elemental species concentrations were compared at the three PM_{2.5} monitoring sites in Imperial County: the Brawley site (~22 miles north of the border), the El Centro site (~9 miles north of the border), and the Calexico site. Sample analysis from the monitor located in Calexico indicates that PM is comprised primarily of carbonaceous aerosols (organic matter plus elemental carbon) (45%), geological material (21%), ammonium nitrate (13%), ammonium sulfate (14%), and elemental species (7%). Results from X-Ray fluorescence analyses performed at all three sites indicated that elemental species concentrations increased with proximity to the border. Concentrations of non-geological elemental species were 4 and 6 times lower at the El Centro and Brawley sites, respectively, than at Calexico indicating that circumstances unique to Calexico make a significant contribution to the elemental species concentrations. Activities known to occur in the Mexicali area, including a substantial number of manufacturing and assembly plants

³⁶ ICAPCD. 2018. Imperial County 2018 Annual Particulate Matter Less Than 2.5 Microns in Diameter State Implementation Plan. Available at: https://www.co.imperial.ca.us/AirPollution/otherpdfs/2018-IC-PM25SIP.pdf. Accessed: August 2019.

(maquiladoras), small-scale brickyards, and uncontrolled combustion of refuse and other materials, suggest that the unusually high measurements of PM_{2.5} elemental species in Calexico are likely due to transport from Mexicali.

The source attribution analysis included data from the Calexico monitor from 2011 and between September 2014 and August 2015.³⁷ PMF identified seven major sources of PM_{2,5} in Calexico: airborne soil (24%), biomass burning (19%), mobile (16%), secondary sulfate (15%), secondary nitrate (11%), refuse burning (11%), and industrial sources (4%). Airborne soil contributed the highest levels in spring and fall quarters when average wind speeds are seasonally elevated. High values of biomass burning were measured in the winter and summer months, indicating a strong influence of burning for space heating and field burning of crop residues, respectively. The analysis noted higher contributions of refuse burning in the winter, consistent with wintertime bonfires. Lastly, the measured contributions from industry exhibited elevated concentrations of iron, lead, and zinc. Potential sources of these metals were identified in Mexicali, including metal processing operations, brick kilns, cement kilns, and various incinerators.

As discussed above, in the source attribution analysis biomass burning was found to be the second largest contributor to $PM_{2.5}$ at the Calexico monitor. CARB's analysis suggests that bans on biomass burning in quarters 2 and 4 would be slightly more effective in reducing ambient $PM_{2.5}$ concentrations than restrictions solely applied in the winter season. Additionally, source direction analyses showed that $PM_{2.5}$ contributions from mobile sources and secondary nitrate precursor emissions had strong southwest source directionality suggesting contributions from the Calexico West Port-of-Entry. CARB's analysis suggests that reduction or elimination of idling times in the winter has the potential to reduce the $PM_{2.5}$ emissions below the annual $PM_{2.5}$ standard of 12.0 $\mu g/m^3$.

Ultimately, the evaluation concluded that 15 percent of the PM_{2.5} in Calexico was contributed by sources that are not found in Imperial County (i.e. refuse burning and certain industrial sources), and that most of the PM_{2.5} from mobile and secondary nitrate sources originated from the United States-Mexico border crossing area.

3.2.3.2 New Analyses

One method for source attribution is the community inventory ratio technical approach. This approach compares the ratios of source-specific emissions to determine the relative contribution of each source or class of sources to the overall emissions impacting a community. The community inventory ratio analysis in this Plan relies on the community-level emissions inventory developed by CARB (see Section 3.2.2) and focuses on PM_{2.5} and TAC emissions as they directly relate to the health-based air quality objectives in Section 1.3.1.

As shown in Figure 3.14 below, the majority of PM_{2.5} emissions in the Corridor are generated by area-wide sources (78%), followed by stationary sources (14%). A breakdown of emissions contributions to each category is shown in Figures 3.15 through 3.18. The top five contributors to the Community's PM_{2.5} emissions are fugitive windblown dust (50.2%), fuel combustion from

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³⁷ Data from the intervening periods was determined to be invalid.

stationary and area-wide sources (8.8%), unpaved road dust (8.3%), cooking (6.3%), and construction and demolition (6.1%).

Figure 3.14. Base Year (2017) PM_{2.5} Emission Contribution to Community-Level Inventory Total by Source Category

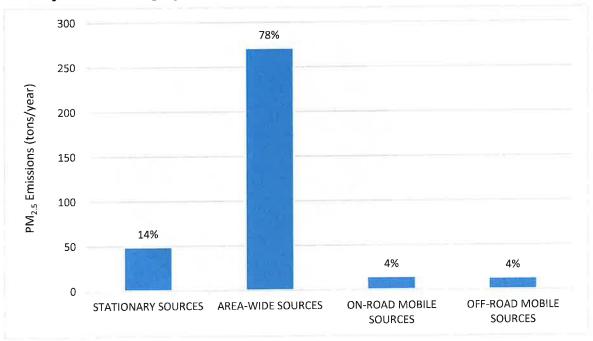


Figure 3.15. Base Year (2017) PM_{2.5} Emission Contribution to Stationary Source Category Total

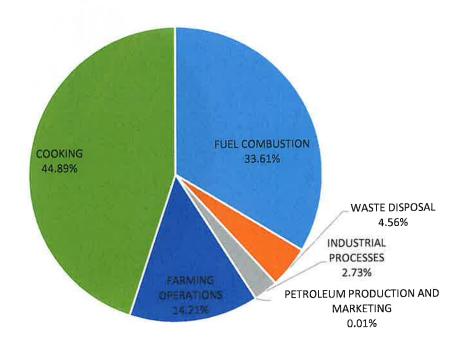


Figure 3.16. Base Year (2017) PM_{2.5} Emission Contribution to Area-wide Source Category Total

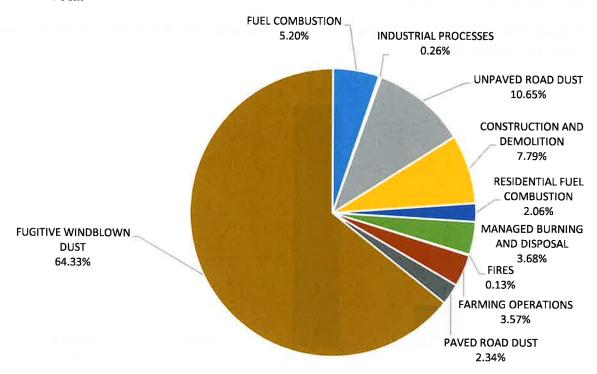


Figure 3.17. Base Year (2017) PM_{2.5} Emission Contribution to On-Road Mobile Source Category Total

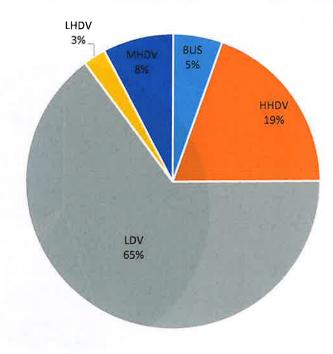
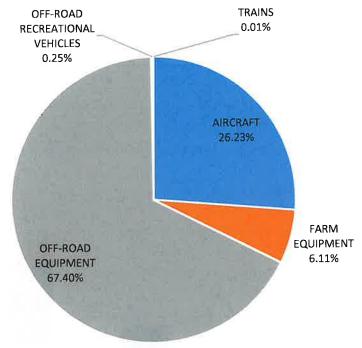


Figure 3.18. Base Year (2017) PM_{2.5} Emission Contribution to Off-Road Mobile Source Category Total



The previous PMF source attribution analysis described in Section 3.2.3.1 identifies the top contributors to PM_{2.5} emissions in Calexico as airborne soil (24%), biomass burning (19%), mobile sources (16%), secondary sulfate (15%), secondary nitrate (11%), refuse burning (11%), and industrial sources (4%). In comparison, the top contributors identified in the community inventory ratio analysis are fugitive windblown dust (50.2%), fuel combustion (8.8%), unpaved road dust (8.3%), mobile sources (7.9%, including both on-road and off-road sources), cooking (6.3%), and construction and demolition (6.1%). There are several similarities in the findings of the two analyses. To start, airborne soil (i.e., fugitive windblown dust and unpaved road dust) are identified as the largest contributors of PM_{2.5} in both analyses. In addition, mobile sources and fuel combustion (which can lead to the formation of secondary sulfate and secondary nitrate) are identified as top contributors in both analyses. Certain categories, such as biomass burning and refuse burning, only appear as top contributors in the PMF analysis; however, that could be because the PMF analysis can capture the effects of international emissions, whereas the community inventory ratio analysis does not. This finding makes sense, in that both biomass burning and refuse burning are known emission sources just south of the border.

The community-level emissions inventory in Section 3.2.2 provides TAC emissions in both raw and toxicity-weighted formats. The benefit of the toxicity-weighted format is that it allows for a direct comparison between TACs of differing risk/toxicity levels. Figure 3.19 shows the contribution of the top five TAC in each source category to the base year (2017) cancer risk-weighted emissions in the Community. As shown in this figure, the largest contributor to cancer risk is DPM from off-road mobile sources, followed by DPM from on-road mobile sources and cadmium from area-wide sources.

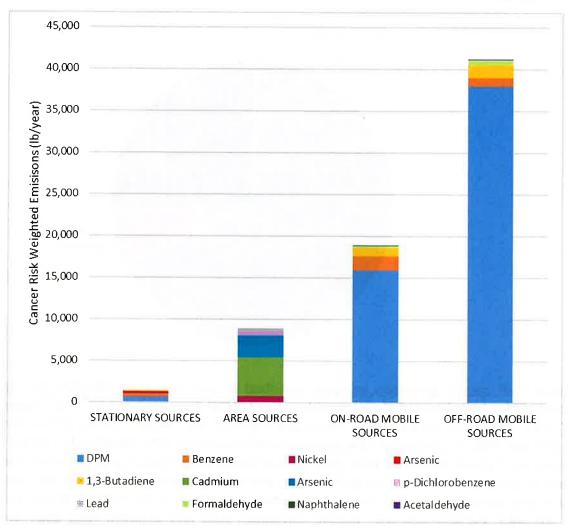


Figure 3.19. Base Year (2017) TAC Emissions Contribution to Cancer Risk Weighted TAC Emissions

3.2.4 Existing Air Quality Policies and Programs

3.2.4.1 County Policies and Programs

The Clean Air Act, established by the USEPA in 1970, regulates air emissions from stationary and mobile sources. Among other things, it allows the USEPA to establish the NAAQS and directs states to develop state implementation plans to attain and maintain the NAAQS. CARB, in turn, delegates some of this authority to local air districts, such as ICAPCD. California Health and Safety Code (HSC) Section 39002 states that local and regional authorities have the primary responsibility for control of air pollution from all sources other than vehicular sources. This includes the responsibility for permitting, enforcement, collection of emission inventory data, and preparation of air quality plans. In line with its delegated authority, ICAPCD staff has developed internal policies, programs, and rules to reduce air pollution from sources within its jurisdiction.

This section discusses the key programs and policies administered by the District that directly impact the air quality in the region and, by extension, the Corridor.

Incentive Programs

Carl Moyer Program

ICAPCD currently administers the Carl Moyer Program³⁸ within Imperial County. The purpose of the Carl Moyer Program is to obtain emission reductions of NO_X, PM₁₀, and reactive organic gases (ROG) from heavy-duty vehicles and other equipment operating in California as early and as cost-effectively as possible. The Carl Moyer Program provides financial incentives to assist in the purchase of cleaner-than-required engine and equipment technologies to achieve emission reductions that are real, quantifiable, and enforceable. ICAPCD makes grants available to qualified applicants. Eligible projects include purchasing cleaner on-road trucks, school and transit buses, off-road equipment, agricultural equipment, and lawn mowers. The Carl Moyer Program has been implemented in ICAPCD for the past 15 years. Most recently, the program has been funding the replacement of agricultural equipment, including tractors and hay loaders at a rate of 4 to 6 pieces of equipment per year.

Table 3.13 presents the 2016, 2017, and 2018 emission reductions resulting from this program.

Table 3.13.	Imperial County Emission Reductions from Carl Moyer Program Projects						
	NO _X (tpy)	ROG (tpy)	PM (tpy)				
2017	19.78	2.41	0.91				
2018	17.69	1.78	1.07				

Funding Agricultural Replacement Measures for Emission Reductions (FARMER) Program

ICAPCD currently administers the FARMER Program³⁹ within Imperial County. The FARMER program provides funding through local air districts for agricultural harvesting equipment, heavy-duty trucks, agricultural pump engines, tractors, and other equipment used in agricultural operations, including zero-emission agricultural utility task vehicles. The purpose of the program is to reduce agricultural sector emissions by providing grants, rebates, and other financial incentives to replace agricultural operation equipment with cleaner alternatives. The program began in 2017 and provided ICAPCD an initial funding allocation of approximately \$1.2 million. ICAPCD has received additional funding of approximately \$1.1 million for 2019. Under the currently awarded amounts, ICAPCD estimates that 11 to 13 agricultural trucks and tractors will be replaced through the program each year. The District is currently working on six active projects.

Table 3.14 presents the estimated emission reductions expected from the first six projects.

³⁸ More information available at: https://www.co.imperial.ca.us/AirPollution/index.asp?fileinc=plancarl. Accessed: August 2019.

³⁹ More information available at: https://ww2.arb.ca.gov/our-work/programs/farmer-program. Accessed: August 2019.

Table 3.14. Imperial County Estimated Emission Reductions from current FARMER Program Projects				
Project Type	NOx (tpy)	ROG (tpy)	PM ₁₀ (tpy)	PM _{2.5} (tpy
On-Road Heavy-Duty AG Truck (New)	0.2177	0.0147	0.0074	0.0068
On-Road Heavy-Duty AG Truck (New)	0.1019	0.0057	0.0031	0.0028
On-Road Heavy-Duty AG Truck (New)	0.1692	0.0112	0.0054	0.005
On-Road Heavy-Duty AG Truck (New)	0.0334	0.0019	0.0019	0.0018
Off-Road Agricultural Equipment (Tractor, New)	0.6835	0.0419	0.0207	0.019
Off-Road Agricultural Equipment (Tractor, New)	0.9733	0.0496	0.0254	0.0234
TOTAL	2.179	0.125	0.0639	0.0588

Lawn Equipment Exchange Program

ICAPCD has been administering the Lawn Equipment Exchange Program for the past 4 years. The program reduces air pollution by allowing residents to exchange working gasoline-powered lawn mowers and lawn equipment with zero-emission electric-powered units at a discounted price. Since inception, ICAPCD has exchanged more than 237 lawn mowers, and 140 leaf blowers and trimmers. This has resulted in average emission reductions of 101 pounds of hydrocarbons and 830 pounds of carbon dioxide.⁴⁰

State Reserve Funding

The 2018 State Reserve Project Solicitation⁴¹ is directed at providing monetary grants to offset the incremental cost of off-road reduced emission technologies. Under the 2017 guidelines, mobile, portable, and stationary off-road compression ignition and large spark-ignition projects such as construction, agricultural, and industrial equipment are eligible for funding. ICAPCD recently used these funds to replace commercial-sized lawn mowers at Southwest High School and Central Union High School, both located within the Corridor.

Table 3.15 presents the emission reductions resulting from this program.

Table 3.15. Imperial County Emission Reductions from State Reserve Funding			
	NOx	ROG	PM
Emission Reductions (tons/yr)	0.02	0.02	0.08

More information available at: https://imperial.granicus.com/MetaViewer.php?view_id=2&clip_id=1470&meta_id=231617. Accessed: August 2019.

⁴¹ More information available at: https://www.arb.ca.gov/msprog/moyer/statereserve.htm. Accessed: August 2019.

NOx Remediation Measures

CARB's Low Carbon Fuel Standard (LCFS) was originally adopted in 2009 and targets reductions in greenhouse gases through reduction of the carbon intensity of transportation fuels in California. In implementing the LCFS, CARB identified that the use of biomass-based diesel fuel may have resulted in increased NOx emissions. CARB committed to remediate potential increases in NOx emissions through a Voluntary NOx Remediation Measure (NRM) grant program. The ICAPCD was awarded a grant under this program to fund clean vehicle and equipment projects for immediate emission reductions in disadvantaged and low-income communities. The mission of the NRM grant, is to promote and protect public health and welfare through the effective and efficient reduction of air pollutants and the NRM must achieve NOx emission reductions that are permanent, surplus, and quantifiable. ICAPCD is using the funds provided by this grant to replace a school bus in Heber.

Table 3.16 presents the emission reductions resulting from this program.

Table 3.16. Imperial County Emission Reductions from NOx Remediation Measures			
	NOx	ROG	PM
Emission Reductions (tons/yr)	0.57	0.01	0.23

Proposition 1B - Goods Movement Emission Reduction Program (GMERP)

Proposition 1B, GMERP, is a partnership between CARB and local agencies, including air districts and seaports to reduce air pollution emissions and health risks from diesel exhaust that are created by freight movement along California's trade corridors. Imperial County is within the San Diego/Border Trade Corridor. ⁴² Currently San Diego Air Pollution Control District is administering the program on behalf of the District. ⁴³ This program has been in effect in ICAPCD for four funding cycles, starting in 2010. Table 3.17 presents the number of trucks that have been replaced or retrofitted under this program, along with resulting emission reductions. Note that these are mobile emissions, and as such emission reductions may not occur entirely in Imperial County.

⁴² More information available at: https://www.arb.ca.gov/bonds/gmbond/gmbond.htm. Accessed: August 2019.

⁴³ More information available at: https://www.sdapcd.org/content/sdc/apcd/en/grants-and-incentives/proposition-1b-goods-movement-emission-reduction-program--gmerp-.html. Accessed: August 2019.

Table 3.17. Imperial County Emission Reductions from GMERP				
	Trucks replaced	Trucks retrofitted	Emission Reductions (tons)[a	
			PM ₁₀	NOx
Year 1 Funds	51	0	11.5	214.6
Year 2 & 3 Funds	147	24	32.9	780.7
Year 4 Funds	106	0	4.1	512.9
TOTAL	304	24	48.5	1,508.2

Additional Incentive Programs

The following incentive programs have been considered by the District or implemented in the past, but are not being currently implemented:

- Lower-Emission School Bus Program. This CARB program provides grant funding for new lower-emission school buses, as well as retrofit equipment for school buses. The program was administered by ICAPCD in 2008 and 2009, during which time the District retrofitted 54 and replaced 13 school buses in the County. The District is currently considering options for using this program in the future.⁴⁴
- Woodsmoke Reduction Program. The Woodsmoke Reduction Program is administered by CARB and offers financial incentives for homeowners to replace wood stoves, wood inserts, or fireplaces with cleaner burning, more energy efficient devices.⁴⁵ ICAPCD has not yet participated in this program, but anticipates doing so in the future.

Non-Incentive Programs

Smoke Management Program

California HSC Section 41850 authorizes local air districts to reasonably regulate, but not prohibit agricultural burning. Furthermore, California HSC Section 41856 required CARB to develop guidelines for the regulation and control of agricultural burning for each air basin in the state. Title 17 of the California Code of Regulations ("Title 17") was developed to provide smoke management guidelines for agricultural and prescribed burning. Under Title 17, ICAPCD developed a Smoke Management Program (SMP), which addresses the relevant agricultural burning regulations, as well as applicable ICAPCD policies.⁴⁶ The objective of the SMP is to employ smoke management techniques on all agricultural burning projects to prevent smoke

[[]a] Emission reduction estimates are based on a five-year project lifespan.

⁴⁴ More information available at: https://www.arb.ca.gov/msprog/schoolbus/schoolbus.htm. Accessed: August 2019.

⁴⁵ More information available at: https://www.arb.ca.gov/planning/sip/woodsmoke/reduction_program.htm. Accessed: August 2019.

⁴⁶ More information available at: https://www.arb.ca.gov/smp/district/imp2010.pdf. Accessed: August 2019

impacts to communities and sensitive receptors in Imperial County. The SMP identifies ICAPCD smoke management and forecasting resources, and procedures for burn registration, smoke management planning, and obtaining burn permits. It also provides guidelines for consideration of smoke sensitive areas and alternatives/incentives for not burning.

ICAPCD submits an annual burn report to CARB, in compliance with Title 17 Section 80130. The report includes the amount and type of crops burned during the previous calendar year. These reports indicate that there have been significant reductions in burning since 2003 in Imperial County. In fact, ICAPCD has reduced burning from 40,221 acres in 2003 to 12,767 acres in 2018, representing a 68 percent reduction in total acres burned.⁴⁷ Part of this success can be attributed to farmers utilizing the Agricultural Burning Emission Reduction Credit (ABERC) program instead of burning fields. As shown in Figures 3.20 and 3.21, since 2015, the number of acres participating in the ABERC program has been larger than the number of acres burned.

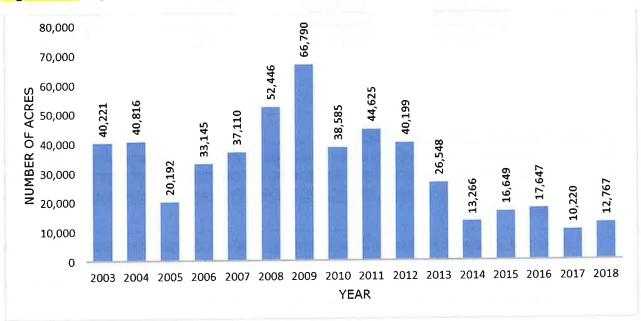


Figure 3.20. Agricultural Acres Burned in Imperial County, 2003-2018

3-40

⁴⁷ Agricultural Acres Burned in Imperial County 2003-2018: https://www.co.imperial.ca.us/AirPollution/index.asp.
Accessed: August 2019.

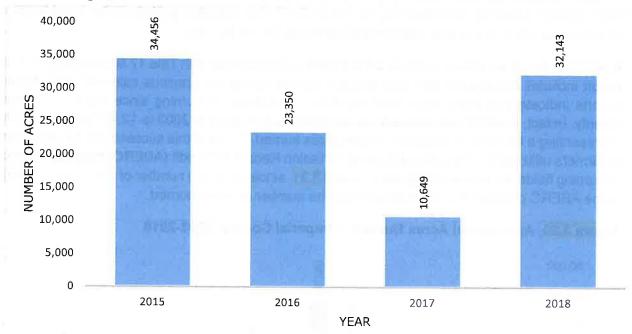


Figure 3.21. Agricultural Acres Not Burned in Imperial County and Participating in ABERC Program, 2014-2018

Emission Reduction Credit (ERC) Program

An ERC is a credit earned by an entity when it reduces its emissions beyond what is required by regulation. That credit is an asset that can be used by the creating entity or sold to other entities that need to offset their emissions. The ICAPCD ERC Program is implemented through the following rules:

- Rule 214, Emission Reduction Credit Banking. This rule defines standards and practices
 to ensure that ERCs are real, permanent, quantifiable, enforceable, and surplus. It
 ensures that emission reductions are transferred through the District ERC bank for use
 as offsets that meet the requirements of New Source Review.
- Rule 214.1, Mobile Source Emission Reduction Credit Banking. Rule 214.1 establishes a
 procedure by which businesses and industries may create and use emission reduction
 credits. These credits may be used as stationary source offsets where allowed by rules
 and regulations, or may replace other emission reduction requirements. Eligible emission
 reduction strategies include an accelerated vehicle retirement program, and retrofitting of
 passenger cars, and light-, medium-, and heavy-duty vehicles.
- Rule 214.2, Paving Unpaved Public Roads Emission Reduction Credits. This rule
 provides a procedure for quantifying and certifying emission reductions for voluntary
 paving of unpaved public roads, and issuance of Paving Emission Reduction Credit
 (PERC) certificates. These PERC certificates may be issued to meet New Source Review
 offset requirements.

• Rule 214.3, Agricultural Burning Emission Reduction Credit Bank. This rule ensures that agricultural burning emission reductions are transferred through the ABERC bank. These credits may be used as permit offsets or for variance offset requirements. As shown in Figures 3.12 and 3.13 above, since 2015, the number of acres participating in the ABERC program has been larger than the number of acres burned. ABERCs are reduced in value over time, such that by the end of the fifth year after the ABERCs are generated, any unused amount will be zero.

The number of ABERCs generated from 2016 through 2018 is presented in Table 3.18.

Table 3.18	Imperial County Agricultural Burning Emission Reduction Credits Generated				
	2016	2017	2018		
PM ₁₀	89.57	79.84	170.55		
со	804.20	713.04	1364.62		
TOC	61.85	55.11	116.16		
NOx	29.74	26.46	52.14		

Rule 310, Operational Development Fee

The purpose of ICAPCD's *Rule 310, Operational Development Fee*, is to provide ICAPCD with a mechanism for mitigating emissions produced from the operation of new commercial and residential development projects. Project proponents may choose from three options: payment of a pre-determined project mitigation fee, development of an Alternative Emission Reduction Plan ("AER Plan") that reduces emissions associated with operation (which reduces fees based on partial or full mitigation of emissions as demonstrated by the AER Plan), or request project-specific operational emission analysis to reduce the mitigation fees. The funds generated by the Operational Development Fees are distributed by ICAPCD for various mitigation projects.

There have been seven projects completed under this program. Four additional projects are currently in progress. Table 3.19 presents the emission reductions resulting from this program.

Table 3.19. Imperial County Emission Reductions from Rule 310 Projects			
	Ozone (tpy)	PM (tpy)	
Completed Projects	15.26	6.11	
Projects in Progress	1.14	4.24	

Policies

The District has an internal policy manual with a variety of policies that are mostly administrative in nature. However, some policies are centered on specific source types and serve to enhance existing District rules. These policies include:

- Policy #8, Designation of Restricted and Prohibited Burning Areas. This policy prohibits field burning and other large burns for areas within any city or townsite.
- Policy #15, Burning of Residential Rubbish Restricted. This policy ensures that residential rubbish burning is regulated similar to that of permitted burning, in compliance with existing District regulations, so that it will not constitute a nuisance.
- Policy #34, Agricultural Burning Procedures for Allocating Acreage, Burn Day Decisions, and Tracking. This policy ensures that burn acreage is limited and that meteorological conditions are reviewed before allowing permitted burns.
- Policy #38, Large Confined Animal Facilities Permits Required. This policy requires Beef Feedlots and Dairies which meet the criteria for a Large Confined Animal Facility to develop an emission mitigation plan containing a number of measures as appropriate to each source category.

3.2.4.2 State Policies and Programs

Overview of California Air Resources Board's Statewide Actions

Community-scale air pollution exposure is caused by many factors, including the cumulative impacts from multiple pollution sources. Effective solutions require multiple strategies at both the statewide and local level to deliver new emissions reductions directly within these communities.

CARB has adopted a number of comprehensive air quality and climate plans over the last several years that lay out new emissions reduction strategies. These plans include the State Strategy for the State Implementation Plan,⁴⁸ the California Sustainable Freight Action Plan,⁴⁸ California's 2017 Climate Change Scoping Plan,⁵⁰ and the Short-Lived Climate Pollutants Reduction Strategy,⁵¹ along with a suite of incentive programs. The CAPP Blueprint⁵² further identified additional actions to reduce the air pollution burden in heavily impacted communities throughout the State. Together, these plans provide a foundation for the new actions identified as part of this Emission Reduction Plan.

This section illustrates CARB's statewide role in the Emission Reduction Plan, by broadly describing the regulatory, enforcement, and incentive-based actions CARB has taken to reduce

DRAFT SEPTEMBER 2019

⁴⁸ CARB. 2017. Revised Proposed 2016 State Strategy for the State Implementation Plan. March 7. Available at: www.arb.ca.gov/planning/sip/sip.htm. Accessed: August 2019.

⁴⁹ California Department of Transportation. 2016. California Sustainable Freight Action Plan. July. Available at: http://www.dot.ca.gov/hq/tpp/offices/ogm/cs freight action plan/theplan.html. Accessed: August 2019.

CARB. 2017. California's 2017 Climate Change Scoping Plan. November. Available at: www.arb.ca.gov/cc/scopingplan/scopingplan.htm. August 2019.

⁵¹ CARB. 2017. Short-Lived Climate Pollutant Reduction Strategy. March. Available at: www.arb.ca.gov/cc/shortlived/shortlived.htm. Accessed: August 2019.

⁵² CARB. 2018. Final Community Air Protection Blueprint for Selecting Communities, Preparing Community Emissions Reduction Programs, Identifying Statewide Strategies, and Conducting Community Air Monitoring. October. Available at: https://ww2.arb.ca.gov/our-work/programs/Community-Air-Protection-Program. Accessed: August 2019.

emissions statewide. It also highlights specific foundational CARB actions that address areas of concern identified by the El Centro-Heber-Calexico Community.

Regulatory Programs

Federal, State, and local air quality agencies all work together to reduce emissions. At the federal level, the USEPA has primary authority to control emissions from certain mobile sources, including sources that are all or partly under federal jurisdiction (e.g., some farm and construction equipment, aircraft, marine vessels, locomotives), which it shares in some cases with air districts and CARB. The USEPA also establishes ambient air quality standards for some air pollutants.

At the State level, CARB is responsible for controlling emissions from mobile sources and consumer products (except where federal law preempts CARB's authority), controlling toxic emissions from mobile and stationary sources, controlling greenhouse gases from mobile and stationary sources, developing fuel specifications, and coordinating State-level air quality planning strategies with other agencies.

Regionally, air districts are primarily responsible for controlling emissions from stationary and indirect sources (with the exception of consumer products in most cases) through rules and permitting programs within their regions.

CARB regulatory programs are designed to reduce emissions to protect public health, achieve air quality standards, reduce greenhouse gas emissions, and reduce exposure to toxic air contaminants. CARB establishes regulatory requirements for cleaner technologies (both zero and near-zero emissions) and their deployment into the fleet, for cleaner fuels, and to ensure in-use performance. CARB's regulatory programs are broad – impacting stationary sources, mobile sources, and multiple points within product supply chains from manufacturers to distributors, retailers, and end-users. CARB's regulations affect cars, trucks, ships, off-road equipment, consumer products, fuels, and stationary sources.

One important and relevant regulatory authority of CARB's is to adopt measures to reduce emissions of toxic air contaminants from mobile and non-mobile sources, known as Airborne Toxic Control Measures (ATCM).⁵³ These regulatory measures include process requirements, emissions limits, or technology requirements. Additionally, CARB implements the Statewide Air Toxics "Hot Spots" Program⁵⁴ to address the health risk from toxic air contaminants at individual facilities across the State. The Air Toxics "Hot Spots" Program includes several components to collect emissions data, identify facilities having localized impacts, ascertain health risks, notify nearby residents of significant risks, and reduce those significant risks to acceptable levels.

Under the Air Toxics "Hot Spots" Program, air districts are required to set a threshold for facilities that pose a significant health risk and prioritize facilities for health risk assessments. Air districts also establish a risk value above which facilities must conduct a risk reduction audit and emissions

⁵³ California Health and Safety Code § 39650 et seq.

Assembly Bill 2588, Air Toxics "Hot Spots" Information and Assessment Act, Connelly, Statutes of 1987, California Health and Safety Code § 44300 et seq.

reduction plan. Facilities must develop these health risk assessments, risk reduction audits, and emission reduction plans. CARB provides technical guidance to support smaller businesses conducting health risk assessments and developing emissions reduction plans.

Additionally, CARB has pursued enforceable agreements with industry that result in voluntary but enforceable adoption of the cleanest technologies or practices and provide assurance that emissions reductions will be realized. CARB's agreement with the Union Pacific Railroad Company and BNSF Railway Company to accelerate introduction of cleaner locomotives in the South Coast Air Basin is an example of an enforceable agreement.

information on CARB's Air **Toxics** "Hot Spots" Program, https://www.arb.ca.gov/ab2588/ab2588.htm. For more detailed information on CARB's statewide emissions reduction strategies. see Appendix C of the CAPP Blueprint https://ww2.arb.ca.gov/our-work/programs/community-air-protection-program.

Enforcement Programs

To achieve the reductions associated with rules and regulations, regulated entities must comply with requirements and technology must function as expected. CARB's goal, set out in more detail in statute and in its Enforcement Policy, is to achieve comprehensive compliance with every regulation the CARB Governing Board has adopted, and the Enforcement Program finds violations, investigates cases, and resolves cases through either the administrative settlement process, or litigation. CARB's enforcement efforts encompass a broad spectrum of programs, including certification requirements for vehicles, engines, aftermarket parts, consumer products, and fuels; in-use fleet requirements focused on diesel mobile sources; and greenhouse gas standards for stationary sources.

CARB settlement of enforcement cases can also fund Supplemental Environmental Projects, which are not otherwise required by law or regulation but benefit air quality by reducing emissions, reducing exposure to air pollution, or preventing future air quality violations.⁵⁵ Examples of Supplemental Environmental Projects include installation of air filtration systems in schools, increasing services to children with asthma, and school bus and diesel emissions reduction projects.

One critical and relevant enforcement program is CARB's continued effort to streamline the Truck and Bus Regulation enforcement process.⁵⁶ This work is closely linked to implementation of Senate Bill 1,⁵⁷ which ties truck registration in California to compliance with the Truck and Bus Regulation. Once fully implemented, CARB's Enforcement Program will identify potential violators through Department of Motor Vehicles' registrations, notify potential violators, give violators an opportunity to prove compliance, and finally place registration holds on all trucks that do not

⁵⁵ CARB. 2016. Supplemental Environmental Project (SEP) Policy. December 8. Available at: https://ww2.arb.ca.gov/sites/default/files/2019-05/SEP Policy 1.pdf. Accessed: August 2019.

For more information on the Truck and Bus Regulation, visit: http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm.

⁵⁷ California Vehicle Code § 4000.15(a).

comply with the regulation. This process is expected to significantly improve the compliance rate with the Truck and Bus Regulation and improve air quality along trucking corridors in California.

For more detailed information on CARB's Enforcement Programs, visit: https://www.arb.ca.gov/enf/enf.htm.

Incentive Programs

CARB operates incentive programs that reduce the costs of developing, purchasing, or operating cleaner technologies. The programs help ensure cleaner cars, trucks, equipment, and facilities are operating in our neighborhoods by driving the development of new, cleaner technologies, and by accelerating their sale and adoption. Specifically, they accelerate the introduction of advanced technology vehicles and equipment, accelerate the turnover of older and higher emitting vehicles and equipment, and increase access to clean vehicles and transportation in disadvantaged communities and lower-income households.

Examples of CARB incentive programs include the Carl Moyer Memorial Air Quality Standards Attainment Program⁵⁸ (the Community Air Protection Incentives⁵⁹ are implemented by the air district through this program), Proposition 1B: Goods Movement Emission Reduction Program,⁶⁰ Funding Agricultural Replacement Measures for Emission Reductions (FARMER) Program,⁶¹ and Low Carbon Transportation Investments and Air Quality Improvement Program (which includes the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project).⁶² While CARB is responsible for program oversight, some of these programs are implemented as a partnership with local air districts.

For more information on air pollution incentives, grants, and credit programs, visit: https://www.arb.ca.gov/ba/fininfo.htm.

CARB Actions Related to the El Centro-Heber-Calexico Corridor

This section highlights CARB actions that specifically relate to the El Centro-Heber-Calexico Corridor. This list should not be interpreted as comprehensive or exhaustive, but rather illustrative of some of the major statewide strategies driving emissions reductions in conjunction with those

⁵⁸ For more information on the Carl Moyer Memorial Air Quality Standards Attainment Program, visit: https://www.arb.ca.gov/msprog/moyer/moyer.htm.

For more information on the Community Air Protection Incentives, visit: https://www.arb.ca.gov/msprog/cap/capfunds.htm

For more information on the Proposition 1B: Goods Movement Emission Reduction Program, visit: https://www.arb.ca.gov/bonds/gmbond/gmbond.htm.

For more information on the Funding Agricultural Replacement Measures for Emission Reductions Program, visit: https://ww2.arb.ca.gov/our-work/programs/farmer-program.

For more information on the Low Carbon Transportation Investments and Air Quality Improvement Program, visit: https://ww2.arb.ca.gov/our-work/programs/low-carbon-transportation-investments-and-air-quality-improvement-program.

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local level strategies identified in this Emission Reduction Plan. The full list of CARB foundational strategies can be found in Appendix D and Appendix F of the CAPP Blueprint.⁶³

Advanced Clean Trucks Regulation

CARB is working through a public process to develop and consider proposals for new approaches and strategies that may transition to zero emission technology those truck fleets that operate in urban centers, have stop and go driving cycles, and are centrally maintained and fueled. For more information on the proposed regulation, visit: https://ww2.arb.ca.gov/our-work/programs/advanced-clean-truck.

Heavy-Duty Vehicle Inspection and Maintenance

When emissions control systems are not operating correctly, in-use emissions can increase. CARB's current inspection programs include the roadside Heavy-Duty Vehicle Inspection Program and the fleet Periodic Smoke Inspection Program. These regulations require heavy-duty vehicles operating in California to be inspected for excessive smoke and tampering. In July 2018, CARB approved amendments to Heavy-Duty Vehicle Inspection Program and the Periodic Smoke Inspection Program to reduce the smoke opacity limits to levels more appropriate for today's modern engine technology. CARB is now exploring the development of a more comprehensive heavy-duty inspection and maintenance program which would help ensure all vehicle emissions control systems are adequately maintained throughout the vehicles' operating lives. For more information on existina heavy-duty maintenance programs, https://www.arb.ca.gov/enf/hdvip/hdvip.htm. For more information on the development of a comprehensive heavy-duty inspection and maintenance program. visit: https://ww2.arb.ca.gov/our-work/programs/heavy-duty-inspection-and-maintenance-program.

Cross-Agency Engagement and Integration of Pesticide Application Information

The Department of Pesticide Regulation and the Imperial County Agricultural Commissioner's Office participated in the Steering Committee process. CARB is also working directly with the Department of Pesticide Regulation to integrate pesticide information in the online Resource Center. For more information on the online Resource Center, visit: https://ww2.arb.ca.gov/our-work/programs/community-air-protection-program.

Reducing Emissions from Dairy and Other Livestock

As part of the Short-Lived Climate Pollutant Reduction Strategy, CARB, several lead State agencies, and other stakeholders will encourage and support near-term actions by dairies to reduce manure methane emissions through financial incentives, collaboration to overcome barriers, development of policies to encourage renewable natural gas production where appropriate as a pollution control strategy, and other market support. Enteric fermentation from

⁶³ CARB. 2018. Final Community Air Protection Blueprint for Selecting Communities, Preparing Community Emissions Reduction Programs, Identifying Statewide Strategies, and Conducting Community Air Monitoring.

October. Available at: https://ww2.arb.ca.gov/our-work/programs/Community-Air-Protection-Program. Accessed: August 2019.

all livestock is also responsible for methane emissions. CARB, along with other lead State agencies, will continue to support and monitor research and explore voluntary, incentive-based approaches to reduce enteric fermentation emissions from dairy and non-dairy livestock sectors until cost-effective and scientifically-proven methods to reducing these emissions are available and regulatory actions can be evaluated. For more information on the strategy, visit: https://www.arb.ca.gov/cc/shortlived/shortlived.htm.

3.2.5 Sensitive Receptors and Land Use Policy

Land use planning is essential for ensuring effective and efficient use of land resources. Land use policy regulates the types of land uses that can be established in certain areas and as a result, can aid in environmental conservation, reduce urban sprawl, and decrease the public's exposure to pollutants. The following sections identify the locations of sensitive receptors in the Corridor and provide an overview of the existing land use policies in Imperial County.

3.2.5.1 Identification of Sensitive Receptors

Sensitive receptors refer to those segments of the population most susceptible to impacts from air pollution emissions (e.g., children, the elderly, and people with pre-existing serious health problems affected by air quality). ⁶⁴ Sensitive receptors include residential communities, public and private K-12 schools, public and private day care centers, convalescent homes and elderly residential facilities, hospitals and long-term care facilities, and parks and athletic facilities.

A search for non-residential sensitive receptors (such as daycare centers, schools, hospitals, and other care facilities) showed that there are at least 82 sensitive receptors within the Corridor (see Figure 3.22 and Appendix E). Non-residential sensitive receptor locations were identified based on searches of the following on-line public databases:

- California Community Care Licensing Division (https://secure.dss.ca.gov/CareFacilitySearch/DownloadData);
 - o Residential Care Facilities for the Elderly
 - o Child Care Centers
 - Adult Residential Facilities
- Homeland Infrastructure Foundation-Level Data (https://hifld-geoplatform.opendata.arcgis.com/search)
 - o Private Schools
 - o Public Schools

⁶⁴ CARB. 2005. Air Quality and Land Use Handbook: A Community Health Perspective. April. Accessed: https://www.arb.ca.gov/ch/handbook.pdf. Accessed: August 2019.

- Hospitals
- o Child Care Facilities

To further validate the location of sensitive receptors, there was an exercise at the fourth Steering Committee meeting held on January 30, 2019 during which the Steering Committee members were asked to identify sources of concern and the location of sensitive receptors on maps of the Corridor (see Figure 3.23 for an example).

Figure 3.22. Sensitive Receptor Locations in the El Centro-Heber-Calexico Corridor

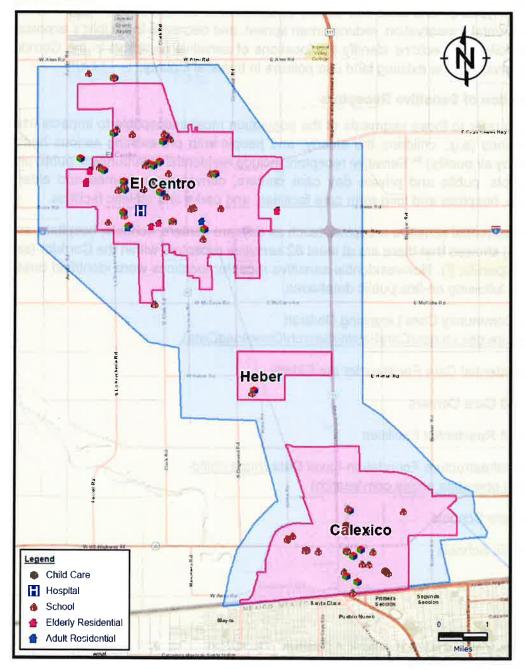
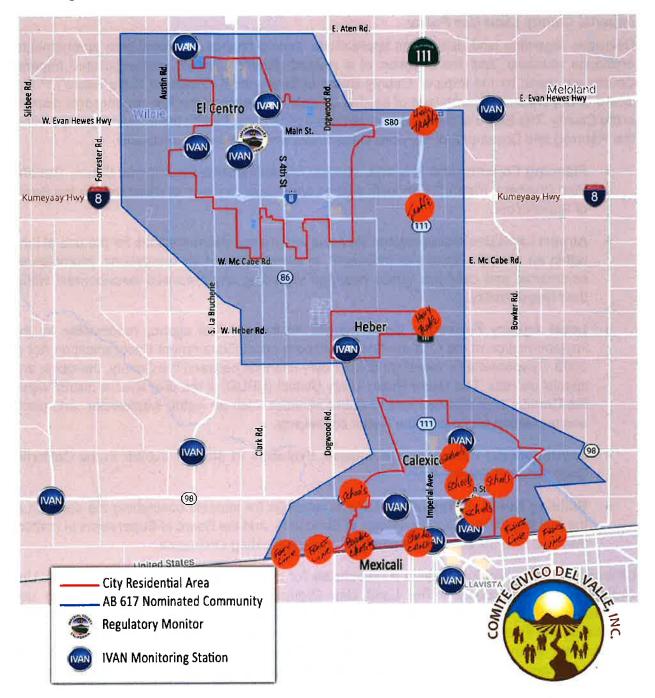


Figure 3.23. Locations of Emission Sources and Sensitive Receptors as Identified at a Steering Committee Meeting; Locations of Existing IVAN and Regulatory Monitors



3.2.5.2 Overview of Existing Land Use Policy

Land use policy in the Corridor is managed by several entities including Imperial County, City of El Centro, and the City of Calexico. Imperial County is responsible for the unincorporated areas

of the County while the City of El Centro and Calexico are responsible for the incorporated areas of their respective cities.

Imperial County Land Use Policy

Decisions regarding land use permit applications, zoning changes, general plan amendments, ordinance revisions, and the adoption of a revised general plan for unincorporated Imperial County are made by the Imperial County Board of Supervisors ("Board of Supervisors"). ⁶⁵ The Board of Supervisors is comprised of elected officials from each of the five supervisorial districts in the County. The Board of Supervisors oversees and/or consults with the following groups within the Planning and Development Services Department when making its decisions:

- Planning Commission: Reviews, revises, and implements the Imperial County General Plan ("General Plan").⁶⁶ Conducts studies and prepares plans as delegated by the Board of Supervisors.
- Airport Land Use Commission: Reviews and makes determinations for the use of land within an airport's "sphere of influence", assures safety of air navigations, promotes air commerce, and conducts public hearings regarding any proposed development within their responsibility.
- Local Agency Formation Commission: An independent agency responsible for the
 implementation of the Cortese-Knox-Hertzberg Local Government Reorganization Act of
 2000. Responsible for oversight of boundary changes between the County, the cities, and
 special districts. The Heber Public Utility District (HPUD) is the only special district within
 the Corridor and provides limited public services such as water, wastewater, and parks
 and recreation services to the Heber community.
- Environmental Evaluation Committee: Evaluates all projects subject to the California Environmental Quality Act.
- Building Board of Appeals: Conducts hearings for appeals concerning the decision of the Building Official, Condemnation of Structures, and the Board of Supervisors in matters that deal with the Building Department and the Building Ordinance.

Ultimately, the Board of Supervisors is responsible for implementing and amending the Land Use Ordinance for the County. The Land Use Ordinance provides comprehensive land use regulations for all unincorporated areas in Imperial County. The Land Use Ordinance also establishes the Planning & Development Department, which is tasked with managing land use development in the County. For instance, the Planning & Development Department (and associated Planning Commission) is responsible for developing the General Plan for the County,

DRAFT SEPTEMBER 2019

⁶⁵ Imperial County. Board of Supervisors. Available at: http://www.icpds.com/?pid=4382. Accessed: August 2019.

⁶⁶ Imperial County. General Plan. Available at: http://www.icpds.com/?pid=571. Accessed: August 2019.

⁶⁷ Imperial County. Ordinances. Available at: http://www.icpds.com/?pid=573. Accessed: August 2019.

which serves as a policy guide for future development. The Land Use Element, ⁶⁸ specifically, designates the general distribution, location, and extent standards for housing, business, industry, agriculture, open space, public facilities, and other land uses and is based on the following six concepts adopted by the Board of Supervisors:

- 1. Quality of life;
- 2. Safety for people and property;
- 3. Wide selection of social and economic opportunities;
- 4. Efficient use of natural, human, and financial resources;
- 5. Clean air, water, and land; and
- 6. Quiet, beautiful communities and rural areas.

The Land Use Element includes policies and programs that ensure appropriate land use development. These programs protect agricultural and industrial land uses from the encroachment of residential development, as well as protect residential land uses from environmental impacts of the former land uses. The Land Use Element strongly supports continued use of areas designated as agriculture and exclusion of incompatible residential uses in these areas. In addition, agricultural zones are preferred adjacent to industry. New residences, except for managers or caretakers, are prohibited in areas with industrial zoning. If residential areas are adjacent to industrial areas, the adjacent industrial area must be light industrial as a transition zone.

The General Plan designates the townsite of Heber and surrounding area bounded by Farnsworth Lane on the west, Correll Road on the north, Pitzer Road on the east, and Fawcett Road on the South as the Heber "Urban" Area. The Heber Urban Area development is further guided by the Heber Urban Area Community Plan ("Heber Community Plan"). ⁶⁹ Heber is expected to have substantial population growth as a result of new housing construction and expansion of sewer and water infrastructure. Therefore, many of the goals of the Heber Community Plan center around ensuring that new development is allowed to thrive while mitigating impacts to schools and residential areas in Heber. Specifically, existing industrial land uses are allowed to expand, but will be monitored to ensure the land uses do not pose an environmental threat. Agricultural development is not compatible with the Heber Community Plan. Existing agricultural land uses are allowed to be maintained and continued as long as it does not conflict with surrounding land uses and there is no expansion. Other measures included in the Heber Community Plan include discouraging the development of non-compatible land uses near geothermal plants, prohibiting

Imperial County 2015. Land Use Element of the Imperial County General Plan. Available at: http://www.icpds.com/CMS/Media/Land-Use-Element-(2015).pdf. Accessed: August 2019.

⁶⁹ Imperial County. Heber Urban Area Plan. Available at: http://www.icpds.com/CMS/Media/Heber-Urban-Area-Plan.pdf. Accessed: August 2019.

the burning of household trash in the planning area, and encouraging the paving of unpaved roadways within the townsite.

Guidelines for updating and/or amending the General Plan are included in the Land Use Ordinance. For this, applications must be submitted to the Planning & Development Department. The application is then reviewed by the Planning Commission, which recommends the approval of the proposed change or denies the application. The Board of Supervisors is tasked with providing final approval of General Plan amendments.

City of El Centro Land Use Policy

The City of El Centro Community Development Department manages land use policy for the incorporated area of El Centro, as well as unincorporated portions of Imperial County that are within the City's sphere of influence. The Community Development Department is supervised by the El Centro City Council and consists of three divisions:⁷⁰

- 1. Code Enforcement Division: Performs inspections and keeps records in order to improve and preserve the City of El Centro.
- 2. Building & Safety: Provides building code enforcement for all construction projects in the City of El Centro.
- 3. Planning & Zoning: Ensures compliance with the policies as set forth in the Zoning Ordinance and General Plan.

The Land Use Element of the El Centro General Plan provides a guide to land use planning in the City of El Centro.⁷¹ Guidelines for updating and/or amending the El Centro General Plan are included in the Municipal Ordinance.⁷² The El Centro Municipal Ordinance also divides the city into residential, commercial, manufacturing, and special/other zones. Commercial and industrial land uses are prohibited in all residential zones.

City of Calexico Land Use Policy

The City of Calexico Development Services Department manages land use policy for the incorporated area of Calexico, as well as unincorporated portions of Imperial County that are within the City's sphere of influence. The Calexico Development Services Department is supervised by the Calexico City Council and consists of three divisions⁷³:

⁷⁰ City of El Centro. Organizational Chart. Available at: http://www.cityofelcentro.org/userfiles/August%202014%20Org%20Chart%20All%20Depts.pdf. Accessed: August 2019.

⁷¹ City of El Centro. General Plan. Available at: http://www.cityofelcentro.org/communitydevelopment/plans-documents. Accessed: August 2019.

⁷² City of El Centro. Municipal Ordinance. Available at: https://library.municode.com/ca/el_centro/codes/code_of_ordinances?nodeld=CHCOTA_CH29ZO. Accessed: August 2019.

⁷³ City of Calexico. Development Services. Available at: http://www.calexico.ca.gov/index.asp?SEC=ECF96EA2-AA20-424A-8AE2-8DFD45E85A8A&Type=BBASIC. Accessed: August 2019.

- 1. Building Division: Conducts plan checks, issues building permits, and performs inspections. Enforces the building codes as adopted by the City.
- 2. Engineering Division: Oversees the City's community development. Is responsible for the orderly development of all public infrastructure in the City of Calexico, such as water and wastewater systems.
- 3. Planning Division: Reviews all development proposals. Processes all requests for annexations, re-zonings, and land use entitlements. Is responsible for long-range and advanced planning in the City. Makes recommendations to the Planning Commission and City Council concerning updates to the Calexico General Plan and other planning documents.

The City of Calexico has also established the Planning Commission to review applications and oversee public hearings related to land use development and planning. The Planning Commission makes recommendations to the City Council based on an application's consistency and compatibility with the Calexico General Plan.

The Land Use Element of the Calexico General Plan provides a guide to land use planning in the City of Calexico.⁷⁴ Guidelines for updating and/or amending the Calexico General Plan are included in the Calexico Municipal Code.⁷⁵ The Calexico Municipal Code divides the city into residential, commercial, industrial, and special purpose zones.

3.2.5.3 Identification of Existing and Potential Land Use Issues

The proximity of residential and sensitive land uses to industrial and agricultural land uses was identified as a concern in the *Imperial County AB 617 Community Nominations* report. In addition, during the fourth Steering Committee meeting, attendees expressed concern about the proximity of Heber Elementary School to the nearby water treatment plant and feedlot (see Figure 3.24). As shown in Figure 3.24, residential land uses are also located in close proximity to industrial and agricultural land uses in this area.

The proximity of the sensitive land uses to industry is a result of the economic drivers for the Corridor. The primary industries in the Corridor are commercial agriculture and various industrial facilities, around which the towns of El Centro, Calexico, and Heber were built. The land use plans in the Corridor tend to be supportive of the existing industry and discourage development of residential and sensitive land uses near the existing agriculture and industrial areas. In some instances, existing agriculture and land uses have been re-zoned to "conditionally compatible" land uses where there have been adjacent residential and sensitive land uses. Conditionally

⁷⁴ City of Calexico. 2015 Draft General Plan Update. Available at: http://www.calexico.ca.gov/index.asp?SEC=254C9C81-D449-44C7-B581-0B8070E31FF1&Type=BBASIC. Accessed: August 2019.

⁷⁵ City of Calexico. Municipal Code. Available at: https://library.municode.com/ca/calexico/codes/code of ordinances?nodeld=CITY CALEXICOMUCO1995. Accessed: August 2019.

Available at: https://ww2.arb.ca.gov/resources/documents/imperial-county-ab617-community-nominations-submitted-partnership-comite-civico. Accessed: August 2019.

compatible land uses are land uses that are generally not compatible, but can be found compatible in certain situations, thus allowing existing non-conforming uses to remain in place.

Heber Flement Plants

Heber Elementary School

Freeclot

Figure 3.24. Proximity of Sensitive Receptors to Industrial Sources in Heber

3.2.6 Assessment of Compliance

Under federal and state law, ICAPCD is under legal obligation to establish and enforce air quality regulations. These regulations are primarily meant to ensure that the area meets federal and state air quality standards. ICAPCD also has authority to regulate toxic and hazardous air emissions from stationary sources. These regulations are enforced in the same manner as those which pertain to ambient air quality standards.

ICAPCD is also responsible for issuing permits, monitoring permitted and unpermitted facilities for compliance, responding to air quality complaints, and performing inspections at permitted facilities. As of 2018, there are 212 ICAPCD permitted facilities operating in the El Centro-Heber-Calexico Corridor, with a total of 257 permitted units. Of these 212 permitted facilities, 43% include combustion sources, 16% are service stations, 8% are facilities operating paint booths, and 4% are geothermal facilities. The remaining 29% consist of beef feedlots, non-retail stationary sources, manufacturing, and other types of facilities. Permitting and enforcement statistics are detailed in Appendix F.

ICAPCD performs inspections at all permitted facilities in the El Centro-Heber-Calexico Corridor at least once per year. These inspections are intended to confirm that facilities are in compliance with air district rules and permit conditions. A total of 157 notices of violation (NOVs) and notices to comply (NTCs) were issued from 2016 to 2018 in the El Centro-Heber-Calexico Corridor. Of those violations, approximately 67% were administrative in nature, including failure to submit annual reports, failure to apply for permits, and failure to submit fees. The remaining violations were related to dust and opacity (3%), open burns (1%), service station maintenance (10%), and other stationary source violations (19%). A non-compliance rate can be defined as:

Number of facilities receiving violations

Total number of facilities

Using this definition, the Corridor had an overall non-compliance rate between 14 and 22 percent from 2016 to 2018.

4 Targets and Strategies

The CAPP Blueprint requires communities to develop targets and strategies for obtaining the objectives of their emissions reduction programs. Emission reduction targets must be specific and quantifiable in order to track progress overtime. Furthermore, emission reduction targets must focus and accelerate actions to provide direct emissions reductions within the community to maximize reductions in exposure to TACs and to achieve healthful levels of PM_{2.5}. Once emission reduction targets are established, strategies can be developed for achieving the targets. The strategies can include regulatory strategies, facility risk reduction audits, air quality permitting, enforcement strategies, incentive program strategies, and land use, transportation, and mitigation strategies. The emission reduction targets and strategies for the Corridor were developed based on information compiled from the Technical Assessment (Chapter 3) and in consideration of input provided by the Steering Committee. Specific details regarding this Plan's targets and strategies are provided in the following sections.

4.1 Emission Reduction Targets

Emission reduction targets must be specific, quantifiable, measurable, and achievable within five years. The CAPP Blueprint provides a process for developing targets that meet the required criteria. This process includes the following steps:

- 1. Establish specific, numerical goals for compliance and deployment of technology and control techniques.
- 2. Calculate the emissions reductions associated with these goals to establish emission reduction targets.

Of the 27 strategies presented in the following sections, 5 strategies are expected to result in quantifiable reductions in emissions. These reductions are summarized in Table 4.1 below and formulate the emission reduction targets of this Plan. Additional strategies are also expected to result in emission reductions; however, due to their nature or the stage in their planning the amount of reductions to be achieved is unknown.

El Centro-Heber-Calexico Corridor

VOC 8.52 8.35 0.13 0.04 Estimated Emission Reductions [a] 13.95 13.48 ×ON 0.46 0.01 2024 (tons per year) DPM 0.02 0.22 0.20 PM₁₀ 0.02 0.02 ত PM_{2.5} 0.33 0.13 0.20 ፸ $\overline{\mathbf{c}}$ VOC 0.13 0.14 0.01 **Estimated Emission Reductions** 0.10 0.09 Š 0.01 2020 (tons per year) 0.004 0.004 DPM 0.004 0.004 **PM**₁₀ ত PM_{2.5} 0.13 0.13 ত্র 豆 Table 4.1. Emission Reduction Targets TOTAL Replacement Projects [e] CARB/State Strategies Wood Burning Device Strategic Updates to ICAPCD Policy #34 Parking Lot Paving Description Grant Program [b] School Bus Projects Strategy M-3 M-5 φ **Σ** R-2 7

Notes:

- [a] Emission reductions for 2025-2029 are identical to the above for strategies I-1, M-3, M-5, and M-6. See Table 4.3 for Strategy R-2 emission reductions in 2025-2029.
- ^[b] Emission reductions for Strategy I-1 assume three units are replaced in 2020.
- le Emission reductions for Strategy M-3 are yet to be determined.
- emission reductions will also depend on the number of burn days each year, and the frequency of burning up to the maximum acres allowed under Policy ld Maximum emission reductions from Policy #34 updates are estimated at 6.6 tons/day PM2.5, but are not guaranteed to occur in the Corridor. Actual
- [e] Emission reductions for Strategy M-6 assume a 1999 model year diesel bus is replaced with an electric bus at a rate of one per year starting in 2020, for a total of five buses replaced by 2024. DPM emission reductions for this strategy are assumed to be equal to the PM10 emission reductions.

4.2 Compliance Goals

In the development of this Plan, ICAPCD performed a three-year retrospective review of compliance in the Corridor (see Section 5.2.1). This assessment showed that a total of 157 NOVs and NTCs were issued from 2016 to 2018. These violations were predominantly administrative in nature, but also included violations related to dust and opacity, open burns, service station maintenance, and other stationary source violations. When considering the number of facilities receiving violations compared to the total number of facilities, the Corridor had an overall non-compliance rate between 14 and 22 percent from 2016 to 2018. In order to improve compliance within the Corridor, the District is proposing several enhanced enforcement strategies, as outlined in Section 4.4.4 and Section 5.3.1. While these strategies will likely improve compliance in the long term, it is unknown how directly the non-compliance rate will be tied to strategy implementation. For this reason, a compliance goal hasn't been established in this Plan. However, as noted in Chapter 6, the District will continue to track key compliance statistics, including the non-compliance rate.

4.3 Proximity-Based Goals

Exposure to TACs and PM_{2.5} may still be an issue in certain locations even with the implementation of the cleanest possible technologies. Sensitive receptors, such as children, the elderly, and individuals with certain medical conditions, are more vulnerable than the rest of the population. Examples of proximity-based goals include installation of air filtration systems at schools, vegetative barriers, and new truck routes to avoid populated areas. In order to develop proximity-based goals, the Steering Committee identified sensitive receptor locations that are in close proximity to emissions sources and established measurable goals for implementing exposure reduction measures. A detailed discussion of sensitive receptor identification is provided in Section 3.2.5.1.

Of the 27 strategies presented in the following sections, 3 strategies are expected to directly reduce human exposure to pollutants. Table 4.2 below presents a summary of the proximity-based goals for this Plan.

Table 4.2. Proximity-Based Goals								
Strategy	Description	Exposure-Related Goals 2020-2024						
M -1	Air Filtration Systems	240,000 sq. ft. of building space						
M-2	Urban Greening Projects	At least \$200,000 in new projects						
M-4	Expanded/Improved School Flag Program	As many schools as funding allows						

4.4 Reduction Strategies

ICAPCD and the Steering Committee have identified strategies necessary to meet the emission reduction targets and associated goals. These strategies establish a path towards continuing long term reductions in PM_{2.5} and TACs. The strategies have been informed by the technical assessment of the types of sources contributing to elevated pollution levels, as well as the relative benefits and feasibility. Identified reduction strategies include regulatory strategies, facility risk reduction audits, air quality permitting, enforcement strategies, incentive program strategies, and land use, transportation, and mitigation strategies. The identified strategies are separated into two Tiers:

- Tier 1 Strategies Strategies with well-defined projects, where the project partners have been identified.
- Tier 2 Strategies Strategies which require further study, planning, and stakeholder input prior to implementation.

Details on the identified strategies are in the following sections.

4.4.1 Regulatory Strategies

Types of regulatory strategies that were considered for inclusion in this Plan include an expedited schedule for Best Available Retrofit Control Technology (BARCT) implementation, identification of new district rules and regulations, and coordination with CARB to quantify the impact that proposed CARB regulatory measures/amendments could have on the Corridor.

In recent years, ICAPCD has performed a thorough review of its rulebook to identify potential ways to produce emissions reductions through new or modified rules that impose source control requirements or limitations on activities that generate emissions. Reviews of District rules were conducted during the writing of recent SIPs for the PM_{2.5}, PM₁₀, and Ozone NAAQS. Specifically, in the 2018 PM_{2.5} SIP and the 2017 Ozone SIP, sources within the District were evaluated to determine if the ICAPCD rules regulating them were as stringent as required for the nonattainment status of those pollutants at the time. The requirement for these pollutants was to have sources controlled by Reasonably Available Control Measures (RACM) or Reasonably Available Control Technology (RACT) for stationary sources. For the 2018 PM_{2.5} SIP, the RACM/RACT analysis revealed the need for improved controls on PM_{2.5} emissions from wood burning fireplaces and heaters. Thus, the District proposed a new rule requiring new wood burning devices to comply with New Source Performance Standards (NSPS) certification requirements. The RACM/RACT assessment conducted for the 2017 Ozone SIP revealed that the existing controls on sources within the District were adequate for the requirements of a Moderate nonattainment area, and thus no new or modified rules were introduced.

For the 2018 PM₁₀ SIP, District rules were evaluated against more stringent standards. Due to the area's Serious nonattainment status, sources were required to be controlled at a level of stringency equivalent to the Best Available Control Measures (BACM) or Best Available Control Technology (BACT) for stationary sources. The District performed a review of its rulebook and found that, after the Regulation VIII rules controlling sources of fugitive dust were updated as part of legal proceedings following the 2009 PM₁₀ SIP, no other new or amended rules were required.

More recently, the District and CARB have been working with United States and Mexican agencies to develop the Imperial County-Mexicali Air Quality Work Plan.⁷⁷ This collaborative effort between governments on both sides of the border provides a plan for prioritizing actions that should be taken to improve air quality in the border region. Priorities of the plan include education and outreach, improved air monitoring, and strategies to reduce emissions from sources such as agricultural burning, vehicles at the border, and unpaved roads. The results of this plan may include new regulatory action taken by agencies, including CARB and ICAPCD. The plan's working draft will be reviewed on a regular basis to determine if and when new rules or regulations in Imperial County result from it.

Given the extensive review in the recent past of Imperial County air quality rules and the ongoing consideration for new control strategies as part of the Imperial County-Mexicali Air Quality Work Plan, the primary focus of this Community Emissions Reduction Plan and the actions taken by the District specifically as part of AB 617 will focus more on policy revisions. More detail on these policy revisions is provided in Section 4.4.4 (Enforcement Strategies) and Section 5.3.1 (Enhanced Enforcement Measures) of this Plan.

R-1 - Accelerated BARCT (Tier 1)

AB 617 amended California HSC Section 40920.6 to require that each air district that is a nonattainment area for one or more pollutants adopt an expedited schedule for implementation of BARCT on industrial sources that, as of January 1, 2017, were subject to the California Greenhouse Gas (GHG) Cap-and-Trade program. BARCT must be implemented by the earliest feasible date, but no later than December 31, 2023. Imperial County is a nonattainment area for O₃ and particulate matter (PM₁₀ and PM_{2.5}) air quality standards and features two facilities that were subject to the Cap-and-Trade program as of January 1, 2017, Spreckels Sugar Company, Inc. (Brawley, California) and U.S. Gypsum Company (Plaster City, California). These facilities operate large industrial boilers (Spreckels Sugar) and wallboard kilns (U.S. Gypsum) which are subject to the expedited schedule for implementation of BARCT. Although these facilities reside outside of the Corridor, emission reductions resulting from BARCT implementation have the potential to affect ambient pollutant concentrations within the Corridor. ICAPCD is in the process of identifying one or more potential control options for this equipment, reviewing the cost effectiveness of each potential control option, and calculating the incremental cost-effectiveness of each potential control option. This process will be completed and information will be reviewed at a public meeting during calendar year 2019.

R-2 - CARB/State Strategies (Tier 1)

ICAPCD coordinated with CARB to identify state regulatory amendments that, while not directly targeting Imperial County, would result in benefits to the Corridor when adopted. There are currently at least five proposed statewide measures that would result in emissions benefits within the Corridor:

CARB. 2018. Imperial County-Mexicali Air Quality Work Plan to Improve Air Quality in the Border Region (Working Group Draft). Available at: https://ww3.arb.ca.gov/planning/border/workplan.pdf. Accessed: August 2019.

- Advanced Clean Car 2 CARB would consider expanded California-specific standards for new light-duty vehicles, impacting 2026 and later model year vehicles, to increase the number of new zero emission and plug-in hybrid electric vehicles sold in California and increase the stringency of fleet-wide emission standards for greenhouse gases and criteria pollutants.
- Advanced Clean Truck CARB is working through a public process to develop and consider proposals for new approaches and strategies that may transition to zero emission technology those truck fleets that operate in urban centers, have stop and go driving cycles, and are centrally maintained and fueled.⁷⁸
- Heavy-Duty Inspection and Maintenance When emissions control systems are not operating correctly, in-use emissions can increase. CARB's current inspection programs include the roadside Heavy-Duty Vehicle Inspection Program⁷⁹ and the fleet Periodic Smoke Inspection Program.⁸⁰ These regulations require heavy-duty vehicles operating in California to be inspected for excessive smoke and tampering. In July 2018, CARB approved amendments to the Heavy-Duty Vehicle Inspection Program and the Periodic Smoke Inspection Program to reduce the smoke opacity limits to levels more appropriate for today's modern engine technology. CARB is now exploring the development of a more comprehensive heavy-duty inspection and maintenance program which would help ensure all vehicle emissions control systems are adequately maintained throughout the vehicles' operating lives.⁸¹
- Low NOx Engine Standard This measure would establish lower NO_X standards and associated test procedures for model year 2022 and subsequent model year medium-duty and heavy-duty engines. CARB is in the process of evaluating the technical feasibility of this measure.⁸²
- Small Off-Road Engine Amendment In 2020, CARB will consider new standards for small off-road engines (SORE), which are spark-ignition engines rated at or below 19 kilowatts and used primarily for lawn, garden, and other outdoor power equipment.⁸³

If adopted, these measures would result in emission reductions of PM_{2.5}, DPM, NO_x, and VOCs (see Table 4.3 below). These reductions would apply to both the on-road mobile source and offroad mobile source community-level emission inventory categories (see Sections 3.2.2.3 and 3.2.2.4).

⁷⁸ CARB Advanced Clean Trucks. Available at: https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks. Accessed: August 2019.

⁷⁹ CARB Heavy Duty Vehicle Inspection and Maintenance Program. Available at: https://www2.arb.ca.gov/our-work/programs/heavy-duty-inspection-and-maintenance-program. Accessed: August 2019.

⁸⁰ CARB Smoke Inspection Programs. Available at: https://ww2.arb.ca.gov/our-work/programs/smoke-inspection-programs. Accessed: August 2019.

⁸¹ CARB Heavy-Duty Vehicle Enforcement. Available at: https://ww3.arb.ca.gov/enf/hdvip/hdvip.htm. Accessed: August 2019.

⁸² CARB. 2019. Staff Assessment of the Technical Feasibility of Lower NOx Standards and Associated Test Procedures for 2022 and Subsequent Model Year Medium-Duty and Heavy-Duty Diesel Engines. April 18. Available at: https://ww3.arb.ca.gov/msprog/hdlownox/white_paper_04182019a.pdf. Accessed: August 2019.

⁸³ CARB Small Off-Road Engines (SORE). Available at: https://ww2.arb.ca.gov/our-work/programs/small-off-road-engines-sore. Accessed: August 2019.

	Emission Reductions (tons per year)									
Proposed Statewide	PM _{2.5}		DPM		NO _X		voc			
Measure	2024	2029	2024	2029	2024	2029	2024	2029		
Advanced Clean Car 2		0.008		0.0002		0.487		0.23		
Advanced Clean Truck	0.001	0.03	0.0001	0.004	0.03	0.63				
Heavy-Duty Inspection and Maintenance	0.20	0.25	0.20	0.25	10.60	12.52				
Low NO _x Engine Standard					2.05	19.87				
Small Off-Road Engine Amendment					0.80	1.89	8.35	13.93		
TOTAL	0.20	0.28	0.20	0.25	13.48	35.40	8.35	14.17		

ICAPCD will continue to coordinate with CARB to identify state regulatory amendments that could result in benefits to the Corridor. Each new regulatory amendment will be reviewed for public health and clean air benefits, cost-effectiveness, and air quality and attainment benefits.

4.4.2 Facility Risk Reduction Audits

AB 617 requires air districts to perform an assessment of its Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) facilities to determine which have risk reduction audits and emission reduction plans that could be reviewed and updated. Specifically, AB 617 authorizes air districts to reopen existing plans in order to strengthen them. AB 2588, enacted in 1987, requires stationary sources to report the types and quantities of certain hazardous materials released into the air. Reportable emissions include continuous releases, intermittent releases, and those resulting from process upsets or leaks. The purpose of AB 2588 is to collect emissions data in order to identify facilities that have localized impacts or an elevated risk of adverse health effects. California HSC Section 44360(a) requires air districts to prioritize facilities based on the submitted emission inventories, and place them in one of three categories: high, intermediate, and low priority. In categorizing a facility, air districts are required to consider the potency, toxicity, quantity, and volume of hazardous materials released from the facility, the proximity of the facility to potential receptors, and any other factors determined to pose a significant risk. Facilities designated as high priority must submit Health Risk Assessments to assess the risk to the surrounding community. Owners of facilities found to pose significant risks must prepare and

⁸⁴ CARB. Overview of the Air Toxics "Hot Spots" Information and Assessment Act. Available at: https://www.arb.ca.gov/ab2588/overview.htm. Accessed: August 2019

implement risk reduction audits and plans within six months of designation. Facilities designated as intermediate priority are required to submit a complete toxics inventory once every four years. Low priority facilities are exempt from reporting.

Table 4.4 below lists the facilities within and directly surrounding the Corridor that are subject to AB 2588:

Table 4.4. AB 2588 Facilities within or directly surrounding the El Centro-Heber-Calexico Corridor						
Facility ID	Facility Name	Facility Designation				
2	SUPERIOR READY MIX/RYERSON	Low				
15	IMPERIAL IRRIGATION DISTRICT ECGS	Low				
19	RYERSON CONCRETE CO	Low				
24	GRANITE CONSTRUCTION COMPANY	Low				
39	SFPP, L.P. IMPERIAL TERMINAL	Low				
42	WILBUR ELLIS CO	Low				
43	ORMAT NEVADA, INC	Low				
78	EIGHT STAR COMMODITIES	Low				

All of the above facilities are designated as low priority, which means that the owners/operators are not required to perform risk reduction audits or submit emission reduction plans. As a result, this emission reduction strategy is not applicable to the El Centro-Heber-Calexico Corridor.

4.4.3 Air Quality Permitting

Strategies involving air quality permits can be an effective way to create new emissions reductions by requiring a defined level of stringency in emissions controls in order for a business to be granted a permit to operate.

A-1 - Technology Clearinghouse (Tier 1)

While permits are already required for most industrial operations in Imperial County, making updates to the way the District grants permits and introducing new requirements on control technologies needed to gain a specific type of permit can further control pollutant emissions. Under this strategy, the District has made a commitment to utilize CARB's Technology Clearinghouse⁸⁵ as an authority on control technology requirements. The Technology Clearinghouse is a work-in-progress by CARB and will include emission limits and control technologies for specific industries and sources. Beginning on January 1, 2020, the District will use the Technology Clearinghouse as a reference in developing Best Available Control

⁸⁵ CARB. 2018. Interim Technology Clearinghouse. Version 1.0. September 27. Available at: https://www.arb.ca.gov/techclearinghouse/. Accessed: August 2019.

Technology (BACT) and Best Available Control Technology for TACs (T-BACT) for any new or modified source permitting processes within or directly surrounding the Corridor. This will result in the substitution over time of older control technologies with newer, more efficient ones designed to limit air emissions. Given the general nature of this strategy, an estimate of its potential emission reductions is unavailable at this time.

4.4.4 Enforcement Strategies

Enforcement of rules and regulations in the Corridor is the responsibility of CARB and District staff. Many improvements to enforcement-related processes can be implemented without requiring new regulatory processes, thus presenting an opportunity to rapidly address Community concerns and deliver emission reductions. In conjunction with the development of this Plan, both the District and CARB conducted a three-year retrospective review of enforcement activities in the Corridor, the results of which are discussed in Section 5.2. The retrospective review allowed the District and CARB to identify opportunities for enhanced enforcement activities. Under this Plan, the District is proposing to:

- Install cameras in the desert west of the Corridor and make the video feed available to the public so that potential exposure concerns can be monitored. (E-1, Tier 1)
- Provide cross-agency training to improve violation response time. (E-2, Tier 1)
- Increase community outreach by providing industry-specific workshops and trainings. (E-3, Tier 1)
- Publish a quarterly newsletter which includes information on enforcement statistics and rule changes. (E-4, Tier 1)
- Form a dedicated outreach team to understand community's enforcement-related concerns. (E-5, Tier 1)
- Facilitate the complaint process in order to increase public access to filing of complaints.
 (E-6, Tier 1)
- Make strategic updates to ICAPCD Policy 17, Guidelines for Staff Processing and Investigation of Complaints. (E-7, Tier 1)
- Make strategic updates to:
 - o ICAPCD Policy 18, Notices of Violation Issuance and Follow Up
 - o ICAPCD Policy 28, Notices to Comply Administrative Guidelines (E-8, Tier 1)
- Perform an annual retrospective review of enforcement statistics in order to identify areas
 of potential improvement and focus for the upcoming year. (E-9, Tier 1)
- Work with CARB to identify enforcement strategies within CARB's current regulatory programs that could benefit the Corridor, as detailed in Section 5.3.1. (E-10, Tier 1)

See Section 5.3.1 for detailed descriptions of the above enforcement strategies. The enforcement strategies are expected to result in improved compliance; however, the potential emission reductions associated with these strategies are not readily quantifiable.

4.4.5 Incentives-Based Strategies

Incentive funding programs support the introduction and expedited deployment of clean technologies beyond regulatory requirements. These technologies can contribute to improvements in regional and local air quality.

4.4.5.1 Existing Funding Programs

As discussed in Section 3.2.4.1, there are several incentive programs that are currently being administered by the District within Imperial County. These include: the Carl Moyer Program, which provides financial incentives and funding for the replacement of older on-road vehicles and other equipment; the FARMER Program, which provides funding for the replacement of older agricultural equipment; the Lawn Equipment Exchange Program, which provides discounts on zero-emission lawn equipment; and other general funding programs for various types of projects in the County. The District intends to continue administering these programs as long as funding and projects are available and will look for opportunities to leverage the funds from these programs for strategies in this Plan, when synergies exist. Information on the emission reductions achieved to date through these programs is provided in Section 3.2.4.1.

4.4.5.2 Potential Funding Programs

In addition to those programs already in place within Imperial County, the District has identified other potential funding programs that could provide additional incentive-based emissions and exposure reductions.

I-1 - Wood Burning Device Grant Program (Tier 1)

The Woodsmoke Reduction Program is administered by CARB and offers financial incentives for the replacement of residential wood burning devices with more efficient equipment.86 While the District has not yet participated in this program, it represents an already-established opportunity with funds available to produce emission reductions of pollutants generated from wood burning, such as particulate matter. Even though Imperial County is a desert, emissions from wood burning can deteriorate the local air quality, particularly during the winter when inversions are common.

CARB has created a Benefits Calculator Tool for the Woodsmoke Reduction Program to assist in estimating emission reductions from the replacement of wood burning devices.87 Emission factors

⁸⁶ More information available at: https://www.arb.ca.gov/planning/sip/woodsmoke/reduction_program.htm. Accessed: August 2019.

⁸⁷ CARB. Benefits Calculator Tool for the Woodsmoke Reduction Program. Draft. Available at: https://ww2.arb.ca.gov/resources/documents/cci-quantification-benefits-and-reporting-materials?corr. Accessed: August 2019.

in the tool are from CARB's emission inventory methodology for residential wood combustion⁸⁸ and USEPA's AP-42.⁸⁹ The 2018-2019 Woodsmoke Reduction Program Guidelines were released on May 21, 2019.⁹⁰ Per the guidelines, the deadline for executing all grant agreements is June 30, 2020. In addition, any work done prior to a District grant agreement being fully signed and executed will be ineligible for funding. As a result, the District is currently in the process of identifying eligible projects for the program and anticipates completing the grant agreement before the June 30, 2020 deadline. As part of this process, the District intends to solicit input from the Steering Committee on both identifying and prioritizing potential projects for funding. The District anticipates that it will be able to identify at least three eligible projects for this fiscal year appropriation. Table 4.5 presents the estimated emission reductions and cost-effectiveness data associated with this strategy, assuming three units are replaced in 2020 (see Appendix G for calculation details). These reductions would apply to the area-wide residential fuel combustion community-level emission inventory category (see Section 3.2.2.2).

Table 4.5. Estimated Emission Reductions Associated with Wood Burning Device Grant Program							
	PM _{2.5}	NO _X	voc				
Emission Reductions, 2020-2024 (tons per year)	0.13	0.01	0.13				
Cost Effectiveness (\$/ton)	\$5,424	\$88,383	\$3,516				

I-2 - Urban Greening Incentive Programs (Tier 2)

On multiple occasions, members of the Steering Committee and members of the public in attendance at Steering Committee meetings have expressed interest in planting trees and other vegetation within the Corridor to mitigate air quality impacts. Under this strategy, the District would monitor for and identify potential grant programs for urban greening projects. Each year, for the next five years, the District would report on whether there are any new urban greening incentive program funding applicable to the Corridor and if so, the number of applications submitted by the District or partner agencies and accepted. Any funding obtained would be put towards projects sought under Strategy M-2, Urban Greening Projects. As mentioned under Strategy M-2, the District would solicit input from the Steering Committee on both identifying and prioritizing

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⁸⁸ CARB. 2015. Section 7.1. Residential Wood Combustion. October. Available at: https://ww3.arb.ca.gov/ei/areasrc/fullpdf/full7-1 2011.pdf. Accessed: August, 2019.

⁸⁹ USEPA. AP-42 Section 1.5, Liquified Petroleum Gas Combustion. Available at: https://www3.epa.gov/ttnchie1/ap42/ch01/final/c01s05.pdf. Accessed: August 2019.

OARB. 2019. Woodsmoke Reduction Program. Program Guidelines. Fiscal Year 2018-2019 Appropriation. May 21. Available at: https://ww3.arb.ca.gov/planning/sip/woodsmoke/2018-2019 wrp guidelines.pdf. Accessed: August 2019.

potential projects for funding. Because the future availability of applicable incentive programs is unknown, this strategy has been categorized as Tier 2.

4.4.5.3 Outreach Strategies

Updates will be provided as available to keep the public informed on the various programs available for funding emission reduction and exposure projects within the Community. This information will be communicated during the regular Steering Committee meetings, when the public and Steering Committee members can discuss new opportunities and the Community's potential involvement. Additionally, resources will be provided on the Imperial County AB 617 website regarding specific programs and planned or potential participation by the County or Community. For programs which may have widespread applicability to businesses or individuals in the Community, the Steering Committee will collaborate with ICAPCD to host interactive workshops to inform the public on how they can be involved or receive funding for the program's emission reduction efforts.

4.4.6 Land Use Strategies

Land use strategies can address issues arising from the proximity of sensitive receptors to emission sources. While land use decisions are generally made by local city planners, the 2017 Update to the State of California General Plan Guidelines⁹¹ specifically requires planners to consider air quality and environmental justice in land use decisions. By actively engaging with local cities on land use decisions, the Steering Committee and the District can promote improved outcomes.

L-1 - Paving Project Identification (Tier 1)

As discussed in Section 3.2.3.2, fugitive windblown dust and unpaved road dust are among the top three contributors to PM_{2.5} emissions in the Corridor. Results from an interactive poll that was conducted during the July 24, 2019 Steering Committee Meeting (Appendix H.2) show that approximately 50% of public attendees and 70% of Steering Committee members were in favor of implementing parking lot paving projects in the Corridor. Under this strategy, the District is proposing to work with local public works departments and other representatives from the communities of El Centro, Heber, and Calexico to identify locations that could benefit from paving projects. Potential paving projects include well-traveled unpaved roads, parking lots, and unpaved areas located near sensitive receptors including, but are not limited to, schools and senior centers. The District intends to solicit input from these entities by July 1, 2020 and have a list of locations that would benefit from paving available within six months from that date. This list, along with input from the Steering Committee, would inform the projects sought under Strategy M-3, Parking Lot Paving Projects.

⁹¹ Governor's Office of Planning and Research. 2017. State of California General Plan Guidelines: 2017 Update. July 31, Available at: http://www.opr.ca.gov/planning/general-plan/. Accessed: August 2019.

L-2 - General Plan Comment and Review (Tier 2)

California state law requires every city and county to have a general plan, which then serves as the foundation upon which all local land use decisions are based. The Land Use element of a general plan generally designates the distribution of land uses for housing, business, industry, open space, education, public buildings, etc., while the Circulation element identifies the general location and extent of existing and proposed major thoroughfares, transportation routes, etc. Additional elements address conservation, open space, noise, and safety. In addition, Senate Bill 1000 (SB 1000), adopted in 2016, requires cities and counties to include an Environmental Justice element in their general plans, or related goals, policies, and objectives integrated in other elements, that identify disadvantaged communities. The general plans must identify objectives and policies to, among other items, reduce the unique or compounded health risks in disadvantaged communities.⁹²

General plans are routinely reviewed and updated. Land use policy in the Corridor is managed by several entities including Imperial County, City of El Centro, and the City of Calexico. Imperial County is responsible for the unincorporated areas of the County while the cities of El Centro and Calexico are responsible for the incorporated areas of their respective cities. Land use policies for each of these areas is discussed in detail in Section 3.2.5.2. As discussed in Section 3.2.5.3, the proximity of residential and sensitive land uses to industrial and agricultural land uses was identified as a concern in the *Imperial County AB 617 Community Nominations* report. 93 Because land use and transportation planning decisions can have a significant impact on the exposure of air pollutants to sensitive receptors, under this strategy the Steering Committee and the District are proposing to track and review local general plan updates on a quarterly basis (so long as the Steering Committee is active) and issue a joint comment letter, as appropriate, when a local action has the potential to affect air quality or exposure in the Corridor.

<u>L-3 – Urban Greening Project Identification (Tier 2)</u>

Under this strategy, the District is proposing to work with local representatives from the planning departments and communities of El Centro, Heber, and Calexico to create an area-wide plan that identifies potential locations where urban greening projects (i.e., projects involving the installation of trees and vegetative barriers) could be implemented to mitigate air quality impacts to sensitive receptors. Possible locations include at parks and schools, along highways, and near industrial sources. The District intends to solicit input from these entities by July 1, 2020 and have a list of potential locations, including prioritization, available within 6 months from that date. This list, along with input from the Steering Committee, would inform the projects sought under Strategy M-2, Urban Greening Projects.

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⁹² SB 1000, Leyva. Land use: General Plans: Safety and Environmental Justice. September 24, 2016. Available at: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB1000. Accessed: August 2019.

⁹³ Available at: https://ww2.arb.ca.gov/resources/documents/imperial-county-ab617-community-nominations-submitted-partnership-comite-civico. Accessed: August 2019.

4.4.7 Transportation Strategies

In the Corridor, the proximity of mobile emission sources to nearby sensitive receptors such as schools, homes, day care centers, and hospitals can exacerbate the cumulative exposure burden. Transportation planning processes can help address these proximity issues. The community-level emissions inventory found that on-road mobile sources contribute approximately 4 percent of the PM_{2.5} emissions total. Additionally, the technical analyses conducted for the ICAPCD 2018 SIP for the Annual PM_{2.5} NAAQS involved a type of source apportionment analysis which found that most of the PM_{2.5} from mobile and secondary nitrate sources at the Calexico monitor originated from the United States-Mexico border crossing area.

T-1 - Border Activity Strategies (Tier 2)

Under this strategy, ICAPCD proposes to work with local transportation agencies and other bodies to assess the feasibility of implementing measures that reduce the impact of activities at the border. The impact of the border is not limited to emissions from idling and truck traffic along highways. There are additional exposure impacts related to auxiliary services, deliveries, etc. that make the impact more expansive. One possible measure under this strategy would be to evaluate alternative routes for traffic coming through the ports-of-entry. For example, currently, the highway from the West Port of Entry runs from the border, directly through the center of Calexico. If traffic were instead routed to the outskirts of Calexico into less populated areas, the exposure burden to the Community could be reduced. Other heavily traveled routes could also be evaluated as part of this strategy. Within one year from approval of this Plan, ICAPCD is proposing to meet at least twice with local transportation agencies to discuss the feasibility of measures under this strategy. Through these discussions, any barriers to measures should be identified, as well as the need for any supplementary studies. The outcome of these discussions will be used to determine if one or more measures under this strategy are viable and can be recategorized as Tier 1 strategies in 2021 and beyond.

T-2 - Signage to Reduce Idling (Tier 2)

Under this strategy, ICAPCD proposes to solicit input from local school districts, senior facilities, and medical centers to determine if installing signage that encourages vehicles not to idle near these sensitive receptor land uses would be found as beneficial. Within one year from approval of this Plan, ICAPCD is proposing to host at least one workshop on this topic. During the workshop, the following topics may be discussed: 1) the health impacts of vehicle exhaust, 2) communities that have had similar signage initiatives, 3) proposed signage language, and 4) estimated potential cost. The outcome from the workshop will be used to determine if this strategy is viable and can be recategorized as a Tier 1 strategy in 2021 and beyond.

T-3 - Truck Idling Education and Outreach (Tier 1)

Under this strategy, ICAPCD proposes to partner with CARB to conduct education and outreach to reduce the amount of truck idling in the Corridor. Within one year from approval of this Plan, ICAPCD is proposing to conduct at least one workshop for local businesses that have heavy-duty truck fleets operating in the Corridor. If interest and attendance is favorable, training sessions

would continue to be scheduled yearly through 2024, with additional outreach and education occurring through the District's quarterly newsletter publication, as discussed in Section 5.3.1.1.

4.4.8 Mitigation Strategies

As discussed in Section 3.2.5, at least 82 sensitive receptor locations have been identified in the Corridor. These entities, and the broader Community, are exposed to elevated concentrations of pollutants on a daily basis as the Corridor exists in an area that is designated as nonattainment for the 8-hour O₃, 24-hour PM₁₀, and 24-hour and annual PM_{2.5} NAAQS. As discussed in Chapter 3, a variety of emission sources contribute to the exposure burden. The community-level emissions inventory, presented in Section 3.2.2, shows that the top three contributors to PM_{2.5} emissions in the Community are fugitive windblown dust, fuel combustion from stationary and area-wide sources, and unpaved road dust. Top contributors to TACs in the Community are DPM from off-road mobile sources and on-road mobile sources. In addition, the source attribution analysis conducted for the ICAPCD 2018 SIP for the Annual PM_{2.5} NAAQS confirmed that biomass burning, mobile sources, and impacts from across the border contribute heavily to the exposure burden at the Calexico monitor (i.e., the southern portion of the Corridor). Ultimately, health protective mitigation measures and practices can help reduce the exposure burden of a community.

M-1 – Air Filtration Systems (Tier 1)

Air filtration systems have been shown to be effective in significantly reducing concentrations of DPM, particulate matter, and other pollutants in the indoor environment. Results from an interactive poll conducted during the July 24, 2019 Steering Committee Meeting (Appendix H.2) show that approximately 83% of public attendees and 67% of Steering Committee members were in favor of implementing air filtration projects at schools and sensitive receptor locations. Under this strategy, the District is proposing to install air filtration systems on up to 240,000 square feet of building space at sensitive receptor locations including, but not limited to, schools and senior centers. While this translates to approximately twelve schools (or approximately 240 1,000-square foot classrooms), the type and location of the air filtration projects would be informed by input from the Steering Committee. At the August 14, 2019 Steering Committee Meeting, the Steering Committee and the public participated in an electronic polling exercise which asked them to prioritize schools for the installation of air filtration projects (see Appendix H.2). One piece of the feedback received during this exercise was that the Steering Committee wanted to consider more health data (e.g., asthma and absentee rates) before making any final decisions. The Steering Committee also proposed possibly making the air filtration projects a competitive process. These items will be a topic of discussion at future Steering Committee meetings. The District anticipates that installation of the systems would occur evenly over a five-year period (2020-2024).

M-2 – Urban Greening Projects (Tier 1)

Urban greening projects establish and enhance the built environment by using natural solutions to mitigate air quality impacts. The results from the interactive poll conducted during the July 24, 2019 Steering Committee Meeting showed that approximately 64% of public attendees, and 70% of Steering Committee members were in favor of implementing urban greening projects (also

known as green space projects). Under this strategy, the District is proposing to initially designate a minimum of \$200,000 in AB 617 funding towards the implementation of urban greening projects within the Corridor. The location and priority of these projects would be informed by input from the Steering Committee and the outcome of Strategy L-3, Vegetation Planting Location Identification. The District anticipates that implementation of the projects would occur evenly over a five-year period (2020-2024). The District will increase the number of urban greening projects implemented if they are able to obtain incentive funding under Strategy I-2, Urban Greening Incentive Programs.

M-3 - Parking Lot Paving Projects (Tier 1)

As previously discussed in this Plan, fugitive windblown dust and unpaved road dust are top contributors to PM₁₀ and PM_{2.5} emissions in the Corridor. Paving is one approach to reducing emissions from these source categories. Under this strategy, the District is proposing to fund parking lot paving projects within the Corridor, as funding permits. The locations and priority of these projects would be informed by input from the Steering Committee and the outcome of Strategy L-1, Paving Project Identification. Table 4.6 presents the estimated emission reductions and cost-effectiveness data associated with a hypothetical 1.5 acre project (see Appendix G for calculation details). Any reductions resulting from this strategy would apply to the area-wide unpaved road dust community-level emission inventory category (see Section 3.2.2.2).

Table 4.6. Estimated Emission Reductions Associated with Parking Lot Paving								
PM _{2.5} PM ₁₀								
Emission Reductions (tons per year)	0.20	1.97						
Cost Effectiveness (\$/ton)	\$307,131	\$30,698						

M-4 - Expanded/Improved School Flag Program (Tier 1)

The School Flag Program in Imperial County uses colored flags based on USEPA's Air Quality Index to notify teachers, coaches, students, and others about outdoor air quality conditions. Schools raise a colored flag each day that corresponds to the local air quality forecast. The purpose of the program is to create public awareness of outdoor air quality conditions and allow schools, coaches, and parents to make decisions on air pollution exposure, including whether it is appropriate for children to exercise outside on any given day.

The results from the interactive poll conducted during the July 24, 2019 Steering Committee Meeting (Appendix H.2) show that approximately 55% of public attendees and 80% of Steering Committee members were in favor of expanding the School Flag Program. Currently, the program is implemented with varied success in the Corridor. Under this strategy, the District is proposing to assist as many schools as funding permits in the Corridor in implementing the program.

Specifically, the District would provide the materials and training necessary for successful implementation. It is expected that this outreach and training would occur up until the end of 2020. Under this strategy the District would also consider ways to enhance the school flag program, including the potential for use of electronic marquee signs.

M-5 - Strategic updates to Policy 34, Agricultural Burning Procedures (Tier 1)

Agricultural burning is a common practice in Imperial County and can contribute to the exposure burden in the Corridor under certain meteorological conditions. Under this measure, the District is proposing to update Policy 34, Agricultural Burning Procedures for Allocating Acreage, Burn Day Decisions, and Tracking. These updates include:

- Reducing the maximum number of acres burned in any single day from 2,000 to 1,600 acres, with a maximum of 400 acres per quadrant of Imperial Valley.
- Prioritizing burns with smaller acreages (<70 acres) and providing growers the option to divide their fields into smaller sections and request permission to burn the smaller sections on an individual basis.
- Adding more detail to the policy's section on "Special Burns", which are to be considered
 as any burns located within a specified radius of a residential area, school, or heavily
 traveled road. Furthermore, this radius is being increased from 1.5 miles to 2.0.

These updates to the policy will result in a reduction in the maximum allowable acres burned per day, which is expected to result in a reduction up to 6.6 tons of PM_{2.5} per day (see Appendix G for calculations details). Actual emission reductions will depend on the number of burn days each year and the frequency of burning up to the maximum acres allowed under Policy 34. Emission reductions from this strategy would apply to the area-wide managed burning and disposal community-level emission inventory category (see Section 3.2.2.2).

M-6 - School Bus Replacement

As discussed in Section 3.2.3.2, the largest contributor to cancer risk in the Corridor is DPM from off-road and on-road mobile sources. School buses frequently operate on diesel and are often in close proximity to sensitive receptors, like students. Results from an interactive poll that was conducted during the July 24, 2019 Steering Committee Meeting (Appendix H.2) show that approximately 75% of public attendees and 70% of Steering Committee members are in favor of implementing school bus replacement projects in the Corridor. Under this strategy, the District is proposing to replace five school buses between 2020 and 2025. Emission reduction estimates assume that existing buses to be replaced are model year 1999 or older, and that the new buses will be electric and have a lifespan of 10 years. Table 4.7 presents the estimated emission reductions and cost-effectiveness data associated with this strategy, assuming one bus is replaced per year between 2020 and 2024 (see Appendix G for calculation details). The District also intends to evaluate the cost-effectiveness and feasibility of replacing diesel buses with natural gas buses under this strategy. Emission reductions from this strategy would apply to the on-road buses community-level emission inventory category (see Section 3.2.2.3).

Table 4.7. Estimated Emission Reductions Associated with School Bus Replacement								
PM NO _X								
Emission Reductions, 2020 (tons per year)	0.004	0.091	0.007					
Emission Reductions, 2024 (tons per year)	0.02	0.46	0.04					
Average Cost Effectiveness (\$/ton)	\$10,790,221	\$454,249	\$5,395,790					

5 Enforcement Plan

5.1 Enforcement Overview

Enforcement of regulations by CARB and District staff is critical to achieving air quality goals. The primary function of enforcement activities is to improve compliance with air quality rules and regulations. Enforcement responsibilities for regional and local air quality issues are jointly shared between the District and CARB. CARB is primarily responsible for the enforcement of mobile source rules, while the District is responsible for area-wide and stationary source enforcement. In some cases, CARB has established memoranda of understanding with the District to delegate enforcement authority.

5.1.1 ICAPCD Enforcement Overview

The ICAPCD Enforcement Division consists of six compliance and enforcement personnel, including four compliance inspectors, one air quality specialist, and one manager. Enforcement officers perform inspections of facilities holding permits to determine compliance with District rules and regulations, permit conditions, and state and federal rules on an annual basis. Each permit is a written authorization by ICAPCD to install and operate equipment that emits or controls emissions of air contaminants. The permit contains conditions under which the equipment can be operated, including limits on material use or operation time, and/or recordkeeping requirements, as applicable. During these inspections, the inspector reviews processes and operations to determine compliance status. The inspector also reviews the facility's permit to determine its compliance status with each condition. Inspectors also conduct inspections on units registered through CARB's Portable Equipment Registration (PERP) program.

Additionally, the Enforcement Division investigates all air quality complaints. Complaints can be filed through the District's general phone number (1-442-265-1800), the Cal-EPA website, 94 or the CARB website. 95 Imperial County residents may also file environmental reports online through the IVAN Imperial website. 96 Complaints made through the IVAN Imperial website are currently monitored by the Imperial County Certified Unified Program Agency (CUPA), who then directs the complaints to the appropriate agencies. To ensure the quickest response time possible, the IVAN website requests that if the complaint is an air pollution problem that it first be submitted directly to the District. The District's general phone number is active during business, non-business, weekend, and holiday hours. The District logs the call and then assigns the complaint to an inspector. Every complaint received by ICAPCD is investigated within 24 hours of receipt. During regular business hours complaints are assigned to area inspectors as soon as possible. Enforcement personnel contact all complainants, unless the complainant has indicated otherwise, or has filed an anonymous complaint. Enforcement officers record details of all complaint investigations, including a statement for the complainant, the date and time of contact, whether the contact was in person or by telephone, whether the complaint was confirmed, the location of

⁹⁴ Information available at: https://calepacomplaints.secure.force.com/complaints/Complaint. Accessed: August 2019.

⁹⁵ Information available at: https://www.arb.ca.gov/enf/complaints/complaints.htm. Accessed: August 2019.

⁹⁶ Information available at: https://ivan-imperial.org/report. Accessed: August 2019.

the area inspected, and additional details as needed. This information is maintained within the District's archives.

During facility inspections and in response to complaints, enforcement officers issue NTCs for minor compliance issues and NOVs for more serious compliance issues, as necessary. These notices serve as a deterrent for non-compliance and occasionally have fines associated with them.

5.1.2 CARB Enforcement Overview

The mission of CARB is to promote and protect public health, welfare, and ecological resources through the effective and efficient reduction of air pollutants while recognizing and considering the economy of the State. CARB adopts regulations designed to reduce criteria pollutants, toxic air contaminants, and GHG emissions. While it is the responsibility of industry to meet regulatory requirements, CARB works to ensure that regulated industries are aware of, and understand, the requirements of each regulation. The effectiveness of each regulation depends on industry compliance. CARB's enforcement program is designed to deter noncompliance and to ensure regulated industries that have not met CARB's regulatory requirements are brought into compliance.

The Enforcement Division seeks to achieve CARB's mission through the fair, consistent, and comprehensive enforcement of air pollution laws, and by providing training and compliance assistance. Enforcement efforts need to be focused to ensure compliance, especially in communities that may be disproportionately impacted by air pollution. These efforts include responding to concerns from the public when they are being impacted by a violation, providing compliance assistance to regulated entities, conducting inspections and investigations to gather additional information, and taking enforcement action when necessary to resolve noncompliance as quickly as possible.

Enforcement of Compliance

Strategies to enforce compliance are response mechanisms to non-compliant sources and are intended for authorities to respond to different types of violations. The objective of these strategies are the following:

- Return violators to compliance.
- Impose sanctions.
- Remove economic benefit of non-compliance.
- Require specific actions including but not limited to test, monitor or information release.
- Correct environmental damages.
- Correct internal company management problems.

Types of Enforcement Actions

There are three types of legal processes that CARB may use to resolve violations: civil, administrative, and criminal. Each type is defined as follows:

- 1. Civil Action: In cases where a mutual settlement cannot be reached, CARB may refer the matter to the Attorney General for civil litigation. As part of the civil process, CARB can obtain a court order or injunction to stop ongoing violations.
- Administrative Action: CARB has the authority to seek administrative penalties for some violations. In this process, administrative hearings are conducted by administrative law judges using CARB's administrative hearing procedures.
- Criminal Action: In some cases, CARB may identify potential criminal violations. In those
 instances, the case may be referred to the Attorney General, a District Attorney, or other
 prosecutors for criminal prosecution.

Whether pursuing civil or administrative penalties, CARB retains the ability to negotiate mutual settlement agreements at any point before a final court ordered resolution of the case. The settlement agreement may include a compliance plan and penalties dependent on the facts and circumstances of the case. Assessed penalties may include:

- Monetary penalties as a common sanction used in enforcement response: There are several basis on which to calculate the appropriate monetary penalty. CARB will determine the appropriate penalty in each case.
- Denial or revocation of permits: CARB may require the company to cease at least part of its operation for being in clear and direct violation of the law.
- Shutdown of operations: CARB may be able to shut down operations. The threat of a shutdown is considered an effective deterrent since it directly affects profits.

Supplemental Environmental Projects (SEPs)

Through the enforcement process, those found to be in violation are required to come into compliance, and usually also pay a penalty. In some cases, CARB or air districts may allow the responsible party to satisfy part of the monetary penalty by voluntarily offsetting a portion of their civil penalty by performing or funding one or more Supplemental Environmental Projects. CARB runs an active program where projects proposed by disadvantaged community groups are matched to violators willing to fund those projects through a Supplemental Environmental Project.

Enforcement efforts throughout the State are strategically planned and implemented by the following Enforcement Division Branches:

- Citations and Registrations Enforcement Branch
- Diesel Programs Enforcement Branch
- Vehicle, Parts, & Consumer Products Enforcement Branch

- Field Operations Branch
- Enforcement Support Branch

CARB is the primary authority responsible for developing and enforcing regulations to control emissions from portable and mobile sources and consumer products in California, except in cases where federal law preempts CARB's authority. Although CARB has authority to regulate emissions from these sources, it does not have authority to enforce where vehicles drive or park. Inspection and enforcement for the following sources may be conducted by CARB:

- Portable equipment
- Heavy-duty idling
- Cargo handling equipment
- Off-road construction equipment
- Drayage trucks
- Transport refrigeration units

Enforcement Division also implements a set of actions to achieve compliance within the regulated entities and correct situations that endanger public health. These actions include:

- Inspections to determine the compliance status of the regulated companies and detect violations.
- Negotiations to develop mutually agreeable schedules and approaches for achieving sustainable compliance.
- Legal action taken where necessary, to compel compliance and impose consequences for violating the law or posing a threat to public health or environmental quality.
- Compliance promotion through educational programs and technical assistance.

CARB enforcement programs cover vehicles, diesel engines, consumer products, and GHG emissions from industries. The goal of CARB enforcement programs is to achieve comprehensive compliance in every regulation the Board adopts. Through enforcement, CARB works to bring responsible parties into compliance and in doing so achieve a level playing field across industry so that no company can benefit from non-compliance at the expense of another; and to deter industry from future violations.

CARB applies enforcement programs professionally in accordance with its enforcement policy which was updated in 2017. CARB Enforcement Division uses data and inspections to identify potential non-compliance, and then investigates each case. Once a violation is identified, the responsible party is notified. CARB works with the party to achieve compliance and measure the relevant facts and circumstances of each case, relative to factors set in law and described in our enforcement policy, to determine an appropriate penalty. The case is settled when the responsible

party has achieved compliance and paid an appropriate penalty. If the case cannot be settled, CARB legal staff refer the case to the California Attorney General for litigation.

CARB Enforcement Division has approximately 50 staff members designated to enforce heavy-duty diesel programs. CARB is committed to allocating sufficient resources to the El Centro-Heber-Calexico Corridor to effectively implement the enforcement plan within the Corridor.

5.2 Three-Year Retrospective Reviews of Enforcement

Both the District and CARB conducted a three-year retrospective review of enforcement in the Corridor to inform the development of targets, strategies, and the enforcement plan. Ultimately, this review included a summary of complaints received and their resolution, a listing of permitted facilities and their type, the number and type of inspections conducted, a list of Notices of Violation and Notices to Comply issued, an assessment of compliance with CARB and District rules and regulations, and a discussion of opportunities for enhanced enforcement activities.

5.2.1 ICAPCD Enforcement Review

ICAPCD prepared a three-year retrospective review to help inform development of strategies to enhance enforcement in the District. There are currently 212 ICAPCD permitted facilities operating in the El Centro-Heber-Calexico Corridor with 257 permitted units. The permits at these facilities cover a wide range of operations, including combustion, spraying of coatings, service stations, and geothermal energy. ICAPCD inspected 100 percent of the facilities within the El Centro-Heber-Calexico Corridor annually from 2016 to 2018. During that time, the District issued 78 NTCs and 79 NOVs to the facilities within the Corridor. Of those violations, approximately 67 percent were administrative in nature, including failure to submit annual reports, failure to apply for permits, and failure to submit fees. The remaining violations were related to dust and opacity (3%), open burns (1%), service station maintenance (10%), and other stationary source violations (16%). A non-compliance rate can be defined as:

 $\frac{\textit{Number of facilities receiving violations}}{\textit{Total number of facilities}}$

Using this definition, the Corridor had an overall non-compliance rate between 14 and 22 percent from 2016 to 2018.

ICAPCD received 75 complaints in the El Centro-Heber-Calexico Corridor from 2016 to 2018. Sixty-six percent of these complaints were related to dust, open burning, and smoke. These complaints predominantly resulted in issuance of warnings, or situations where nothing is found upon inspection. Appendix F contains tables detailing the results of the three-year retrospective review of enforcement.

Based on the 3-year retrospective review, there are a number of opportunities for enhanced enforcement in the Corridor. As discussed above, the emissions-related NOVs and NTCs were written predominantly for stationary source and service station activities, and also include dust and opacity, and open burning. ICAPCD intends to increase the compliance rate long term through the enhanced enforcement measures described in Section 5.3 below.

5.2.2 CARB Enforcement Review

CARB prepared a three-year retrospective review of enforcement activities in the El Centro-Heber-Calexico Corridor. The following sections contain a description of programs implemented in the Corridor by CARB for the years 2016 through 2018, this report includes compliance rate results.

Heavy-Duty Diesel Vehicles

Heavy-Duty Vehicle Inspection Program (HDVIP): The HDVIP program requires heavy-duty trucks and buses to be inspected for excessive smoke and tampering, and engine certification label compliance. Any heavy-duty vehicle traveling in California, including vehicles registered in other states and foreign countries, may be tested. Tests are performed by CARB inspection teams at border crossings, CHP weigh stations, fleet facilities, and randomly selected roadside locations.

Fuel Inspections

A primary component of the CARB's Motor Vehicle Fuels Enforcement program is the inspection of California gasoline and diesel fuel at production, transport, and dispensing facilities. CARB fuels inspectors conduct frequent, unannounced inspections of refineries, service stations, distribution and storage, bulk purchaser and consumer facilities throughout the State of California to obtain samples of gasoline and diesel fuel. During the inspection of motor vehicle fuels, gasoline and diesel samples are obtained from production, transport, and dispensing facilities and are analyzed for all regulated properties.

Consumer Products

Consumer Product inspections are an important regulatory tool to improve public health in the community. "Consumer product" means a chemically formulated product used by household and institutional consumers, including, but not limited to, detergents, cleaning compounds; polishes and floor finishes; cosmetics and personal care products; home, lawn, and garden products; disinfectants and sanitizers; aerosol paints and automotive specialty products; but does not include other paint products, furniture coatings, or architectural coatings. Consumer products, such as hairsprays, deodorants and flooring can be a source of TACs and VOCs that community members willingly bring into their homes.

Investigators in the Consumer Products program purchase samples of regulated consumer products from outlets all over California. They inspect product containers for compliance with registration and dating requirements and send selected products to the laboratory for testing

Descriptions of additional CARB enforcement programs are provided in Appendix F.

5.2.2.1 Enforcement Data Analysis

The inspection history described here includes several program inspections conducted in the El Centro-Heber-Calexico Corridor. Analysis of the enforcement data for the inspection activities in the Corridor suggests that there is a low compliance rate for Heavy-duty vehicle and Consumer

products inspection programs, and high compliance rate with low inspection occurrence for Fuels inspection programs.

The following section presents enforcement history specific to CARB programs implemented and enforced in the El Centro-Heber-Calexico Corridor. An overall analysis of this information is made in further sections.

Complaints Investigation

CARB's previous complaint management system for complaints related to heavy-duty diesel vehicles lacked the ability to track complaints by specific location. However, CARB staff have begun to work/track all complaints through the California Environmental Protection Agency Complaint Reporting system. This will allow CARB staff to better track complaints by community and to see the resolution of the complaint. Furthermore, this process will enhance CARB's complaint response by encouraging better complaint referrals (e.g. referring complaints to the proper agency and/or identifying complaints that may require multiple agencies to be involved in their resolution).

Heavy-duty Vehicle Inspection Program

Preliminary analysis of Heavy-Duty Vehicle inspection program suggests that the average compliance rate within the Imperial community is low for the average three-year enforcement history. As seen in Figure 5.1, all Heavy-Duty Vehicle inspection programs have 68% compliance rate over a three-year period (2016-2018). During this period, CARB conducted 815 inspections to Heavy-Duty Vehicles in the El Centro-Heber-Calexico Corridor. Further breakdown of the citations data indicates that 244 citations were issued for emission violations and 15 citations were issued for non-emission violations. The difference between emission and non-emission citations is that emission violations further contribute to air pollution while non-emissions violations do not. An example of a non-emission violation would be a truck not complying with labeling requirements.

Figure 5.1. Heavy Duty Vehicle Inspection Program Compliance Rate

Heavy-Duty Vehicle Inspection Program



Further details on program implementation results are shown in the Table 5.1 below:

Table 5.1. Heavy-Duty Vehicle Inspection Program Results								
Type of Record/Year	2016	2017	2018	Total				
Inspection locations	12	9	6	27				
Inspections	192	288	335	815				
Compliant	15	239	302	556				
Violation (emission)	167	48	29	244				
Violation (non-emission)	10	1	4	15				

Fuels Inspection Program

Preliminary analysis of the Fuels inspection program suggests that the compliance rate within the Imperial community is high. As seen in Figure 5.2, all Fuel programs have 100% compliance rate over a three-year period (2016-2018). However, it is important to note that during this period, CARB only conducted 25 inspections in the El Centro-Heber-Calexico Corridor, and that there is no available data for year 2018.

Fuels Inspection Program
Compliance Rate

Compliance Service Compliant

Violation (emission)

Violation (non-emission)

Figure 5.2. Fuels Inspection Program Compliance Rate

Further details on program implementation and results are shown in Table 5.2 below:

Type of Record/Year	2016	2017	2018	Total
Inspection locations	6	1	0	7
Inspections	21	4	0	25
Compliant	21	4	0	25
Violation (emission)	0	0	0	0
Violation (non-emission)	0	0	0	0

Consumer Products Program

Preliminary analysis of Consumer products program implementation suggests that the compliance rate within the Imperial community is low. As seen in Figure 5.3, the Consumer products program has a 59% compliance rate for available information (2018). During this period, CARB conducted 73 inspections for the Consumer products program in the El Centro-Heber-Calexico Corridor. Table 5.3 shows that further breakdown of the citations data indicates that one citation was issued for an emission violation and 29 citations are still pending to be resolved.

Figure 5.3. Consumer Products Program Compliance Rate

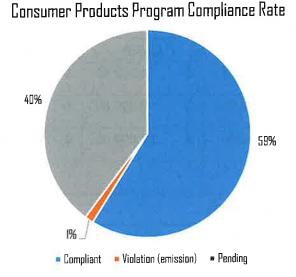


Table 5.3. Consumer Products Inspection Program Results 2016 2017 2018 Total Type of Record/Year 0 0 17 17 Inspection locations 0 73 73 Inspections 0 0 43 0 43 Compliant 1 0 0 Violation (emission) 0 29 29 0 Pending resolution

CARB is working to compile information on the resolution of violations issued in Imperial County and will provide this data to the Steering Committee as it becomes available.

5.2.2.2 Settlements

This section presents an overview of settlement agreements reached between companies and CARB for violations to listed regulations in the El Centro-Heber-Calexico Corridor. Companies were found to be out of compliance during years 2016 and 2017 (available data) for Asbestos Airborne Toxic Control Measures, Truck and Bus, Emission Control Label, Smoke opacity and Mandatory Reporting of GHG Emissions.

As result of these settlements, a total of \$483,300 was collected in fines due to violations, from which \$447,300 went to the Air Pollution Control Fund, and \$36,000 to fund Supplemental

Environmental Projects. For further details on these cases, please visit https://ww3.arb.ca.gov/enf/casesett/casesett.htm.

Table 5.4. Settlements for Year 2016									
Type of Company	Set	tlement total		CARB		SEP	Regulation		
Construction	\$	14,000.00	\$	14,000.00	\$	T <u>E</u>	Asbestos ATCM		
City	\$	10,000.00	\$	10,000.00	\$.#	Asbestos ATCM		
Foods Distributor	\$	36,000.00	\$	27,000.00	\$	9,000.00	Truck and Bus, ECL		

Table 5.5. Settlements for Year 2017									
Company	Se	ettlement total		CARB		SEP	Regulation		
Trucking company	\$	19,800.00	\$	19,800.00	·*		HDVIP, Truck and Bus, ECL		
Trucking company	\$	54,000.00	\$	27,000.00	\$	27,000.00	Truck and Bus		
Electric power company	\$	349,500.00	\$	349,500.00	\$	-	Mandatory Reporting of GHG Emissions		

5.2.2.3 Spatial distribution of enforcement activities

The maps shown in this section are to aide in the visualization of inspection locations. The points on the maps indicate the approximate location and number of inspections for mobile programs conducted in the El Centro-Heber-Calexico Corridor in the years 2016, 2017 and 2018. The goal of the maps is to visually display the location of program inspections to help determine gaps in CARB enforcement activity and where enhanced enforcement is necessary to deter potential violators within the community.

Figures 5.4 through 5.9 present spatial representations of enforcement activities in the El Centro-Heber-Calexico Corridor during years 2016, 2017 and 2018, by program.

Heavy-Duty Vehicles Inspection Program (All categories)

[531]

CA 98

Figure 5.4. Heavy-Duty Vehicle Inspection Program Enforcement Activities: 2016

Figure 5.5. Heavy-Duty Vehicle Inspection Program Enforcement Activities: 2017

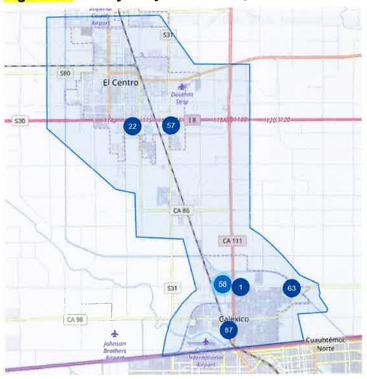
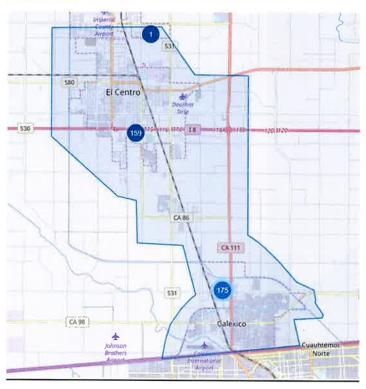


Figure 5.6. Heavy-Duty Vehicle Inspection Program Enforcement Activities: 2018



Fuels Inspection Program (All categories)

Figure 5.7. Fuel Inspection Program Enforcement Activities: 2016

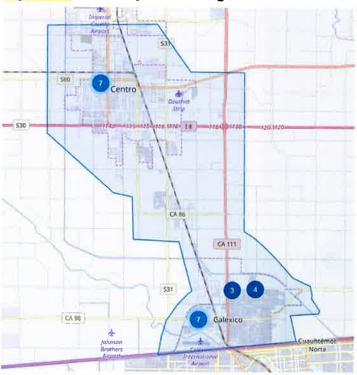
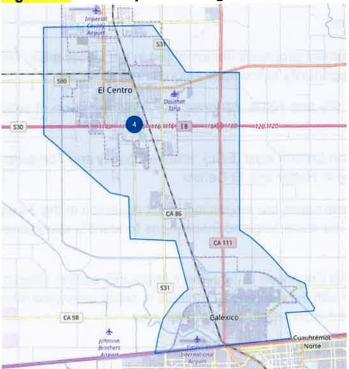
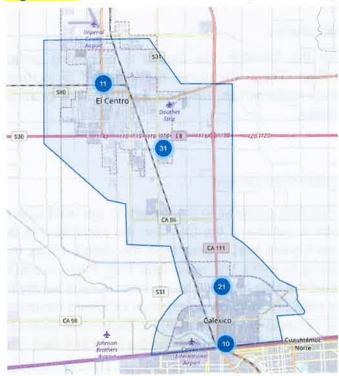


Figure 5.8. Fuel Inspection Program Enforcement Activities: 2017



Consumer Products Inspection Program (All categories)

Figure 5.9. Consumer Products Inspection Program Enforcement Activities: 2018



5.2.2.4 Findings and Compliance analysis

- There is no record of CARB enforcement programs implemented in the Heber area. This has been identified as an area of opportunity to increase enforcement activities.
- Compliance ratings range between 0% and 100%; however, the implementation of some programs may be increased.
- There is no record of HDVIP Emission Control label (ECL), Smoke Opacity and Tampering enforcement programs implemented in Heber and El Centro.
- The low compliance rate, and in some cases low inspection count observed in the 3-year history may demonstrate the need for more targeted inspections to identify compliance issues.

All listed findings are addressed in the CARB Enhanced Enforcement Measures section (Section 5.3.1.2). CARB will continue to work closely with the Steering Committee to better determine other areas of non-compliance within the El Centro-Heber-Calexico Corridor area.

5.3 Enforcement Compliance Mechanisms

Compliance with District and state rules is essential in achieving the emission reduction and exposure reduction targets for the Corridor. The sections below identify approaches to enhance compliance reporting, outreach, and enforcement.

5.3.1 Enhanced Enforcement Measures

5.3.1.1 ICAPCD Enhanced Enforcement Measures

In order to improve compliance rates within the Corridor, the District is proposing certain enhanced enforcement measures with this Plan. These measures are intended to increase community engagement, leverage inter-agency relationships, facilitate the complaint process, and generally improve enforcement in the Corridor.

Community Measures

E-1. Leveraging Technology for Greater Enforcement

ICAPCD is in the process of installing cameras in the desert on the west side of Imperial County. While this area is outside of the Corridor, the population in the Corridor could be impacted from fugitive dust originating in the desert. Under this measure, the District is proposing to make the video feed from these cameras available to the public. This would not only increase the number of eyes surveying the footage, but also allow the public to monitor for potential exposure concerns. The District anticipates that the cameras will be installed by September 2020 and proposes making the camera feed available within six months from that date. The

District would continue to provide the camera feed for as long as the cameras remain active.

E-2. Cross-Agency Training

The District is looking to establish regular communication with outside agencies in order to improve violation response time. To that end, under this measure, the District is proposing to perform cross-training of other local agencies on District rules so that they can readily identify specific types of violations. Examples of cross-training include working with the Imperial County Sheriff's Department and city representatives to learn about the dust impacts of illegal trespassing and collaborating with the fire department on properly identifying illegal burning activity. Within one year from CARB approval of this Plan, the District is proposing to conduct at least one training session for local agencies. If interest and attendance is favorable, training sessions would continue to be scheduled yearly through 2024.

E-3. Increased Community Outreach – Workshops and Trainings

The District is looking to increase community outreach through workshops and trainings to both industry and the public. Under this measure, the District is proposing to provide annual training to industry, with certain focused training (i.e., construction dust mitigation) available upon request. Additionally, the District is proposing to provide enforcement-related workshops to the community to facilitate a better understanding of local compliance issues and educate on community-driven enforcement. Within one year from CARB approval of this Plan, the District is proposing to conduct at least one training session for local industry and one workshop for the public. If interest and attendance is favorable, these training sessions and workshops would continue to be scheduled yearly through 2024.

E-4. Increased Community Outreach – Publications

The District is proposing to increase community outreach through the publication of a quarterly newsletter. This newsletter would include information on enforcement statistics and rule changes, and would be intended for local agencies, affected facilities, and the public. The District issued its first quarterly newsletter on April 3, 2019 and plans to incorporate information on enforcement statistics and rule changes within six months of CARB approval of this Plan.

E-5. Formation of a Dedicated Outreach Team

Conducting community-level outreach is key to understanding community concerns, including identification of potential violations or unpermitted sources. Under this measure, the District and CARB are proposing to form a dedicated enforcement outreach team made up of staff from the agencies to actively engage with the Steering Committee and respond to community concerns. The District is

proposing to have this outreach team assembled within six months of CARB approval of this Plan. The outreach team would continue to engage with the Steering Committee for so long as they are active.

Complaint Response Measures

E-6. Facilitation of the Complaint Process

The District is looking to facilitate the complaint process in order to increase public access to filing complaints and more accurately capture complaint information. To do this, the District is proposing to create an online complaint form, as well as add enforcement-related information on the ICAPCD website homepage (https://www.co.imperial.ca.us/AirPollution/index.asp), including publishing the complaint line (442-265-1800) and including a link to the ICAPCD complaint webpage

(https://www.co.imperial.ca.us/AirPollution/index.asp?fileinc=compreport). The District is proposing to implement these changes within one year from CARB approval of this Plan.

E-7. Strategic Updates to Policy #17

Under this measure, the District is proposing to revise internal Policy #17, Guidelines for Staff Processing and Investigation of Complaints. The policy would be revised to specify circumstances under which NTCs, NOVs, and warnings are issued, as well as add the address of the location of concern to the complaint log. The effect of these revisions would be to both standardize the process for issuance of NTCs, NOVs, and warnings to provide uniformity, as well as assist the inspectors with locating the source of the complaint. The District is proposing to implement these changes within one year from CARB approval of this Plan.

Enforcement Improvements

E-8. Strategic Updates to Policies #18 and #28

Under this measure, the District is proposing to revise internal Policy # 18, Notices of Violation Issuance and Follow Up and Policy #28, Notices to Comply – Administrative Guidelines. The District is proposing to revise Policy #18 to include follow-up guidelines such as the time period for following up after a NOV has been issued, procedures when a facility is found in compliance, and procedures when a facility is found to be out of compliance. The District is proposing to revise Policy #28 to include follow up guidelines such as procedures when a facility is found in compliance. The effect of these revisions would be to standardize follow-up guidelines. The District is proposing to implement these changes within one year from CARB approval of this Plan.

E-9. Annual Review and Prioritization of Enforcement

Under this measure, the District is proposing to perform an annual retrospective review of enforcement statistics in order to identify areas of improvements. This information would be shared with the public and used to establish enforcement priorities for the upcoming year, as well as inform training/educational priorities for both facilities and the community. The results of the review would be shared on or before April 1 each year through 2024.

E-10. Identification of CARB Enforcement Strategy Improvements

The District is proposing to work in conjunction with CARB to identify enforcement strategies within CARB's current regulatory programs that could benefit the Corridor.

5.3.1.2 CARB Enhanced Enforcement Measures

Over the last year, Steering Committee members predominantly expressed concerns regarding the following:

- Heavy duty vehicle routes
- Illegal idling
- Spatial gaps in the implementation of CARB programs

In addition, CARB acknowledges that compliance rates identified in the enforcement history may not necessarily reflect compliance across the community. In cases where enhanced enforcement activities uncover non-compliance issues, CARB's goal will be to achieve the same or higher compliance rates as observed in the three-year history. CARB staff will also work closely with the Steering Committee, the Imperial County Air Pollution Control District and other agencies as required to address gaps in the enforcement of mobile sources and seek opportunities to close these gaps (see Community Feedback, Appendix H).

CARB is committed to enhancing enforcement activities within the El Centro-Heber-Calexico Corridor by utilizing the following tools:

- An assessment of the enforcement history data
- Targeting areas that may require additional enforcement with guidance from the Steering Committee

CARB will utilize current regulations and enforcement programs to target areas of non-compliance within the El Centro-Heber-Calexico Corridor. CARB and Air District staff will use the above tools to focus on areas in and around the community where mobile sources can be targeted.

In response to comments received from community members regarding air quality concerns in the El Centro-Heber-Calexico Corridor, CARB proposes to implement the strategies discussed in this section to enforce and promote compliance from sources in the area.

Measures to Promote Compliance

CARB commits to the following measures to promote compliance in the El Centro-Heber-Calexico Corridor:

1. Increase frequency of CARB compliance inspections with guidance from the Steering Committee:

CARB will collaborate with the Steering Committee co-chairs to work with the Steering Committee members to actively enhance CARB enforcement activities through a combination of improved complaint reporting, more focused inspections, and report-back meetings to update the Steering Committee on the status of CARB inspections and to obtain additional areas of mobile source concern. CARB will work with the co-chairs to meet annually with the Steering Committee in order to prioritize CARB enforcement strategies and identify possible locations where non-compliant vehicles are present. CARB will report back to the Community with the number of CARB inspections performed, mapped locations of the enforcement, and the number of citations and/or Notices of Violations issued.

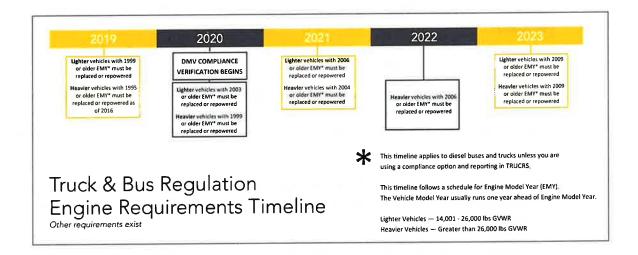
2. Coordinate and conduct inspections of stationary sources with ICAPCD staff when assistance is requested by the District:

Based on Steering Committee input and upon evaluation of concerns, the District can request assistance from CARB and coordinate joint inspections of stationary sources, as needed.

3. Achieving Compliance with the Truck and Bus Regulation via Senate Bill 1:

In April 2017, the Governor signed Senate Bill 1 (SB 1) into law, which included a provision that, beginning in 2020, a vehicle must demonstrate compliance with the STB regulation before it can be registered with the Department of Motor Vehicles (DMV). Beginning in 2020, the DMV, in conjunction with data provided by CARB, will deny vehicle registration to non-compliant HDVs based on the model year of the HDV.

Truck and bus regulation engine requirements timeline:



4. Provide Annual Report of Enforcement Activities:

The Community Outreach and Enforcement Section of CARB's Enforcement Division will provide an annual report to the Steering Committee to update and summarize CARB's enforcement activities within the community. Reporting enforcement activities results is expected to help create an enforcement presence and incentive compliance.

5. Coordination with other agencies:

CARB will seek opportunities to coordinate with other agencies with enforcement authority in Imperial County. Such an opportunity could consist of CARB staff working with cities to provide truck idling signage.

6. Enhancing CARB's Data Management Practices:

CARB is committed to enhancing the quality of enforcement data for the El Centro-Heber-Calexico Corridor. Moving forward, CARB will maintain the location of enforcement activity and received complaints to provide the Steering Committee with the most accurate data available. CARB has recently completed a visualization tool that makes CARB enforcement data more transparent and available. The tool can be accessed online by visiting https://webmaps.arb.ca.gov/edvs/.

- 7. Providing in-person community specific training (CARB may have future online trainings available). CARB commits to deliver one training session during the first year of implementation of this plan, and expand based on attendance and input from the community.
- 8. Commitment to Update Enforcement Strategies as Applicable:

CARB staff are committed to updating enforcement strategies as requested by the Steering Committee, if said strategies are enforceable by CARB staff or if CARB can

reasonably accommodate the request (e.g., additional enforcement training for idling vehicles).

9. Compliance Communication:

This strategy intends to promote voluntary compliance with applicable regulations and requirements, and to help overcome compliance barriers. Compliance will be promoted through educational programs and technical assistance. The information to communicate may include:

- Education and technical assistance to the regulated community to facilitate compliance by providing information about regulatory requirements and how to meet them.
- Available compliance training programs, hot lines, and publications.
- Publicized success compliance stories in the area to create positive social climate and promote compliance.

10. Community outreach:

Communicate specific effects of air pollution to human health and natural resources to build public support. This element of the strategy may include non-government organizations to help promote compliance by publicizing information to increase public awareness of environmental problems.

11. Complaint system:

Citizen complaints are an important way of detecting violations that are unlikely to be detected through self-reporting or inspections. These types of complaints could potentially help detect violations and illegal acts that take place in isolated areas.

CARB will promote the use of systems for reporting potential violations, referred to as "complaints." Community will be provided with contacts and instructions to report potential violations.

12. Technology based and traditional enforcement inspection-based:

CARB staff will inspect mobile and portable (i.e., PERP) air pollution sources and evaluate compliance against regulatory or permit requirements. Additionally, CARB will incorporate new technologies, where feasible, to assist and enhance enforcement work in communities.

13. CARB will present the SEP Program to the Steering Committee members to identify potential project opportunities that would benefit their community. If the project meets SEP Policy criteria, it may be listed as eligible for potential funding through the program.

6 Metrics to Track Progress

According to the CAPP Blueprint, a community emissions reduction program must include specific metrics that can be used to track progress in the selected community. These metrics are critical in helping a community understand whether their emissions reduction program is achieving its intended objectives.

The CAPP Blueprint specifies certain metrics as required. Specifically, a community emissions reduction program must identify and describe how progress on achieving emission reductions for specific categories of sources will be tracked on an annual basis. It must also track emissions for any pollutant that has an identified emissions reduction target. Sections 6.1 and 6.2 present the relevant metrics for the strategies proposed in this Plan.

6.1 ICAPCD Metrics

Table 6.1 presents the annual implementation metrics associated with the ICAPCD-led strategies in Chapter 4 of this Plan. The status of these and the District's air quality and exposure metrics (see Section 6.1.1) will be reported on in the District's annual progress report, which will be made available to the public no later than October 1 of every year following program implementation.

. 4510 0111	1. Summary of ICAPCD Annual Implementation Metrics		
Strategy	Metric Description	Responsible Agency	
R-1	 A description of the outcome of the District's control measure cost-effectiveness analysis. A description of any proposed changes to Rule 400.2 or 400.4 resulting from the District's review, along with a schedule for those proposed changes. 	ICAPCD	
R-2	See Section 6.2.1	CARB	
A-1	 The date the District began using the Technology Clearinghouse as a reference in developing BACT and T-BACT determinations for sources within or directly surrounding the Corridor. The number and type of permit applications that underwent a BACT or T-BACT determination where the Technology Clearinghouse was used as a reference. 	ICAPCD	
E-1	 The date cameras were installed in the desert west of the Corridor. The date the video feeds from these cameras were publicly available. The reason(s) for any significant periods of downtime (i.e., >1 week) in the video feed. A description of any exposure events identified as originating from the desert west of the Corridor and any resulting enforcement activity. 	ICAPCD	

Strategy	Metric Description	Responsible Agency
E-2	 For each cross-agency training session provided: The date, topic, and number of attendees A summary of any action items, concerns, or solutions discussed 	ICAPCD
E-3	 For each industry training session and public workshop provided: The date, topic, and number of attendees A summary of any action items, concern, or solutions discussed A description of the outreach conducted 	ICAPCD
E-4	The publication date for each quarterly newsletter and a summary of any enforcement- or rule-related discussion topics.	ICAPCD
E-5	 The date the outreach team was assembled and the current list of members. The number of presentations or meetings with the Steering Committee. A description of community concerns and associated responses/solutions. 	ICAPCD & CARB
E-6	 The date website changes are implemented. The date an online compliant form is created. The number of complaints received through the online compliant form. 	ICAPCD
E-7	The date an updated Policy #17 is adopted and a summary of the revisions made.	ICAPCD
E-8	 The date an updated Policy #18 is adopted and a summary of the revisions made. The date an updated Policy #28 is adopted and a summary of the revisions made. 	ICAPCD
E-9	 The date the annual review of compliance and enforcement is released to the public. As part of this review, the District will track and report on: The number of inspections conducted, including type, date, and location. The number of NOVs and NTCs issued, including the date and regulation cited. The number of complaints received, including type and resolution 	ICAPCD

Table 6.1. Strategy	6.1. Summary of ICAPCD Annual Implementation Metrics Metric Description		
	·	Agency	
	The non-compliance rate for the year.		
E-10	See Section 6.2.2	CARB & ICAPCD	
I-1	 The number and type of wood burning devices replaced under the Woodsmoke Reduction Program, along with the replacement technology, and associated emission reductions. The amount of incentive funds received under the Woodsmoke Reduction Program. 	ICAPCD	
I-2 L-3	A description of any newly identified urban greening incentive programs applicable to the Corridor.	ICAPCD	
M-2	 The number of applications submitted by the District or partner agencies and accepted. 		
	 The amount of incentive funds received from urban greening incentive programs. 		
	 The number and date of meetings held with local representatives from the planning departments and communities of El Centro, Heber, and Calexico to discuss potential locations for urban greening projects. 		
	The number and type of urban greening projects implemented, along with a description of any nearby sources or sensitive receptors.		
	 The amount of incentive funds and/or AB 617 funds used towards urban greening projects. 		
L-1 M-3	The number and date of meetings held with local public works departments and other representatives from the communities of El Centro, Heber, and Calexico to discuss potential locations for paving projects.	ICAPCD	
	The number and location of paving projects implemented, along with an estimate of the total acres paved, associated emission reductions, and a description of any nearby sensitive receptors.		
	 The amount of incentive funds and/or AB 617 funds used towards paving projects. 		
L-2	The number of general plan updates considered and commented on by the Steering Committee.	ICAPCD	
	 A description of any responses/actions by local agencies (in response to the comment letter(s) received). 		

Strategy	Metric Description	Responsible Agency	
T-1	 The number and date of meetings held with local transportation agencies and other bodies to discuss the feasibility of implementing measures that reduce the impact of activities at the border. A description of the measures considered, along with a discussion of feasibility, proposed next steps, and metrics to track in the 	ICAPCD	
T-2	 coming year. The date and number of attendees for each public workshop held related to signage initiatives for reducing idling. A description of the measures considered, along with a discussion of feasibility, proposed next steps, and metrics to track in the coming year. 	ICAPCD	
T-3	 For each public workshop held for local businesses with heavy-duty truck fleets operating in the Corridor: The date, topic, and number of attendees A description of the outreach conducted 	ICAPCD & CARB	
M-1	 A description of each air filtration system installed in the Corridor, including the location, technology deployed, number of square feet conditioned, and number of sensitive receptors affected. 	ICAPCD	
M-4	 A list of schools in the Corridor implementing the school flag program, including identification of any schools that are new to the program. A description of any enhancements made to the school flag program. The amount of incentive funds and/or AB 617 funds used towards paving projects. 	ICAPCD	
M-5	Number of acres burned per day under Policy #34 (including quantification of the number of acres characterized as "Special Burns") and an estimate of emissions. ICA		
M-6	 The number of school buses replaced, along with the replacement technology (i.e., electric or compressed natural gas [CNG]), and associated emission reductions. The amount of incentive funds and/or AB 617 funds used towards 	ICAPCD	

6.1.1 Air Quality and Exposure Metrics

As described in the Community Air Monitoring Plan for the El Centro-Heber-Calexico Corridor, the District's regulatory monitors will be used to track the progress of this Plan. Specifically, at the end of each calendar year for the next five years, particulate matter data from the El Centro and Calexico regulatory monitors will be evaluated to identify potential correlations between actions taken as a part of this Plan and impacts to air pollutant levels (see Chapter 14 of the draft Community Air Monitoring Plan⁹⁷ for more information on the specific parameters that will be evaluated). Because the implementation of strategies will occur over a five-year period, it may take several years to see reductions in exposure that can be measured at the community scale. Therefore, the results of this analysis at the five-year milestone will be crucial to understanding air quality improvements within the Corridor.

6.2 CARB Metrics

6.2.1 Metrics Associated with Strategy R-2

Strategy R-2 involves the implementation of five proposed statewide regulations that are expected to result in emissions benefits within the Corridor. As part of this strategy, during the regulatory development phase, CARB proposes to update the Steering Committee biannually on the progress and milestones of the regulatory development process for each regulation. CARB also proposes to track the estimated emission reductions associated with each regulation and will report those to Steering Committee once the regulation has been adopted and after the first year of implementation.

6.2.2 Metrics Associated with Strategy E-10

Strategy E-10 involves the implementation of multiple measures intended to promote compliance in the El Centro-Heber-Calexico Corridor. To monitor the results and progress associated with these measures, CARB intends to track and report on the following metrics:

- Number of inspections conducted including type, date, and location.
- Number of NOVs issued including date, recipient, and regulation cited.
- Complaint system responsiveness. This metric will include the number of complaints received by type, agency's response time, and their resolution.
- Timeliness of enforcement responses. This indicator will be used to measure the time it takes to respond to a violation and to achieve compliance.
- Progress in returning violators to compliance. Non-compliant sources will be tracked until full compliance is achieved, including number and type of violations, actions taken and results of those actions.

⁹⁷ Available at: https://docs.wixstatic.com/ugd/99eb03 6d838992c80e4d8ab5d19723862c6424.pdf. Accessed: August 2019.

- Monetary penalties assessed. The total number and the value of penalties assessed as a result of enforcement actions will determine this indicator.
- Measures of technical assistance. This metric will measure the emphasis on compliance promotion, its extent and implementation effectiveness, including the number of facilities (i.e., sources) that received technical assistance and increased compliance achieved by facilities receiving technical assistance.

CARB's Community Outreach and Enforcement Section will include these metrics in an annual report to the Steering Committee that will update and summarize CARB's enforcement activities and their results within the Corridor.

Chapter 7: California Environmental Quality Act Project Review

7 California Environmental Quality Act Project Review

According to Section 15061 (b)(3) of the California Environmental Quality Act (CEQA) Guidelines, a project is exempt from CEQA if, "the activity is covered by the common sense rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA." Since this Plan or "proposed Project" will result in an air quality benefit to the Community, this proposed Project is not expected to result in a significant impact under CEQA.

CEQA Guidelines §15308 provides a categorical exemption for "actions taken by regulatory agencies, as authorized by state or local ordinance, to assure the maintenance, restoration, enhancement, or protection of the environment where the regulatory process involves procedures for protection of the environment." This proposed Project is an action taken by a regulatory agency, the ICAPCD, as authorized by state law for the protection and betterment of air quality in Imperial County. The ICAPCD determined that there is no substantial evidence indicating that any of the exceptions to the categorical exemptions apply to the proposed Project pursuant to CEQA Guidelines Section 15300.2 – Exemptions. Therefore, the proposed Project is exempt from CEQA.

Pursuant to Section 15062 of the CEQA Guidelines, the ICAPCD will file a Notice of Exemption upon Imperial County Air Pollution Control Board approval of the proposed Project.

8 Conclusion and Checklist

8.1 Checklist of Community Emissions Reduction Program Criteria and Conclusions

Table 8.1 presents a checklist outlining the recommended elements for a community emission reduction program under CARB's CAPP. As documented in Table 8.1, this Community Emission Reduction Program successfully addresses all applicable criteria.

Table 8.1. Community Emission Reduction Program Criteria		
Topic	Description	Location in Document
Health-Based Air Quality Objectives	Provide a description of health-based objectives	Section 1.3.1
Community Steering Committee	Provide documentation on the community steering committee	Section 2.1; Appendix B
Public Process	Provide documentation the air district board held a public board hearing when presenting the final program for air district board consideration.	Pending; the Plan has been tentatively scheduled to go before the Air District Board on September 24, 2019.
	Provide documentation the air district provided materials in appropriate languages and interpretation services were available at workshops and public board hearings in accordance with the steering committee charter.	Section 2.2; Appendix C
	Provide documentation of a dedicated public webpage for each community emissions reduction program.	Section 2.2
	Provide documentation that outreach materials were distributed broadly to a variety of groups through various avenues such as the internet, paper mailings, and local print, radio, and television media as appropriate at least five days in advance of each meeting	Section 2.2; Appendix C
Outreach Summary	Provide a summary of the results of the first year of public outreach and an overview of the planned approach for public engagement moving forward.	Section 2.2; Appendix C; Appendix H
Community Profile	Provide a description of the community and include a discussion of community issues, including final geographic boundary, types of pollution impacting the community, a	Section 3.1

Topic	Description	Location in Document	
H	characterization of current public health data, and socioeconomic factors.	k*	
Technical Foundation	Provide an assessment and description of the existing high cumulative air quality exposure burden within the community.	Section 3.2.1	
	Provide an assessment of sensitive receptor locations within the community and how land use issues impact exposure.	Section 3.2.5	
	Provide a community-level emissions inventory based on best available data and developed in accordance with CARB's community inventory guidance.	Section 3.2.2	
	Provide an assessment of the benefits of existing air quality policies and programs in reducing emissions within the community.	Section 3.2.4	
	Provide an assessment of compliance with air quality rules and regulations for sources within the community, consistent with the enforcement plan.	Section 5.2; Appendix F	
	Provide the source attribution analysis that assesses the share of mobile, stationary, and area-wide source emissions contributing to the air quality burden in the community, based on at least one of the source attribution approaches discussed in the online Resource Center.	Section 3.2.3	
	Provide supporting documentation on methodologies and data sources used in the technical assessment.	Chapter 3	
Emission Reduction Targets	Specify emissions reduction targets to be achieved within five years for directly-emitted applicable toxic air contaminants, PM _{2.5} , and any other identified pollutants (e.g., lead, PM ₁₀) as defined in the technical assessment, designed to maximize toxic air contaminant emissions reductions and achieve healthful levels of PM _{2.5} .	Section 4.1	

Topic	Description	Location in Document
	For the mobile, stationary, and area-wide sources of applicable criteria air pollutants and toxic air contaminants impacting the community, specify: Commitments to achieve numerical goals for compliance with air quality rules and regulations.	Sections 4.1 and 4.2
	Commitments to achieve numerical goals for deploying or implementing available	
	technologies or control techniques, with a focus on zero emission technologies where feasible	
Proximity-Based Goals	Specify proximity-based goals to reduce exposure at sensitive receptors.	Section 4.3
Reduction Strategies	Establish reduction strategies, including: Regulatory Strategies Facility Risk Reduction Audits Air Quality Permitting Strategies Enforcement Strategies Incentives-Based Strategies Engagement Approaches Land Use Strategies Transportation Strategies Mitigation Strategies	Section 4.4
Implementation Schedule	For each new strategy, specify a description of the strategy, the expected emissions and/or exposure reductions, cost effectiveness, timeline for implementation, a description of how the technical assessment informed strategy development, and perspectives of the community steering committee.	Section 4.4; Section 5.3.1 Appendix G; Appendix H
Enforcement Plan	Document a three-year enforcement history.	Section 5.2; Appendix F
Requirements	Specify compliance mechanisms that will be implemented.	Section 5.3.1
Required Metrics	Specify required annual metrics to track progress.	Chapter 6
Recommended Additional Metrics	Identify any additional metrics to track progress.	Chapter 6

Table 8.1. Community Emission Reduction Program Criteria		
Description	Location in Document	
Include any applicable CEQA analysis	Chapter 7	
	Description	

9 References

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APPENDIX A
COMMUNITY STEERING COMMITTEE
MEETING SUMMARY

APPENDIX B
AB617 COMMUNITY STEERING
COMMITTEE CHARTER

Appendix C

APPENDIX C
COMMUNITY STEERING COMMITTEE
MEETING MATERIALS (ELECTRONIC)

APPENDIX D
COMMUNITY-LEVEL EMISSIONS INVENTORY
SUPPLEMENTARY DATA

APPENDIX E SENSITIVE RECEPTORS SUPPORTING INFORMATION

DRAFT SEPTEMBER 2019 ICAPCD

APPENDIX F
PERMITTING AND ENFORCEMENT
SUPPORTING INFORMATION

APPENDIX G EMISSION REDUCTION CALCULATIONS

APPENDIX H
COMMUNITY FEEDBACK