

AB 617 Questions and Answers

Question	Answer	Answer Provided By	Date Question Asked
<p>How is pollution contributing to Autism/other health conditions and what are some ways to study or measure and evaluate?</p>	<p>This question should be directed to a state or local health department.</p>	<p>CARB</p>	<p>8-May-19</p>
<p>Why did CARB specifically identify two feedlots on their stationary source map? Why not identify all 21 types of stationary sources? (page 5 of CARB presentation April 10th)</p>	<p>For the initial inventory presentation to the CSC on April 10th, CARB staff worked with District staff to identify what level of information was useful to the community to actively engage in the development of emission inventory and future strategies to reduce emissions. Maps, charts, and detailed handout tables were developed to present preliminary inventory results to enable a productive discussion - most importantly to seek valuable input and feedback from the CSC and the community, to both improve emission estimates and gather knowledge of local emission sources of concern. Example maps were shown during the presentation for top emission sources/activities for a few selected pollutants like PM10 and TOG that the CSC had identified as important to the community. Among stationary sources, feedlots had the highest emissions for PM10 and TOG.</p> <p>It was not CARB's intention to specifically identify feedlot operations in any way. We agree with your comments that it is important to look at and identify all emission sources to provide a comprehensive profile of sources and emissions in the community. Though detailed emission data (in tons per year for criteria pollutants and pounds per day for toxics) were provided within the handouts distributed during the CSC meeting, we agree with your comments that it was not readily available as part of the inventory presentation. In the future, we will include other pollutants of concern, and also look at ways to better present technical emission inventory data that are easily understood and provide enough context for meaningful discussion.</p>	<p>CARB</p>	<p>8-May-19</p>

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<p>In the case of feedlots, the speciation profile was developed taking measurements from an actual feed lot in CA</p>	<p>VOC, PM10, and ammonia emissions for feedlots were calculated using Imperial County Air Pollution Control District’s approved methodology for dairy and feedlot operations in Imperial County. In 2016, Imperial County APCD released an updated methodology to reflect emissions from these sources after the adoption of Rule 217, Large Confined Animal Facilities Permits Required. To view a copy of the methodology, please visit <a href="https://www.arb.ca.gov/ei/areasrc/districtmeth/imperial/2016mar16_dairyfeedlots.pdf">https://www.arb.ca.gov/ei/areasrc/districtmeth/imperial/2016mar16_dairyfeedlots.pdf</a>. Emission factors from this report were combined with the activity data gathered from the 2017 annual reports for permits 3669 and 3980 provided by the District to estimate emissions from dairy and feedlot facilities operating in Imperial County. The attached excel sheet shows how emissions are estimated for the feedlots using the District methodology.</p> <p>The feedlot and dairy PM emission factor is described in “Chapter 5” (page 71): <a href="https://ww3.arb.ca.gov/research/apr/past/a6-175-32b_i.pdf">https://ww3.arb.ca.gov/research/apr/past/a6-175-32b_i.pdf</a>. A screenshot of the method is provided below for easy reference.</p> <div data-bbox="695 683 953 709" data-label="Section-Header"> <p><b>5.10 Dairy/Feedlot Emissions</b></p> </div> <div data-bbox="695 737 1478 1130" data-label="Text"> <p>One sample set of dairy emissions was collected at a dairy in the Visalia area. It was assumed that dairy and feedlot emissions would be similar in nature. The size distribution of the composite was very similar to the other dust sources (Tables 3.5-2 and 3.5-3), suggesting that most of the emissions are simply entrained dust. However, not surprisingly, the organic carbon, nitrate, and ammonium content were significantly increased in the emissions from the dairy as compared to typical agricultural soil collected within a few kilometers of the dairy. Other chemical species also appeared elevated (Na<sup>+</sup>, Cl, P, and K<sup>+</sup>). The higher content of organic compounds and other waste-derived chemical species in the emissions had the effect of depressing the concentration of the “geological” chemical species (Al, Si, Ti, Mn, Fe, and non-water-soluble K) in the dairy emissions in contrast to the non-impacted nearby agricultural soil. Table 5.10-1 compares the organic carbon content and the geological chemical species concentrations in the &lt;10<math>\mu</math> size fraction of dairy emissions and agricultural soil data. While the majority of the dairy emissions are in the coarser size fractions (2.5<math>\mu</math>–10<math>\mu</math> and &gt;10<math>\mu</math>)(Table 3.5-3), measurable mass was also collected on the &lt;1<math>\mu</math> and &lt;2.5<math>\mu</math> filters. The percent composition of organic carbon, nitrate, and ammonium in the finer size ranges is higher than in the coarser size ranges (Table 5.10-2). This finding is consistent with secondary organic and nitrogen-containing compounds originating from dairies and feedlots.</p> </div>
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<p>What criteria/pollutants are non-attainment and a primary concern for improvement?</p>	<p>Imperial County is currently in nonattainment for the 24-hour PM10 standard of 150 ug/m3, the annual PM2.5 standard of 12 ug/m3, and the 8-hour ozone standard of 75 ppb. Ambient PM10, PM2.5, and ozone concentrations in Imperial County are of critical concern since these pollutants may impact the health of area residents. These pollutant levels also exceed federal air quality standards. High PM10 levels typically occur each year in Imperial County due to dust emissions from both natural and man-made sources. PM10 levels may increase substantially during high wind events common throughout the year. Increased control on dust sources, including the desert areas in the western portion of the County, could significantly reduce PM10 emissions. For PM2.5, the monitor located in Calexico often records the highest concentrations in the County, due in large part to the impact of cross-border sources in Mexicali, which is located less than 1 mile from the Calexico monitoring station. Sources in Mexicali such as dirty vehicles, the long wait times at the Ports-of-Entry, uncontrolled and/or unregulated burning of agricultural debris or refuse, industrial emissions, feedlots, unpaved roads, and windblown dust all add to emissions generated within Imperial County, and contribute to the PM2.5 and PM10 levels that are present in the bi-national air shed shared by California and Mexico.</p>	<p>CARB</p>	<p>8-May-19</p>
<p>The US- EPA funded a PM10 source apportionment study of the Imperial Valley/Mexicali Valley to characterize cross border transport of PM10 as well as identify areas and point sources of particulate.</p>	<p>Comment noted.</p>		

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<p>The study was conducted by Desert Research, I mistrust in the early 90's. The report was authored by Drs. Judy Chow and John Watson. Findings from this study may prove useful to the monitoring goals of the CSC.</p> <p>Is there any transportation data (Cal Trans) that can be provided for SR86 &amp; SR11? I don't see my propose monitors in SR-111 area.</p>	<p>Comment noted.</p> <p>With regards to transportation data, this request should be directed to the California Department of Transportation.</p>	<p>CARB</p>	<p>8-May-19</p>
<p>Why is Calexico not monitored like other cities?</p>	<p>The Calexico station monitors for ozone, nitrogen dioxide, carbon monoxide, sulfur dioxide, PM10, PM2.5, PM2.5 speciated, toxics, and hexavalent chromium. Compared to other sites within the Imperial Basin like El Centro, Brawley, etc., Calexico measures much higher for PM2.5 and its location near the international border provides the opportunity to investigate pollution transport from Mexico to the US. These are expensive monitoring efforts and in every area of CA, the site with the highest concentrations is outfitted with the most equipment. The idea is that concentrations at other sites will be much lower, unless there is a unique pollution source, in which case you could pursue source monitoring.</p> <p>Monitoring at Calexico differs from other cities in other air districts due to differing regional sources.</p>	<p>CARB</p>	<p>8-May-19</p>

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<p>Can you include levels of toxic pollutants that are considered dangerous or non-attainment in future presentations?</p>	<p>Unlike criteria pollutants, toxic air contaminants don't have an ambient air concentration threshold below which air quality can be considered "acceptable" or "attainment." Instead, population-wide health risks are estimated through health risk assessments (HRAs) that require a detailed analysis of the pollutant dispersion into the environment and the potential for human exposure. In the absence of HRA data, the toxicity and amount of the pollutants emitted by a source can be used to assess the potential for health impacts; however, the actual health risks will be determined by the amount of exposure at an individual or population-wide level. CARB staff are working on developing toxicity-weighted emissions (pounds of emissions multiplied by a toxicity factor determined by the Office of Environmental Health Hazard Assessment)-- and will be presenting those in future meetings. CARB is working on developing toxicity weighed emissions (which will consider the risk from a particular toxic air contaminant) and will be presenting those in future meetings. For a list of pollutants that are currently in non-attainment in Imperial County, please see question 3 (above).</p>		
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<p>Does the IVAN network sample on the same 6 day schedule as CARB/ICAPCD equipment?</p>	<p>The Calexico speciation air sampling system (SASS) for PM samples on the one in 6 day schedule and the data takes some time to report (possibly 2 months) due to filter analysis and data processing. We have PM10 and PM2.5 monitors at both El Centro and Calexico, they include: The Federal Equivalency Method BAM 1020s that sample for PM10 and PM2.5 and continuously collect and report data every hour to imperialvalleyair.org, AQMIS2 and Airnow, reviewed and validated data takes approximately 2 months to report to AQS. The FRM PM2.5 Partisol 2025s are filter-based (so these are manual) but they sample either every third day (El Centro) or daily (Calexico) and due to filter analysis and data processing it takes some time (possibly 2 months) before the data is uploaded onto EPA's AQS. The Dylos sensors sample every minute, aggregate/record every 5 minutes, and report every 5 minutes. Low cost sensors are a great tool to identify hotspots and provide real-time hyper-local data that can help guide personal activity to reduce exposure, but the data can't be used for regulatory or enforcement actions. FRM/FEM data on the other hand, undergoes a strict QA/QC process.</p>	<p>CARB</p>	<p>8-May-19</p>
<p>Will any IVAN monitors be co-located with ICAPCD/CARB particulate monitor?</p>	<p>CCV is open to collocation with regulatory monitors at government sites. Depends on the decision of the committee whether they would want a monitor collocated at these locations within the corridor. Currently, CCV already has 2 monitors at regulatory sites in <u>Calexico and Brawley.</u></p>	<p>CCV</p>	<p>8-May-19</p>
<p>Does the IVAN network sample on the same 6 day schedule as CARB/ICAPCD equipment?</p>	<p>IVAN monitors report in real-time; they measure at 1 second intervals with a 5 minute average reported on the IVANAir.org website.</p>	<p>CCV</p>	<p>8-May-19</p>
<p>Dylos have been ineffective therefore how would you guarantee they will be the best choice for our communities, the misuse of public funds should be avoided.</p>	<p>The use of Dylos is to leverage the already established infrastructure of the community monitoring network. Dylos are a tool that has been validated by the Imperial project that established the IVAN network and has been tested by ARB and South Coast AQSPEC; regulatory agencies that test new sensors. Understand concern for the management of limited funds but establishing a new data management infrastructure, data displays, and other tools that IVAN use with the Dylos sensors is leveraging the previous investments made in Imperial County over the last 5 years.</p>	<p>CCV</p>	<p>8-May-19</p>

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<p>Currently, 40 monitors already exist for the past years and pollution hasn't decreased.</p>	<p>Monitoring is not the only tool to reducing emissions, but it does help inform the community and create new initiatives that bring resources to reduce them. Monitoring is one of many tools and not the only driver behind reducing emissions, we can leverage the information from monitoring to produce the best emissions reductions programs strategies.</p>	<p>CCV</p>	<p>8-May-19</p>
<p>Are the Blue Dylos that same as the ones as CCV? Or do they have an upgrade?</p>	<p>The model that CCV employs in the IVAN network is the Dylos DC1700 with custom firmware by the Dylos corporation.</p>	<p>CCV</p>	<p>8-May-19</p>
<p>How were the proposed sites chosen?</p>	<p>Proposed sites were chosen based on observations of the community from a lifelong resident of Calexico and El Centro. Proposed sites were for CSC consideration but not final recommendation, just to inform what could be looked at.</p>	<p>CCV</p>	<p>8-May-19</p>
<p>Is there a justified reason for the proposed suggestion?</p>	<p>Observations from the sites proposed; ie. Idling freight traffic, traffic congestion, and observed lax regulation of emissions in Mexicali/Mexico (border).</p>	<p>CCV</p>	<p>8-May-19</p>

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<p>How has pesticide use changed over the past couple years?</p>	<p>Use trends vary from year to year depending upon weather conditions, pest populations, and commodities markets (this affects which crops are planted and when). It is hard to generalize or predict these trends; however, use trends are summarized by the California Department of Pesticide Regulations. A few of those reports can be found here:  <a href="https://www.cdpr.ca.gov/docs/pur/purmain.htm">https://www.cdpr.ca.gov/docs/pur/purmain.htm</a>.</p> <p>Further, pesticide regulations in California are prone to regular changes and these tend to have significant changes on pesticide use. Generally, regulations are intended to mitigate some risk or hazard associated with various pesticide uses; so you could generalize that with each regulatory change, there is a corresponding effect toward increased safety. One recent example is regarding chlorpyrifos. It became a restricted material in 2015 and we observed a dramatic decrease in local use. Then in 2019, new conditions of use were adopted that are much more restrictive and use has dramatically changed once again. Thus far in 2019, there have been no uses of chlorpyrifos in Imperial County.</p>	<p>ICAC</p>	<p>8-May-19</p>
<p>What training is done for workers who are applying pesticides?</p>	<p>Workers who are applying pesticides are required by California Regulations to receive annual training on general pesticide safety and the specific pesticide labels that they will be applying. The training requirements are outlined in the attached code section and I would say that they are comprehensive. Additionally, if the pesticides that they apply require the use of a respirator, they are also required to receive annual respirator training.</p>	<p>ICAC</p>	<p>8-May-19</p>



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<p>Are any monitored pesticides available for home use?</p>	<p>Yes, 3 out of the 7 monitored pesticides have some products that are available for residential use (these products include roach and ant killers, bait stations, etc.). However, most of the use is due to agricultural applications. In addition, some of these monitored pesticides are restricted materials which are only available for purchase and application to an applicator with a valid pesticide applicator license.</p>	<p>CA DPR</p>	<p>8-May-19</p>
<p>What does pesticide monitoring cost?</p>	<p>It depends on the scope of the monitoring study. For a typical intensive seasonal air monitoring study, like the one conducted by CARB in Imperial County in which they looked at 5 communities (1 site per community) for 7 organophosphates 4 times per week for 10 weeks, it can be \$75,000-100,000 per study. Cost for a Pesticide Air Monitoring Network sampling site, which includes collection of 1 sample per week analyzed for the presence of 31 pesticides on a year-round basis, is around \$150,000 per year.</p>	<p>CA DPR</p>	<p>8-May-19</p>
<p>How did you pick the pesticides that were monitored in 2018?</p>	<p>DPR gives higher-risk pesticides higher priority for monitoring. DPR selected pesticides to monitor based on the following criteria:            1) Pounds of use in or around an area/region (indicator of exposure)            2) Volatility of the pesticide (indicator of exposure)            3) DPR's risk assessment priority (indicator of toxicity)            4) Feasibility of inclusion into currently used monitoring methods</p>	<p>CA DPR</p>	<p>8-May-19</p>

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<p>Is there other monitoring that DPR has conducted in Imperial County in the last 5 years? Is that data available?</p>	<p><a href="#">Yes, in 2014, a pesticide application site monitoring study for chlorpyrifos was conducted in Imperial County. The completed monitoring report is available at:</a></p> <p><a href="https://www.cdpr.ca.gov/docs/emon/airinit/air_monitoring_reports/2017_report_monitoring_chlorpyrifos.pdf">https://www.cdpr.ca.gov/docs/emon/airinit/air_monitoring_reports/2017_report_monitoring_chlorpyrifos.pdf</a></p> <p><a href="#">While the above study is not an ambient air monitoring study, it is the only other pesticide study conducted in Imperial County within the last 5 years. For clarification, please see below for the difference between an application-site and a seasonal ambient monitoring study:</a></p> <p><a href="#">Application-site monitoring involves monitoring air concentrations next to applications of a specific pesticide for several days to estimate acute exposures.</a></p> <p><a href="#">While for seasonal ambient monitoring, air samples are collected for several weeks in communities near high-use regions and during high-use periods to estimate seasonal exposures to a single pesticide</a></p>	<p>CA DPR</p>	<p>8-May-19</p>
<p>What training is done for workers who are applying pesticides?</p>	<p>Per federal and state requirements, all workers that apply pesticides must be properly trained. To get more information on the various worker requirements, please see DPR's Worker Health and Safety Branch's website:</p> <p><a href="https://www.cdpr.ca.gov/docs/whs/worker_protection.htm">https://www.cdpr.ca.gov/docs/whs/worker_protection.htm</a></p>	<p>CA DPR</p>	<p>8-May-19</p>

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<p>How has pesticide use changed over the past couple years?</p>	<p>Pesticide use can vary greatly depending on the pesticide, crop, and region of interest. Therefore, without knowing what pesticide is being inquired about, it is difficult to address this question.</p> <p>California has one of the most robust pesticide reporting frameworks in the world, and as such, it can be accessed to determine use patterns for all pesticides usage in California. Specifically, in 1990, DPR established a comprehensive program for reporting agricultural use of pesticides. Under the program, pesticide applications to agricultural sites must be reported monthly to county agricultural commissioners, who in turn, report that information to DPR. Detailed reports are required for applications used to produce agricultural commodities, such as applications to grape vineyards and cotton fields. Specifically:</p> <ul style="list-style-type: none"> <li>• The pesticide use reports for production agricultural use include information for each individual application, including the product applied, the amount applied, crop/site treated, date applied, and location (within a 1 x 1 mile area).</li> <li>• Summary pesticide use reports are required for non-production agricultural and some non-agricultural uses.</li> <li>• Non-production agricultural uses include applications to approximately 20 sites, such as golf courses, cemeteries, and roadsides. Non-agricultural uses that must be reported include applications by structural pest control businesses and applications for vector control.</li> <li>• Some industrial (e.g., fumigations of harvested commodities), institutional (e.g., schools), and veterinarian uses must be reported.</li> <li>• Pesticide use reports for non-production agricultural and non-agricultural uses include the product applied, monthly total amount applied, month applied, and county of application.</li> <li>• Uses by homeowners and consumers require no reporting.</li> </ul> <p>DPR's Pesticide Use Database can be accessed at following site:  <a href="https://www.cdpr.ca.gov/docs/pur/purmain.htm">https://www.cdpr.ca.gov/docs/pur/purmain.htm</a></p>	<p>CA DPR</p>	<p>8-May-19</p>
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<p>Is pesticide testing done in summer months? I saw 2018 was done in the winter months.</p>	<p>Depending on the study, pesticide air monitoring can be conducted during a selected high-use time period or year round. For the seasonal air monitoring study conducted in Imperial County, the use patterns for the 7 organophosphates monitored indicated that the high-use season was during the winter months of January, February, and March.</p> <p>Different pesticides and regions have different high-use time periods and are highly dependent on the pesticide of interest and the crops treated.</p> <p>Additional Background and resources relating to pesticide use and monitoring can be accessed at:  <a href="https://www.cdpr.ca.gov/docs/emon/airinit/community_monitoring.htm">https://www.cdpr.ca.gov/docs/emon/airinit/community_monitoring.htm</a></p>	<p>CA DPR</p>	<p>8-May-19</p>
<p>We would like clarity on outreach to set hospital/impact perspective</p>	<p>The ICAPCD is working to establish a working relationship with the Imperial County Public Health Department and El Centro Regional Medical Center to provide more outreach and education to the community.</p>	<p>ICAPCD</p>	<p>8-May-19</p>
<p>What is the cost of a community monitor and maintenance?</p>	<p>The APCD will contract CCV to conduct the AB617 Community Monitoring as CCV has an existing community monitoring network and has the experience to maintain it.</p>	<p>ICAPCD</p>	<p>8-May-19</p>
<p>Will there be a budget breakdown of the funds for outreach and education? Who is responsible for outreach and education?</p>	<p>Yes, a budget break down for the AB617 Monitoring Plan will be proposed and will need the approval of the AB617 CSC and it includes outreach and education. The APCD and CCV are the responsible the outreach and education.</p>	<p>ICAPCD</p>	<p>8-May-19</p>
<p>Is APCD open to proposal for AB 617 projects?</p>	<p>Yes, the next phase of AB617 is an Emission Reduction Program where the AB617 CSC will propose projects in the corridor.</p>	<p>ICAPCD</p>	<p>8-May-19</p>
<p>Will there be a transparent process to compete for funds?</p>	<p>Yes, all material, budget, projects, etc is public information and will be posted the AB617 website.</p>	<p>ICAPCD</p>	<p>8-May-19</p>
<p>Are projects only open to agencies?</p>	<p>Projects proposals are welcome from the community. However the AB617 CSC will vote of the projects that have a direct benefit to the community.</p>	<p>ICAPCD</p>	<p>8-May-19</p>

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<p>Regarding monitors – can we get others and mix it up?</p>	<p>Monitoring proposed for the AB617 will be of various types of sensors. Comite Civico will bring its expertise in Particulate Matter (PM) community monitoring.</p>	<p>CCV</p>	<p>12-Jun-19</p>
<p>Is it possible to consider Dylos and Clarity monitors?</p>	<p>Comite Civico brings its full knowledge of community monitoring for PM with the Dylos sensors. While we do not hold our IVAN network to a single technology, we are in fact incorporating methane sensors to our monitors, we do not have experience with the “sensing-as-a-service” of Clarity monitors.</p>	<p>CCV</p>	<p>12-Jun-19</p>
<p>What is the life expectancy of the Dylors? Does this include retrofit?</p>	<p>The model of Dylors DC1700 that Comite Civico employs in the IVAN monitors are rated for 18-24-month lifespan when deployed in the field. Comite Civico has observed varied experience with the sensors in our IVAN monitors; we do remove some before the set lifespan for recalibration.</p>	<p>CCV</p>	<p>12-Jun-19</p>
<p>Can you provide information on the accuracy of Dylors 1700? SCAQMD reports R2=.15 – 18 for PM10?</p>	<p>Accuracy for the Dylors DC1700 with custom software employed in the IVAN network is reported as PM2.5 0.79 (hourly), 0.84 (daily); PM10 0.78 (hourly), 0.81 (daily) as conducted in the study Development and Field Validation of a Community-Engaged Particulate Matter Air Quality Monitoring Network in Imperial, CA .</p>	<p>CCV</p>	<p>12-Jun-19</p>
<p>Why can't we use multiple monitors that will have multiple sources of data?</p>	<p>Multiple sensors and monitors are proposed in development of the Community Air Monitoring Plan.</p>	<p>CCV</p>	<p>12-Jun-19</p>
<p>What about New River emissions such as toxic matter, black carbon, nitrous oxides, and VOCs?</p>	<p>The AB617 Community Steering Committee has presented this site as one of high concern (ranking 3rd). In respect to community monitoring Comite Civico proposes to deploy a PM monitor as close as possible to site with support for other monitors later on by the Imperial County Air Pollution Control District and California Air Resources Board after adoption of the Community Air Monitoring Plan.</p>	<p>CCV</p>	<p>12-Jun-19</p>

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<p>Cesar Chavez Blvd will need monitoring due to border crossing. What are your plans?</p>	<p>The AB617 Community Steering Committee has presented this site as one of high concern (ranking 3rd). In respect to community monitoring Comite Civico proposes to deploy a PM monitor as close as possible to site with support for other monitors later on by the Imperial County Air Pollution Control District and California Air Resources Board after adoption of the Community Air Monitoring Plan.</p>	<p>CCV</p>	<p>12-Jun-19</p>
<p>How are we going to combine the data since CCV currently does not have mobile units?</p>	<p>Comite Civico will be providing the data collected by its community monitors to APCD and CARB. Agencies can then use this as complementary data to the regulatory monitors that are currently deployed/will be deployed per the monitoring plan.</p>	<p>CCV</p>	<p>12-Jun-19</p>
<p>What will be the related cost for the encasing boxes for the Dylos 1700?</p>	<p>The company that supplies the weatherproof enclosures discounts the price with higher quantities ordered. The cost for the proposed 15 monitors is \$273 per unit as of writing.</p>	<p>CCV</p>	<p>10-Jul-19</p>
<p>Do all of the current Dylos in the community have the encasing boxes (protective boxes) or just certain ones?</p>	<p>Currently all IVAN monitors are designed with the weatherproof enclosure. The enclosure provides safety to the monitor components like the Dylos air quality sensor and has room for expansion to other sensors we are incorporating to the community monitoring system.</p>	<p>CCV</p>	<p>10-Jul-19</p>