CHAPTER 334

HEALTH AND ENVIRONMENT

HOUSE BILL 21-1189

BY REPRESENTATIVE(S) Benavidez and Valdez A., Amabile, Bacon, Bernett, Bird, Caraveo, Cutter, Duran, Exum, Froelich, Gonzales-Gutierrez, Gray, Hooton, Jackson, Jodeh, Kennedy, Kipp, Lontine, McCluskie, McCormick, Michaelson Jenet, Ortiz, Ricks, Sirota, Titone, Weissman, Herod, Mullica, Woodrow;

also SENATOR(S) Gonzales and Moreno, Buckner, Danielson, Fenberg, Ginal, Jaquez Lewis, Kolker, Lee, Pettersen, Priola, Story, Winter.

AN ACT

CONCERNING ADDITIONAL PUBLIC HEALTH PROTECTIONS IN RELATION TO THE EMISSION OF AIR TOXICS, AND, IN CONNECTION THEREWITH, MAKING AN APPROPRIATION.

Be it enacted by the General Assembly of the State of Colorado:

SECTION 1. In Colorado Revised Statutes, **amend** 25-7-141 as follows:

25-7-141. Air toxics - duties of covered entities - public notice of air quality incidents - monitoring - corrective action - legislative declaration - definitions - rules. (1) Legislative declaration. The GENERAL ASSEMBLY HEREBY:

- (a) FINDS THAT:
- (I) AIR TOXICS ARE POLLUTANTS THAT CAUSE OR MAY CAUSE CANCER OR OTHER SERIOUS HEALTH EFFECTS, SUCH AS ADVERSE REPRODUCTIVE EFFECTS OR BIRTH DEFECTS, OR ADVERSE ENVIRONMENTAL AND ECOLOGICAL EFFECTS; AND
- (II) DISPROPORTIONATELY IMPACTED COMMUNITIES OFTEN INCLUDE LOW-INCOME NEIGHBORHOODS AND RESIDENTS WHO IDENTIFY AS BLACK, INDIGENOUS, LATINO, AND PEOPLE OF COLOR AND ARE DISPROPORTIONATELY AFFECTED BY AIR TOXICS EMISSIONS;
 - (b) Determines that:
- (I) Colorado communities have a right to know about exposures to air toxics in real time;

Capital letters or bold & italic numbers indicate new material added to existing law; dashes through words or numbers indicate deletions from existing law and such material is not part of the act.

- (II) COLORADO COMMUNITIES ARE INCREASINGLY CONCERNED ABOUT THE POTENTIAL HEALTH IMPACTS OF AIR TOXICS RESULTING FROM ROUTINE FACILITY OPERATIONS, FUGITIVE LEAKS, UPSET CONDITIONS, OR EMERGENCY SITUATIONS;
- (III) REAL-TIME AIR MONITORING, INCLUDING FENCELINE AND COMMUNITY-BASED MONITORING SYSTEMS, CAN PROVIDE VALUABLE AIR QUALITY DATA TO ASSESS THE POTENTIAL IMPACTS OF AIR TOXICS EMISSIONS IN NEARBY COMMUNITIES, TO UNDERSTAND TEMPORAL VARIATIONS IN AIR TOXICS EMISSIONS, AND TO ADVISE FACILITIES OF SIGNIFICANT CHANGES IN AIR TOXICS EMISSIONS;
- (IV) COMMUNITY-BASED MONITORING IS USEFUL FOR ESTIMATING AIR TOXICS EXPOSURES AND HEALTH RISKS AND IN DETERMINING TRENDS IN AIR POLLUTANT LEVELS OVER TIME; AND
- (V) FENCELINE MONITORING IS USEFUL FOR DETECTING OR ESTIMATING LEAKS, THE QUANTITY OF FUGITIVE EMISSIONS, AND OTHER AIR EMISSIONS FROM A CERTAIN FACILITY; AND
- (c) Declares that facilities that emit air toxics have a responsibility to collect real-time air toxics data and to provide monitoring results as quickly as possible in a publicly accessible format to help communities understand their level of exposure.
- (1) (2) **Definitions.** As used in this section, UNLESS THE CONTEXT OTHERWISE REQUIRES:
- (a) "Community-based monitoring" means monitoring using equipment that measures and records air pollutant concentrations in the ambient air, including concentrations of covered air toxics, at or near sensitive receptor locations near a covered facility.
 - (a) (b) "Covered air toxic" means:
 - (I) Hydrogen cyanide, hydrogen sulfide, and benzene; AND
- (II) Any other hazardous air pollutant that the commission lists, by rule, pursuant to subsection (3) of this section.
- (b) (c) "Covered facility" means a stationary source that reported at least one of the following amounts of a covered air toxic in its federal toxics release inventory filing pursuant to 42 U.S.C. sec. 11023 for the year 2017 or later IS COVERED BY ONE OF THE FOLLOWING NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM CODES ESTABLISHED BY THE FEDERAL OFFICE OF MANAGEMENT AND BUDGET:
- (I) For hydrogen cyanide, ten thousand pounds 324110, "PETROLEUM REFINERIES";
- (II) For hydrogen sulfide, five thousand pounds; and 336413, "OTHER AIRCRAFT PARTS AND AUXILIARY EQUIPMENT MANUFACTURING";

- (III) For benzene, one thousand pounds; 424710, "PETROLEUM BULK STATIONS AND TERMINALS", IF THE SOURCE IS WITHIN AN EIGHT-HOUR OZONE CONTROL AREA AND HAS REPORTED EMISSIONS OF BENZENE IN ITS FEDERAL TOXICS RELEASE INVENTORY FILING PURSUANT TO 42 U.S.C. SEC. 11023 FOR THE YEARS 2017 THROUGH 2019, AS OF JULY 1, 2020; OR
- (IV) Any other code listed by rule pursuant to subsection (3) of this section.
- (c) (d) "Emergency notification service" has the meaning established in section $29-11-101 \frac{(1.5)}{(1.5)} (11)$.
- (e) "FENCELINE MONITORING" MEANS MONITORING USING EQUIPMENT THAT ENCOMPASSES THE COVERED FACILITY AND CONTINUOUSLY MEASURES AND RECORDS AIR POLLUTANT CONCENTRATIONS AT OR ADJACENT TO A COVERED FACILITY'S BOUNDARY.
- (d) (f) "Incident" means the emission by a covered facility of an air pollutant at a rate or quantity that exceeds allowable emissions as a result of anticipated or unanticipated circumstances, including a malfunction, start-up, shutdown, upset, or emergency.
- (g) "METHOD 325A" MEANS THE TEST METHOD TITLED "VOLATILE ORGANIC COMPOUNDS FROM FUGITIVE AND AREA SOURCES: SAMPLER DEPLOYMENT AND VOC SAMPLE COLLECTION" ADOPTED BY THE AIR EMISSION MEASUREMENT CENTER OF THE FEDERAL ENVIRONMENTAL PROTECTION AGENCY.
- (h) "METHOD 325B" MEANS THE TEST METHOD TITLED "VOLATILE ORGANIC COMPOUNDS FROM FUGITIVE AND AREA SOURCES: SAMPLER PREPARATION AND ANALYSIS" PROMULGATED BY THE AIR EMISSION MEASUREMENT CENTER OF THE FEDERAL ENVIRONMENTAL PROTECTION AGENCY.
- (i) "Method TO-15A" means the test method titled "Determination of Volatile Organic Compounds (VOCs) in Air Collected in Specially-Prepared Canisters and Analyzed by Gas Chromatography / Mass Spectrometry (GC/MS)" published in the second edition of the federal environmental protection agency's "Compendium of Methods from the Determination of Toxic Organic Compounds in Ambient Air".
- (j) "Notification threshold" means acute exposure levels with an averaging time of one hour as established by the division pursuant to subsection (5)(a)(III) of this section.
- (k) "Optical remote sensing technology" means technology with the ability to provide real-time measurements of air pollutant concentrations along an open path as described in "EPA Handbook: Optical and Remote Sensing for Measurement and Monitoring of Emissions Flux of Gases and Particulate Matter" by the federal environmental protection agency.
 - (l) (I) "Petroleum refinery" means an establishment that is located on

ONE OR MORE CONTIGUOUS OR ADJACENT PROPERTIES THAT PROCESSES CRUDE OIL TO PRODUCE MORE USABLE PRODUCTS SUCH AS GASOLINE, DIESEL FUEL, AVIATION FUEL, LUBRICATING OILS, ASPHALT, OR PETROCHEMICAL FEEDSTOCKS. THE TERM INCLUDES AUXILIARY FACILITIES SUCH AS BOILERS, WASTEWATER TREATMENT PLANTS, HYDROGEN PRODUCTION FACILITIES, SULFUR RECOVERY PLANTS, COOLING TOWERS, BLOWDOWN SYSTEMS, COMPRESSOR ENGINES, AND POWER PLANTS.

- (II) PETROLEUM REFINERY PROCESSES INCLUDE SEPARATION PROCESSES, INCLUDING ATMOSPHERIC OR VACUUM DISTILLATION AND LIGHT ENDS RECOVERY; PETROLEUM CONVERSION PROCESSES, INCLUDING CRACKING, REFORMING, ALKYLATION, POLYMERIZATION, ISOMERIZATION, COKING, AND VISBREAKING; PETROLEUM TREATING PROCESSES, INCLUDING HYDRODESULFURIZATION, HYDROTREATING, CHEMICAL SWEETENING, ACID GAS REMOVAL, AND DEASPHALTING; AND FEEDSTOCK AND PRODUCT HANDLING, INCLUDING STORAGE, CRUDE-OIL BLENDING, NON-CRUDE-OIL FEEDSTOCK BLENDING, PRODUCT BLENDING, LOADING, AND UNLOADING.
- (m) "REAL TIME" MEANS THE ACTUAL OR NEAR ACTUAL TIME DURING WHICH COVERED AIR TOXICS OR OTHER AIR POLLUTANT EMISSIONS OCCUR.
- (n) "RELEVANT AREA" MEANS THE AREA WITHIN THREE MILES OF A COVERED FACILITY WHERE COMMUNITIES MAY BE EXPOSED TO COVERED AIR TOXICS.
- (0) "RELEVANT LANGUAGES" MEANS THE TWO MOST PREVALENT LANGUAGES SPOKEN IN THE RELEVANT AREA, AS IDENTIFIED IN THE LATEST AMERICAN COMMUNITY SURVEY PUBLISHED BY THE FEDERAL CENSUS BUREAU.
- (3) Review of covered air toxics and industry codes for covered facilities. IN ORDER TO BETTER PROTECT PUBLIC HEALTH, THE COMMISSION SHALL:
- (a) At least every five years beginning in 2027, or more frequently if it deems it appropriate to do so, including pursuant to a request by an interested person based on data evidencing potential exposure to a pollutant at levels posing a significant risk to human health, review the best available science, the list of covered air toxics, and the North American industry classification system codes for covered facilities to determine whether additional hazardous air pollutants should be listed as covered air toxics and whether any additional stationary sources should be included as covered facilities;
- (b) Based on its review, adjust the lists of covered air toxics and covered facilities by rule; and
- (c) If the commission adjusts the list of covered air toxics or covered facilities, adjust by rule the annual amount that the division may annually spend to conduct the community-based monitoring required by subsection (6)(a) of this section.
 - (2) (4) **Emergency notifications.** Each covered facility shall:
 - (a) Conduct outreach to representatives of the community surrounding the

covered facility IN THE RELEVANT AREA to discuss communications regarding the occurrence of an incident, including:

- (I) Methods by which the covered facility can disseminate information to the community IN THE RELEVANT AREA and methods by which community members can contact the covered facility regarding an incident; and
 - (II) Provisions for communications in Spanish the relevant languages;
- (b) Use an emergency notification service through which the covered facility will, AS SOON AS POSSIBLE, communicate IN THE RELEVANT LANGUAGES with, and make data available to, the community surrounding the covered facility IN THE RELEVANT AREA AND THE DIVISION regarding the occurrence of an incident OR AN EXCEEDANCE OF A NOTIFICATION THRESHOLD IDENTIFIED BY A FENCELINE MONITORING SYSTEM;
- (b.5) FOR TWO YEARS, MAINTAIN A RECORD OF ALL COMMUNICATIONS MADE THROUGH AN EMERGENCY NOTIFICATION SERVICE, INCLUDING WHETHER ANY OTHER ACTION WAS TAKEN IN RESPONSE TO THE INCIDENT OR EXCEEDANCE OF A NOTIFICATION THRESHOLD, WHICH RECORD MUST BE AVAILABLE TO THE PUBLIC;
- (c) Implement the emergency notification service within six months after July 2, 2020; and
 - (d) Pay all costs associated with its use of the emergency notification service.
- (5) Fenceline monitoring. (a) (I) Beginning on January 1, 2023, a covered facility that is a petroleum refinery shall conduct fenceline monitoring of covered air toxics in real time and shall disseminate all fenceline monitoring data to the public as described in subsection (5)(h) of this section.
- (II) Beginning on July 1, 2024, all covered facilities not subject to subsection (5)(a)(I) of this section shall conduct fenceline monitoring of covered air toxics in real time and shall disseminate all fenceline monitoring data to the public as described in subsection (5)(h) of this section.
- (III) THE DIVISION SHALL ESTABLISH NOTIFICATION THRESHOLDS FOR EACH COVERED AIR TOXIC. IN ESTABLISHING THE NOTIFICATION THRESHOLDS, THE DIVISION SHALL TAKE A PRECAUTIONARY APPROACH TO ASSURE PROTECTION OF PUBLIC HEALTH. THE NOTIFICATION THRESHOLDS:
- (A) SHALL BE BASED ON SCIENTIFIC RESEARCH THAT IS PUBLICLY AVAILABLE AND PEER-REVIEWED ABOUT THE POTENTIAL HUMAN HEALTH IMPACTS OF SHORT-TERM EXPOSURES TO POLLUTANTS;
- (B) MAY BE BASED ON ACUTE EXPOSURE LEVELS OR GUIDELINES UTILIZED BY A FEDERAL AGENCY OR ANOTHER STATE; AND
 - (C) Shall be included in the fenceline monitoring plan of each covered

FACILITY.

- (b) At least one year before a covered facility begins conducting fenceline monitoring, the covered facility shall submit an initial draft fenceline monitoring plan to the division. Each fenceline monitoring plan must:
- (I) Provide for monitoring consistent with method 325A, method 325B, and method TO-15A combined, or the most up-to-date emissions test or measurement methods for fenceline monitoring approved or promulgated by the federal environmental protection agency;
- (II) PROVIDE FOR MONITORING OF COVERED AIR TOXICS USING OPTICAL REMOTE SENSING TECHNOLOGY OR OTHER MONITORING TECHNOLOGY WITH THE ABILITY TO PROVIDE REAL-TIME SPATIAL AND TEMPORAL DATA TO UNDERSTAND THE TYPE AND AMOUNT OF EMISSIONS;
 - (III) BE SUBMITTED TO THE DIVISION IN THE RELEVANT LANGUAGES; AND
 - (IV) IDENTIFY:
- (A) THE EQUIPMENT TO BE USED TO CONTINUOUSLY MONITOR, RECORD, AND DISSEMINATE EMISSION DATA FOR EACH COVERED AIR TOXIC IN REAL TIME, INCLUDING EQUIPMENT TO CONTINUOUSLY RECORD WIND SPEED AND WIND DIRECTION DATA;
 - (B) SITING AND EQUIPMENT SPECIFICATIONS;
- (C) PROCEDURES FOR AIR MONITORING EQUIPMENT MAINTENANCE AND FAILURES, MAINTENANCE PLANS AND SCHEDULES, TEMPORARY BACK-UP MEASURES TO IMPLEMENT DURING EQUIPMENT FAILURES, DATA MANAGEMENT, QUALITY ASSURANCE, AND QUALITY CONTROL; AND
- (D) Methods for disseminating fenceline monitoring data to the public, local governments, area schools, and the division in real time via the website specified in subsection (5)(h)(I) of this section.
- (c) Upon receipt of an initial draft fenceline monitoring plan or plan that is resubmitted pursuant to subsection (5)(i) of this section, the division shall:
 - (I) PROMPTLY POST THE PLAN ON THE DIVISION'S WEBSITE;
- (II) Ensure that the plan is subject to at least ninety days of public comment;
 - (III) RESPOND IN WRITING TO ALL COMMENTS RECEIVED;
- (IV) Consult with local governments in the relevant area about the plan; and

- (V) Consult community members and hold at least two public hearings regarding the plan before the division acts on the plan. The hearings must:
- (A) BE HELD AT A LOCATION NEAR THE COVERED FACILITY, PRIORITIZING DISPROPORTIONATELY IMPACTED COMMUNITIES;
 - (B) BE HELD ONCE DURING THE EVENING AND ONCE DURING A WEEKEND;
 - (C) BE AVAILABLE FOR REMOTE PARTICIPATION VIA THE INTERNET;
- (D) INCLUDE INTERPRETATION SERVICES IN THE RELEVANT LANGUAGES THAT ARE NOT THE SAME LANGUAGE IN WHICH THE HEARING IS CONDUCTED; AND
 - (E) Provide Child Care Services for the attendees.
- (d) (I) NO LATER THAN FOUR MONTHS AFTER THE SUBMISSION OF AN INITIAL DRAFT FENCELINE MONITORING PLAN OR PLAN THAT IS RESUBMITTED PURSUANT TO SUBSECTION (5)(i) OF THIS SECTION, THE COVERED FACILITY MAY SUBMIT A REVISED PLAN TO THE DIVISION.
- (II) Upon receipt of a revised plan, the division shall promptly post the revised plan on the division's website. If the initial plan failed to include the required elements under subsection (5)(b) of this section, the division shall again comply with subsection (5)(c) of this section with respect to the revised plan, in which case the deadline in subsection (5)(e) of this section is extended for ninety days.
- (e) If the division determines that the covered facility is emitting hazardous air pollutants in quantities that may pose a risk to public health in the relevant area, the division may require as part of the plan the reporting of pollutants other than covered air toxics that the monitors are reasonably capable of measuring. The division shall approve or disapprove a fenceline monitoring plan no later than eight months after it is initially submitted to the division. If the division disapproves of a monitoring plan, it shall promptly modify the monitoring plan to ensure compliance with subsection (5)(b) of this section prior to approval.
- (f) Once the division approves a fenceline monitoring plan, the division shall promptly post the plan on its website. Within three weeks after approval, the covered facility shall make the approved plan available to the division and the public in the relevant languages, and the division shall promptly post the translated plan on the division's website. The covered facility shall make hard copies of the approved and translated plans available at any public libraries in the relevant area.
- (g) If a covered facility is a major source, as that term is defined in section 25-7-114 (3), the division shall incorporate fenceline monitoring requirements into the covered facility's operating permit required by section 25-7-114.3.

- (h) Each covered facility shall collect real-time data from the fenceline monitoring system, shall maintain records of the data, and shall disseminate the data to the division and the public. The dissemination must:
- (I) BE AVAILABLE IN REAL TIME ON A WEBSITE MAINTAINED BY THE COVERED FACILITY AND INCLUDE A MAP OF ALL FENCELINE MONITORING EQUIPMENT LOCATIONS AND THE ABILITY TO ACCESS HISTORICAL FENCELINE MONITORING DATA;
 - (II) BE IN THE RELEVANT LANGUAGES SPOKEN IN THE RELEVANT AREA;
- (III) INCLUDE DESCRIPTIONS IN THE RELEVANT LANGUAGES OF COVERED AIR TOXICS AND THEIR POSSIBLE HEALTH EFFECTS AS SPECIFIED BY THE FEDERAL CENTERS FOR DISEASE CONTROL AND PREVENTION; AND
- (IV) INCLUDE DATA ABOUT AIR CONCENTRATIONS OF ANY HAZARDOUS AIR POLLUTANT OTHER THAN COVERED AIR TOXICS THAT THE DIVISION DETERMINED UNDER SUBSECTION (5)(e) OF THIS SECTION MUST BE INCLUDED IN THE FENCELINE MONITORING PLAN.
- (i) A COVERED FACILITY SHALL UPDATE AND RESUBMIT FOR DIVISION APPROVAL ITS FENCELINE MONITORING PLAN EVERY FIVE YEARS; EXCEPT THAT THE DIVISION MAY REQUIRE AN UPDATED PLAN BEFORE THE EXPIRATION OF FIVE YEARS BASED ON:
- (I) Its own determination that there has been a substantial change in the covered facility's operations or emissions; or
- (II) A Written request submitted by a member of the public that the division determines justifies an updated plan.
- (6) Community-based monitoring. (a) Beginning no later than January 1, 2023, the division shall conduct community-based monitoring of covered air toxics in the relevant areas. The community-based monitoring must occur for no less than thirty cumulative days during each quarter of every year. The division may expend up to eight hundred thousand dollars from the general fund to purchase and equip a mobile air-quality monitoring van for use in the northern metropolitan Denver area, Henderson, the city of Pueblo, and other communities, to conduct community-based monitoring pursuant to this subsection (6).
- (b) Subject to subsection (3)(c) of this section, the division shall not spend more than one million dollars annually to conduct the community-based monitoring required by subsection (6)(a) of this section.
- (c) No later than July 1, 2022, and every three years thereafter, the division shall:
- (I) Post a list of intended community-based monitoring equipment locations on the division's website in the relevant languages;
 - (II) Ensure that the list of intended monitoring equipment locations is

SUBJECT TO AT LEAST NINETY DAYS OF PUBLIC COMMENT; AND

- (III) CONSIDER INPUT FROM LOCAL GOVERNMENTS AND SCHOOL DISTRICTS IN THE RELEVANT AREAS ABOUT THE LIST OF INTENDED MONITORING EQUIPMENT LOCATIONS.
- (d) The division shall make community-based monitoring data available to the public.
- (7) **Costs paid by covered facilities.** (a) Each covered facility is responsible for the cost of installing, operating, and maintaining all fenceline monitoring equipment used pursuant to the monitoring plan as well as the cost of disseminating the data to the public.
- (b) A covered facility shall pay a processing fee pursuant to section 25-7-114.7 (2)(a)(III) to cover the division's indirect and direct costs of reviewing and approving fenceline monitoring plans.
- (c) Covered facilities shall pay the division for the covered facility's annual pro rata share of the direct and indirect costs of conducting community-based monitoring, which money shall be credited to the stationary sources control fund created in section 25-7-114.7 (2)(b)(I). Payment will be received in advance of performing community-based monitoring unless the division expressly authorizes reimbursement.
- **SECTION 2. Appropriation.** (1) For the 2021-22 state fiscal year, \$480,939 is appropriated to the department of public health and environment for use by the air pollution control division. This appropriation is from the stationary sources control fund created in section 25-7-114.7 (2)(b)(I), C.R.S. To implement this act, the division may use this appropriation as follows:
- (a) \$91,056 for personal services related to stationary sources, which amount is based on an assumption that the division will require an additional 1.2 FTE; and
 - (b) \$93,226 for operating expenses related to stationary sources.
 - (c) \$12,761 for the purchase of legal services; and
 - (d) \$283,896 for the purchase of information technology services.
- (2) For the 2021-22 state fiscal year, \$12,761 is appropriated to the department of law. This appropriation is from reappropriated funds received from the department of public health and environment under subsection (1)(c) of this section and is based on an assumption that the department of law will require an additional 0.1 FTE. To implement this act, the department of law may use this appropriation to provide legal services for the department of public health and environment.
- (3) For the 2021-22 state fiscal year, \$283,896 is appropriated to the office of the governor for use by the office of information technology. This appropriation is from reappropriated funds received from the department of public health and environment under subsection (1)(d) of this section. To implement this act, the office may use

this appropriation to provide information technology services for the department of public health and environment.

SECTION 3. Applicability. This act applies to conduct occurring on or after the effective date of this act.

SECTION 4. Safety clause. The general assembly hereby finds, determines, and declares that this act is necessary for the immediate preservation of the public peace, health, or safety.

Approved: June 24, 2021