

SAN LUIS OBISPO COUNTY AIR POLLUTION CONTROL DISTRICT

RULE 219 - TOXICS NEW SOURCE REVIEW*(Adopted 3/24/99)*

A. PURPOSE. The purpose of this Rule is to provide a mechanism for evaluating potential toxic impacts of air emissions of toxic substances from new, modified, and relocated sources including devices and processes that are required to obtain a permit pursuant to the Rules and Regulations of the San Luis Obispo County Air Pollution Control District (District). Toxic impacts may include cancer, or chronic non-cancer or acute adverse health effects.

B. APPLICABILITY. This Rule applies to any new, modified, or relocated source of air emissions of toxic substances including devices and processes that is required to obtain a permit pursuant to District Regulations. This Rule applies only where there is an increase in toxic emissions or the distance to the nearest receptor has decreased to the extent that, for either condition, the risk to the nearest receptor and the maximum exposed individual from facility-wide emissions is equal to or greater than one excess cancer per million population (1.0/106) or the health hazard index is equal to or greater than 0.10 for either acute or chronic non-cancer effects. This Rule shall at no time be less stringent than the requirements of the Air Toxics "Hot Spots" Information and Assessment Act of 1987. Nothing in this Rule exempts a source from compliance with the requirements of District Rule 204, Requirements.

C. DEFINITIONS. The definitions shall be used for this Rule and supersede any similar definitions.

1. "APCO": The Air Pollution Control Officer of the San Luis Obispo County Air Pollution Control District or his/her designate.
2. "Air Emissions": Any issuance or activity that may cause the issuance of air contaminants including the actual or potential spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing of a substance into the ambient air which results from the routine operation of a facility, that is predictable, including, but not limited to, continuous and intermittent releases and predictable process upsets or leaks.
3. "Air Emissions of Toxic Substances": Air emission of any substance shown to cause or promote adverse health effects in humans or animals and which is defined by OEHHA, established by the APCO, or listed in the most recent version of Appendix A of the "Emissions Inventory Criteria and Guidelines Report", as embodied in the California Code of Regulations.
4. "Air Quality or Air Dispersion Model": A mathematical simulation used to estimate the downwind concentrations of air borne emissions from a source or permit unit. The model may take into account source-specific release characteristics, topography, and atmospheric conditions.
5. "Distance to the Nearest Receptor": The straight line distance from an actual emission point, a theoretical emission point as in the case of an area or volume source, or a District-approved aggregated emission point for certain fugitive emission sources, to the closest wall of the nearest structure routinely housing that receptor including off-site worksites. For determining acute impacts this distance is to the nearest off-site location reasonably accessible by any member of the public, unless a qualified receptor is located on site.
6. "Facility-wide": All devices, processes, and permit units located at a source. Facility-wide emissions include all emissions from all permit units, devices, and processes located at the source and emissions from activities associated with permit units, devices, and processes including fugitive emissions.

7. "Formal Risk Assessment": A more rigorous assessment of the potential risk posed by a source than that provided by a screening assessment, but using a similar analysis. A formal risk assessment may include site-specific data such as meteorology, deposition rates, and estimating techniques based on probabilities. The procedures used to develop the risk assessment shall be consistent with the latest guidelines or recommendations from the California Office of Environmental Health Hazard Assessment (OEHHA).
8. "Health Hazard Index (HHI)": A unit-less number indicating the estimated potential for relative adverse health impacts from acute (short term exposures lasting seconds to hours) and chronic non-cancer (long term exposures lasting months to years) exposures to air emissions of toxic substances. The HHI is the ratio of the ground level concentration (GLC) of any given toxic substance, as determined either through air quality modeling or measurement, and the reference exposure level (REL). The REL is determined by OEHHA and is defined as a concentration or dose of a toxic compound below which non-cancer health effects are not anticipated in the most sensitive receptor. $HHI = GLC/REL$. The index is the sum of the individual acute or chronic HHI affecting the same target organ.
9. "Health Risk Assessment (HRA)": A detailed and comprehensive scientific analysis which evaluates the air dispersion of toxic substances in the environment and predicts the potential impact from exposure in human populations. The HRA quantifies and assesses the potential for adverse health effects to the maximum exposed individual, the point of maximum impact, and the nearest receptor from exposure to toxic substances associated with those levels of exposure. The results of a risk assessment should not be construed as the expected rate of disease in or harm to the exposed population. It is an estimate of the potential of an adverse health impact due to long and short term exposure, given the current knowledge and assumptions of the specific situation.
10. "Cancer Risk": A mathematical estimate of the probability of contracting cancer due to exposure to known or suspected toxic substances over a lifetime of continual exposure for twenty-four (24) hours per day for seventy (70) years. This is determined at the maximum exposed individual and the nearest receptor but is also determined for the point of maximum impact for purposes of District review. The estimate may account for project life times that are less than seventy years, if clearly enforceable permit conditions limit the project life and public exposure time. As cancer risk is organ-specific, exposure to different compounds may not be additive unless the same organs are impacted. Note that risk is not a measure of the expected rate of a disease.
11. "Maximum Exposed Individual (MEI)": A location where an actual person lives, resides, works, or is otherwise housed which may include a residence, off-site worksite, and/or other sensitive receptor where estimated emissions are at a maximum concentration. Due to air dispersion effects, a nearest receptor is not necessarily the MEI.
12. "Modification": Any physical change, change in method of operation, or addition to an existing permit unit that requires an application for an Authority to Construct or Permit to Operate and results in an increase in air emissions of toxic substances above permitted or normal operating values. Routine maintenance and/or repair shall not be considered a physical change.
13. "Off-site Worksite": The location of the nearest commercial or industrial business or government agency where individuals are employed or work, not directly associated with or employed by the emitting source. An off-site worksite includes co-located worksites where employees of the co-located company or agency are not direct employees of the source responsible for the emissions. A co-located worksite shares a common wall, floor, or ceiling with the source or with the building associated with that source, as in the case of gasoline dispensing facilities.
14. "Permit Unit": Any article, machine, piece of equipment, device, process, or combination thereof including portable equipment which may cause or control the release of air emissions of one or more toxic substance and which requires a District Permit to Operate.

15. "Point of Maximum Impact (PMI)": The location of the point of highest, estimated emissions, as determined by an approved air quality modeling study, not over water and not within the property boundary of a source, unless a qualified receptor is located within a property boundary. The PMI represents the location of a theoretical individual and may not necessarily represent the location where any one person actually or potentially lives, works, or resides. The PMI is equivalent to the MEI, if an actual receptor is co-incidentally located at the PMI.
16. "Potential to Emit": The maximum quantity of a subject toxic substance, including fugitive emissions, that a permit unit is capable of emitting considering permitted emission control equipment. The potential to emit is calculated based on the maximum design capacity or other operating condition which predicts the maximum potential emission rate. If specific conditions are contained in the Authority to Construct or Permit to Operate that limit or will restrict emissions to a lower level, the limitations stated in the conditions shall be used to calculate the potential to emit.
17. "Receptor": Any residence including private homes, condominiums, apartments, and living quarters; educational resources such as preschools and kindergarten through grade twelve (k-12) schools; health care facilities such as hospitals or retirement and nursing homes; or off-site worksites. A receptor includes individuals housed in long term care hospitals, prisons, and dormitories or similar live-in housing. For purposes of estimating acute impacts the nearest receptor shall be defined as the offsite location where any member of the public has reasonable access unless there is a qualified receptor on site.
18. "Relocation": The movement of a source, permit unit, or part of a permit unit responsible for air emissions of toxic substances to a different physical location. Risk assessments for relocations to a point farther from the maximum exposed individual and the nearest receptors are not required, as long as the type and quantity of subject emissions remain the same as or are less than before the relocation.
19. "Screening Risk Assessment": The estimate of potential cancer, acute, and chronic non-cancer risk from a source of air emissions of toxic substances. All screening risk assessments shall be modeled using a reasonable worst-case scenario and shall follow the most recent methodology recommended by the OEHHA.
20. "Small Business": A business which is independently owned and operated and meets the following criteria, or, if affiliated with another concern, the combined activities of all concerns shall meet the following criteria:
 - a. The number of employees is twenty (20) or less; and
 - b. The total, gross annual receipts are two million dollars (\$2,000,000) or less.
21. "Source": The collection of all permit units or activities associated with the permit units which emits toxic substances into the air and is located on one or more contiguous properties within the District, including properties that are separated only by a public roadway or other public right-of-way, and which are owned or operated by the same person or persons under common control. Stationary sources and portable equipment are included in the definition of source. Mobile sources are not included in this definition of source.
22. "Toxic Best Available Control Technology (T-BACT)": The most stringent emissions limitation or control technique without considering cost effectiveness which:
 - a. has been achieved in practice for the type of source, category of source, permit unit, or modification proposed; or
 - b. is any other emissions limitation or control technique, including process and equipment changes of basic and control equipment and implementation of pollution prevention measures, found by the APCO to be technologically feasible for such source, category of source, permit unit, or modification, and which limits air emissions of toxic substances to the maximum extent feasible.

D. EXEMPTIONS

1. Small businesses such as dry cleaners, gasoline stations, and wood furniture refinishers which have implemented all technically feasible and cost effective control measures for any given air emission of a toxic substance are exempt from Subsections E.1 through E.10 of this Rule for that contaminant, as long as the facility-wide risk does not exceed the limits set in Section E.4.
2. The requirements of Section E shall not apply to any modification, where there is no net increase in risk. If a modification does not result in an increase in emissions, as stated in the definition for "modification" found in Subsection C.12, no HRA or T-BACT analysis is required.
3. Modifications which result in increases in air emissions of toxic substances of less than ten percent (10.0%) by weight for each individual subject compound above permitted or normal operating values do not require a health risk assessment unless the emission increases cause a corresponding increase in the facility-wide risk that exceeds the levels set in Section E.

E. REQUIREMENTS. The APCO shall deny an Authority to Construct or Permit to Operate for a new, modified, or relocated source of air emissions of toxic substances unless an applicant documents to the satisfaction of the APCO that the source will not adversely impact the health and welfare of the public, including off-site worksites, within the District. This documentation shall consist of, but is not limited to:

1. A list identifying all of the possible air emissions of toxic substances which might be emitted from the proposed source, modification, or relocation including an estimate of the maximum and average hourly emission rates and annual emission rate for each substance based on each permit unit's potential to emit; and
2. The distances to the nearest receptors including residences, off-site worksites, schools and health care facilities; and
3. Perform a screening or formal risk assessment which shows to the satisfaction of the APCO that the toxic impact from facility-wide emissions on the public will not result in a cancer risk equal to or greater than one in a million (1.0/10⁶) or an acute or chronic non-cancer HHI of equal to or greater than 0.10 at the maximum exposed individual and nearest receptor; or
4. Apply Toxics Best Available Control Technology and perform a screening or formal risk assessment which shows to the satisfaction of the APCO that the toxic impact of facility-wide emissions on the public will not result in a cancer risk equal to or greater than ten in a million population (10.0/10⁶) or HHI equal to or greater than one (1.0) at the maximum exposed individual and the nearest receptor.
5. The District may, for good cause, require the source to determine the facility-wide risk to be calculated at the point of maximum impact for purposes of complying with all or part of the requirements established in Subsections E.3 and E.4.
6. The District, at its discretion, may complete the screening risk assessment for a source. The District may use an approved, alternative method for estimating the risk including but not limited to use of the most recent prioritization methodologies or risk estimate guidelines approved by the Air Resources Board, the Office of Environmental Health Hazard Assessment, the California Air Pollution Control Officers Association, or their successor organizations.
7. All air quality modeling shall use the models recommended in the most recent version of the United States Environmental Protection Agency (EPA) modeling procedures, as outlined in "Guideline on Air Quality Models", Document Number EPA 450/2-78-027R, or equivalent modeling protocol approved by the

APCO.

8. The District may permit an acute or chronic non-cancer HHI value of greater than 0.10 specified in Subsection E.3 or the limit of one (1.0) for an acute or chronic non-cancer HHI specified in Subsection E.4 for good cause which shall include adequate documentation for allowing the exceedence on a case by case basis.
9. All risk assessments shall include an analysis of multi-pathway impacts, unless the emitted compounds only include inhalation impacts or non-inhalation pathways are clearly de minimis.
10. The facility-wide risk from any source subject to this Rule shall not exceed the limits established in Subsections E.3 or E.4 unless the source is in strict compliance with the requirements of Subsection E.11.
11. The facility-wide risk from any source shall not exceed ten (10.0) in a million for cancer or a HHI of one (1.0) for either chronic non-cancer or acute health impacts, unless that facility is included in the Air Toxics Hot Spots program by the District, and the source simultaneously develops and implements an APCO-approved airborne toxic risk reduction audit and plan, as codified in Chapter 6, Facility Toxic Air Contaminant Risk Reduction Audit and Plan, of the California Health and Safety Code.
12. On a case by case basis the APCO may waive for good cause any of the requirements of Section E except E.11 after making a written determination. The determination shall include a toxic emissions analysis through a formal risk assessment which may contain an uncertainty analysis, a listing of the benefits of the new or modified source, and a statement about any existing federal, state, or local mandates requiring the modification of the source or the establishment of a new one. No facility shall be exempted from the requirements of Subsection E.11.
13. Nothing in this Rule shall relieve any source located within 1,000 feet of a school from the reporting requirements specified in Section 42301.6 of the California Health and Safety Code.
14. Portable equipment registered or permitted in this or any other District or with the ARB shall comply with the requirements of this Rule.
15. The APCO may require public notification of the risk associated with the construction or modification of any source where the cancer risk exceeds ten (10.0) in a million or the HHI is greater than one (1.0). The content, format, and duration of the public notification shall be determined at the time that this option is implemented.

F. EMISSION REDUCTION CREDITS. Toxic emission reduction credits are prohibited, and there shall be no banking of toxic emissions for future use.

G. CONCURRENT RISK REDUCTION (CCR). The reduction of one or more air emissions of a toxic substance to offset new or increased emissions of a different toxic substance is prohibited. At the District's discretion, the reduction of an air emission of a toxic substance at a source may be used to offset the risk due to an increase in an air emission of the same toxic substance at the same source, if the reduction is real, permanent, quantifiable, and enforceable through District permit conditions. The decreases and increases in emissions and associated risk shall be concurrent and occur at the same source. The risk reduction shall occur after the submittal of an application for an Authority to Construct, but before the issuance of the Permit to Operate for the new, modified, or relocated permit unit. The emission reduction shall be in excess of any emissions limit required by the District, state, or federal regulations or accounted for in a state implementation plan. Use of the CCR shall not result in a risk from any of the permit units and associated activities used in the CCR evaluation exceeding the limits set in Subsections E.3 and E.4. Calculating increases and decreases in air emissions of toxic substances shall be in the same manner as that described in District Rule 213, Calculations.

H. SEVERABILITY: If a court of competent jurisdiction issues an order that any provisions, section, subsection, sentence, clause, phrase, or portion of this Rule (item) is held invalid, unconstitutional, or

unenforceable for any reason, such item shall be deemed as separate, distinct, and independent from all other items of this Rule. All other items shall remain in full force and effect to the extent allowed by law. In the event that one item of the Rule is in conflict with another item of the Rule the most stringent interpretation prevails.