SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Preliminary Draft Staff Report Proposed Amended Rule 1401.1 - Requirements for New and Relocated **Facilities Near Schools**

December 2022

Deputy Executive Officer

Planning, Rule Development, and Implementation Sarah Rees, Ph.D.

Assistant Deputy Executive Officer

Planning, Rule Development, and Implementation Michael Krause

Planning and Rules Manager

Planning, Rule Development, and Implementation Kalam Cheung, Ph.D.

Danielle Collado – Assistant Air Quality Specialist AUTHOR:

CONTRIBUTORS: Barbara Radlein – Program Supervisor

Brian Vlasich – Air Quality Specialist

David Lui – Supervising Air Quality Engineer David Ono – Senior Air Quality Engineer Manager

Jack Cheng – Senior Enforcement Manager Janice West – Senior Air Quality Engineer

JiaYuan Li – Systems and Programming Supervisor Jillian Wong, Ph.D. – Assistant Deputy Executive Officer

Luke Lau – Air Quality Engineer II

Sina Taghvaee, Ph.D. – Air Quality Specialist Xiang Li, Ph.D. - Air Quality Specialist

Michael Laybourn – Program Supervisor **REVIEWED BY:**

> Daphne Hsu – Principal Deputy District Counsel Ryan Mansell – Senior Deputy District Counsel

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT GOVERNING BOARD

Chair: BEN J. BENOIT

Mayor, Wildomar

Cities of Riverside County

Vice Chair: VANESSA DELGADO

Senator (Ret.)

Senate Rules Committee Appointee

MEMBERS:

MICHAEL A. CACCIOTTI Mayor, South Pasadena Cities of Los Angeles County/Eastern Region

ANDREW DO Supervisor, First District County of Orange

GIDEON KRACOV Governor's Appointee

LARRY MCCALLON Mayor, Highland Cities of San Bernardino County

HOLLY J. MITCHELL Supervisor, Second District County of Los Angeles

VERONICA PADILLA-CAMPOS Speaker of the Assembly Appointee

V. MANUEL PEREZ Supervisor, Fourth District County of Riverside

NITHYA RAMAN Council Member, Fourth District City of Los Angeles Representative

REX RICHARDSON Vice Mayor, City of Long Beach Cities of Los Angeles County/Western Region

CARLOS RODRIGUEZ Mayor, Yorba Linda Cities of Orange County

JANICE RUTHERFORD Supervisor, Second District County of San Bernardino

EXECUTIVE OFFICER:

WAYNE NASTRI

Table of Contents

EXECUTIVE SUMMARY EX	S-1
CHAPTER 1: BACKGROUND	••••
INTRODUCTION	1-1
HEALTH RISK AND CANCER POTENCY IN EARLY LIFE	1-2
NEED FOR PROPOSED AMENDMENTS	1-2
PUBLIC PROCESS AND OUTREACH	1-3
CHAPTER 2: PROPOSED AMENDED RULE 1401.1	••••
INTRODUCTION	2-1
PROPOSED AMENDMENTS TO RULE 1401.1	2-1
ADMINISTRATIVE AMENDMENTS	2-2
CHAPTER 3: IMPACT ASSESSMENT	••••
ADDITION OF EARLY LEARNING AND DEVELOPMENT CENTERS	3-1
IMPACT ASSESSMENT	3-2
CALIFORNIA ENVIRONMENTAL QUALITY ACT	3-3
SOCIOECONOMIC IMPACT ASSESSMENT	
INCREMENTAL COST-EFFECTIVENESS	3-4
DRAFT FINDINGS UNDER HEALTH AND SAFETY CODE SECTION 40727	3-4
COMPARATIVE ANALYSIS	3-5
LIST OF TABLES	
Table 1-1 Recently Adopted and Amended Air Toxics Rules Where Definition of School Accounted for Concerns of Early Childhood Exposure	
Table 2-1 Summary of Requirements for New Facilities (Table 1 from Existing R	
Table 2-2 Summary of Requirements for Relocated Facilities (Table 2 from Existing R	ule
Table 3-1 Licensed Child Care Centers in South Coast AQMD.	

EXECUTIVE SUMMARY

Rule 1401.1 – Requirements for New and Relocated Facilities Near Schools, was adopted in 2005 and applies to new or relocated facilities emitting toxic air contaminants. Rule 1401.1 is designed to be more health protective for school children by establishing more stringent risk requirements for new and relocated facilities emitting toxic air contaminants locating near schools, thereby reducing the exposure of toxic emissions on school children. In recent years, research indicates that early-life exposures to air toxics contribute to an increased lifetime risk of developing cancer, or other adverse health effects, compared to exposure in adulthood. This research prompted the Office of Environmental Health Hazard Assessment (OEHHA) to update the risk assessment methodology to include age sensitivity factors for young children. Based on this OEHHA update, the definition of "school" included in several South Coast AOMD air toxics rules has been updated to include early learning and development programs, that include centers serving prekindergarten children. Proposed Amended Rule 1401.1 (PAR 1401.1) would incorporate the same expanded definition of "school" to include early learning and development programs. PAR 1401.1 also establishes consistency with other South Coast AQMD air toxics rules by removing the exclusion of unimproved school property in the PAR 1401.1 rule language. This will ensure that any toxic-emitting facility near a center with young children will meet stricter air toxic risk requirements. To estimate the impacts of PAR 1401.1, a screening assessment was conducted based on the proximity between new and relocated facilities permitted within the last five years and early learning and development centers to identify permitting actions that potentially would have been subject to additional review under PAR 1401.1. Based on this assessment, out of approximately 6,000 applicable facilities that submitted permit applications within the last five years, an average of 140 facilities per year would have been subject to additional review under the provisions of PAR 1401.1. These facilities would have to demonstrate that the applicable risk requirements are met as required in Rule 1401.1.

PAR 1401.1 ES-1 December 2022

CHAPTER 1: BACKGROUND

INTRODUCTION

EXISTING REGULATIONS

HEALTH RISK AND CANCER POTENCY IN EARLY LIFE

NEED FOR PROPOSED AMENDMENTS

PUBLIC PROCESS AND OUTREACH

PAR 1401.1 December 2022

INTRODUCTION

The South Coast Air Quality Management District (South Coast AQMD) has a robust and comprehensive regulatory program to address toxic air contaminants. South Coast AQMD Rules 1401 – New Source Review of Toxic Air Contaminants, 1401.1 – New Source Review of Toxic Air Contaminants, and 1402 – Control of Toxic Air Contaminants from Existing Sources, are referred to as the "umbrella" rules that specify requirements for all sources. Rules 1401 and 1401.1 apply to permitting activities, and Rule 1402 implements requirements for existing sources. Rule 1401 applies to new and modified permitted sources. Rule 1401.1 establishes additional requirements for permitted sources near schools. Rules 1401 and 1401.1 are designed to protect the public from the health risks posed by toxic air contaminants (TACs) emitted by stationary sources. The following paragraphs summarize Rule 1401 and 1401.1 provisions.

Rule 1401 – New Source Review of Toxic Air Contaminants

Rule 1401 is a permit unit-based rule that applies to any increase in toxic emissions from new, relocated, or modified equipment. Under Rule 1401, new and modified permitted sources cannot exceed a Maximum Individual Cancer Risk (MICR) of one in one million if the source is not equipped with Best Available Control Technology for toxics (T-BACT). If T-BACT is installed, the MICR cannot exceed ten in one million. The MICR is the estimated probability of a potential maximally exposed individual contracting cancer as a result of exposure to toxic air contaminants. Rule 1401 also has requirements for cancer burden, which represents the estimated increase in the occurrence of cancer cases in a given population due to exposure to TACs, as well as non-cancer chronic and acute hazard index thresholds. Rule 1401 has been amended several times to add or modify new compounds or risk values to the list of TACs as they are identified and as risk values are finalized or amended by the state.

Rule 1401.1 – New Source Review of Toxic Air Contaminants

Rule 1401.1 was adopted in 2005 and last amended in 2015. Rule 1401.1 is designed to be more health protective for school children by establishing more stringent risk requirements related to facility-wide cancer risk and non-cancer acute hazard index (HI) and chronic HI for new and relocated facilities emitting TACs located near schools. For new facilities, the rule requires the facility-wide cancer risk to be less than one in one million at any school or school under construction within 500 feet of the facility. If there are no schools within 500 feet, the same risk levels must be met at any school or school under construction within 500 to 1,000 feet unless there is a residential or sensitive receptor within 150 feet of the facility. If there is a residential or sensitive receptor within 150 feet of the emissions source (permit unit), due to the application of Rule 1401 risk requirements, the risk to the school that is located at least another 350 feet away can reasonably be expected to have decreased below one in one million cancer risk. Accordingly, if the nearest school is between 500 to 1,000 feet and there is a residential or sensitive receptor within 150 feet, Rule 1401.1 does not require that risk at the school be demonstrated. For relocated facilities, existing Rule 1401.1 requires that a relocating facility must demonstrate, for each school or school under construction within 500 feet of the facility, that either: 1) the risk at the school from the facility in its new location is no greater than the risk at that same school when the facility

PAR 1401.1 1-1 December 2022

was at its previous location; or 2) the facility-wide cancer risk at the school does not exceed one in one million. Unlike other South Coast AQMD risk-based rules, the required risk thresholds of Rule 1401.1 do not change based on whether the source is equipped with T-BACT.

HEALTH RISK AND CANCER POTENCY IN EARLY LIFE

OEHHA is a state agency under the California Environmental Protection Agency that establishes risk exposure information (i.e., risk values) for TACs. A health risk assessment estimates the increased probability that an individual would contract cancer or experience other adverse health effects because of exposure to listed TACs. OEHHA's Risk Assessment Guidelines are incorporated in the South Coast AQMD's Risk Assessment Procedures, which are required for implementing Rules 1401 and 1401.1.

In 2003, OEHHA developed and approved the Health Risk Assessment Guidance document. Since 2003, OEHHA and U.S. Environmental Protection Agency (EPA) have conducted additional research to address growing concerns regarding children's exposure to environmental chemicals, including the possibility that young children may be more susceptible than adults to injury caused by those chemicals. The findings from this research indicate that the risks of cancer from exposures to carcinogens from conception through puberty can differ from those from exposures in adulthood. In March 2015, OEHHA revised its Risk Assessment Guidelines ("2015 OEHHA Guidelines") to ensure infants and children are explicitly addressed in assessing risk. The 2015 OEHHA Guidelines incorporate age sensitivity factors and other changes which have increased estimated cancer risk estimates to residential and sensitive receptors. Based on the change in methodology, the estimated cancer risk has increased by approximately three times, and more than three times in some cases, depending on whether the toxic air contaminant has multiple pathways of exposure in addition to inhalation.²

NEED FOR PROPOSED AMENDMENTS

Based on the 2015 OEHHA Guidelines regarding childhood sensitivity, the scope of provisions related to schools have been updated in many South Coast AQMD air toxic rules to incorporate early learning and development programs. Table 1-1 includes a list of these recently adopted and amended South Coast AQMD air toxic rules where the definition of school was updated to account for the increased impacts from exposure to TACs during the early childhood years.

OEHHA, Technical Support Document for Cancer Potency Factors: Methodologies for derivation, listing of available values, and adjustments to allow for early life stage exposures, May 2009, obtained on November 1, 2022, from https://oehha.ca.gov/media/downloads/crnr/tsdcancerpotency.pdf

OEHHA, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessment, February 2015, obtained on November 1, 2022, from https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf

1480

Rule

Title

1407.1 Control of Toxic Air Contaminant Emissions from Chromium Alloy Melting Operations

1426 Emissions from Metal Finishing Operations

1466 Control of Particulate Emissions from Soils with Toxic Air Contaminants

Hexavalent Chromium Emissions Chromium Electroplating and Chromic Acid Anodizing Operations

Table 1-1 Recently Adopted and Amended Air Toxics Rules Where Definition of School Accounted for Concerns of Early Childhood Exposure

For reference, the school definition included in the rules listed in Table 1-1 is as follows:

1426 – Emissions from Metal Finishing Operations

Ambient Monitoring and Sampling of Metal Toxic Air Contaminants,

SCHOOL means any public or private school, including juvenile detention facilities with classrooms, used for the education of more than 12 children at the school in kindergarten through grade 12. School also means an Early Learning and Developmental Program by the U.S. Department of Education or any state or local early learning and development programs such as preschools, Early Head Start, Head Start, First Five, and Child Development Centers. A school does not include any private school in which education is primarily conducted in private homes. The term includes any building or structure, playground, athletic field, or other area of school property.

The definition of school in Rule 1401.1 is inconsistent with recently adopted or amended South Coast AQMD air toxics rules. Rule 1401.1 currently defines a school as a public or private facility for educating 12 or more children in kindergarten and grades 1 to 12; however, it does not include centers serving pre-kindergarten children. To ensure consistency with recently adopted or amended South Coast AQMD air toxics rules and address the risk of early life exposure, PAR 1401.1 will update the definition of school to include early learning and development programs serving pre-kindergarten children and other child care centers. PAR 1401.1 also establishes consistency with other South Coast AQMD air toxics rules by removing the exclusion of unimproved school property in the PAR 1401.1 rule language. This will provide a greater assurance that any toxic-emitting facility located near a center with younger children will meet potentially more stringent toxic risk requirements. PAR 1401.1 is also consistent with most current scientific information and the 2015 OEHHA Guidelines regarding the importance of reducing early life exposures to air toxics in younger children.

PUBLIC PROCESS AND OUTREACH

Development of PAR 1401.1 is being conducted through a public process. South Coast AQMD staff has distributed about 22,000 Public Workshop notices to engage stakeholders (including all permit holders) regarding PAR 1401.1. A Public Workshop is scheduled for December 13, 2022.

PAR 1401.1 1-3 December 2022

CHAPTER 2: PROPOSED AMENDED RULE 1401.1

INTRODUCTION
PROPOSED AMENDMENTS TO RULE 1401.1
ADMINISTRATIVE AMENDMENTS

PAR 1401.1 December 2022

INTRODUCTION

In 2015, OEHHA updated the risk assessment methodology based on research indicating early-life exposures to air toxics contribute to an increased lifetime risk of developing cancer, or other adverse health effects, compared to exposures that occur in adulthood. The 2015 OEHHA Guidelines incorporate this revised methodology and include age and sensitivity factors for young children. The 2015 OEHHA Guidelines and findings are reflected in South Coast AQMD's Risk Assessment Procedures.³ Most air toxics rules in the South Coast AQMD air toxics regulatory program currently reflect these OEHHA findings and have expanded the scope of provisions related to schools to include younger children by including early learning and development programs in the definition of school.

PROPOSED AMENDMENTS TO RULE 1401.1

Rule 1401.1 specifies the requirements for facility-wide cancer risk and non-cancer acute hazard index and chronic hazard index for new and relocated facilities emitting TACs near schools.

Rule 1401.1 paragraph (c)(13) currently defines a school as:

SCHOOL means any public or private school, including juvenile detention facilities with classrooms, used for purposes of the education of more than 12 children at the school, including in kindergarten and grades 1 to 12, inclusive, but does not include any private school in which education is primarily conducted in private homes. The term includes any building or structure, playground, athletic field, or other area of school property, but does not include unimproved school property.

PAR 1401.1 amends the definition of a school to expand the scope to include prekindergarten children and allows the school definition to be consistent with other air toxics rules by adding the following rule language:

A school also includes an Early Learning and Developmental Program by the U.S. Department of Education or any state or local early learning and development programs such as pre-schools, Early Head Start, Head Start, First Five, and Child Development Centers.

Existing Rule 1401.1 excludes unimproved school property. Unimproved property is any property on which there are no buildings or play areas and where it can reasonably be expected that no children will be present. Most recently amended South Coast AQMD air toxic rule provisions related to schools have included unimproved school property because children may still be present in some unimproved areas. Additionally, those currently unimproved areas could be developed or improved in the future; removing this language

South Coast AQMD, Risk Assessment Procedures for Rules 1401, 1401.1, and 212 Version 8.1, September 2017, obtained on November 22, 2022, from http://www.aqmd.gov/docs/default-source/permitting/rule-1401-risk-assessment/riskassessproc-v8-1.pdf

South Coast AQMD, Governing Board meeting, October 2005, Agenda Item #26. Proposed Rule 1401.1 - Requirements for New and Relocated Facilities Near Schools, obtained on November 22, 2022, from http://www.aqmd.gov/nav/about/governing-board/agendas-minutes

would ensure the protection of children. For consistency with other South Coast AQMD air toxics rules and for the protection of children, PAR 1401.1 removes the unimproved property language.

With the above-described revisions, the definition of school in PAR 1401.1 paragraph (c)(17) would be identical to other recently amended or adopted South Coast AQMD air toxics rules. It would consist of the following revised text:

SCHOOL means any public or private school, including juvenile detention facilities with classrooms, used for purposes of the education of more than 12 children at the School, including in kindergarten through and grades 1 to grade 12., inclusive, but does not include any private school in which education is primarily conducted in private homes. School also means an Early Learning and Developmental Program by the U.S. Department of Education or any state or local early learning and development programs such as pre-schools, Early Head Start, Head Start, First Five, and Child Development Centers. A School does not include any private School in which education is primarily conducted in private homes. The term includes any building or structure, playground, athletic field, or other area of School property, but does not include unimproved school property.

Rule 1401.1 provisions also apply to a school under construction. Existing Rule 1401.1 defines a "School under Construction" as:

any property on which the Executive Officer has been notified any of the following has occurred: (1) construction of a school has commenced; or (2) the Notice of Preparation of a project level Environmental Impact Report has been published for the construction of a school; or (3) identification of a specific school site in an approved local government specific plan and the Executive Officer has been notified of such activities.

The effective date for a school under construction is when the activity occurs or when the Executive Officer is notified of that activity, whichever is later. Commencement of construction is established by any physical indication at the school building site. For example, this could include the demolition of old buildings or the groundbreaking on a vacant property. Rule 1401.1 provisions will continue to apply to a school under construction, and under PAR 1401.1, these provisions will apply to early learning and development programs.

ADMINISTRATIVE AMENDMENTS

Applicability – Subdivision (b)

The Rule 1401.1 applicability subdivision currently states that permit applications will be evaluated based on the Rule 1401 list of toxic air contaminants and risk assessment procedures in effect at the time the application is deemed complete. PAR 1401.1 includes an update to subdivision (b) to clarify that permit applications will also be evaluated based

PAR 1401.1 2-2 December 2022

on the version of the Rule 1401.1 provisions in effect at the time the application is deemed complete.

Rule 1401.1 – Tables 1 and 2

Existing Rule 1401.1 includes a summary of requirements for new and relocated facilities in Table 1 and Table 2, respectively. Two of the references in each of these tables are incorrect. PAR 1401.1 corrects these references, as shown in the following tables.

Table 2-1 Summary of Requirements for New Facilities (Table 1 from Existing Rule 1401.1)

Distance from New Facility to Nearest School or	Other Residential or Sensitive	*Risk Demonstration at School at < 500 ft	*Risk Demonstration at School at 500 – 1,000 ft	Rule 212 Additional Information	Meet Requirements for Future Applications
School Under Construction	Receptor at < 150 ft	Paragraph (d)(1)	Paragraph (d)(2)	Subdivision (f-g)	Subdivision (g- <u>h</u>)
< 500 feet	N/A	Yes	N/A	N/A	Yes
500 – 1,000 ft	Yes	N/A	N/A	Yes	Yes
500 - 1,000 ft	No	N/A	Yes	N/A	Yes

Table 2-2 Summary of Requirements for Relocated Facilities (Table 2 from Existing Rule 1401.1)

Distance from Relocated Facility to Nearest School	*Risk Demonstration at School at < 500 ft	Rule 212 Additional Information	Meet Requirements for Future Applications
or School Under Construction	Subdivision (e)	Subdivision (f-g)	Subdivision (g- <u>h</u>)
< 500 feet	Yes	Yes	Yes
500 – 1,000 ft	N/A	Yes	Yes

^{*}Risk Demonstration at school or school under construction for Relocated Facility:

PAR 1401.1 2-3 December 2022

 $[\]leq 1$ in one million cancer risk and hazard indices ≤ 1.0

or no increase in cancer risk or hazard indices

CHAPTER 3: IMPACT ASSESSMENT

ADDITION OF EARLY LEARNING AND DEVELOPMENT CENTERS

IMPACT ASSESSMENT

CALIFORNIA ENVIRONMENTAL QUALITY ACT

SOCIOECONOMIC ASSESSMENT

INCREMENTAL COST-EFFECTIVENESS

DRAFT FINDINGS UNDER HEALTH AND SAFETY CODE SECTION 40727

COMPARATIVE ANALYSIS

PAR 1401.1 December 2022

ADDITION OF EARLY LEARNING AND DEVELOPMENT CENTERS

PAR 1401.1 would expand the scope of schools to be considered when evaluating permit applications for new and relocated facilities by extending risk requirements to include centers that serve pre-kindergarten children. The California Department of Social Services (CDSS) issues licenses to child care centers in California. To identify early learning and development centers under PAR 1401.1, the CDSS child care center database⁵ is used, as it encompasses pre-kindergarten facilities, including child care centers, day care centers, and infant care centers.

Table 3-1 provides an inventory of early learning and development centers within the jurisdictional boundaries of the South Coast AQMD. As shown in the Table, the CDSS database categorizes child care facilities by center type (child care/day care center and infant center). It should be noted the CDSS also issues licenses to child care centers operated out of private homes, but these are not subject to existing Rule 1401.1 requirements or PAR 1401.1 provisions and were not included in Table 3-1.

Child Care Number **Definition** Age of Center of Children (22 CCR § 101152 Definitions) Type **Centers** "Child Care Center" or "Day Care Center" (or "center") means any child care facility of any capacity, other than a family child care home as defined in Section Child Care 102352f.(1), in which less than 24-hour per day Center or 2 to 5 3,132 Child Day nonmedical care and supervision are provided to children in a group setting. The term "Child Care Care Center Center" supersedes the term "Day Care Center" as used in previous regulations. "Infant Care Center" means any child care center or part Infant Care of a child care center of any capacity where less than 24-0 to 2 371 Center hour per day nonmedical care and supervision are provided to infants in a group setting.

Table 3-1 Licensed Child Care Centers in South Coast AQMD

The CDSS-licensed child care centers presented in Table 3-1 illustrate the impact of the expanded scope of the definition of school under PAR 1401.1. These child care centers primarily serve children from newborn to age five; therefore, by extending the scope of the definition of school to include these centers, pre-kindergarten children are provided the same protection from air toxics emitted from new and relocated facilities as school-aged children. The age ranges for each child care center type were determined through a combination of definitions contained in the California Code of Regulations and an exchange of emails with an associate governmental program analyst at the CDSS. The data

⁵ California Department of Social Services, Child Care Centers, , November 2022, obtained on November 22, 2022, from https://www.ccld.dss.ca.gov/carefacilitysearch/DownloadData

presented in Table 3-1 has been processed to remove centers already considered schools under the current 1401.1 school definition. For example, centers on the CDSS database that included the term "elementary school," "middle school," or "high school" in their name were removed as these centers would currently be subject to the Rule 1401.1 provisions. Additionally, some centers included infant and child care services at the same address, so the duplicate addresses were removed in these instances. Overall, the list of facilities reveals approximately 3,500 centers that can potentially be considered as additional schools when implementing PAR 1401.1.

As previously mentioned, the updated Schools definition under PAR 1401.1 is presently included in other South Coast AQMD toxics rules. The South Coast AQMD anticipates that for PAR 1401.1, it would follow the same procedures for identifying schools as what is currently done for other South Coast AQMD toxics rules, such as Rule 1469. These procedures include a web-based mapping search for terms such as "preschools", "elementary schools", "middle schools", and "high schools", as well as a search of the Head Start program website⁶ to identify Early Head Start, Head Start, First Five, and Child Developmental Centers.

IMPACT ASSESSMENT

Localized Toxic Impacts

In general, the Rule 1401.1 facility-wide risk requirements are more stringent than the current equipment-based requirements in Rule 1401 for new or relocated facilities that elect to site near schools. Therefore, the extended coverage of PAR 1401.1 is expected to result in lower toxic risk levels for children where toxic emitting facilities are close to an early learning and development center than would be allowed under current rules. The South Coast AQMD's Risk Assessment Procedures provide four levels of screening risks: Tiers 1, 2, 3, and 4. The tiers are progressively more complex, require increasingly more site-specific details, and provide more refined risk estimates. Under PAR 1401.1 provisions, facilities near an early learning and developmental center may need to conduct more detailed risk assessments, including dispersion modeling (Tier 3 or Tier 4). Facilities that cannot meet the risk requirements of PAR 1401.1 would have the option to limit its throughput, capacity, or hours of operation; install additional controls; or locate or relocate elsewhere within the same general area, rather than near a school, to ensure that PAR 1401.1 requirements are met.

Permitting Impacts

The amendments in PAR 1401.1 will be effective upon rule adoption. As mentioned in Chapter 2, PAR 1401.1 includes text to clarify that permit applications will be evaluated based on the Rule 1401.1 provisions in effect at the time the application is deemed complete. Historical permitting data was analyzed to estimate the PAR 1401.1 impacts. This "look back" approach was also used during the development of Rule 1401.1 in 2005. The goal of this exercise is to identify permitting actions that would have been subject to additional review under PAR 1401.1. To accomplish this task, permitting data for the past

PAR 1401.1 3-2 December 2022

⁶ https://eclkc.ohs.acf.hhs.gov

five years were studied to identify facilities located near the CDSS-identified child care centers, which would have been subject to PAR 1401.1. Rule 1401.1 provisions do not apply to existing facilities, which is defined in Rule 1401.1 paragraph (c)(3) as any facility that had equipment requiring a Permit to Construct/Operate before November 2005 or those where an application for a Permit to Construct/Operate is deemed complete before February 2, 2006. Therefore, the evaluation of recently submitted permits for PAR 1401.1 applicability was limited to "new" facilities that were in existence after November 2005. Relocated facilities are included in the evaluation because relocated facilities are considered "new" facilities when removed existing permitted equipment is installed at another facility without a change of ownership. Based on the South Coast AQMD's permitting database, over the last five years, permits were issued to approximately 6,000 facilities that are considered new or relocated facilities under Rule 1401.1 provisions.

The locations of these "new" facilities were compared to the child care center locations based on data provided by CDSS. To accomplish this spatial analysis assessment, a 150feet zone radius was added to the identified child care center locations to represent the child care center property boundary. An additional 1,000-feet buffer zone radius was added around the child care center "properties" to illustrate the applicability of PAR 1401.1 provisions. The assessment then identified the facilities that are located within the buffer zone of the child care centers. Based on this assessment, it is conservatively estimated that out of approximately 6,000 "new" facilities that submitted permit applications within the last five years, an average of 140 facilities per year would have been subject to additional review under the provisions of PAR 1401.1. The number of applicable facilities located within the 1,150-feet buffer zone is considered a conservative estimate as some applicable facilities included permits issued for equipment that might not have emitted air toxic emissions. Additionally, the 150-feet zone radius used to represent the child care center property boundary likely includes a larger area than the actual child care center property boundary. Moreover, the assessment might have identified facilities that are already subject to Rule 1401.1 due to a facilities' location near a school under the existing definition in Rule 1401.1 (i.e., a high school).

CALIFORNIA ENVIRONMENTAL QUALITY ACT

Pursuant to the California Environmental Quality Act (CEQA) and South Coast AQMD's certified regulatory program (Public Resources Code Section 21080.5, CEQA Guidelines Section 15251(1), and South Coast AQMD Rule 110), the South Coast AQMD, as lead agency, is currently reviewing the proposed project (PAR 1401.1) to determine if it will result in any potential adverse environmental impacts. Appropriate CEQA documentation will be prepared based on the analysis.

SOCIOECONOMIC IMPACT ASSESSMENT

A socioeconomic impact assessment will be conducted and released for public review and comment at least 30 days prior to the South Coast AQMD Governing Board public hearing which is scheduled to be held on March 3, 2023 (subject to change).

PAR 1401.1 3-3 December 2022

INCREMENTAL COST-EFFECTIVENESS

Health and Safety Code Section 40920.6 requires an incremental cost-effectiveness analysis when there is more than one control option that would achieve the emission reduction objective of the proposed amendments relative to ozone, Carbon Monoxide (CO), Sulfur Oxide (SOx), Nitrogen Oxide (NOx), and their precursors. Since PAR 1401.1 applies to toxic air contaminants, the incremental cost-effectiveness analysis requirement does not apply.

DRAFT FINDINGS UNDER HEALTH AND SAFETY CODE SECTION 40727

Requirements to Make Findings

Health and Safety Code Section 40727 requires that prior to adopting, amending, or repealing a rule or regulation, the South Coast AQMD Governing Board shall make findings of necessity, authority, clarity, consistency, non-duplication, and reference based on relevant information presented at the public hearing and in the staff report.

Necessity

A need exists to adopt PAR 1401.1 to minimize the exposure of school children to toxic air contaminants and to help meet the South Coast AQMD Governing Board's goals and objectives regarding cumulative impacts from toxic air contaminants.

Authority

The South Coast AQMD Governing Board has the authority to adopt PAR 1401.1 pursuant to the Health and Safety Code Sections 39002, 39650 et. seq., 40000, 40001, 40440, 40441,40506, 40702, 40725 through 40728, 41508, 41700, 42300, and 44391.

Clarity

PAR 1401.1 is written or displayed so that its meaning can be easily understood by the persons directly affected by it.

Consistency

PAR 1401.1 is in harmony with and not in conflict with, or contradictory to, existing statutes, court decisions, or state and federal regulations.

Non-Duplication

PAR 1401.1 will not impose the same requirements as any existing state or federal regulations. The rule is necessary and proper to execute the powers and duties granted to and imposed upon the South Coast AQMD.

Reference

By adopting PAR 1401.1, the South Coast AQMD Governing Board will be implementing, interpreting, or making specific the provisions of the Health and Safety Code Sections 39666 (new source review rules for toxics) and 41700 (nuisance).

PAR 1401.1 3-4 December 2022

COMPARATIVE ANALYSIS

Health and Safety Code Section 40727.2 requires a comparative analysis of the proposed rule requirements with any Federal or South Coast AQMD rules and regulations applicable to the same equipment or source category. There are no comparable federal rules or regulations regarding toxic air contaminants at new or relocated facilities near existing schools. In addition, Health and Safety Code Section 42301.6 and South Coast AQMD Rule 212 – Standards for Approving Permits and Issuing Public Notice require public notice for facilities locating near schools under certain circumstances. South Coast AQMD Rule 1402 establishes risk levels for existing facilities but does not apply to new sources. South Coast AQMD Rule 1401 applies to new sources, at an equipment level. It allows up to one in one million cancer risk for each new equipment at a facility and up to ten in one million if the equipment has T-BACT. Unlike PAR 1401.1, Rule 1401 has no facility-wide requirements and has no special provisions for facilities locating near schools. Therefore, there are no existing rules or regulations that specifically set facility-wide toxics emissions limits for new or relocated facilities near schools.

PAR 1401.1 3-5 December 2022