Proposed Rule 2306 - Indirect Source Rule for New Intermodal Facilities
Working Group Meeting #1

07/30/2021
10:00 AM
SOUTH COAST AQMD
DIAMOND BAR, CA

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Meeting Agenda

- **Background**
  - Proposed Rule (PR) 2306 – Indirect Source Rule for New Intermodal Facilities
  - Potential Emission Sources
  - Assembly Bill (AB) 617

- **Two New Proposed Intermodal Facilities in the South Coast Air Basin**
  - Proposed Colton Intermodal Facility
  - Proposed Southern California International Gateway ("SCIG")
  - CEQA Review Process and CEQA Limitations

- **Environmental Justice Concerns**

- **Need for PR 2306**

- **Overview of Rule Development Process**

- **Next Steps**

- **Staff Contacts**
Background

- 2016 AQMP included control measure MOB-02: Rail Yard and Intermodal Facilities which is one of four facility-based mobile source measures for NOx and PM
- Goal of MOB-02 is to assist in implementing the State SIP Strategy “Further Deployment of Clean Technologies” measures related to
  - On-road heavy-duty vehicles
  - Off-road equipment
  - Federal sources that operate in and out of intermodal facilities
- In May 2018 the South Coast AQMD Governing Board directed staff to initiate rulemaking for MOB-02
Proposed Rule 2306 – Indirect Source Rule for New Intermodal Facilities

- PR 2306 is designed to partially implement MOB-02 by focusing on new intermodal facilities.
- In general, new intermodal facilities include new facilities where locomotives and truck transportation modes are used for conveying goods.
- Through the rulemaking process staff will work with stakeholders to identify criteria to identify new intermodal facilities that would be applicable to PR 2306.
- Considerations include:
  - Number of containers moved.
  - Potential emissions related to federal NO2 standards, attainment of federal ambient air quality standards, and/or general conformity.
  - Proximity to Environmental Justice communities.
Potential Emission Sources at New Intermodal Facilities

Potential emission sources at new intermodal facilities includes:

- Drayage Trucks
- Cargo Handling Equipment
  - Such as container gantries and yard hostlers
- Locomotives (Line Haul and Switchers)
  - Including maintenance and testing areas
- Transport Refrigeration Units (TRUs)
- Others
Assembly Bill (AB) 617

- AB 617 was signed into state law in 2017
- Requires air agencies to identify priorities and actions to reduce toxic air contaminants and criteria pollutants in disproportionately affected communities
- There are currently five designated communities in the South Coast AQMD where Community Emission Reduction Plans (“CERPs”) have been developed that prioritize actions
- Emissions from railyards have been identified as areas of concern and an air quality priority in the CERPs in four of the AB 617 communities:
  - San Bernardino, Muscoy (“SBM”),
  - Wilmington, West Long Beach, Carson (“WCWLB”),
  - Boyle Heights, East Los Angeles, West Commerce (“ELABHWC”), and
  - Southeast Los Angeles (“SELA”)
Community Emission Reduction Plans (“CERPs”)

- Identified measures in the CERPs focused on reducing emissions at railyards and included:
  - Pursue development of an Indirect Source Rule
  - Reduce localized impact from railyards
  - Expand zero emission infrastructure
  - Work with CARB to develop new requirements to reduce emissions
  - Implement fenceline monitoring around intermodal facilities
Two New Proposed Intermodal Facilities in the South Coast Air Basin

- There are two new proposed intermodal facilities:
  - Freight Component of the California High-Speed Rail Project in Colton
  - Southern California International Gateway ("SCIG") by the Port of Los Angeles

- Both facilities would be operated by Burlington Northern Santa Fe ("BNSF") and are currently under environmental review

- Unique opportunity exists now to ensure that these new proposed intermodal facilities:
  - Implement the cleanest technologies feasible
  - Incorporate infrastructure to support zero emission technologies
  - Include measures that minimize air quality and public health impacts
  - Address community air quality priorities identified in CERPs
Proposed Colton Intermodal Facility

- Proposed intermodal facility planned for the City of Colton
  - Freight component of the California High-Speed Rail Project, Los Angeles to Anaheim Section

- Located next to two existing railyard facilities:
  - Within five miles south of an existing BNSF intermodal facility
    - Expects to be double the acreage of the existing BNSF intermodal facility
  - Directly adjacent to an existing railyard operated by Union Pacific

- Based on the Revised Notice of Preparation ("NOP")\(^1\), it will add 10 trains per day
  - South Coast AQMD estimates:
    - Annual average of 3,650 train trips; and
    - Annual average of 1.4 million round truck trips

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Proposed Colton Intermodal Facility (Cont’d)

Existing Union Pacific Facility

Proposed Facility

Map Legend
- Residential Area
- 1-Mile Boundary

Proposed Facility

Georgia Morris Elementary

William G. Jehue Middle

Ernest Garcia Elementary

Paul Rogers Elementary

Colton Middle

Arrowhead Regional Medical Center

Slover Mountain High School

Colton High School

Woodrow Wilson Elementary School

Samuel W. Simpson Elementary

Abraham Lincoln Elementary

Ulysses Grant Elementary

George Morris Elementary

Georgia Morris Elementary

William G. Jehue Middle

Ernest Garcia Elementary

Paul Rogers Elementary

Colton Middle

Arrowhead Regional Medical Center

Slover Mountain High School

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Proposed Southern California International Gateway ("SCIG")

- Proposed intermodal facility planned by the Port of Los Angeles
- Adjacent to an existing Union Pacific Intermodal Container Transfer Facility ("ICTF")
  - SCIG will lead to two mega intermodal facilities adjacent to one another in an area with existing high polluting facilities
- Located within 2 miles from the Port of Long Beach and within one mile from the Phillips 66, Marathon and Valero Refineries
- Based on the Revised Draft EIR\(^2\), it will add an annual average of 2,880 train trips
  - Adding annual average of 1 million round truck trips

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CEQA Review Process

- Proposed Colton Intermodal Facility
  - The California High-Speed Rail Authority (Authority) is the CEQA Lead Agency
  - The Authority initiated the CEQA/NEPA review process and released a Revised NOP in August 2020
  - Based on the Revised NOP, impacts on Environmental Justice and air quality are expected to be significant
  - The Authority is expected to release the Draft Environmental Impact Report in 2021 or early 2022

- Proposed Southern California International Gateway (“SCIG”)
  - Port of Los Angeles is the CEQA Lead Agency and began the CEQA review process in 2005
  - The South Coast AQMD has provided numerous written and oral comments raising concerns about SCIG’s air quality and public health impacts on Environmental Justice communities and lack of measures to mitigate those impacts
  - The South Coast AQMD and others challenged the SCIG’s EIR and prevailed
  - In May 2021, the Port released a Revised Draft EIR and identified the proposed SCIG project would cause significant localized air quality impacts related to NO2, PM10, and PM2.5 during operation
  - The Revised Draft EIR lacks any mitigation for reducing NO2 impacts. The only mitigation for PM is street sweeping, which is not sufficient to reduce the significant localized PM emissions
CEQA Limitations

- CEQA analyzes a project’s incremental (“net new”) impacts from a baseline, but does not consider impacts already existing on the ground (“existing conditions”) as project’s impacts.

- Projects are required under CEQA to implement feasible mitigation for incremental adverse impacts found to be significant compared to the baseline, but does not require a project to mitigate impacts already existing on the ground.

- A project located in an Environmental Justice area with a high-pollution baseline has the potential to obscure the project’s of incremental impacts, and mitigation may not be required.

- CEQA requires public disclosure and allows balancing with other public interests.
  - A project can still be approved to be built even if it has unavoidable, significant air quality and health risk impacts.

- PR 2306 will be focusing on the potential impacts that the community surrounding new intermodal facilities is already experiencing and will experience in the short and long-term.
Environmental Justice Concerns

- U.S. EPA defines Environmental Justice as:
  
  “the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies”

- Environmental Justice plays a central role for agencies at all government levels
  - Executive Order (“EO”) 14008 of January 27, 2021 directs federal agencies to address disproportionate health, environmental, economic and climate impacts on communities

- Both the Colton and SCIG facilities would be located near low-income communities and communities of color that are disproportionately impacted by pollution
U.S. EPA’s Environmental Justice Policy

- The National Environmental Policy Act ("NEPA"), which under EO 12898, requires Federal agencies to assess the environmental effects of projects and their effects on disproportionately impacted communities.

- Published the Environmental Justice 2020 Action Agenda with goals of:
  - Deepening Environmental Justice practice within EPA programs to improve the health and environment of disproportionately impacted communities.
  - Working with state and local governments to expand their impact within these communities.

- Established the Office of Environmental Justice to coordinate EPA’s efforts to address the needs of vulnerable populations.

- Provides grants and financial and technical assistance to disproportionately impacted communities working to address Environmental Justice issues.
In response to AB 617, established the Community Air Protection Program to reduce exposure in communities most impacted by air pollution
- Selected the disproportionately impacted communities for participation in the program
- Distributed funding allocated by the California Legislature for cleaner advanced technologies to communities through local air districts

Convened the Environmental Justice Advisory Committee to advise in developing the Scoping Plan and other climate change programs
- ARB’s Scoping Plan describes the approach the state will take to reduce greenhouse gases and is updated at least every five years

Administers Community Air Grants to community-based organizations for technical assistance and to support efforts to improve air quality and reduce emissions in order to combat climate change
Administers Environmental Justice Small Grants for non-profit community organizations and tribal governments to address Environmental Justice issues in areas disproportionately impacted by environmental pollution and hazards

Formed the Environmental Justice Task Force to coordinate the compliance and enforcement work of CalEPA’s boards (including the Air Resources Board) in disproportionately impacted communities

Along with OEHHA, developed CalEnviroScreen, a mapping tool that helps to identify disproportionately impacted areas
South Coast AQMD’s Early Adoption of Environmental Justice Agenda

- First established a community advisory council to advise on impact of air quality
  - In 2009, restructured into the Environmental Justice Advisory Group
- Adopted guiding Environmental Justice principles and initiatives to ensure South Coast AQMD is better positioned to work towards ensuring environmental equity in communities
- Developed Children’s Air Quality Agenda that focused South Coast AQMD’s work to mitigate disproportionate impacts of poor air quality on children

**South Coast AQMD** defines Environmental Justice as:

"...equitable environmental policymaking and enforcement to protect the health of all residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location, from the health effects of air pollution."
Conducted four Multiple Air Toxics Exposure Studies ("MATES") that monitored and evaluated emissions of toxic air contaminants in the South Coast Air Basin, especially focusing on disproportionately affected communities

- The MATES V Study is being finalized and has enhanced air toxics monitoring at local scales with a focus on Environmental Justice communities

Established the Environmental Justice Community Partnership to host forums, training sessions, and other outreach activities with an Environmental Justice focus

AB 617 Program
- Six disproportionately affected communities designated under the program
- Conducts extensive and ongoing outreach to, and discussions with, designated communities to develop and implement their CERPs
Identifying Environmental Justice Communities – CalEnviroScreen

- CalEnviroScreen is a science-based mapping tool developed by CalEPA and OEHHA that helps identify California communities most affected by multiple sources of pollution and vulnerable to its effects.
- Analyzes indicators of pollution burden and population characteristics in each census tract in the state.
- Calculates a score measuring the relative pollution burdens and vulnerabilities in one census tract compared to other census tracts.
  - Score is not a measure of health risk.
- The most burdened and vulnerable areas have the highest scores.
Environmental Justice Communities Near Colton Intermodal Facility

According to data obtained from CalEnviroScreen3:

- Communities immediately northeast and east of the facility all score in the top 95th percentile, meaning they experience the greatest pollution burden compared to other areas in the state.
- 45,600 residents, one hospital, and ten schools are within a one-mile radius.
- 18,100 residents are located in census tracts within 1,000 feet of the proposed facility boundaries.
  - Within recommended buffer zone4 for siting new sensitive land uses adjacent to a major service and maintenance rail yard.
- Average 69% of population are reported to be below the poverty level.
- Average 77% of population are Hispanic or African American.

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Environmental Justice Communities Surrounding SCIG

According to data obtained from CalEnviroScreen:

- Multiple communities within a one-mile radius score in the top 95th percentile
  - Communities experience the greatest pollution burden compared to other areas in the state
  - One community to the immediate east of the proposed facility score in the top 99th percentile

- 50,200 residents, seven schools and a Veteran Housing Facility are within a one-mile radius from the facility

- 12,000 residents are located in census tracts within 1,000 feet of the proposed facility boundaries

- Average 71% of population are reported to be below the poverty level

- Average 61% of population are Hispanic or African American

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Need for PR 2306

Minimize Public Health Impacts to Surrounding Environmental Justice Communities

Ensure Project Will Not Interfere with Attainment of Federal Air Quality Standards

Ensure Project will Meet Federal Conformity Requirements
Loma Linda University’s School of Public Health and Center for Community Action and Environmental Justice conducted assessments\(^6\) on health outcomes of residents in San Bernardino near the BNSF intermodal facility.

- Found significant association with increasing proximity to the railyard and adverse respiratory health outcomes, particularly among children
- Subsequent research\(^7\) found that children are at the highest risk of permanent damage to their respiratory systems

Health impacts associated with living in close proximity of intermodal facilities are not unique to San Bernardino.

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Health Effects of Diesel Particulates

- The California Office of Environmental and Human Health Assessment (OEHHA) determined in 1998 that diesel exhaust is a carcinogen\(^8\)
  - Cause multitude of non-cancer health effects such as respiratory ailments that can aggravate asthma
- OEHHA found that diesel exhaust particles pose the highest cancer risk of any toxic air contaminant that was evaluated\(^9\)\(^10\)
- The U.S. EPA stated that there is substantial evidence supported by decades of research that exposures to particulate matter from diesel exhaust are strongly linked with cancer\(^11\)

PR 2306 is Needed to Ensure New Intermodal Facilities Will Not Interfere with Attainment of Federal Air Quality Standards

- NAAQS are federal air quality standards established by the United States Environmental Protection Agency (“U.S. EPA”) under the authority of the federal Clean Air Act (“CAA”)
- Primary purpose is to protect public health

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https://ww2.arb.ca.gov/sites/default/files/2020-07/aags2.pdf
New Intermodal Facilities Have the Potential to Have Substantial NOx Emissions

- New intermodal facilities will potentially operate a variety of emission sources, such as:
  - Drayage Trucks
  - Various Forms of Cargo Handling Equipment
  - Locomotives
  - Transport Refrigeration Units

- Equipment are generally fueled with diesel which emit ozone precursors such as NOx as well as emitting diesel particulate, PM10, and PM2.5
  - The South Coast Air Basin is designated as an extreme non-attainment area for ozone

- 2035 NOx emissions for the Proposed SCIG project are 245 tons per year
  - Compared to 2020 emissions for NOx RECLAIM, the proposed SCIG project represents the 10th highest NOx emitter
New Intermodal Facilities Have the Potential to Exceed Federal Air Quality Standards

- According to the Revised Draft EIR, the NO2 concentrations for the proposed SCIG project during operation exceed the applicable NAAQS by 325%.
- Exceedances are projected to continue for decades after facility completes construction.
- South Coast Air Basin is currently in attainment of the 1-hour federal NO2 standard.
  - Proposed SCIG Project on its own could potentially put Basin into nonattainment.

Estimated NO2 Concentrations from Proposed SCIG Project Compared to NAAQS

Federal Conformity Requirements

What is Federal Conformity?

- Conformity is required under the federal Clean Air Act for improving air quality and to protect public health.
- Applies to federal actions conducted or sponsored by federal agencies to ensure consistency with state air quality goals in areas designated by the U.S. EPA as “non-attainment” or “maintenance”.
- There are two categories of conformity:
  - General Conformity and
  - Transportation Conformity.
General and Transportation Conformity

Federal Clean Air Act

General Conformity
- Covers federally funded or approved actions not covered by Transportation Conformity

Transportation Conformity
- Covers federally funded or approved transportation activities (e.g., highways, transit, intermodal facilities)

Purpose:
Ensures federal actions do not:
- Cause or contribute to new violations of NAAQS;
- Worsen existing violations of the NAAQS; or
- Interfere with goals of the SIP; or
- Delay the timely attainment of applicable NAAQS
South Coast AQMD Responsibilities for General Federal Conformity

- The South Coast AQMD has responsibility under the federal Clean Air Act to ensure that federal action conforms to the latest approved SIP as well as federal conformity requirements.
- Previous air quality plans include a budget that allows for growth, and new development needs to "conform" to that budget.
  - General conformity budgets are established in a set-aside account in AQMP that is included in the adopted State Implementation Plan (SIP) approved by U.S. EPA.
  - The SIP must account for any federal action.
  - If emission increases are greater than the de minimis thresholds for the relevant pollutants or precursors, a conformity determination from the South Coast AQMD is needed.
Southern California Association of Governments (“SCAG”) has responsibility under the federal Clean Air Act to ensure federally-supported transportation action conforms to or is consistent with the latest approved SIP
- SCAG’s Regional Transportation Plan (“RTP”) is included in the AQMP as regional transportation strategies and control measures
- Not being included in the RTP has the potential to create new violation of the federal air quality standards, worsen the existing violation, or delay the timely attainment of the applicable air quality standards
  - Has the potential to obstruct the implementation of the adopted AQMP

The Colton intermodal facility is **not** included in the latest approved SIP (2016 AQMP)
- The Colton intermodal facility is **not** in the adopted 2020 RTP which means it will not be accounted in the forthcoming 2022 AQMP
- Project-level particulate matter hot spot analysis pursuant to federal conformity requirements may be needed
Overview of Rule Development Process

- Information Gathering and Analysis
- Initial Objective and Scope
- Rule Development Concepts
- Draft Proposed Rule Language
Information Gathering and Analysis

- Information gathering and analysis occurs throughout the rule development
  - Initial data gathering starts well before the first Working Group Meeting to identify potentially affected facilities and equipment
  - Additional information gathered from stakeholders, other agencies, facilities, technology suppliers
- Information and analysis presented to the Working Group
South Coast AQMD’s rule development process is designed to be collaborative.

Objective is to work through key issues through communication.

Early participation from stakeholders during the rulemaking process is highly encouraged.

Staff to hold periodic working group meetings to update stakeholders on latest developments.

Stakeholder Input
Next Steps

➢ Initiate individual meetings with Facility Stakeholders, Community Groups, and Other Government Agencies
➢ Present updates during next working group meeting
## Staff Contacts

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<th>General Questions</th>
<th>Proposed Rule 2306</th>
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