Equilon Enterprises, LLC, Shell Oil Production, US (Equilon)
AB 2588 Public Meeting

South Coast Air Quality Management District
July 22, 2020
Purpose of Meeting

- Notify public of estimated health risks in 2015
- Background about Equilon
- About Health Risk Assessments
- Estimated health risks for Equilon
- Public input and comments
Who We Are

• The South Coast AQMD is the regional agency responsible for air quality for areas in LA, Orange, Riverside and SB Counties
  • Largest of the 35 local air agencies in CA
  • Work with CARB and EPA to meet state and federal standards

• Responsibilities
  • Control emissions from stationary sources (e.g., power plants)
  • Comply with U.S. government air quality standards
  • Permit and inspect 28,400 affected businesses
  • Administer $100 million of incentive funding annually
South Coast AQMD’s Air Toxics Program

- Over 25 rules to reduce toxic air contaminants
- Community meetings and direct public communication 1-800-CUT SMOG
- All new and modified sources are evaluated for toxics during permitting (Rules 1401 and 1401.1)

- South Coast AQMD Toxics Rules
- Rule 1402 and Toxics Hot Spots Program
- Ambient Air Monitoring and AB 617
- Permitting
- Community Meetings and 1-800-CUT-SMOG
- Multiple Air Toxics Exposure Study
- Compliance

- Requires Health Risk Assessments, Risk Reduction Plans, and Public Notification
- Ambient monitoring near facilities and community monitoring
- Ensures facilities are complying with Toxic Rules
- Measures regional toxic air contaminants throughout air basin
The Air Toxics “Hot Spots” Information & Assessment Act (AB 2588)

• State law enacted in 1987 (Connelly)
• Public **Right-to-Know** Program

**Purpose**
- Collect emissions data with updates every 4 years
- Identify facilities having localized impacts
- Evaluate potential health risks through Health Risk Assessments
- Notify residents of those potential health risks
- Reduce health risks below certain thresholds

**Rule 1402**
- Implements requirements of AB 2588
- More stringent requirements for reducing health risk
Equilon

• Located at 20945 S. Wilmington Ave in Carson, CA.
• Bulk gasoline and chemical distribution terminal
• HRA required based on 2015 emissions
Operations at Equilon

- Primary sources of risk are from portable diesel-fired internal combustion engines and storage tanks
- Other emission sources include a soil vapor extraction system, bioreactor, wastewater treatment system, and truck load racks
About Health Risk Assessments

Estimates the chance that a person may experience a health effect from toxic air contaminant emissions

“Snapshot” based on toxic air contaminant emissions from one year of operation
Assumes 2015 emissions levels for 30 years

Snapshot can change if toxic air contaminant emissions are reduced

Conservative assumptions - people are outdoors 24 hours, 7 days a week in one location
3 Key Health Risk Elements of Rule 1402

Cancer Risk
- Estimates the increased probability for cancer
- Expressed in “Chances in a million”

Non-Cancer Risk
- Estimates non-cancer health effects
- Acute non-cancer effects are from short-term exposure
- Chronic non-cancer effects are from long-term exposure
- Expressed using a Hazard Index (HI)

Cancer Burden
- Estimates the increase in the occurrence of cancer cases in a population subject to a cancer risk of 1 in a million or greater
- Cancer burden ≥ 0.5 requires risk reduction
# Health Effects of Key Toxic Air Pollutants

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<thead>
<tr>
<th>Toxic Air Pollutant</th>
<th>Exposure</th>
<th>Health Effect</th>
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<tbody>
<tr>
<td>Diesel Particulate Matter</td>
<td>Long-term</td>
<td>Cancer and non-cancer chronic effects on the respiratory system</td>
</tr>
<tr>
<td>Benzene</td>
<td>Short-term and Long-term</td>
<td>Cancer, non-cancer acute, non-cancer chronic, non-cancer chronic 8-hour effects on the human reproductive, blood, and immune systems</td>
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## Rule 1402 Health Risk Thresholds

<table>
<thead>
<tr>
<th>Cancer Risk Thresholds</th>
<th>Risk Reduction</th>
<th>Cancer Risk ≥ 25 in one million</th>
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<td>Public Notification</td>
<td>Cancer Risk ≥ 10 in one million</td>
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<tr>
<th>Non-Cancer Risk Thresholds</th>
<th>Risk Reduction</th>
<th>Non-Cancer HI ≥ 3</th>
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<td>Public Notification</td>
<td>Non-Cancer HI ≥ 1</td>
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| Cancer Burden Threshold    | Risk Reduction                  | Cancer Burden ≥ 0.5               |
Cancer Risk Evaluations

Residential Receptor
- Continuous exposure for 30 years
- All age groups evaluated

Offsite Worker Receptor
- Exposure for 8 hours per day, 5 days per week for 25 years
- Adult age groups evaluated
Residential Cancer Risk – 2015 Emissions

EQUILON ENTERPRISES, LLC, SHELL OIL PRODUCTION, US
Public Notification Map

Maximum Cancer Risk – 22 in-one-million (Residential)

E. Del Amo Blvd

E. 213th Street

Wilmington Ave
Residential Cancer Risk – 2015 Emissions
Residential Cancer Risk – 2015 Emissions

Maximum Cancer Risk – 22 in-one-million (Residential)
Non-Cancer Acute Risk – 2015 Emissions

Maximum Non-cancer Acute Hazard Index – 1.30
Cancer Risk Context

South Coast AQMD Public Notification Threshold

Maximum Residential Cancer Risk from Equilon if 2015 Emissions Continued

South Coast AQMD Risk Reduction Threshold

Regional Average Cancer Risk from All Sources*

Mostly due to diesel particulate matter

* Based on MATES IV study
Public Notification Process

• AB 2588 Notification
  • Letter sent to ~200 addresses
  • Public meeting via Zoom
More Information on the AB 2588 Program

• South Coast AQMD AB 2588 Website

• Link to the 2015 Approved HRA

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