Southern California Edison
Pebbly Beach Generating Station (PBGS)
AB 2588 Public Meeting

South Coast Air Quality Management District
June 24, 2020
Purpose of Meeting

- Notify public of estimated health risks in 2015
- Background about PBGS
- About Health Risk Assessments
- Steps taken to reduce the health risks
- Estimated health risks today
- 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
- 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

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)
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
PBGS

• Located at 1 Pebbly Road in Avalon, CA.

• Primary producer of electric power for Santa Catalina Island
  • Primary provider of water for Santa Catalina Island
  • Primary provider of liquefied petroleum gas for Avalon

• HRA required based on 2015 emissions

Boundary of PBGS
Operations at PBGS

- Primary source of risk is from six diesel-fired internal combustion engines
- Other devices include a diesel-fired emergency generator, 23 liquefied petroleum gas-fired micro turbines, two diesel fuel tanks, a portable gasoline welder, and abrasive blasting equipment
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

<table>
<thead>
<tr>
<th>Toxic Air Pollutant</th>
<th>Health Effect</th>
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<tbody>
<tr>
<td><strong>Exposure</strong></td>
<td><strong>Potential Effects</strong></td>
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<td>Diesel Particulate Matter</td>
<td>Long-term</td>
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Rule 1402 Health Risk Thresholds

Cancer Risk Thresholds
- Risk Reduction: Cancer Risk > 25 in one million
- Public Notification: Cancer Risk > 10 in one million

Non-Cancer Risk Thresholds
- Risk Reduction: Non-Cancer HI > 3
- Public Notification: Non-Cancer HI > 1

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
Rule 1402 Risk Reduction Plans

• Permanent, verifiable, and enforceable risk reduction measures
• Must be implemented within 2½ years from the approval of plan or sooner
• Must reduce the facility-wide health risk below 25 in-a-million for cancer risk and a Hazard Index of 3 for non-cancer health effects

Risk Reduction Plan – Required if Risk > Risk Reduction Threshold
Residential Cancer Risk – 2015 Emissions
Residential Cancer Risk – (Pebbly Village)
Residential Cancer Risk – (Mt Ada Inn)
Cancer Risk Context

South Coast AQMD Public Notification Threshold

Maximum Residential Cancer Risk from PBGS if 2015 Emissions Continued*

South Coast AQMD Risk Reduction Threshold

Santa Catalina Island Average Cancer Risk from All Sources

Regional Average Cancer Risk from All Sources**

Mostly due to diesel particulate matter
Public Notification Process

• AB2588 Notification
  • Letter sent to ~30 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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