

# Public Comments and OEHHA's Response to Comments

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- ◆ OEHHA received comments from:
  - ◆ Santa Barbara Air Pollution Control District
  - ◆ Western States Petroleum Association
  - ◆ County Sanitation Districts of Los Angeles County
  - ◆ Natural Resources Defense Council (NRDC)
  - ◆ U. S. Environmental Protection Agency (USEPA)
- ◆ This presentation summarizes the significant comments of general interest.
- ◆ A more detailed Response to Comments is posted on OEHHA's website.



# Comments from the Santa Barbara Air Pollution Control District

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- ◆ **Comment:**
  - ◆ **Explain early in life weighting factors. Clarify that Hot Spots Analysis Reporting Program (HARP) will reflect proposed values.**
  
- ◆ **Response:**
  - ◆ **Provided explanation.**
  - ◆ **Confirmed HARP will be reprogramed with proposed values.**



# **Comments from the County Sanitation Districts of Los Angeles County**

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- ◆ **Comment:**
  - ◆ **Examples should be included to provide side-by-side point risk calculations. We are concerned that facilities could be perceived as increasing pollution levels, while in the fact, the opposite may be occurring. A facility could have substantially lowered its emissions, and yet be identified as causing an increase in risk.**
- ◆ **Response:**
  - ◆ **OEHHA has expanded our explanation of the changes in the Introduction. We included a statement that estimated risks can go up or down simply due to the change in the methodology for estimating risks.**



# **Comments from the County Sanitation Districts of Los Angeles County**

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- ◆ **Comment:**
  - ◆ **A simple table showing a single age-weighted breathing rate against percentiles similar to Table 3.23 in the previous (year 2000) version of the draft TSD would be beneficial to those calculating Tier 1 point estimate risks.**
- ◆ **Response:**
  - ◆ **Unfortunately because the age ranges are different such a table are of limited benefit. The previous breathing rates are presented in Chapter 3 and a slide in OEHHA's presentation to the SRP. The proposed breathing rates are not radically different from the previous breathing rates to the limited extent that they can be compared.**



# Comments from NRDC

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- ◆ **Comment:**
  - ◆ **The NRDC urges OEHHA to encourage presentation of the risks from multiple facilities.**
  
- ◆ **Response:**
  - ◆ **Although OEHHA agrees with NRDC that cumulative risks from multiple facilities, is important, the Hot Spots legislation specifies that Hot Spots risk assessments only consider emissions from the facility in question.**



# Comments from NRDC

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- ◆ **Comment:**
  - ◆ **NRDC is concerned that daily or yearly variability in emissions could lead to a significant underestimation of exposure. NRDC is particularly concerned that with persistent and/or bioaccumulative contaminants, long term exposure estimates based solely on an annual average could significantly underestimate exposures**
- ◆ **Response:**
  - ◆ **Estimation of the variability in hourly emissions from industrial processes is not generally available. However, if the annual average emission rate is properly determined, estimates of cancer and noncancer chronic risk would probably not be underestimated, even with bioaccumulative contaminants.**



# Comments from NRDC

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- ◆ **Response (cont.):**
  - ◆ **Estimates of acute maximum 1 hour concentrations consider worst case 1 hour emissions where appropriate. Emissions estimates are intended to err on the side of overestimation, not underestimation, however, if emissions estimates are inaccurate the risk estimates could be seriously underestimated.**



# Comments from NRDC

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- ♦ **Comment:**
  - ♦ **The list of contaminants for which this pathway is to be evaluated does not include all air toxics for which there is evidence of exposure through breast milk ingestion. Inhalation exposure to volatile organic compounds (VOCs), including benzene, toluene, and tetrachloroethylene (TCE), have been found to result in elevated levels of these compounds in breast milk.**



# Comments from NRDC

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- ◆ **Response:**
  - ◆ **OEHHA analyzed the significance of exposure to volatile organic chemicals via the breast milk pathway and concluded that exposure was not significant relative to infant exposure through inhalation. The chemicals of most concern for the breast milk pathway, with low level environmental exposures, are those with a long  $t_{1/2}$  in the mother's body that accumulate in the mother's body (e.g. dioxins).**



# Comments of WSPA

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- ◆ **Comment:**
  - ◆ **We support the proposed changes to the default values for exposure duration for a resident and worker. As noted in the TSD, a 30-year residential exposure duration is a reasonable estimate of the 90th or 95th percentile of residence time. Similarly, for the worker, 25 years represents a reasonable estimate of the 95th percentile for employment tenure. These proposed values are also consistent with the default values used under many other regulatory programs.**



# Comments of WSPA

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- ◆ **Response:**
  - ◆ **Data available since the previous version of the Exposure Assessment and Stochastic Analysis Document allowed OEHHA to refine our estimates of residential exposure duration, employment tenure and activity patterns. There is an explanation of how the fraction of time away from home is to be applied in Chapter 11. We will review the explanation and provide more detail.**



# Comments of WSPA

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- ◆ **Comment:**
  - ◆ **The derivation of breathing rate point estimates to be applied for exposures of less than 24-hours per day (e.g., for 8-hour) is unclear. It is also unclear how to translate a 1-hour breathing rate to an 8-hour (or other exposure time) breathing rate for a school child, off-site worker, or other receptor.**
- ◆ **Response:**
  - ◆ **OEHHA has clarified the application of the breathing rates for offsite workers in Chapter 3. OEHHA has added a heavy intensity and light intensity breathing rates so that a greater range of worker breathing are available for different occupations.**



# Comments of WSPA

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- ◆ **Comment:**
  - ◆ **It is well documented that outdoor air is not well correlated with indoor air (at least based on centralized ambient air monitors) and is very poorly correlated with personal exposure. Indeed, indoor air quality is a function of ventilation (e.g., open windows, air conditioner use, building construction) and a myriad of other activities such as cooking or cleaning**
- ◆ **Response:**
  - ◆ **It is true that indoor air concentrations may not be well correlated with outdoor air concentrations.**
  - ◆ **Further concentrations of chemicals found in the outdoors may be lower than the same chemical indoors due to indoor emission sources.**



# Comments of WSPA

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- ◆ **Response (cont.):**
  - ◆ **However, the purpose of the Hot Spots program is provide a “public right to know” concerning emissions and risk from stationary facilities in the proximity of residents and offsite workers.**
  - ◆ **Since the ultimate source of indoor air is outdoor air, the assumption that the modeled annual average concentration of indoor air from facility emissions would be reflected indoors appears to be valid.**



# Comments of USEPA

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- ◆ **Comment:**
  - ◆ **Using the DLW for the Age 0 < 2, and a mean of all the studies for all other age groups for the long term daily estimate for chronic risk assessment would generate a higher High end L/kg-day value for the 2 <9 age group than the 0 < 2 age group, which is against the decreasing trend observed for the mean value and all other estimates. This is also true for the 95<sup>th</sup> percentiles**
- ◆ **Response:**
  - ◆ **It is physiologically implausible that high end (95<sup>th</sup> percentile) breathing rates on a per kg body weight basis would be higher in the age 2<9 group compared to the 0<2 group.**



# Comments of USEPA

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- ◆ **Response (cont.)**
  - ◆ **The caloric intake method will tend to overestimate breathing rate because it does not capture typical caloric intake with only two days worth of survey data.**
  - ◆ **The MET method is less certain than the other two methods because the upper percentiles exceed the limits of sustainable activity.**
  - ◆ **OEHHA re-evaluated our approach and has decided in the interests of a consistent approach for each age group to average the DLW method and the total caloric intake method (CSFII) for all age groups, including 0-<2 yrs, and not to average in the MET method, which has more uncertainty than the other methods.**

