

# Program Name

## **Air Toxics Science Advisory Committee Meeting #12**

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March 22, 2017

ODOT Building, 123 NW Flanders, Portland, OR

# Agenda

- Introduction
- ATSAC administrative items
- Diesel particulate matter: summary of work and discussion
- Check in with attending DEQ staff
- Break (10 minutes)
- New toxicity information for ammonia, benzo(a)pyrene, 2,4-, 2,6-toluene diisocyanate, and xylenes
- Summary of ATSAC recommendations
- Next steps
- Audience questions and comments (11:45 am to Noon)

# Administrative Items

- AT SAC rounding policy: Typically round to one significant figure, but each case discussed by the AT SAC.
- AT SAC age-dependent adjustment factors (ADAFs) for mutagenic carcinogens: Do not use to alter ABCs, but apply when conducting a risk assessment
- Short-term guideline concentrations: AT SAC urged DEQ to use agency toxicologists to identify SGCs from vetted authoritative bodies
- If two toxicity values are available from different agencies which have used the same study as their basis, then AT SAC will choose the higher (less-stringent) of the two values.

# Ammonia

- Current ABC of 200 ug/m<sup>3</sup> based on 2000 OEHHA REL.
- New IRIS information became available in September 2016 (RfC of 500 ug/m<sup>3</sup>).
- Both agencies used the same occupational worker study by Holness et al., 1989, to obtain their RfC values.
- Retain current ABC or revise it?

# Benzo(a)pyrene

- Benzo(a)pyrene toxicity serves as basis of ABC for PAHs.
- Current ABC of 0.0009 ug/m<sup>3</sup> for BaP; 1999 OEHHA URE of 1.1 x 10<sup>-3</sup> per ug/m<sup>3</sup>, or 0.0009 ug/m<sup>3</sup>.
- New IRIS information became available in January 2017(Inhalation Unit Risk of 6 x 10<sup>-4</sup> per ug/m<sup>3</sup>, or 0.002 ug/m<sup>3</sup>).
- Both agencies used the hamster study by Thyssen et al., 1981, to obtain their RfC values.
- Retain current ABC for PAHs, or revise it?

## 2,4-, 2,6-toluene diisocyanate (mixture)

- Current ABC of 0.07 ug/m<sup>3</sup> is based on 1995 IRIS RfC.
- New ATSDR information became available in September 2015 (chronic MRL of 0.000003 ppm, or 0.02 ug/m<sup>3</sup>).
- Two different studies were used:
  - - IRIS used Diem et al., 1982 study.
  - - ATSDR used Clark et al., 1998 study instead of the Diem study.
- Retain current ABC, or revise it?

# Toluene

- Current ABC of 700 ug/m<sup>3</sup> is based on 2000 OEHHA REL.
- New ATSDR information became available in August 2007 (chronic MRL of 0.05 ppm, or 200 ug/m<sup>3</sup>).
- Same study, Uchida et al., 1993, was used to obtain both values.
- Retain current ABC, or revise it?

# Summary of ATSAC ABC Recommendations: Jan. 2015 – Jan. 2016

- Out of 52 chemicals with ABCs, the ATSAC has reviewed 29 of them.
- Of these 29, 19 of the ABCs were revised, 9 were retained, and DPM pending.
- Three current ABCs for three different forms of nickel will likely be replaced with two recommended ABCs for two categories of nickel: soluble nickel compounds and insoluble nickel compounds.
- ABC for PAHs are likely to be undergirded by 25 individual PAHs rather than the current 32 PAHs; and the mix will change.
- ATSAC identified ABCs for three new chemicals: Phosgene, n-Propylbromide, and Styrene.



# Next Steps

- ATSAC rulemaking to EQC in November 2017; public comment period likely to occur late summer 2017.
- Role of ATSAC in pending Cleaner Air Oregon rulemaking still being decided.
- If ATSAC continues in its current role, next round of ABC review will occur in 2020.

Documents can be provided upon request in an alternate format for individuals with disabilities or in a language other than English for people with limited English skills. To request a document in another format or language, call DEQ in Portland at 503-229-5696, or toll-free in Oregon at 1-800-452-4011, ext. 5696; or email [deqinfo@deq.state.or.us](mailto:deqinfo@deq.state.or.us).