

Stockton Environmental Monitoring

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Overview

- **Orica carcinogenic Cr VI pollution event in Stockton**
- **Followed by arsenic and ammonia pollution events**
- **Orica committed to Stockton residents at CRG meeting to fund the installation and operation of monitoring stations on Stockton**

Process

- **Stockton Community Action Group (SCAG) was to prepare a proposal to present to Orica**
- **This was done with considerable input from OEH/EPA to ensure they met the requirements of stations proposed for the Lower Hunter Monitoring system and Howard Bridgman from University of Newcastle**
- **Proposal presented to Orica on 2 December 2011**
- **Followed by meetings with Orica and EPA with SCAG and Howard Bridgman**

Monitoring Station (Permanent)

- Base on Upper Hunter monitoring stations with some variation on monitors
- Will include:
 - NO_x/NO₂
 - Ammonia (ppb)
 - PM_{2.5} (BAM)
 - PM₁₀ (TEOM)
 - ASP (allow analysis of particles PM_{2.5} and PM₁₀ – same as Mayfield)
 - Meteorological parameters (wind speed and direction, temperature and humidity)

Monitoring Station (Permanent)

- **Would be established by EPA**
- **Connected to OEH/EPA website**
- **Accessible by the community**
- **Presentation similar to Upper Hunter data**
- **Regular reports prepared by EPA on data**
- **Station operated by EPA**

Monitoring Station (Permanent)

- **Capital cost estimated at \$410,000 and includes:**
 - **Equipment**
 - **Building and fencing**
 - **Slab**
 - **Connections**
 - **Approvals**
 - **EPA project manger**
 - **Connection to the OEH website**
- **Time frame 6 to 8 months to install and commission following approval to proceed**

Monitoring Station (Permanent)

- **Operating Costs** estimated at \$180,000 first year and reducing as more stations come on-line down to approximately \$100,000 per annum. Operating costs shared between industries on KI ultimately.
- **Costs include:**
 - Stores, filters, calibration
 - Power
 - 3G
 - Site rental and fees
 - Car, laptop, storage
 - Staff (staff cost reduces as further stations come on-line)
 - ANSTO testing and hire cost

Temporary Station

- To allow monitoring to commence at an early date first quarter 2012 temporary system has been discussed
- Would involve the following:
 - Hire of ANSTO ASP unit and installation in sub-station near existing monitors
 - Caravan/trailer fitted with NO_x/NO₂ and ammonia monitors and located near sub-station
 - Data on Orica website for community access
 - Funded and operated by Orica
- All equipment transferred to permanent monitoring station when ready

Next Stage

- Meeting between SCAG, Orica, EPA and Howard Bridgman to be held early January 2012 to discuss and develop
- Orica to commit to temporary and permanent monitoring stations and timeline installation/operation
- Presentation to the Stockton community on air quality monitoring, Stockton station and Lower Hunter monitoring system by EPA and Howard Bridgman

Next Stage

- **Commitment from wider industry towards Stockton monitoring station**
 - **Can KI industry in particular PWCS and NCIG commit to sharing operating costs of permanent station on Stockton before the proposed Government scheme given:**
 - Coal dust issue being experienced at a greater level in Stockton
 - Proposed expansions of coal terminals
 - Concern in the Stockton community of the health effects of fine PM2.5 and PM10 particles
 - Lack of suitable monitoring to EPA and latest world best practice in Stockton (continuous for PM2.5 and PM10 and ASP system for analysis)

Summary

- **Temporary monitor set-up and operated at Stockton by Orica first quarter 2012**
- **Permanent Stockton monitoring station set-up as part of Lower Hunter monitoring system by the EPA installed by end of 2012**
- **Access of data by community on websites**
- **Presentation to Stockton Community**
- **Commitment to funding of Stockton monitoring operations shared by wider industry on KI and in particular PWCS and NCIG before Government scheme introduced**
- **SCAG wishes to thanks Howard Bridgman and the EPA/OEH for their assistance**