



Particle collection using 'The Woozle'

A high volume sampler (0.9 to 1 m³ min⁻¹) originally intended to sample dioxins emitted from bushfires.

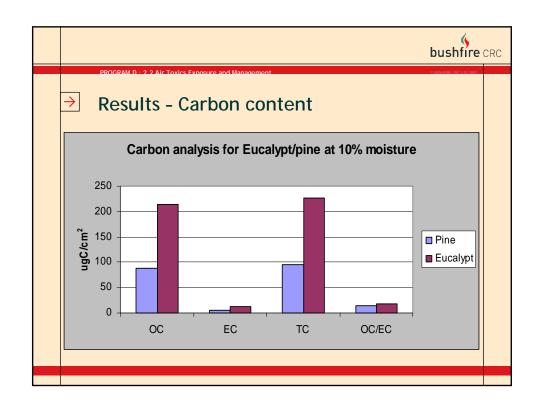
Including:

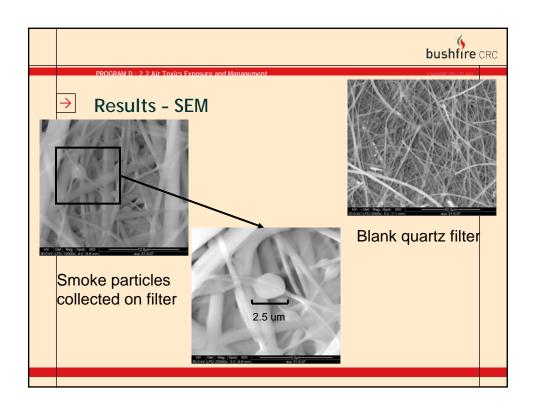
- An 8 x 10" quartz filter
- A PM 2.5 Dustrak upstream of the filter.
- A CO₂ gascard, a Q-trak and a hydrocarbon analyzer, all drawn from the main sample line downstream of the filter.
- [CO₂], [CO], [CH₄], [NMHC], [PM], enable carbon mass balance EF's

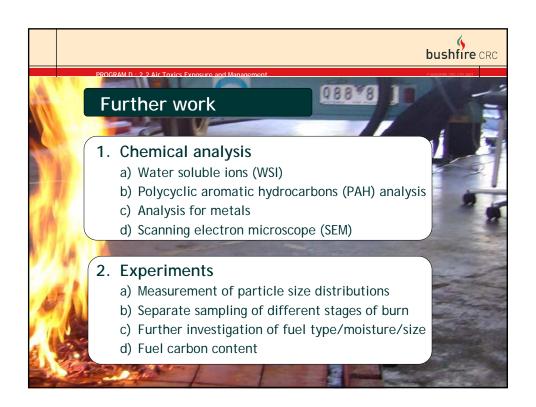




_	Sults - TSP	e and Management Emission facto	e RUSHFIRE	hfire
Fue	el type	Fuel Moisture (%)	Emission Factor (g/Kg fuel)	
Euc	calyptus	5	11.7	
		10	17.6	
Pin	e	10	11.3	-
		26	21.4	-









PROGRAM D · 2 2 Air Toxics Exposure and Management

Field Monitoring - Sampling design

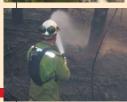
- 1. Ideal sampling in breathing zone of firefighter
- 2. Robust, small, light weight equipment
- 3. Long battery life, and large data storage/appropriate filter media
- 4. Comfortable, unrestrictive, versatile
- 5. Local area monitoring
- 6. Quick and easy to mount to vehicles



Field monitoring - personal

Samples collected in the breathing zone of active firefighters







Devices

TSI SidePak w/ 10 mm nylon Dorr-Oliver cyclone

TEI *personal* Data-logging Real-time Aerosol Monitor (pDR)

Gravimetric sampling 25 mm glass fibre filter Conductive plastic cyclone

Draeger Pac III Gas Monitor w/ Carbon Monoxide sensor

