# Instructions for DustWatch Form

Could you please note in the attached form:

#### 1 Location

in the format: Nearest town - distance and direction from town

#### 2 Date and time

in the format: 04/12/04 13:45

#### 3 Event type

## Locally blowing dust

Definition: Dust is being lifted off local paddocks.

Visibility: Estimate the visibility at the site of entrainment (ie in the paddock).

#### Dust storm

Definition: Dust is being carried in and lifted locally by a dust storm

Visibility: Estimate the visibility within the dust storm.

### Dust haze

Definition: Dust is being carried in from somewhere else (ie no local dust being lifted)

Visibility: Estimate the overall visibility by how far you can see (up to 40km)

#### 4 Dust Colour

Describe the colour of the dust e.g. light brown, red, reddish brown, white etc.

## 5 Visibility (km)

Record the visibility in kilometres as this is used to measure for severity. In estimating visibility, the estimate is based on the distance of the furthest object that can be "clearly seen and identified." The trick here is the concept of "clearly visible". Can you see the outline of the object clearly?

The dust storm and dust haze observations can be made by setting up distance markers to make visibility measures easier. For example the treeline on the creek is 10km away, the windsock is 5km, front gate is 1km, machinery shed 0.5km.

## 6 Wind speed (km/h)

Use the Beaufort Scale (see separate worksheet) to estimate wind speed.

#### 7 Wind Direction

Use standard compass directions to indicate from which direction the wind was blowing from at the time of observation.

When completed, please either e-mail, fax or mail the form to:

E-mail: dustwatch@environment.nsw.gov.au

Ph: 0419 634 554 Fax: 02 6742 3129 Mail: DustWatch PO Box 20

Office of Environment and Heritage

GUNNEDAH, NSW 2380

## DustWatch South East Observation Sheet

See below for definitions

		Time	Event type			Dust	Visibility	Wind			
Location	Date	(24hr clock)	Local Blowing Dust	Regional Dust Storm	Dust Haze	Colour	(km)	speed (km/h)	Wind Direction	Observer Comments	Observer's name
Bourke - 20km east of	12/11/2004	15:00	1			red brown	5	20	SW	rolling storm to SW	Joe Bloggs
Bourke - 20km east of	12/11/2004	16:00			1	red	0.1	75	N	storm hit 15:25, very thick and gritty still a lot of dust being blown in	Joe Bloggs
Bourke - 20km east of	12/11/2004	17:00		1		light brown	0.5	60	NE	still a lot of dust being blown in house	Joe Bloggs
Start here											

#### **Event Type Definitions:**

Locally blowing dust: Dust is being lifted off local paddocks. Estimate the visibility at the site of entrainment (ie in the paddock).

Dust storm: Dust is being carried in and lifted locally by a dust storm. Estimate the visibility within the dust storm.

**Dust haze:** Dust is being carried in from somewhere else (ie not local dust). Estimate the overall visibility by how far you can see (up to 40km)

After each dust event, please e-mail, fax or mail the form to BE DustWatch Team

E-mail: dustwatch@environment.nsw.gov.au

Fax: 02 6742 3129

Mail: Office of Environment and Heritage

PO Box 20

GUNNEDAH, NSW 2380

Beaufort	<b>Description of</b>	Observation	Wind Speed
No.	wind		km/h
0	Calm	Smoke rises verticallly	0 - 0.5
1	Light Air	Direction of wind shown by smoke drift, but not by wind vanes	0.5 - 10
2	Light Breeze	Wind felt on face, leaves rustle, ordinary vanes moved by wind	10 - 13
3	Gentle Breeze	Leaves and small twigs in constant motion, wind extends light flag	13 - 26
4	Moderate	Raises dust and loose paper, small branches are moved	26 - 32
5	Fresh Breeze	Small trees in leaf begin to sway	32 - 45
6	Strong Breeze	Large branches in motion, whistling heard in telegraph wires	45 - 52
7	Moderate gale	Whole trees in motion, inconvenience felt when walking into wind	52 - 72
8	Gale	Twigs broken off trees, generally impeded progress	72 - 80
9	Stong gale	Slight structural damage e.g. slates and chimney pots removed from	80 - 100
10	Storm	Trees uprooted, considerable structural damage occurs	100 - 111
11	Violent Storm	Widespread damage	111 - 133
12	Hurricane	Violence and destruction evident	>133

# **Suggested Customisation:**

You could customise your own Beaufort scale by using local windspeed indicators. For example, at a strong breeze the windmill starts to get a whine in it; during a gale (72 - 80km/h) the tin on the shed roof starts to flap, etc. Of course the traditional Beaufort scale is based on parameters which will not change through time, so it's a good idea to double check your custom indicators with the traditional