

## 5 RESULTS

The following comments on results should be read in conjunction with their corresponding FAOA Map Plots (see **Sections 5.1 to 5.11**). The likely source/s mentioned in these results is based on the odour character/s detected and position of the facilities relative to the wind direction i.e. whether the facility was upwind or downwind.

As previously mentioned in **Section 4**, where an odour character has not been assigned at a particular MLP, it is representative that the odour detected could not be characterised as either a waste or non-waste facility odour. The occurrences of these events over the course of the study have been summarised in **Table 5.1** below

**Table 5.1 – List of odours detected but not characterised on the map plots**

Date	Session	Measurement Location Point	Odour Character
4 September 2012	Evening	4-6	Unknown (i.e. difficult to be categorical described)
4 September 2012	Evening	5-10	Unknown (i.e. difficult to be categorical described)
4 September 2012	Evening	8-3	Smokey
5 September 2012	Evening	3-31	Unknown (i.e. difficult to be categorical described)
11 September 2012	Evening	6-26	Unknown (i.e. difficult to be categorical described)

## **5.1 3 SEPTEMBER 2012 – MORNING**

The wind conditions at the time of this assessment session were light winds, tending predominately in the northwest direction.

### **Area 4**

There was an instance at MLP 4-6 whereby a very weak to weak Manure / Dirty odour was detected south of the Global Renewables Facility. The likely source would have been from a piggery nearby.

At MLPs 4-12 and 4-14, very weak to distinct MSW / Garbage / Cheesy odour was detected east of WAMC Landfill along Ferrers Rd. The likely source would have been from the WAMC Landfill.

Overall, however, there was minimal odour present in this assessment area at this time.

### **Area 6**

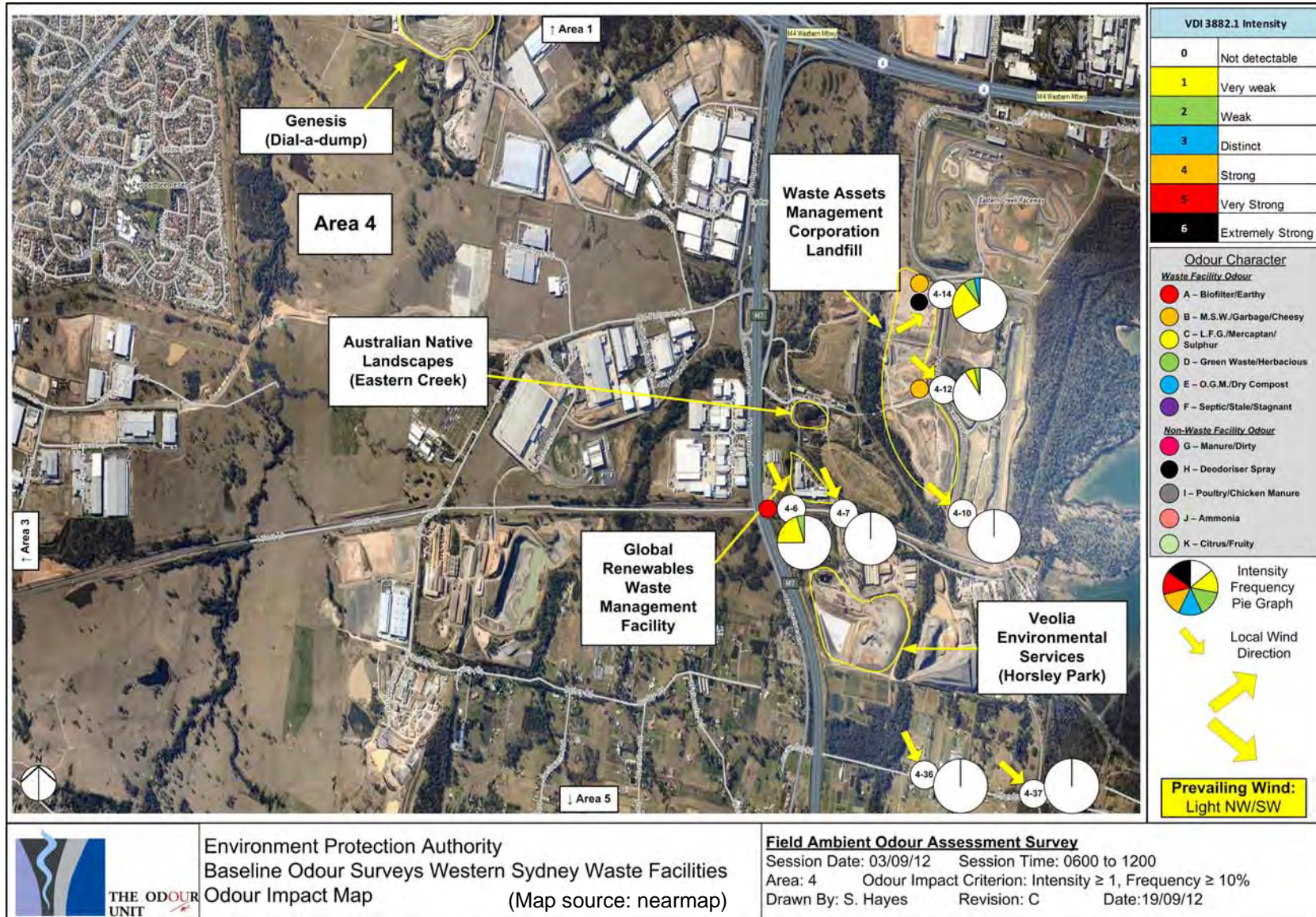
There were multiple types of odours detected on this occasion north of the SITA SAWT Facility (see MLP's 6-1 to 6-3). The odour intensity was generally weak to distinct with MSW / Garbage / Cheesy, Greenwaste / Herbacious and Dry Compost odour characters. This represented moderate odour presence in the area and was detectable approximately 1.5 km from the northern boundary of the SITA SAWT Facility. It was likely originating from the SITA SAWT Facility at the time.

### **Area 7**

There was a very weak to distinct MSW / Garbage / Cheesy odour detected southeast of the SITA SAWT Facility. This odour was detectable 2.5 km away (i.e. from the southern boundary to MLP 7-16). It was likely to have originated from the SITA SAWT Facility at the time.

There was also another instance at MLP 7-25 whereby a localised, very weak Manure / Dirty odour was detected south of the Global Renewables Facility. The likely source would have been from a piggery nearby.

No odour was detectable downwind of the NSW Investments Landfill at the time.



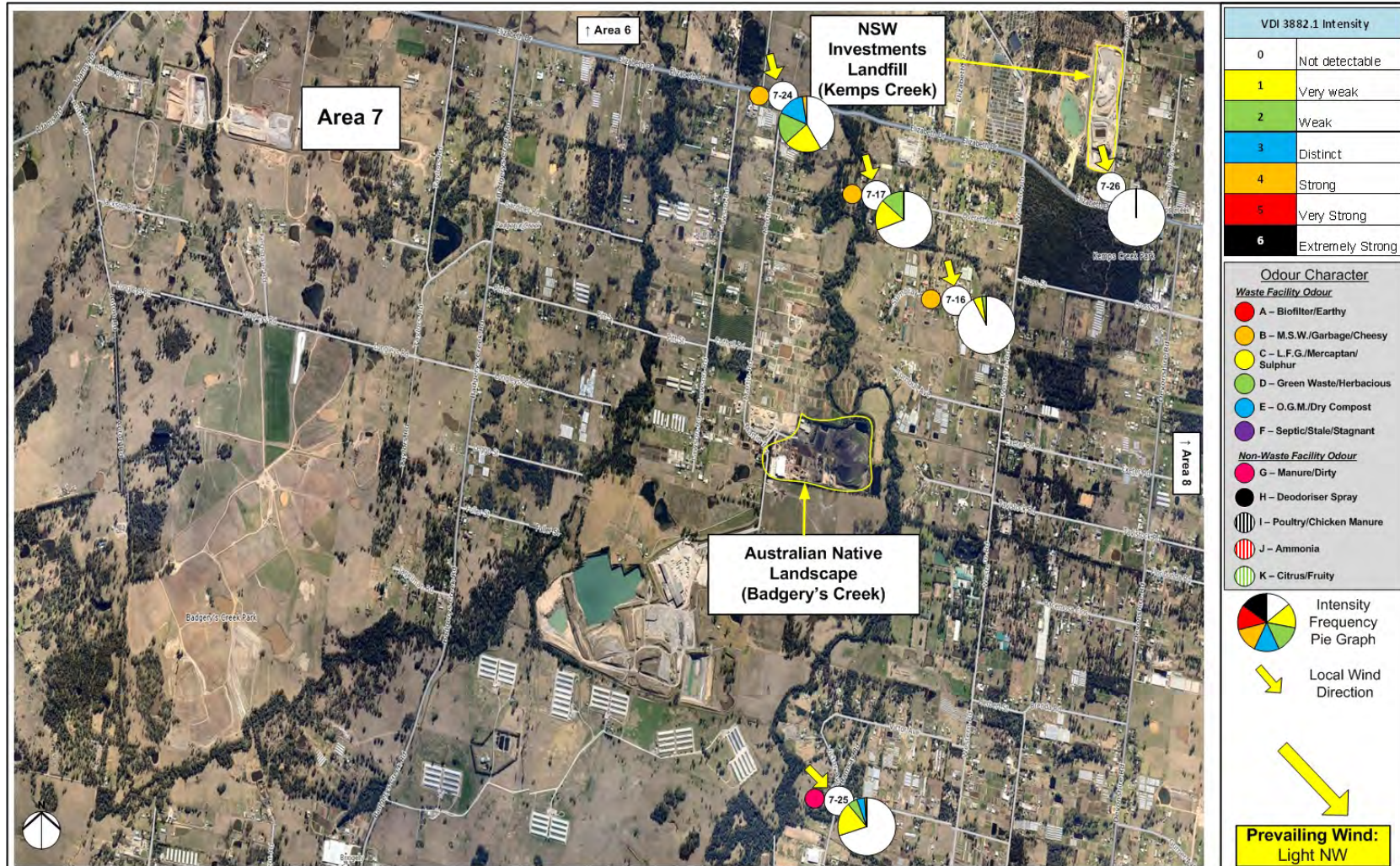
Environment Protection Authority  
 Baseline Odour Surveys Western Sydney Waste Facilities  
 Odour Impact Map (Map source: nearmap)

**Field Ambient Odour Assessment Survey**  
 Session Date: 03/09/12 Session Time: 0600 to 1200  
 Area: 4 Odour Impact Criterion: Intensity ≥ 1, Frequency ≥ 10%  
 Drawn By: S. Hayes Revision: C Date: 19/09/12



Environment Protection Authority  
 Baseline Odour Surveys Western Sydney Waste Facilities  
 Odour Impact Map (Map source: nearmap)

**Field Ambient Odour Assessment Survey**  
 Session Date: 03/09/12    Session Time: 0600 to 1200  
 Area: 6    Odour Impact Criterion: Intensity ≥ 1, Frequency ≥ 10%  
 Drawn By: S. Hayes    Revision: C    Date: 19/09/12



Environment Protection Authority  
 Baseline Odour Surveys Western Sydney Waste Facilities  
 Odour Impact Map (Map source: nearmap)

**Field Ambient Odour Assessment Survey**  
 Session Date: 03/09/12 Session Time: 0600 to 1200  
 Area: 7 Odour Impact Criterion: Intensity ≥ 1, Frequency ≥ 10%  
 Drawn By: S. Hayes Revision: C Date: 19/09/12

## **5.2 3 SEPTEMBER 2012 – EVENING**

The wind conditions at the time of this assessment session were calm to light winds, tending predominately in the east/southeast direction.

### **Area 1 and Area 4**

On this occasion, odour was present in Assessment Area 4 and was detectable as far as Area 1 (i.e. from MLP 4-15 to 1-30). This equates to approximately 1.5 km in distance. The odour detectable was generally very weak to distinct, becoming weaker as the assessors traversed downwind. The odours detected were MSW / Garbage / Cheesy and LFG / Mercaptan / Sulphur characters. The likely source would have been from the WAMC Landfill at the time.

In Assessment Area 4, distinct to strong Greenwaste / Herbacious odour was detectable southeast of the Eastern Creek Precinct at this time. The odour would have likely originated from the Global Renewables Facility at the time.

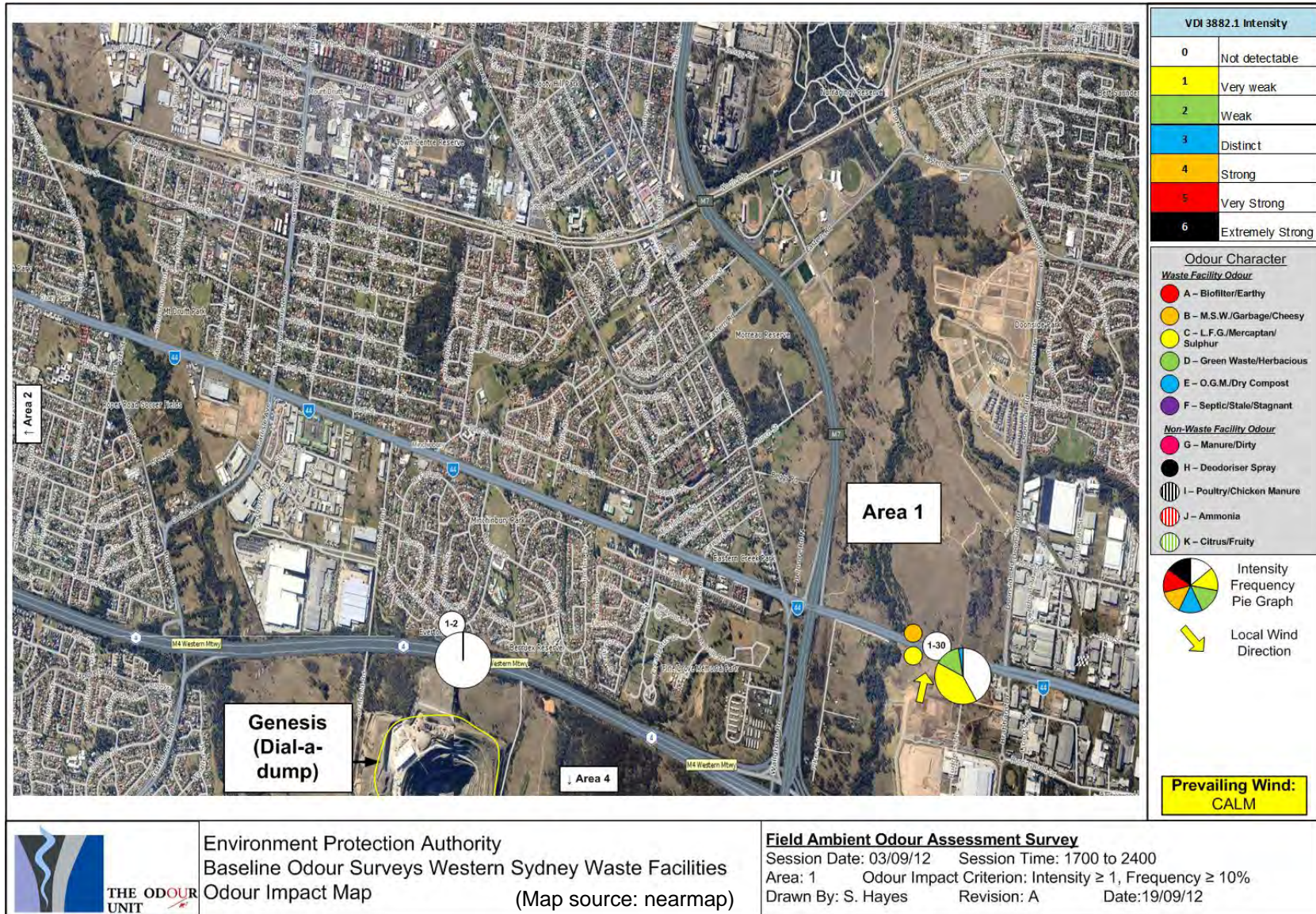
### **Area 6**

This session detected MSW / Garbage / Cheesy odour at very weak to distinct intensities on Humewood Place, Twins Creek (i.e. north of the SITA SAWT Facility and downwind). The likely source of the odour would have been the SITA SAWT Facility at this time.

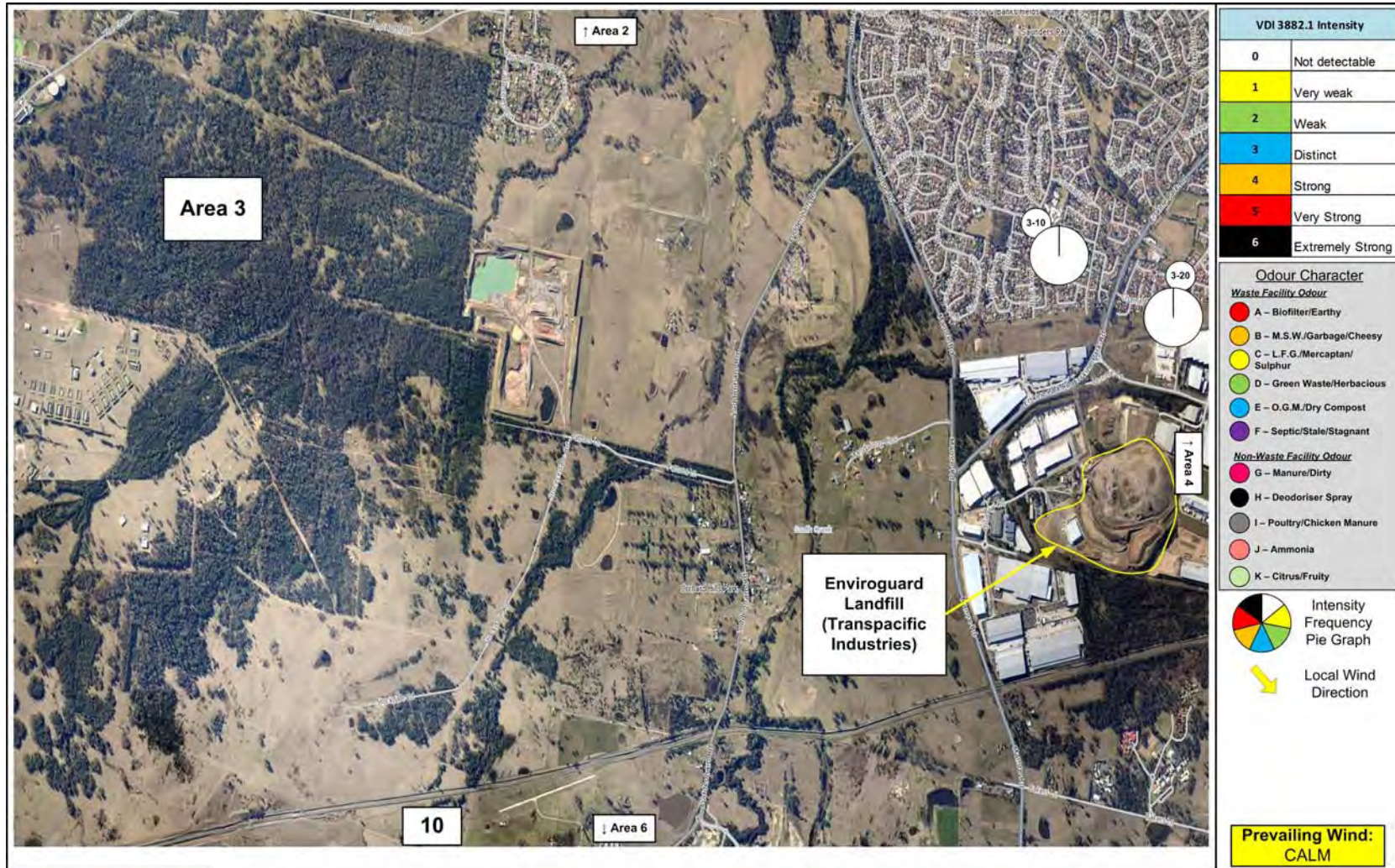
Other odour was also detectable at very weak to weak intensities that were likely from poultry farms and piggeries residing in this Assessment Area.

### **Area 7**

A distinct to strong Poultry/Piggery based odour was detectable along Elizabeth Drive at MLP 7-24. The likely source would have been from a multitude of farms and piggeries residing within the vicinity of the assessment locations.



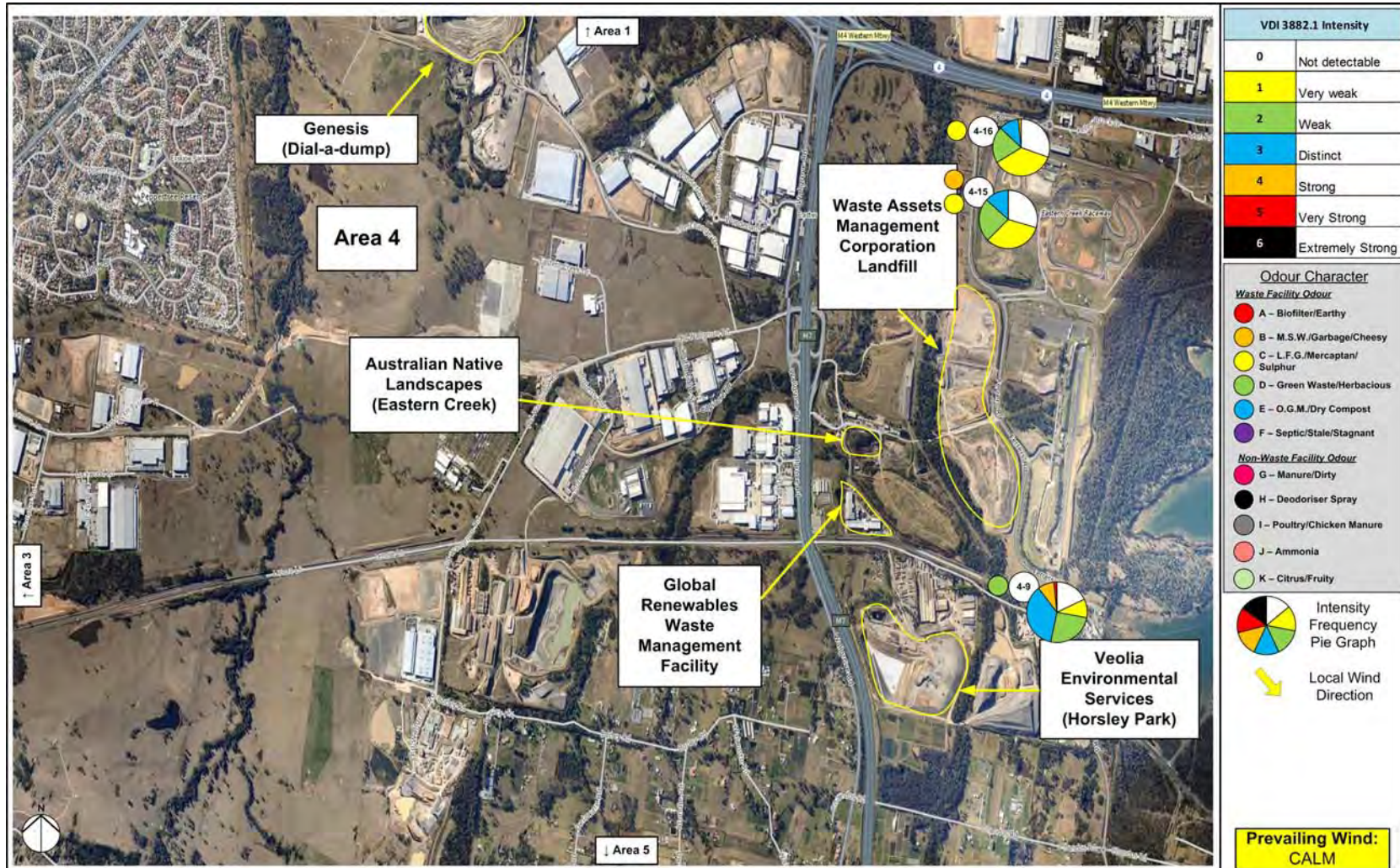




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 Odour Impact Map (Map source: nearmap)

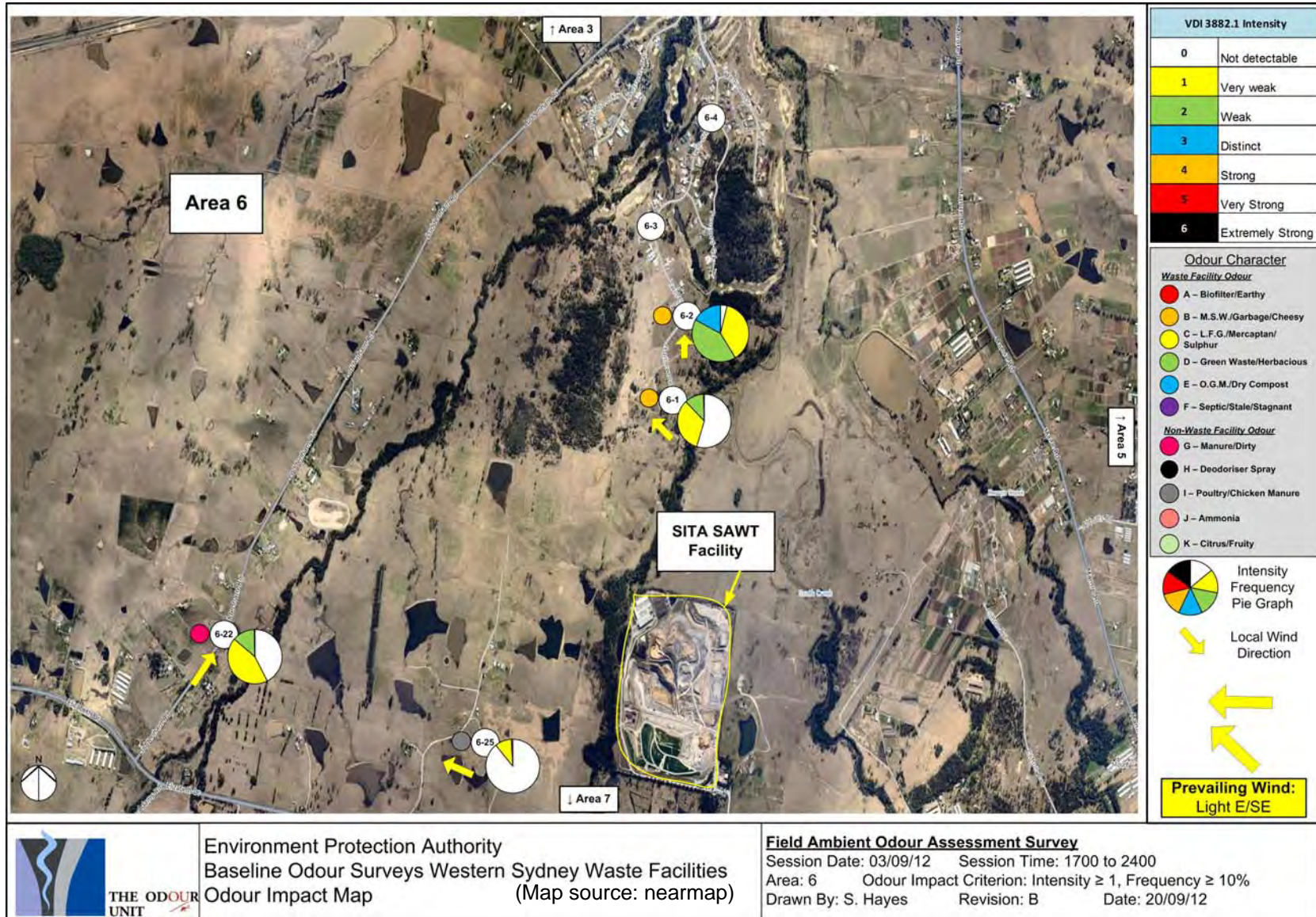
**Field Ambient Odour Assessment Survey**

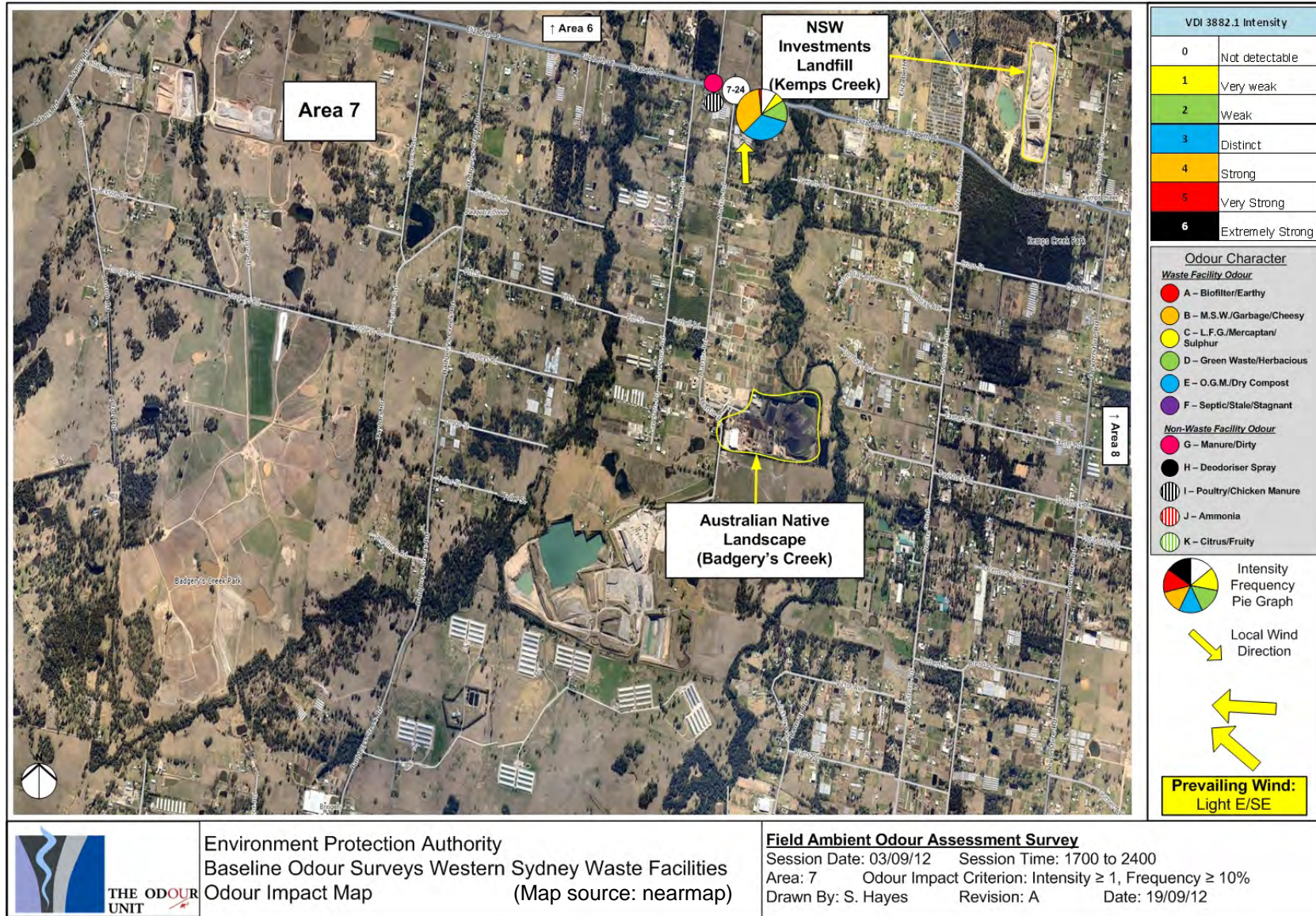
Session Date: 03/09/12    Session Time: 1700 to 2400  
 Area: 3    Odour Impact Criterion: Intensity ≥ 1, Frequency ≥ 10%  
 Drawn By: S. Hayes    Revision: A    Date: 19/09/12



Environment Protection Authority  
 Baseline Odour Surveys Western Sydney Waste Facilities  
 Odour Impact Map (Map source: nearmap)

**Field Ambient Odour Assessment Survey**  
 Session Date: 03/09/12    Session Time: 1700 to 2400  
 Area: 4    Odour Impact Criterion: Intensity ≥ 1, Frequency ≥ 10%  
 Drawn By: S. Hayes    Revision: A    Date: 19/09/12





Environment Protection Authority  
 Baseline Odour Surveys Western Sydney Waste Facilities  
 Odour Impact Map (Map source: nearmap)

**Field Ambient Odour Assessment Survey**  
 Session Date: 03/09/12 Session Time: 1700 to 2400  
 Area: 7 Odour Impact Criterion: Intensity ≥ 1, Frequency ≥ 10%  
 Drawn By: S. Hayes Revision: A Date: 19/09/12

### **5.3 4 SEPTEMBER 2012 – MORNING**

The wind conditions at the time of this assessment session were light winds, tending predominately in the east / southeast direction.

#### **Area 4**

On this occasion, odours were detectable within the Eastern Creek Precinct, along the Austral Bricks Private Road and varied as the assessor traversed east along this road and onto Ferrers Rd. The odours were detectable at very weak to distinct intensities and ranged from Biofilter / Earthy and OGM (MLPs 4-6 and 4-7) characters, changing to Greenwaste / Herbacious and MSW / Garbage / Cheesy (MLPs 4-8 to 4-11, 4-13, 4-14 and 4-40) characters further downwind.

Deodoriser spray odour was also detectable along Ferrers Rd, east of the WAMC Landfill. The likely sources of these odours at the time would have been a combination from the Global Renewables Facility (MLPs 4-6 to 4-8) and WAMC Landfill (MLPs 4-8 to 4-11, 4-13, 4-14 and 4-40).

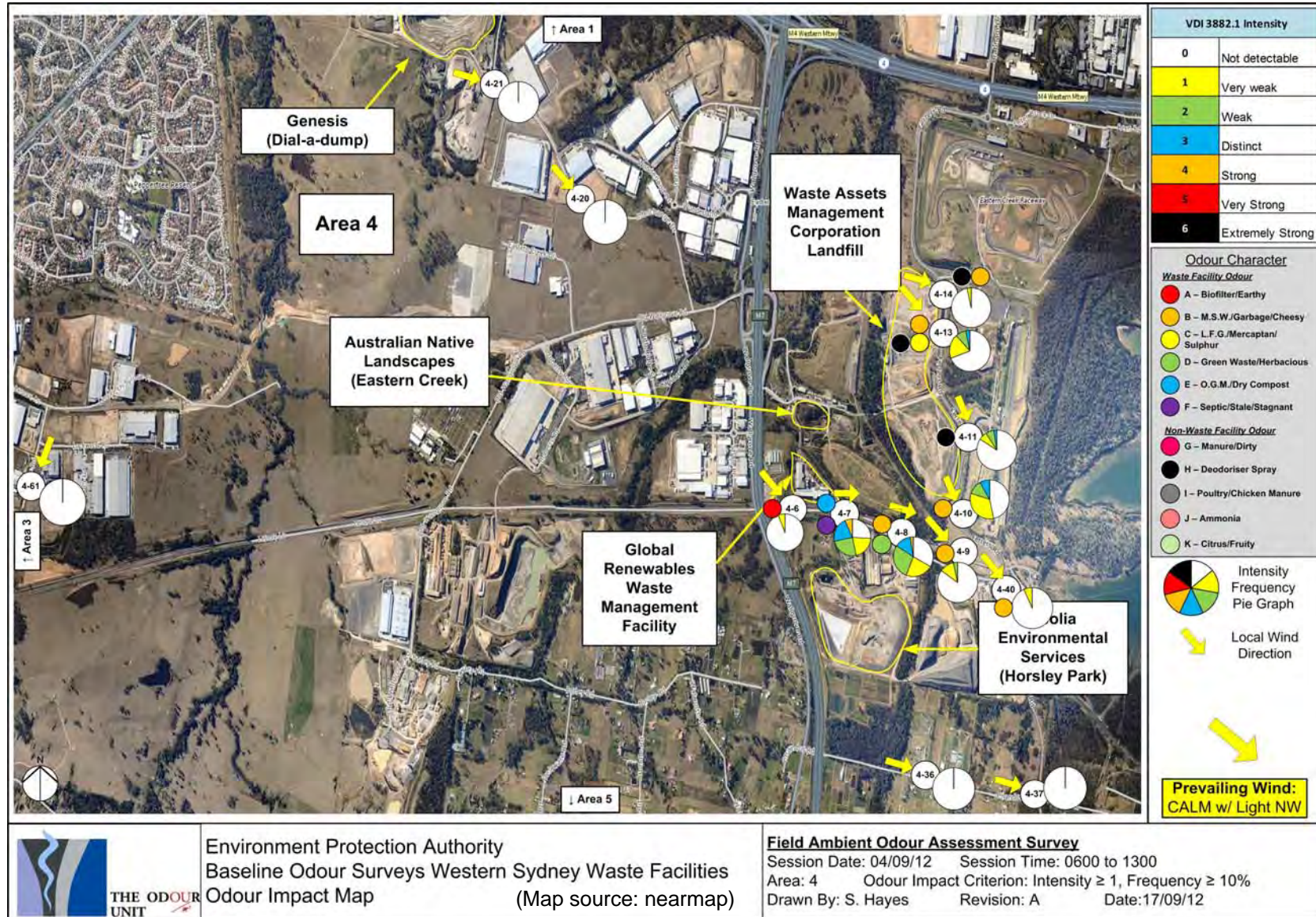
No odour was detectable downwind from Veolia Environmental Services (Horsley Park) and the Genesis Landfill on this occasion (see MLPs 4-20 and 4-20).

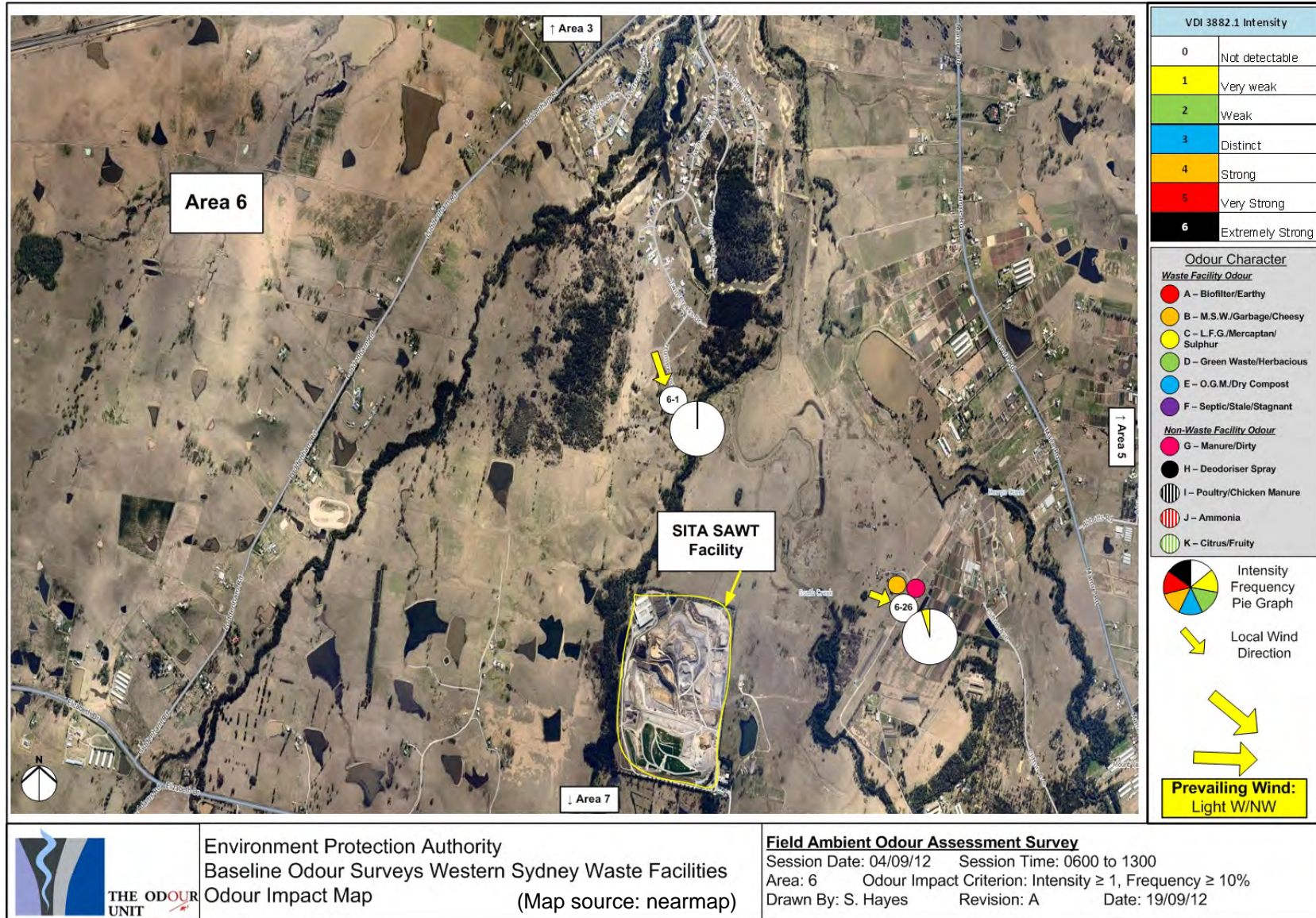
#### **Area 6**

No significant odour was detectable in this Assessment Area on this occasion.

#### **Area 7**

No significant odour was detectable in this Assessment Area on this occasion.







Environment Protection Authority  
 Baseline Odour Surveys Western Sydney Waste Facilities  
 Odour Impact Map (Map source: nearmap)

**Field Ambient Odour Assessment Survey**  
 Session Date: 04/09/12 Session Time: 0600 to 1300  
 Area: 7 Odour Impact Criterion: Intensity ≥ 1, Frequency ≥ 10%  
 Drawn By: S. Hayes Revision: A Date: 19/09/12



## **5.4 4 SEPTEMBER 2012 – EVENING**

The wind conditions at the time of this assessment session were light winds, tending predominately in the east/south east direction.

### **Area 3**

No significant odour was detectable in this Assessment Area on this occasion.

No odours were detectable from the TPI Enviroguard Landfill at this time.

### **Area 4**

On this occasion, odour was detected at weak to distinct intensities; approximately 500 metres west of the Global Renewables Facility (see MLPs 4-1, 4-18 and 4-59). A myriad of odours were detectable including MSW / Garbage / Cheesy, Biofilter / Earthy and Greenwaste / Herbacious. These were likely originating from the Global Renewables Facility at the time.

Odours were also detected from the WAMC Landfill on this occasion, beyond the boundary at very weak to distinct intensities at the time along Ferrers Rd. The odour characters were MSW / Garbage / Cheesy and LFG / Mercaptan / Sulphur. These odours were also detectable further downwind, approximately 1 km from the site's northern boundary (see MLPs 4-16 and 4-17).

It is possible that both the Global Renewables and WAMC Landfill facilities were contributing to the MSW / Garbage / Cheesy odour detected on the west and east sectors of the Eastern Creek Precinct on this occasion.

Additionally, other odours were detectable in the same Assessment Area (see MLP 4-29) that could be related back to piggery/poultry operations residing within the general area and not the waste facilities.

**Area 5**

No significant odour was detectable in this Assessment Area on this occasion.

**Area 6**

A very weak to weak Greenwaste / Herbacious odour was detectable along Humewood Place, Twin Creek (i.e. north of the SITA SAWT Facility) at this time. The odour would have likely originated from the SITA SAWT Facility.

A Poultry / Chicken Manure odour was also detectable along Elizabeth Drive (MLP 6-23) on this occasion. It was likely originating from the farming operations residing within this general area.

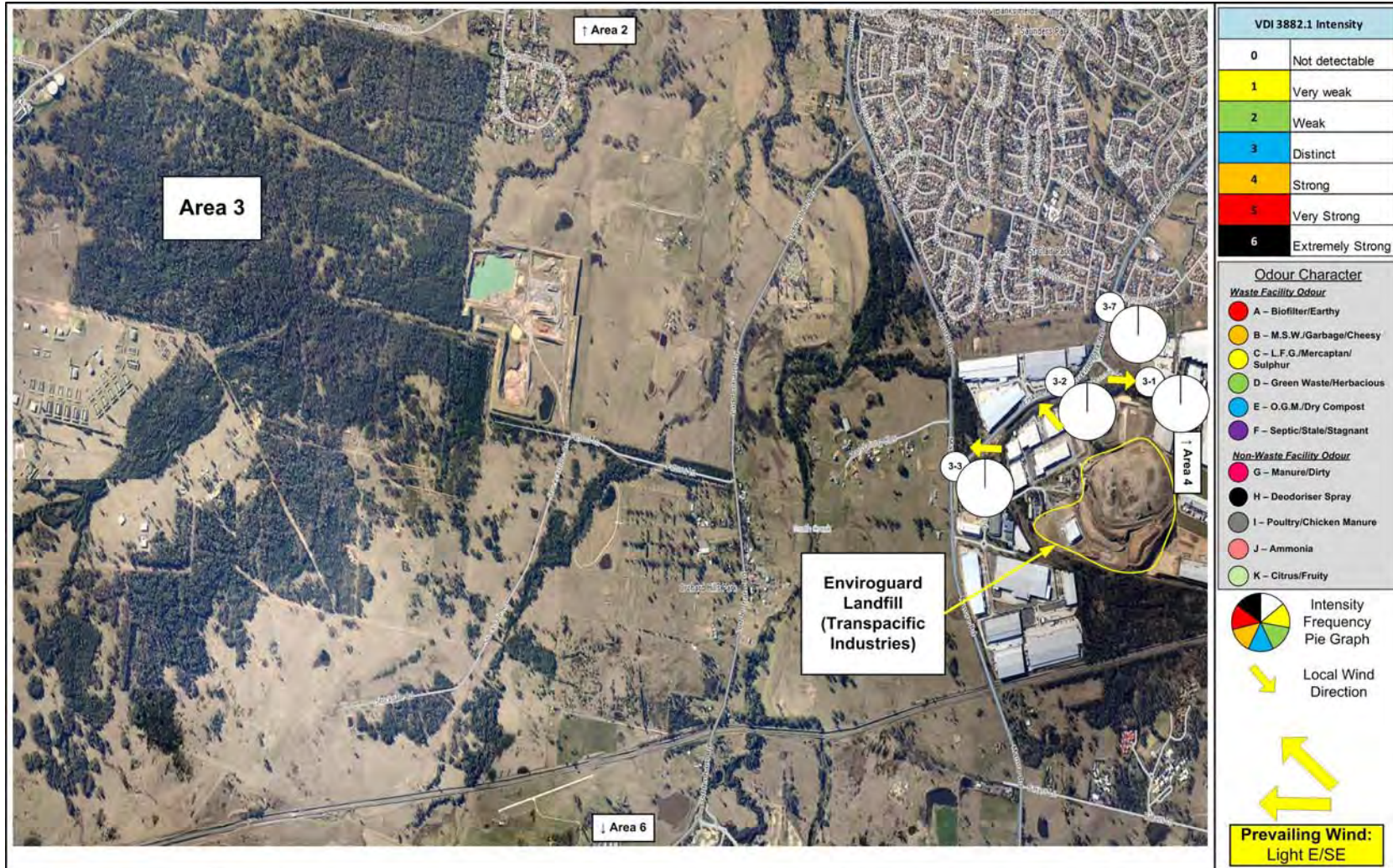
**Area 7**

Distinct odours were detectable immediately downwind of the Australian Native Landscapes Facility (Badgery's Creek) site boundary (see MLP 7-1). The odours were LFG / Mercaptan / Sulphur and Greenwaste / Herbacious. The source could not be accurately determined, however, it is likely that the Greenwaste / Herbacious odour was emanating from the Australian Native Landscapes Facility (Badgery's Creek) and/or possibly the piggery farms residing within the vicinity of this area. This odour, however, was localised and not detectable further downwind from this point. The source of the LFG / Mercaptan / Sulphur could not be determined on this occasion.

Some weak to distinct intensities of Manure / Dirty odour was also detectable at MLP 7.1 during a second measurement by a different assessment team and was likely emanating from piggeries within the vicinity of this area.

**Area 8**

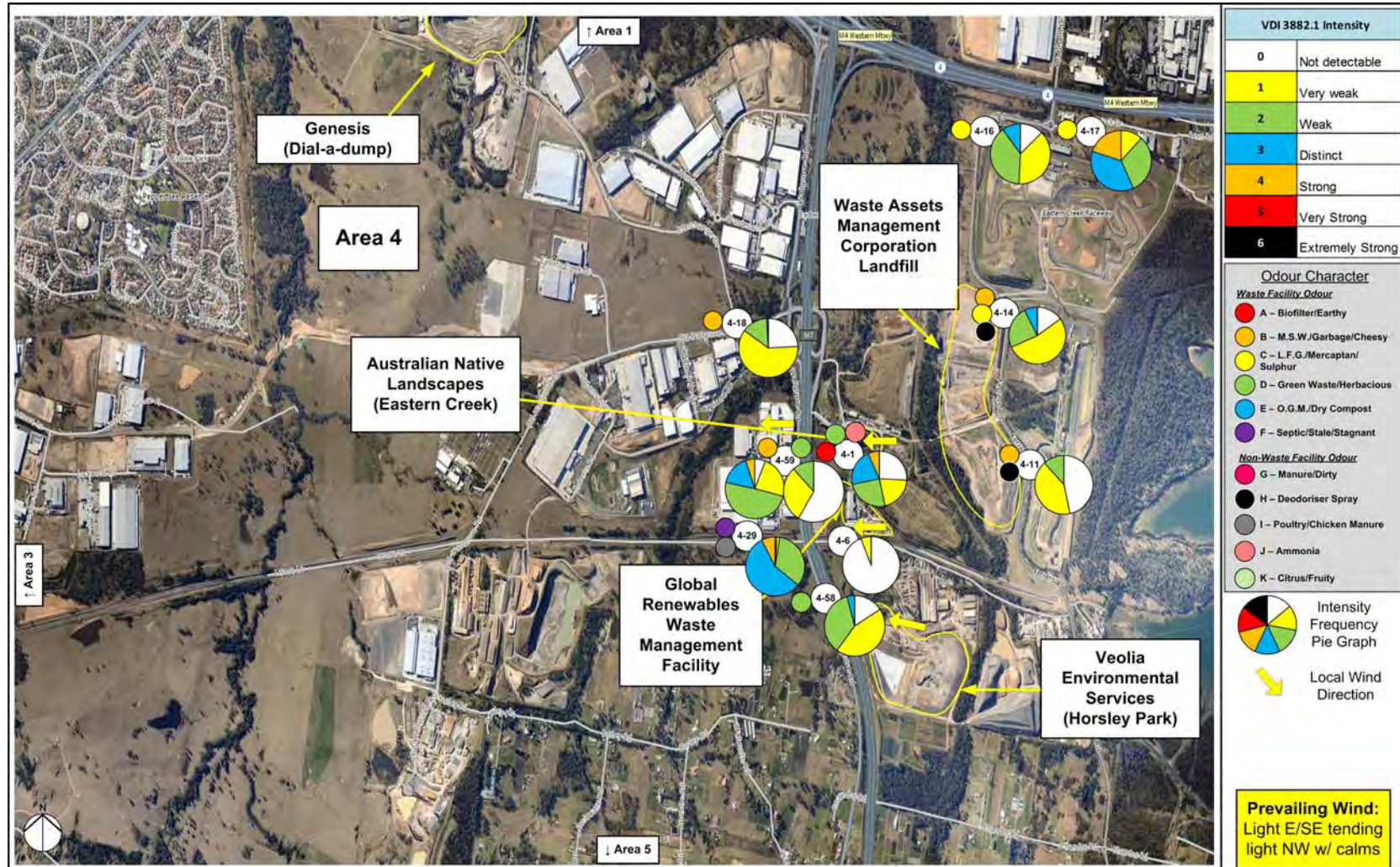
On this occasion, odour was Manure / Dirty and Greenwaste / Herbacious odours were detectable at very weak intensities. It is unlikely that the source of this odour would have been emanating from the Brandown Resource Recycling Facility and Landfill. As such, the source could not be accurately determined on this occasion.



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 Odour Impact Map (Map source: nearmap)

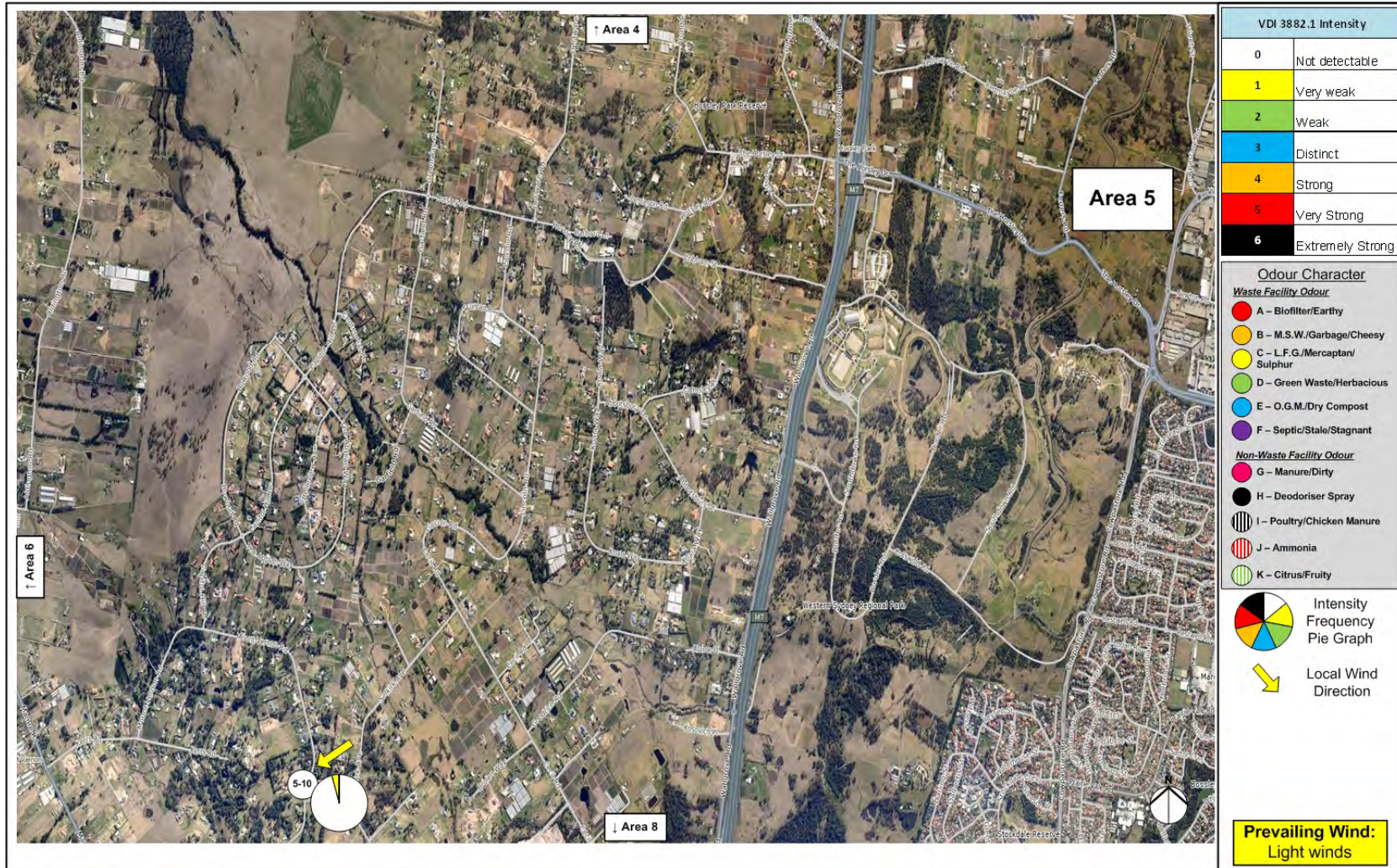
**Field Ambient Odour Assessment Survey**

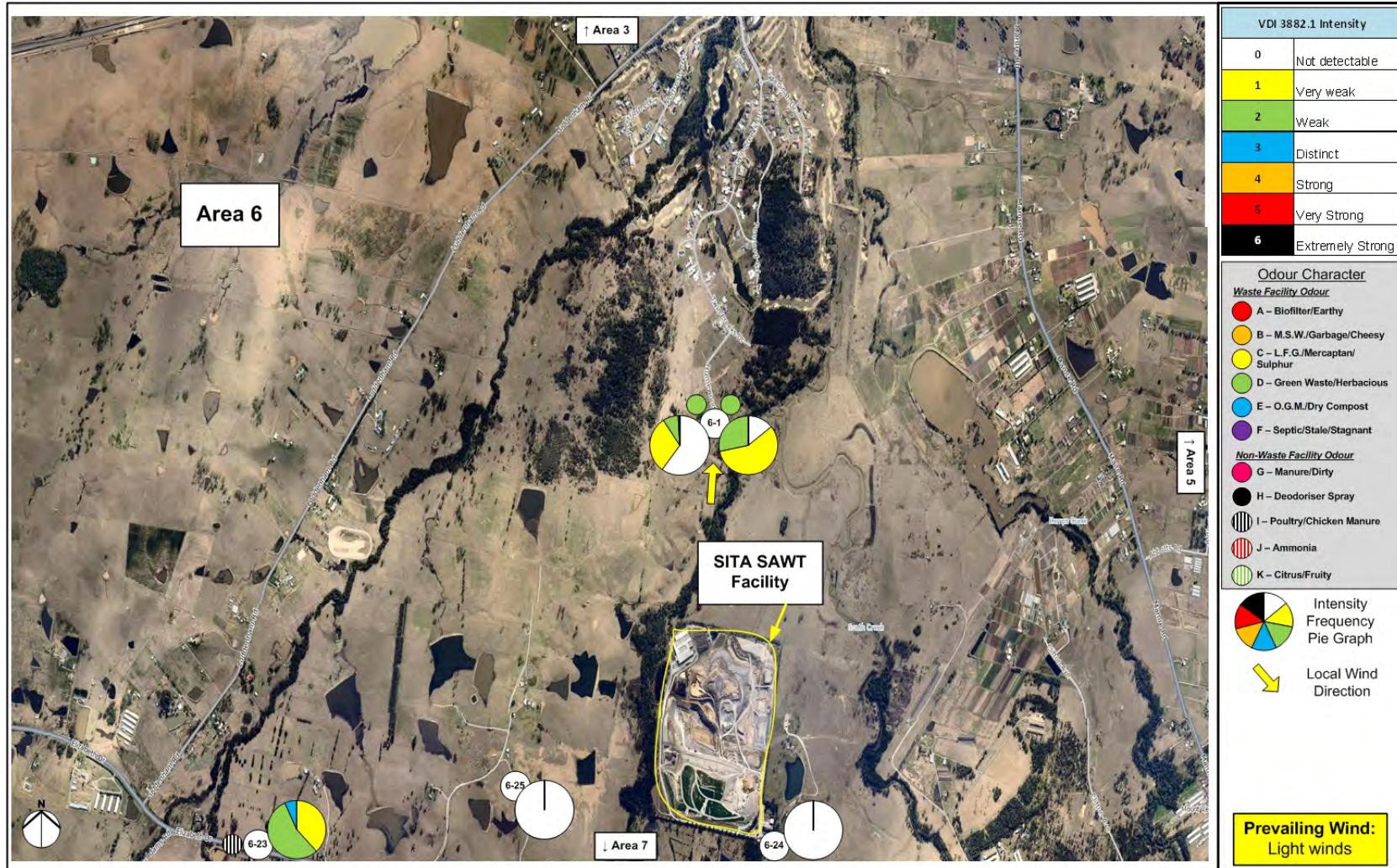
Session Date: 04/09/12 Session Time: 1630 to 2330  
 Area: 3 Odour Impact Criterion: Intensity  $\geq 1$ , Frequency  $\geq 10\%$   
 Drawn By: S. Hayes Revision: A Date: 19/09/12



Environment Protection Authority  
 Baseline Odour Surveys Western Sydney Waste Facilities  
 Odour Impact Map (Map source: nearmap)

**Field Ambient Odour Assessment Survey**  
 Session Date: 04/09/12 Session Time: 1630 to 2330  
 Area: 4 Odour Impact Criterion: Intensity ≥ 1, Frequency ≥ 10%  
 Drawn By: S. Hayes Revision: A Date: 19/09/12



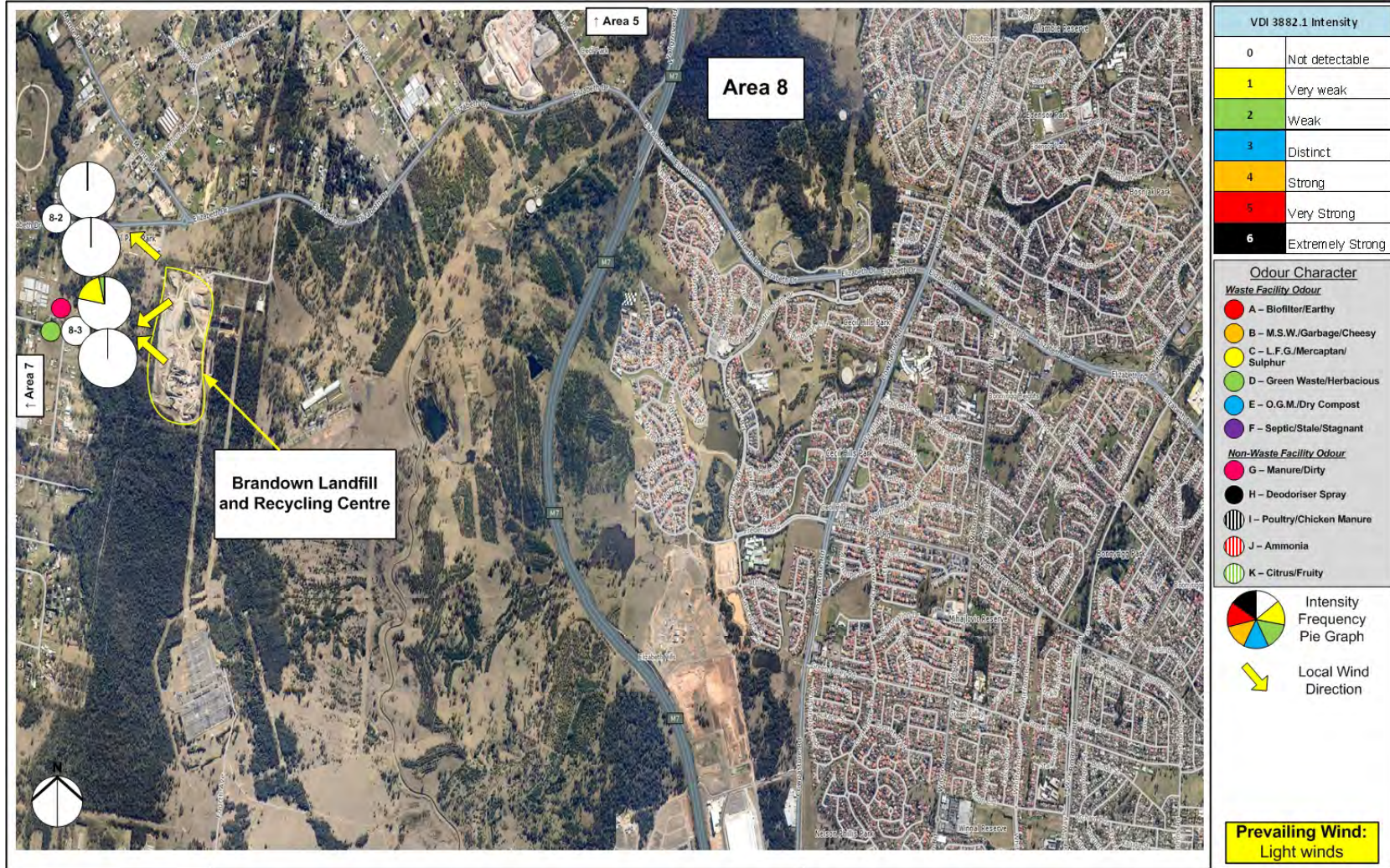


Environment Protection Authority  
 Baseline Odour Surveys Western Sydney Waste Facilities  
 Odour Impact Map (Map source: nearmap)

**Field Ambient Odour Assessment Survey**  
 Session Date: 04/09/12 Session Time: 1630 to 2330  
 Area: 6 Odour Impact Criterion: Intensity ≥ 1, Frequency ≥ 10%  
 Drawn By: S. Hayes Revision: A Date: 19/09/12



	<p>Environment Protection Authority          Baseline Odour Surveys Western Sydney Waste Facilities          Odour Impact Map (Map source: nearmap)</p>	<p><b>Field Ambient Odour Assessment Survey</b>          Session Date: 04/09/12    Session Time: 1630 to 2330          Area: 7    Odour Impact Criterion: Intensity ≥ 1, Frequency ≥ 10%          Drawn By: S. Hayes    Revision: A    Date: 19/09/12</p>
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	Environment Protection Authority Baseline Odour Surveys Western Sydney Waste Facilities Odour Impact Map (Map source: nearmap)	<b>Field Ambient Odour Assessment Survey</b> Session Date: 04/09/12    Session Time: 1630 to 2330 Area: 8    Odour Impact Criterion: Intensity ≥ 1, Frequency ≥ 10% Drawn By: S. Hayes    Revision: A    Date: 19/09/12
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## **5.5 5 SEPTEMBER 2012 – MORNING**

The wind conditions at the time of this assessment session were light to moderate winds, tending predominately in the northern direction.

### **Area 4**

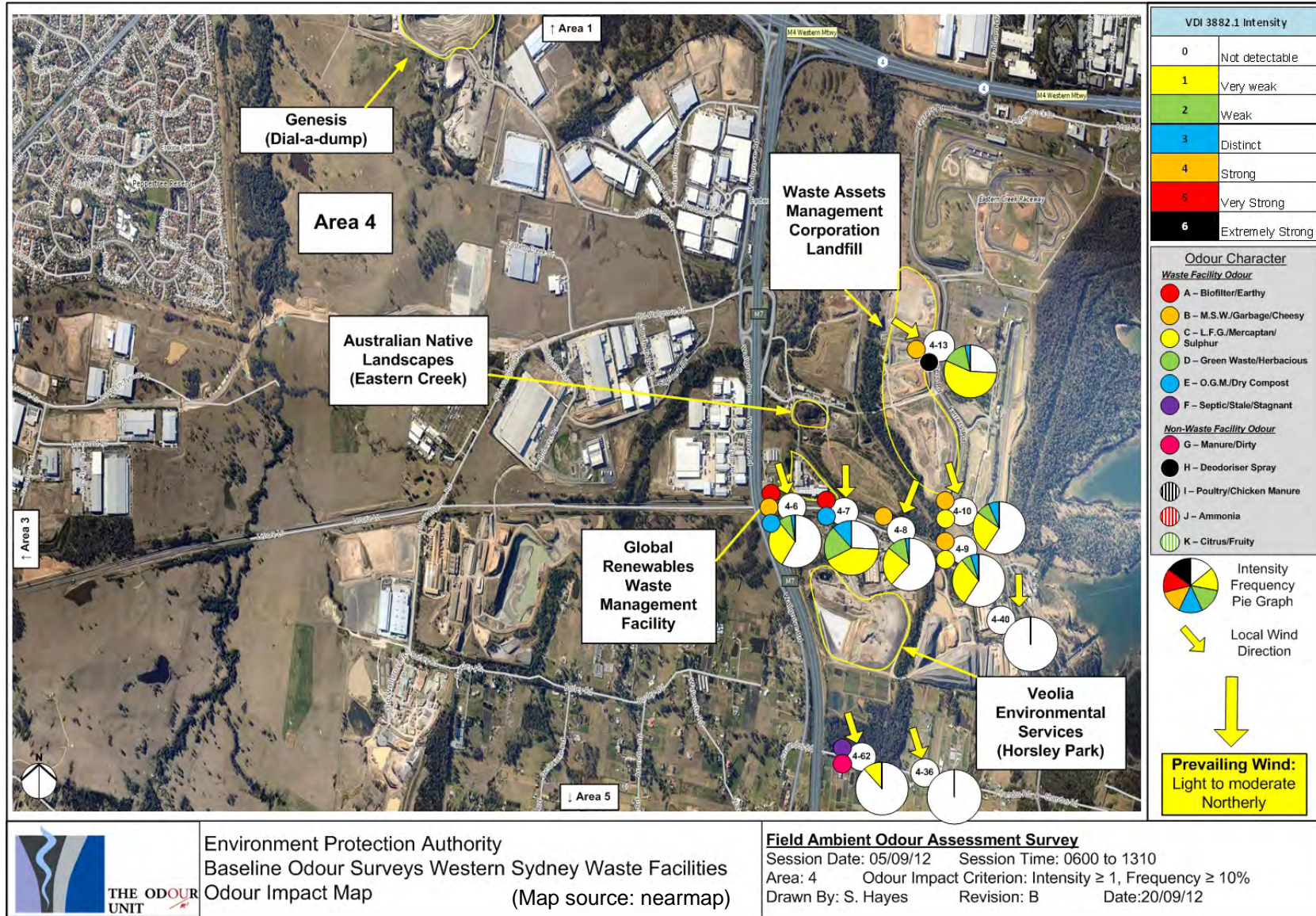
There were several odours detectable within the Eastern Creek Precinct on this occasion at very weak to distinct intensities (see MLPs 4-6 and 4-7). The odour characters included Biofilter / Earthy, MSW / Garbage / Cheesy and OGM. These odours were detectable downwind of the Global Renewables Facility, indicating that this would be the likely source at the time. As assessors traversed east of the Austral Brick Private Road (see MLPs 4-8 to 4-9), the OGM and Biofilter / Earthy odours were not detectable, however, a LFG / Mercaptan / Sulphur odour was detectable and likely originating from the WAMC Landfill.

All odours detected within the Eastern Creek Precinct were not detectable further downwind on this occasion (see MLPs 4-36, 4-40 and 4-62).

### **Area 7**

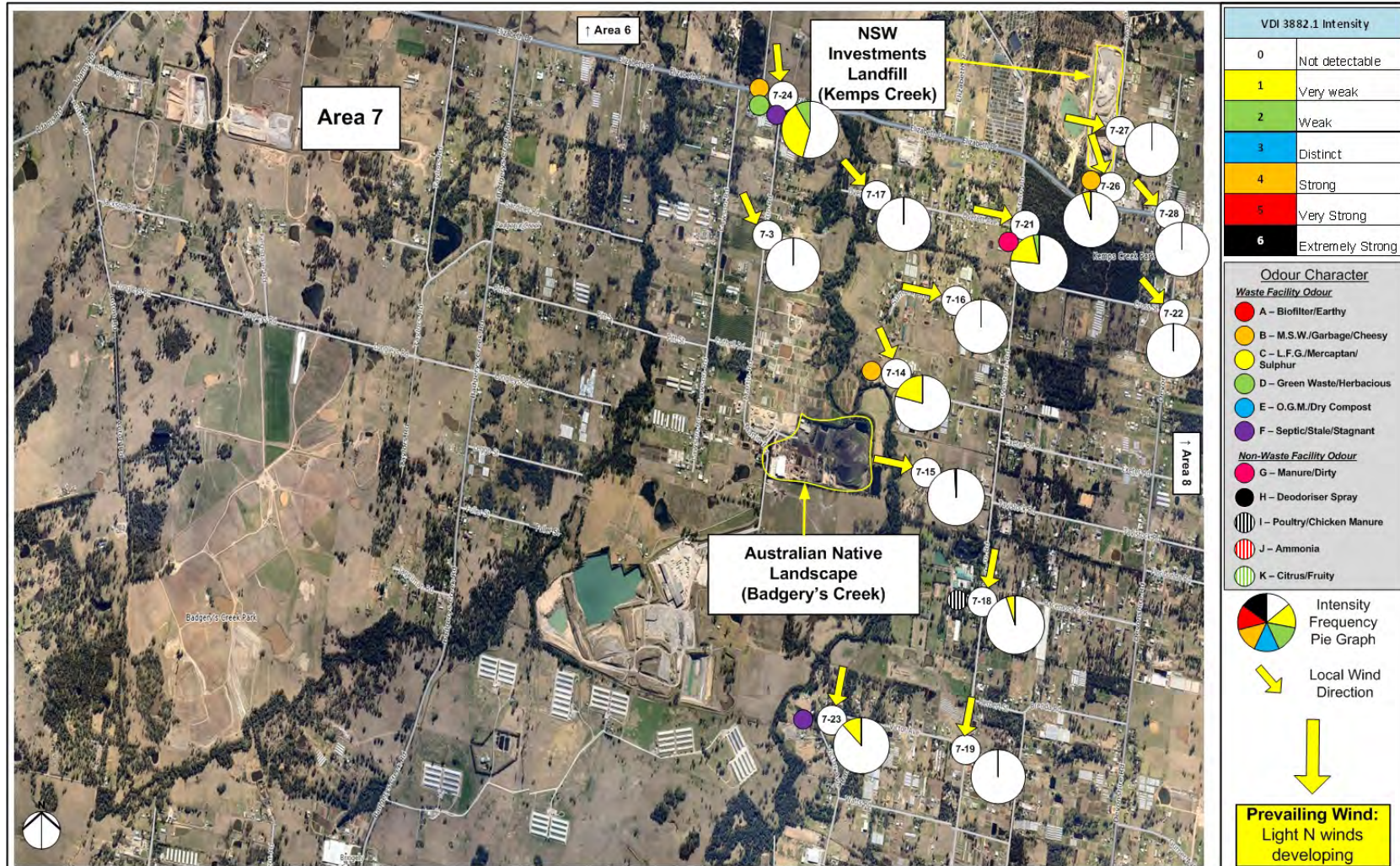
No significant odour was prevalent in this Assessment Area at this time.

Some very weak MSW / Garbage / Cheesy was detectable, however, at intermittent frequencies on this occasion. The assessors did note that Council Trucks were heavily active in the area. This was likely the source of the intermittent MSW / Garbage / Cheesy odour at MLPs 7-24 and 7-26, and was not likely from the SITA SAWT Facility on this occasion.



Environment Protection Authority  
 Baseline Odour Surveys Western Sydney Waste Facilities  
 Odour Impact Map (Map source: nearmap)

**Field Ambient Odour Assessment Survey**  
 Session Date: 05/09/12 Session Time: 0600 to 1310  
 Area: 4 Odour Impact Criterion: Intensity ≥ 1, Frequency ≥ 10%  
 Drawn By: S. Hayes Revision: B Date: 20/09/12



Environment Protection Authority  
 Baseline Odour Surveys Western Sydney Waste Facilities  
 Odour Impact Map (Map source: nearmap)

**Field Ambient Odour Assessment Survey**  
 Session Date: 05/09/12    Session Time: 0600 to 1310  
 Area: 7    Odour Impact Criterion: Intensity ≥ 1, Frequency ≥ 10%  
 Drawn By: S. Hayes    Revision: B    Date: 20/09/12

## **5.6 5 SEPTEMBER – EVENING**

The wind conditions at the time of this assessment session were light to moderate winds, tending predominately in the northern direction.

### **Area 3**

No significant odour was detectable in this Assessment Area on this occasion.

### **Area 4**

On this occasion, odours were detected at very weak to strong intensities. The odour characters were a combination of Biofilter / Earthy and MSW / Garbage / Cheesy. The odours were found to travel approximately 1.5 km downwind from the southern boundary of the Global Renewables Facility. The biofilter emissions were judged to be the main contributor (see MLPs 4-6, 4-63, 4-60, 4-41, 4-35 and 4-62). These were likely originating from the Global Renewables Facility.

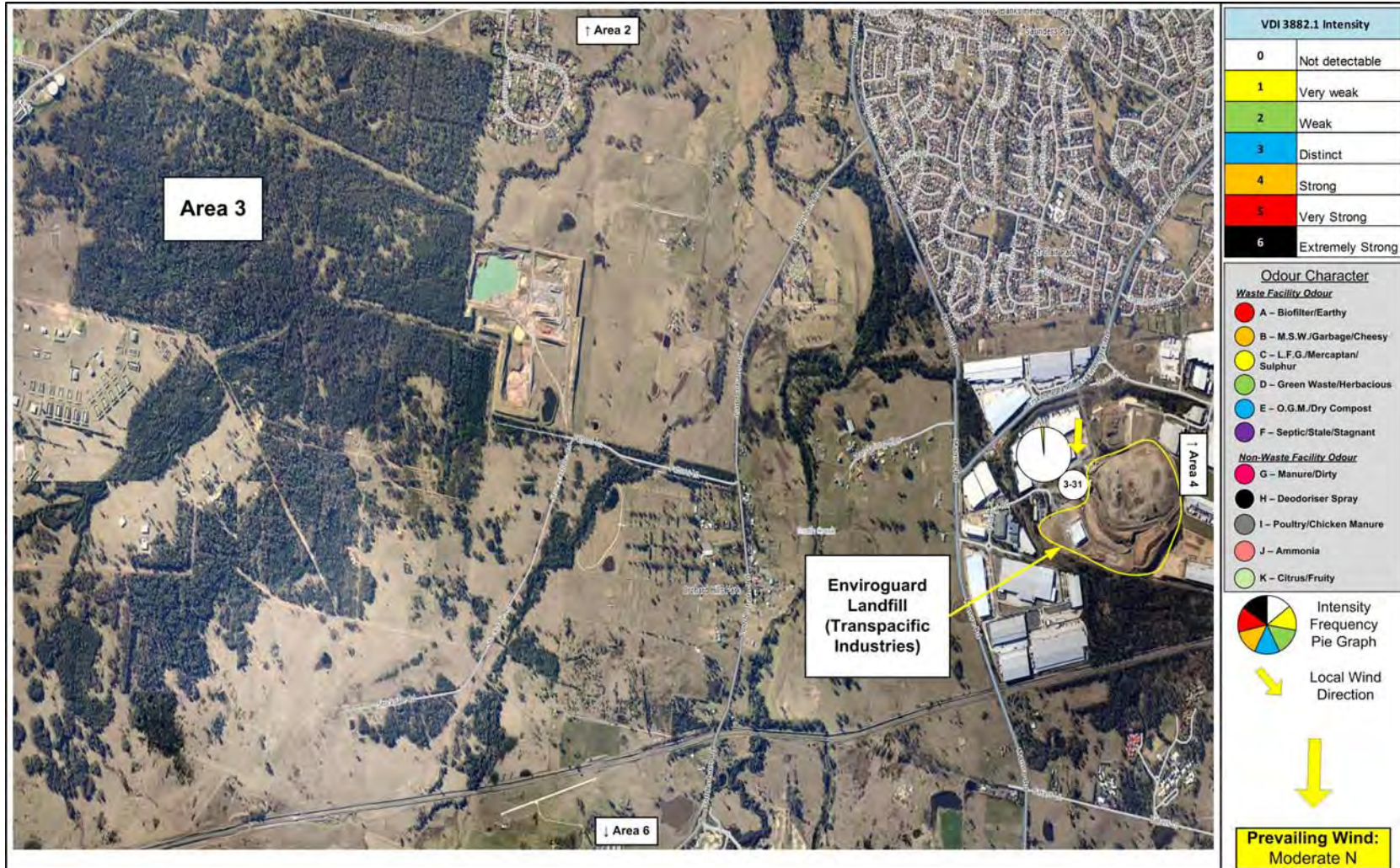
No significant odour was detectable downwind of the Veolia Environmental Services (Horsley Park) Landfill on this occasion.

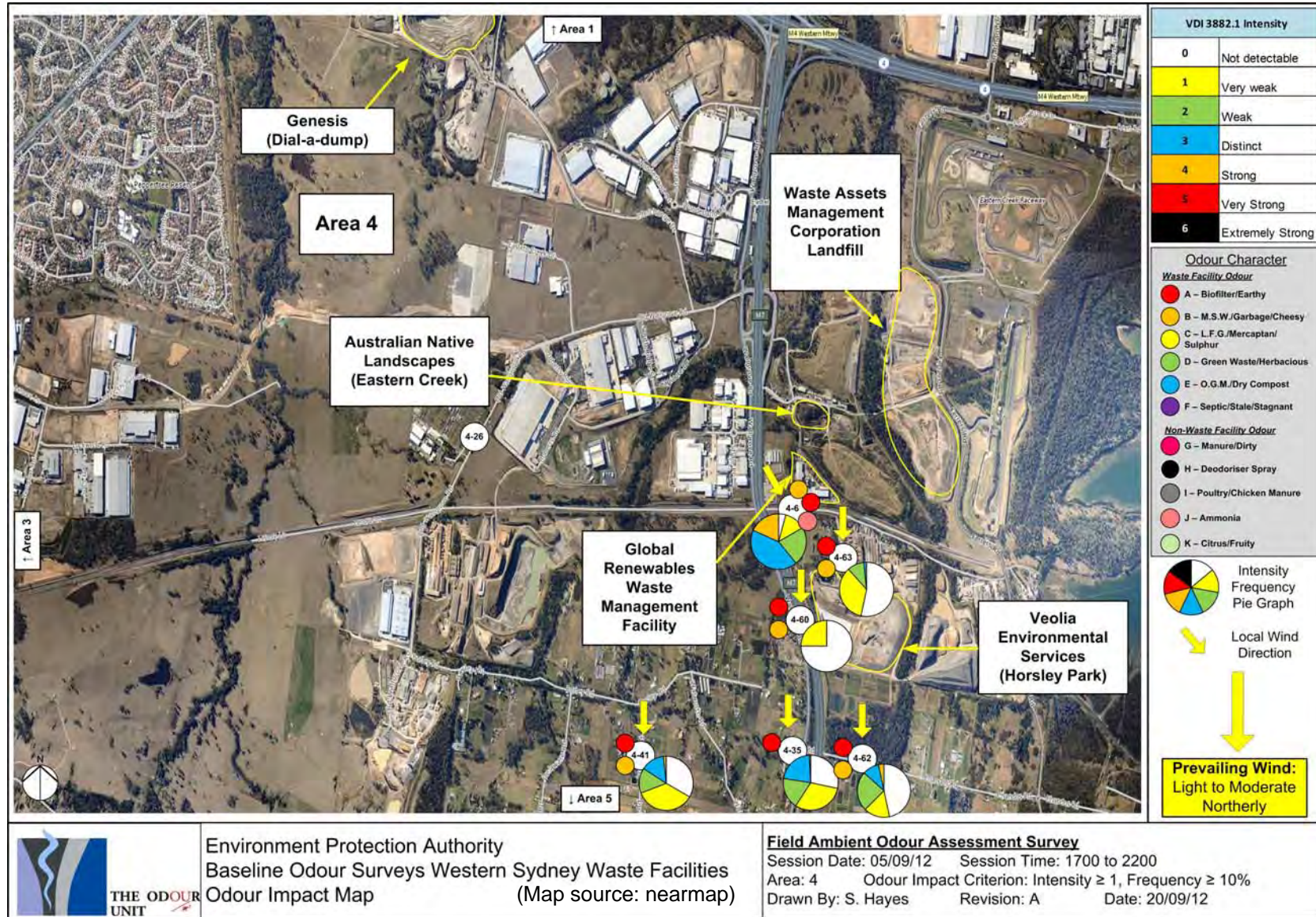
### **Area 5**

On this occasion, a very weak to distinct LFG / Mercaptan / Sulphur odour was detectable within the vicinity of Wallgrove Rd and The Horsley Drive (MLP 5-21). It was difficult to accurately determine the likely source on this occasion as it was not detectable on any other occasion during this assessment session. It is likely to have been a localised incident.

### **Area 6 and Area 7**

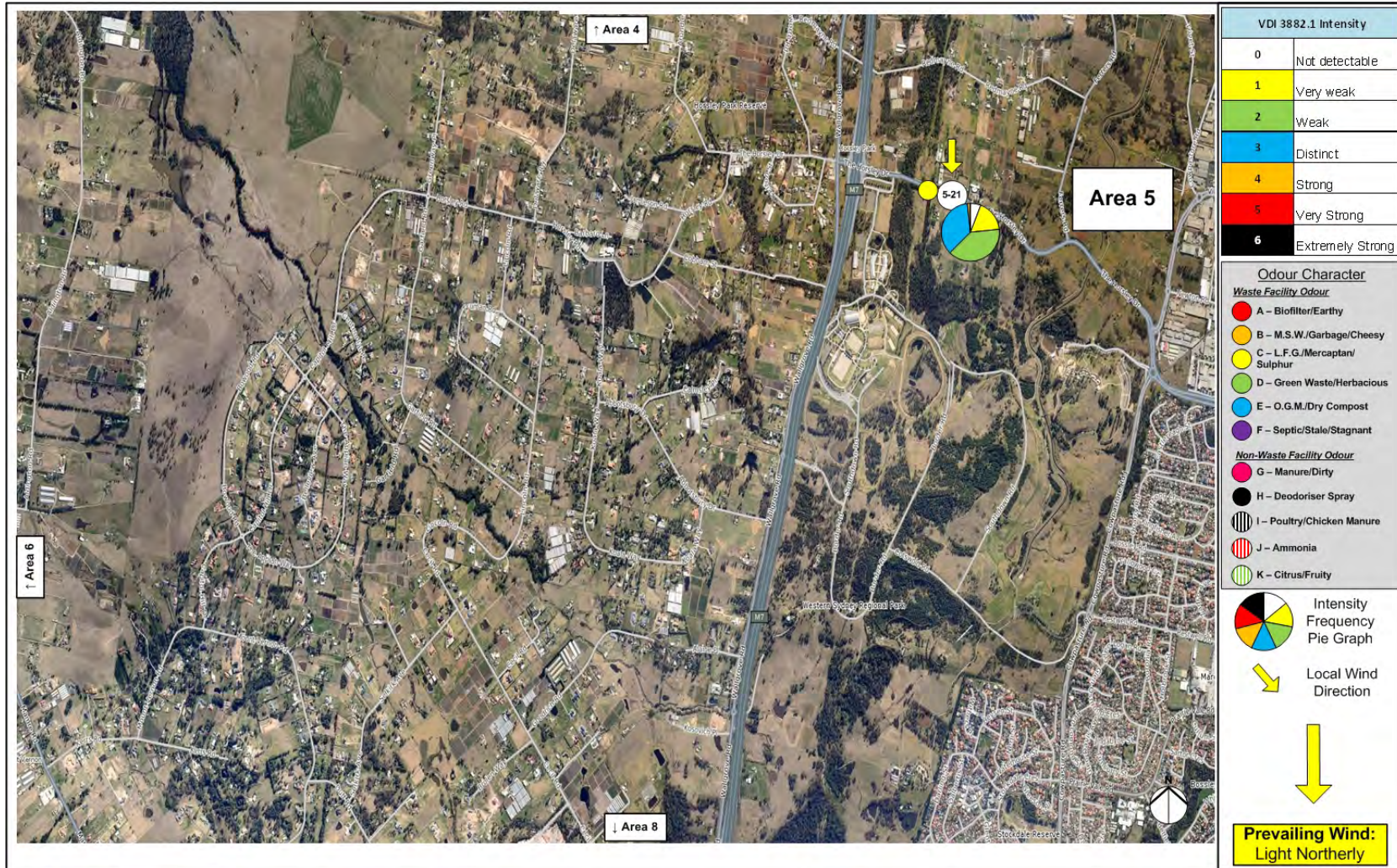
There was very weak to distinct MSW / Garbage / Cheesy and Green/Herbacious odour detectable up to 2 km downwind from the southern boundary of the SITA SAWT Facility. On this occasion, all odours detectable in these two areas are likely to have been originating from the SITA SAWT facility

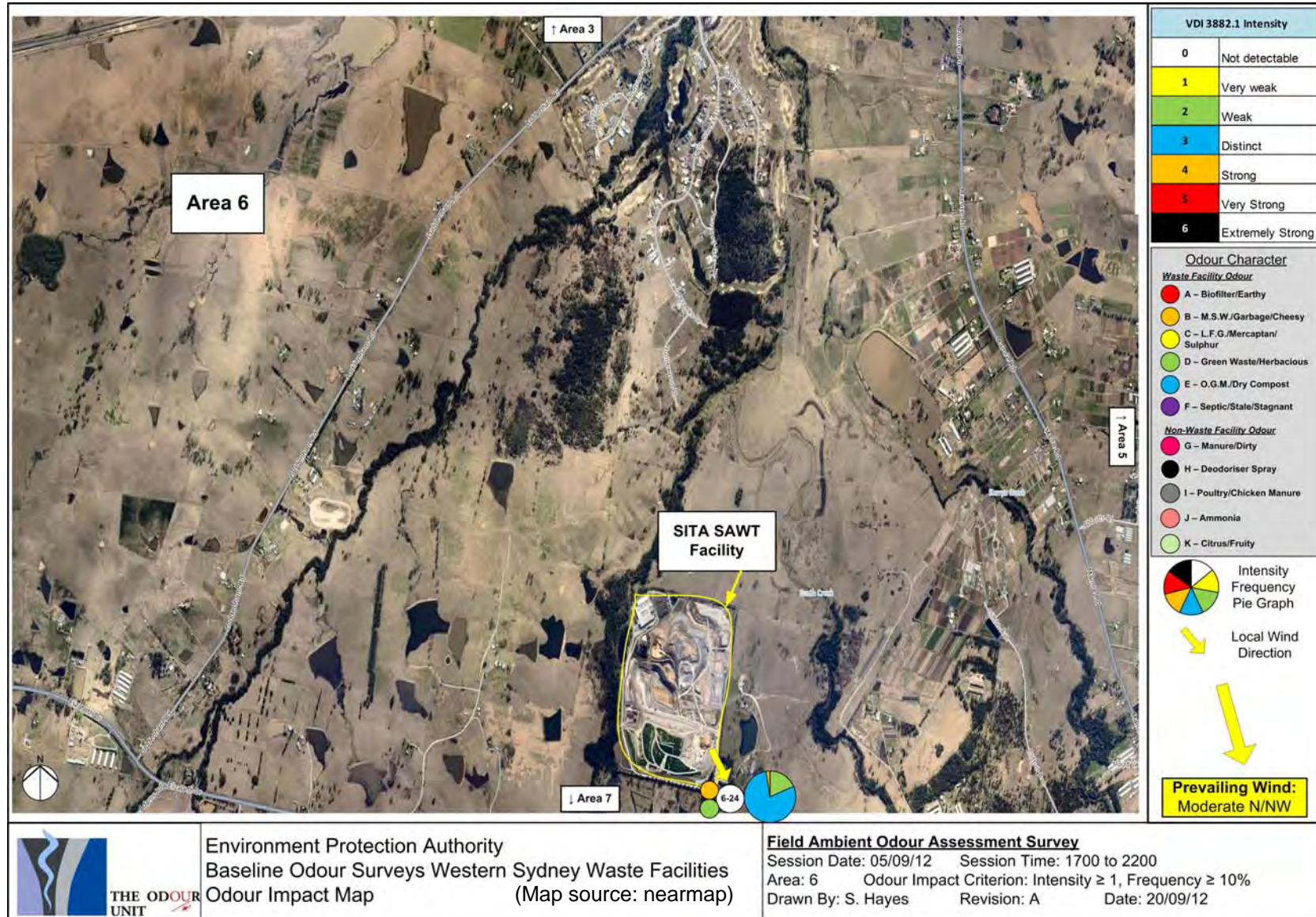




Environment Protection Authority  
 Baseline Odour Surveys Western Sydney Waste Facilities  
 Odour Impact Map (Map source: nearmap)

**Field Ambient Odour Assessment Survey**  
 Session Date: 05/09/12 Session Time: 1700 to 2200  
 Area: 4 Odour Impact Criterion: Intensity ≥ 1, Frequency ≥ 10%  
 Drawn By: S. Hayes Revision: A Date: 20/09/12

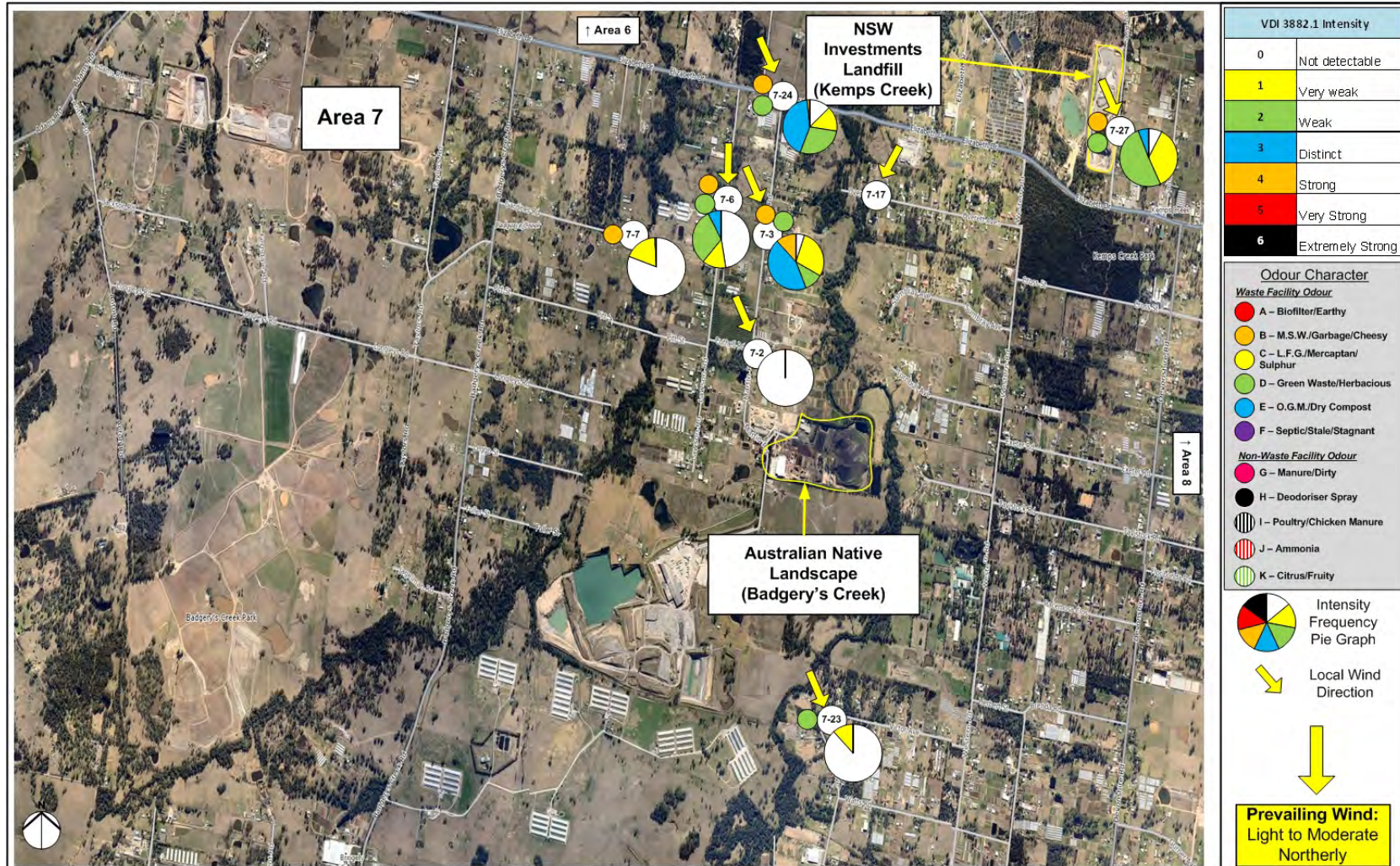




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 Drawn By: S. Hayes Revision: A Date: 20/09/12





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**Field Ambient Odour Assessment Survey**  
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 Area: 7 Odour Impact Criterion: Intensity ≥ 1, Frequency ≥ 10%  
 Drawn By: S. Hayes Revision: A Date: 20/09/12