

AIR SPECTRUM



THE QUALITY AIR EXPERTS

- odour control •
- dust control •
- fly control •
- misting equipment •
- odour analysis •
- consulting •

designed and
manufactured in the UK



For more information contact:
+44 (0) 1905 362100
www.airspectrum.com



**Cottonmount landfill site
which is part of Biffa Waste Services Ltd
waste management facilities, has been using
Air Spectrum for over four years and the service
we have received has been exceptional the quality
of the product is far superior than competitors. If we
need advice the professionalism of Rebecca and her
team is great and nothing is too much trouble.**

Darren Cooper, Site Manager, Cottonmount Landfill

designed and
manufactured in the UK



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ABOUT US



Air Spectrum Environmental is a UK-based worldwide distributor and installer of odour control and dust control solutions.

We are a family owned business; designing and manufacturing all our equipment and blending our neutralisers, insecticide and dust suppression additives, in the UK. We have been providing odour control and dust suppression solutions to a wide spectrum of industries and environments for over 20 years.

We have a long track record in prescribing and delivering individual and specialised solutions to effectively tackle specific odour and dust problems.

Our experience and expertise encompasses odour, dust and insect issues in a wide spectrum of industries and environments.

Air Spectrum also supplies the most thorough **odour consultancy service** available. Our services include: **Site odour assessment & site surveys; Sampling & analysis; odour dispersion modelling reports**, including topographical and meteorological data. With expert knowledge of solutions and control measures, our consultants offer unbiased and accurate advice about appropriate abatement and control measures.

Our team of experts are always available to answer questions by telephone or email.

Accredited with the **ISO 9001** quality standard, as well as the international environmental standard **ISO 14001**, ensures our customers of the highest standards of service and products.

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manufactured in the UK



THE BENEFITS OF CHOOSING AIR SPECTRUM

- 1** Industry Expertise - over 20 years' experience
- 2** High Standard Great British Design & Manufacture
- 3** British Engineering to ISO 9001 & ISO 14001 standards
- 4** Bespoke Solutions as well as a wide range of Abatement Technologies
- 5** Cost Effective - to work with your budget
- 6** Effective Neutraliser & Dust Additive Ranges
- 7** Technical Service, Support and Training
- 8** Long-term Service & Maintenance Plans
- 9** Effective & efficient After-Sales Support
- 10** Latest Testing Technology



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INDUSTRY



landfill



composting



refuse
derived
fuel



solid
derived
fuel



materials
recovery
facility



energy
from waste



anaerobic
digestion



food
processing



water
treatment /
effluent



petrochemical
waste



quarries



construction



recycling
facility

PROBLEM



odour



dust

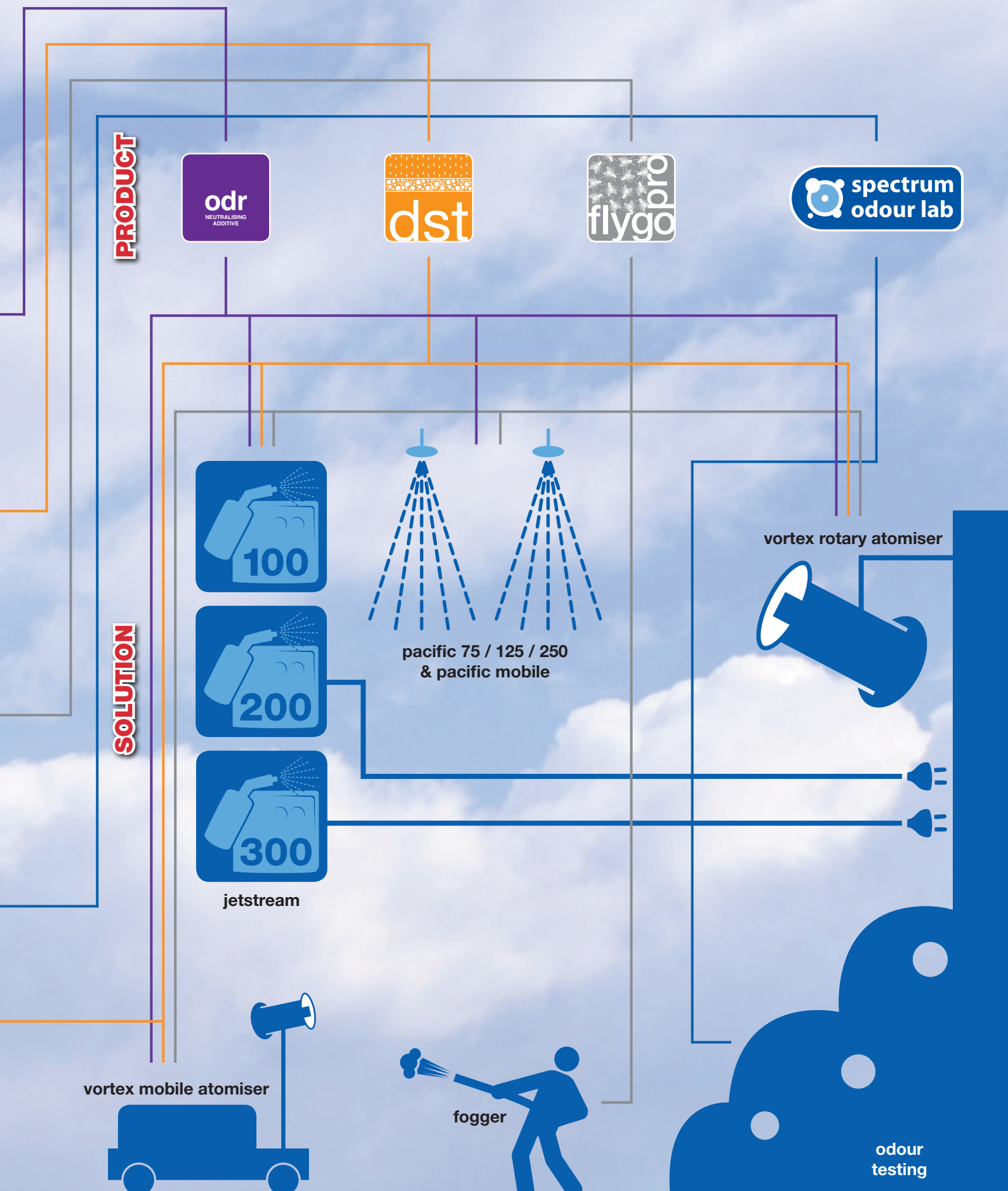


flies



testing

spray
bar



PRODUCT RANGE

JETSTREAM

The Jetstream systems can be used internally or externally for odour control in localised areas such as misting scrubbers, exhaust vents, stacks or extraction ductwork and dust in localised areas such as hoppers and conveyor drop points. The Jetstream machines can be used with ODR, Air Spectrum's odour neutraliser and DST, Air Spectrum's dust suppression additive.

100: An intrinsically safe, ATEX compliant odour control system. There is no risk of the **Jetstream100** producing a spark because it runs on compressed air rather than electricity. This makes it 'intrinsically safe' and ideal for use where volatile materials are present, such as in oil refineries and petro-chemical manufacturing processing plants. It is a compact, low-cost misting unit, and is ideal for applications where space is limited or where a low-cost solution is needed. The **Jetstream100** can power up to four auto-clean, air misting nozzles, allowing it to effectively neutralise odour or suppress dust in internal applications or in localised external applications. The **Jetstream100** is simple to operate, with a manual on/off switch and is supplied with brackets for wall mounting.

200: The **Jetstream200** is an electrically powered, compressed air misting system; driving multiple nozzles for use in localised areas both in external applications, such as hoppers and conveyor drop points, and in internal areas such as, misting scrubbers, extraction or ductwork systems. A 7-day timer control, remote facility and pulse mode allows the system to function without frequent operator attention. It can also be triggered from an external source such as a wind-switch ensuring reduced running and maintenance costs. The **Jetstream200** requires a compressed air and mains electricity supply.

300: The **Jetstream300** is a compressed air, single nozzle misting system, designed to produce a very fine atomised mist, which is introduced with ODR, Air Spectrum's odour neutraliser, for point source control in areas such as extraction ductwork, single stacks or exhaust vents. It is often used in commercial kitchens, restaurants and take-aways to, neutralise cooking odours. A 7-day timer control, remote facility and pulse mode allows the system to function without frequent operator attention. It can also be triggered from an external source such as a wind-switch ensuring reduced running and maintenance. The **Jetstream300** features a built-in compressor and requires a mains electricity supply.

- All Jetstream machines can be used in conjunction with
- All Jetstream machines can be used for dust applications on hoppers and conveyor drop points for point source control.



and



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manufactured in the UK



PRODUCT RANGE

PACIFIC

75/125/250

The **Pacific** is a highly effective, high pressure, multi-nozzle, finely atomised mist delivery system for the neutralisation and suppression of widespread indoor and outdoor odour or dust problems. The **Pacific** system creates a 'misting curtain' by pumping water with or without ODR (Air Spectrum's odour neutraliser) or DST (Air Spectrum's dust suppression additive), through a high pressure line to nozzles, spaced at 1 or 2 metres apart, effectively suppressing dust and neutralising odour. A 7-day timer control, remote facility and pulse mode allows the system to function without frequent operator attention. It can also be triggered from an external source such as a wind-switch, ensuring reduced running and maintenance costs.

The **Pacific** system is available in three standard static forms; the **Pacific 75**, **Pacific 125** or **Pacific 250**, with 75, 125 or 250 nozzles respectively.

Mobile

A portable, highly effective, high pressure, multi-nozzle, finely atomised mist delivery system for effective, highly targeted, short term odour control or dust suppression.

The **Pacific Mobile** is trailer mounted with a diesel powered engine, so that it can be taken directly to the source of the problem. It includes a 1125litre capacity bowser, filled with diluted ODR, Air Spectrum's odour neutraliser, or water for dust suppression. A 100m nozzle line (50m either side) is deployed on pig tail stakes (included), around the problem area. The flexible nozzle line can be adapted to provide a variety of solutions.

Turnkey operation gives up to 4 hours continuous running on one tank and all fittings are push fit, making the **Pacific Mobile** a convenient, effective and affordable solution for dust and odour problems.



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PRODUCT RANGE

VORTEX

Rotary Atomiser

The **Vortex Rotary Atomiser** is suitable for use in both outdoor and indoor environments for the suppression of dust or to control odour. It can be used in conjunction with Air Spectrum's DST for dust suppression or ODR neutraliser to control odour.

The **Vortex** uses rotary centrifugal energy to force liquid into a finely atomised mist, which is projected forward by a fan at the back of the unit. It can be set to produce a variety of different droplet sizes and can be adjusted to suit differing circumstances, achieving the optimal droplet size to tackle the particular odour and/or dust problem.

The **Vortex Rotary Atomiser** system can be wall or ceiling mounted.

Mobile Fan

The **Vortex Mobile Fan** system is compact, robust, highly mobile and can be quickly wheeled into position to effectively tackle odour or dust problems, whenever and wherever they occur. It is specifically intended to provide focused control of acute odour release or dust problems within localised environments. Its immediate availability on-site ensures the operator is always prepared for unexpected problems or for emergency use.

Mobile Atomiser

The powerful **Vortex Rotary Atomiser Mobile** provides excellent odour control and/or dust suppression in both outdoor and indoor environments. Highly mobile, it can be moved to variable locations quickly and is the ideal solution to tackle localised and emergency odour and/or dust problems. With a 1125 litre integral bowser; the system can run for a full day without service.

All-terrain bowzers are also available. With a maximum capacity of 2000 litres they require less refills.

Rotary Atomiser



Mobile Fan



Mobile Atomiser



designed and
manufactured in the UK



CSCS
carded

over
20
years
of experience

ISO
9001
registered
company

ISO
14001
registered
company

lifetime
warranty
unlimited
usage

ODR is a best selling range of organic, non-toxic, food-grade odour neutralisers using bio-degradable essential oils collected from sustainable resources. Unlike masking chemicals, **ODR** neutralises malodour by removing it from the air. When **ODR** is atomised to produce a fine mist it interacts with the odour particles to neutralise them. Having absorbed the odorous components, **ODR** breaks down the molecular structure of the odour to form harmless, non-volatile salts that degrade naturally, working in 5 ways: pairing, oxidation, adsorption, absorption and combination. **ODR** is available in differing strengths to counteract differing levels of malodour and molecular make-up of the malodours.



ODR1 is particularly suitable for applications where the odorous compounds are soluble in water, e.g. landfill sites, composting sites, effluent treatment.



ODR4 is our core product with a significant amount of the active neutralising ingredient. Capable of treating soluble and non-soluble odorous compounds very effectively. Typical applications include land remediation, landfill, composting sites, effluent treatment, food processing.



ODR2 is suitable for sites where the odours are soluble in water, and where operators wish to demonstrate that the odour control measures are operational by leaving a signature scent in the air. Typical applications include landfills, composting sites, effluent treatment.



ODR5+ has increased levels of the active ingredient that are suitable for particularly strong odours.



ODR3 has an increased level of 'active neutralising' ingredient. Typical applications include landfills, composting sites, effluent treatment, food processing.



ODR6+ has increased levels of the active ingredient that are suitable for particularly strong odours.

ODR ENHANCED



ODR ENHANCED is a new bespoke neutraliser, giving a cotton fresh fragrance, that is specially designed and chemically developed to produce positive results from problematic sites, where the odour is more complicated and elevated, such as; landfill, composting sites, effluent treatment and food processing. It is an organic, non-toxic food-grade neutraliser that uses essential oils from sustainable resources.



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DST is Air Spectrum's range of dust suppression additives which improve the effectiveness of the water used to suppress airborne particles. They are industry tested biodegradable and polymer based. The **DST** range offers various treatment methods for a wide range of applications. **DST** works in 4 ways: encapsulates, adheres, compacts and protects. Applications include arenas, dirt roads, conveyors, earthworks, embankments, stockpiles and mining.



DST1 has been specially developed for tackling airborne dust from mining operations and quarries, cement works, ore transportation and the food industry.



DST4 has been designed for road constructions, mining operations, quarries and tracks, reducing the number of passes required in road surface treatment.



DST2 has been developed for embankments, ore stockpiles, mining operations and quarries and soil waterproofing.



DST5 is a high quality granular formulation for use in soil erosion control and water infiltration applications on irrigated soils and surface irrigated crops. This is achieved through the flocculation of unstable fine soil particles.



DST3 has been specially designed to prevent emissions of dust emitted by vehicular traffic. It forms a high resistant and waterproof coating.



DST6 has been specially developed for sandy soil dust and other arena materials. It is an oil-based product and its main applications are riding arenas, race tracks/bridal paths, forest lanes/dirt tracks and garden/park pathways.

FLYGOPRO



MICROSOL 3+



FLYGOPRO is a non-chemical, non-hazardous, insecticide for flying and crawling insects and maggots.

FLYGOPRO works by using a unique physical action, NOT chemical.

Applications include waste sites, landfills, composting, animal housings, hospitals, farming, food storage, slaughterhouses and anywhere where flies are a problem.



MICROSOL 3+® is a disinfectant product, that is used to clean through the insides of air spectrum odour control/ dust suppression systems to prevent the build-up of bacteria known to form in water systems, including Legionella.

MICROSOL 3+® is completely safe to use, non-corrosive and bio-degradable.

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OLFACTOMETRY

Site Odour Assessment: Site odour assessments qualify all the sources of emission within a site boundary, ranking them in order of significance of contribution to the net odour yield. This assessment method is based upon the guidance notes used by the environment agency and local authorities.

Our senior consultants carry out the site odour assessment, investigating complaint data, odour management plans, and then recording the suspected emission sources. The site odour assessment is carried out using well known techniques such as “sniff test” using the FIDOL method, where the odours are scored on Frequency of emission, Intensity of odour, Duration of odour, offensiveness and finally location relative to external receptors.

Using the results: A comprehensive report detailing the findings and conclusions is then presented to provide a clear understanding of how to improve the site odour management. By determining the exact odour emission points on a site prior to attempting any form of abatement or process control, significant time and money is saved and a more likely outcome of success ensured.

Odour Dispersion Modelling: Processing operations of any nature that are located within large urbanised areas need to ensure strict environmental compliance, especially where potential nuisance by odour can escalate into complaints, investigation and enforcement.

The modelling process begins with the collection of data, drawn from the point source, or sources, including strength of odour and emission rates, if applicable, on the site in question. This is analysed, together with topographical, meteorological data, wind mapping and dispersal data, to present a visual interpretation of dispersal of odour or potential dispersal of odour at the site.

Zoned maps can be produced to indicate the odour concentration at various points on the local geography and urbanised areas. This enables an informed decision to be made as to any recommended abatement measures deemed advisable.

ODOUR LAB



- threshold analysis
- concentration analysis
- hedonic tone analysis
- odour characterisation
- human acuity testing
- odour abatement analysis
- emission measurement



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MOBILE & STATIC SYSTEMS



NO CAPITAL COSTS

We have a large rental fleet for every application, available for short and long term rental

from only **£115** per month



all rental packages include:

- power supplies for maximum portability
- fully supported servicing ensuring equipment reliability
- user guide

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manufactured in the UK



CSCS
carded

over
20
years
of experience

ISO
9001
registered
company

ISO
14001
registered
company

lifetime
warranty
unlimited
usage



**REDUCE
YOUR
COSTS**

Regular servicing will help you to:

- ensure maximum operating efficiency
- meet your odour management plans
- keep within site legislation

**All packages can be
tailored to individual
site requirements**

Packages can include:

- your annual supply of neutraliser
- breakdown cover and ALL replacement parts
- support boxes

BRONZE

- Full annual system service
- Replacement filters
- Full system flush with Microsol 3+

from **£40** per month*

SILVER

- All the benefits of the **Bronze** package
Plus
- Replacement of consumable pipework and fittings
- Replacement nozzles
- Cleaning of atomiser heads

from **£75** per month*

GOLD

- All the benefits of the **Silver** package
Plus
- Complimentary drum of Microsol 3+
- additional service visit

from **£99** per month*

*UK prices only. Excluding VAT. Cover and prices are dependent on machine, age and condition.
Subject to inspection before acceptance onto scheme.

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CONTACT US

Air Spectrum Environmental Limited
Spectrum House,
Checketts Lane Industrial Estate,
Checketts Lane,
Worcester
WR3 7JW, UK

T: 01905 362100
INT: +44 1905 362100
E: sales@airspectrum.com

WHAT OUR CUSTOMERS SAY

“ Veolia Environmental Services plc Rochester Transfer Station accepts over 130 vehicles for waste disposal each day. I was very impressed in a number of things: Air Spectrum worked to a very tight deadline and fitted the system in less time than I thought possible and having made at first a call for a quotation for works to be carried out, Xalla Axton arrived one morning and had the whole thing wrapped up in record timing, and in a price that was unbeatable by other competitors. What did surpass my expectations was the fact that you felt like a valued customer. The after-care counts for a lot in my book. Xalla Axton made the whole experience from the first phone call enquiring of the product to the install a pleasure and would not hesitate to recommend the products or the Company. ”

Tony Collins, Transfer Station Manager, Veolia Environmental Services plc

“ We approached Air Spectrum in 2011 to help us counter a difficult neighbour. From the initial site audit it was clear that Air Spectrum were very experienced and knowledgeable without preaching as is often the case with some companies. The solution has been fine tuned to a very effective system. Any teething problems were quickly dealt with and the system runs very smoothly with minimal attention. Ongoing annual site surveys are, in my opinion, essential from a due diligence perspective and also to ensure that initial tightening of procedures do not slip over time. I have no hesitation in recommending Air Spectrum wholeheartedly. ”

Richard Spear, Director, Coombe Fisheries Limited

“ Air spectrum are a pleasure to work with and I have no hesitation in recommending their products and their teams to other companies. ”

Daniel Hollingsworth, Site Operations Manager, Biffa Waste Services Ltd

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