NEIGHBOURHOOD SERVICES SCRUTINY FORUM AGENDA

Tuesday, 16 March 2010

at 4.00 pm

in Committee Room B, Civic Centre, Hartlepool

MEMBERS: NEIGHBOURHOOD SERVICES SCRUTINY FORUM

Councillors S Akers-Belcher, Barker, R W Cook, Coward, Fleming, J Marshall, Rogan, Worthy and Wright

Resident Representatives: John Cambridge and Brenda Loynes

Also invited to attend:

The Mayor, Stuart Drummond

Councillors Aiken, C Akers-Belcher, Allison, Atkinson, Brash, S Cook, Cranney, Fenwick, Fleet, Flintoff, Gibbon, Griffin, Hall, Hargreaves, Hill, Jackson, James, Laffey, Lauderdale, A E Lilley, G Lilley, London, A Marshall, McKenna, Dr Morris, Payne, Plant, Preece, Richardson, Shaw, Simmons, Sutheran, Thompson, Tumilty, Turner, Wallace, Wistow, Young

Resident Representatives: Christine Blakey, Ronald Breward, Liz Carroll, Bob Farrow, Mary Green, Ray Harriman, Ted Jackson, Jean Kennedy, Rose Kennedy, Evelyn Leck, Alan Lloyd, John Lynch, Brian McBean, Mary Power, Julie Rudge, Iris Ryder, Linda Shields, Bob Steel, Joan Steel, Sally Vokes and Maureen Waller

1. APOLOGIES FOR ABSENCE

2. TO RECEIVE ANY DECLARATIONS OF INTEREST BY MEMBERS

3. MINUTES

3.1 To confirm the minutes of the meeting held on 1 March 2010 *(to follow)*

4. RESPONSES FROM THE COUNCIL, THE EXECUTIVE OR COMMITTEES OF THE COUNCIL TO FINAL REPORTS OF THIS FORUM

No items

5. CONSIDERATION OF REQUEST FOR SCRUTINY REVIEWS REFERRED VIA SCRUTINY CO-ORDINATING COMMITTEE

No items

6. CONSIDERATION OF PROGRESS REPORTS/BUDGET AND POLICY FRAMEWORK DOCUMENTS

No items

7. ITEMS FOR DISCUSSION

Investigation into the Possible Environmental Impacts of Dust Deposits on the Headland and Surrounding Areas

7.1 Evidence from key groups:-

(a) Covering Report – *Scrutiny Support Officer;* and

(b) Evidence from:-

(i) Van Dalen;

(ii) PD Ports;

(iii) Heerema; and

(iv) the Regeneration and Neighbourhoods Department

7.2 Feedback from the site visit held on 19th February 2010, the observations of ships from the Town Wall, the visits to properties on the Headland and the Focus Group held on 23rd February 2010:-

(a) Covering Report – *Scrutiny Support Officer*

(b) Verbal Feedback from the:-

(i) site visit held on 19th February 2010;

(ii) observations of ships from the Town Wall;

(iii) visits to properties on the Headland; and

(iv) Focus Group held on 23rd February 2010

8. ISSUES IDENTIFIED FROM FORWARD PLAN

9. ANY OTHER ITEMS WHICH THE CHAIRMAN CONSIDERS ARE URGENT

ITEMS FOR INFORMATION

Date of Next Meeting:- Tuesday, 23 March 2010 at 2.00 pm in the Council Chamber, Civic Centre, Hartlepool

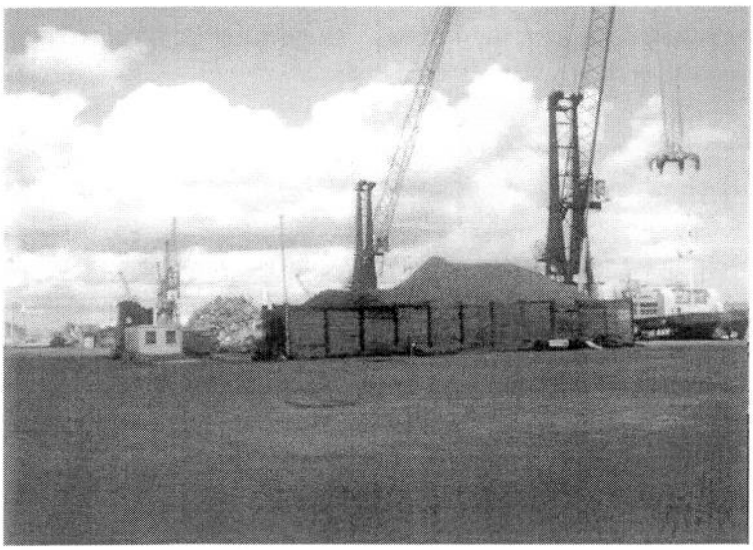
envoy report

REPORT NUMBER: 08-1072.02

DUST AND PARTICULATE MONITORING
SCRAP METAL LOADING OF 'BLUE BAY' – 2ND MAY 2008

ON BEHALF OF

VAN DALEN (HARTLEPOOL) LTD, IRVINES QUAY, HARTLEPOOL, TS24 0UZ.



Report Prepared by:

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REPORT NUMBER: 08-1072.02

DUST AND PARTICULATES
INITIAL FINDINGS AND PROPOSED SCOPE OF WORKS FOR MONITORING

ON BEHALF OF

VAN DALEN (HARTLEPOOL) LTD

EXECUTIVE SUMMARY

Envoy was commissioned by Van Dalen (Hartlepool) Ltd to perform dust and particulate monitoring works during a ship loading event at their metal recycling export terminal situated at Irvins Quay, Hartlepool. Works included a combination of personnel monitoring & ambient air monitoring on the ship using site calibrated air pumps, and were commissioned following a public liaison meeting hosted by the port authority in which it was agreed that targeted monitoring of the subsequent ship loading event would be monitored and the results of such monitoring compared to relevant operational standards. During this meeting Envoy also agreed to examine samples gathered by local residents.

The ship loading event that occurred immediately after the meeting was the loading of the "Blue Bay" commercial transport. Envoy personnel attended and monitored the ship loading event on the 2nd May 2008 using a combination of visual inspection and air pump samples through two distinct monitoring techniques applicable to safety and environmental monitoring.

Our findings are:

- Samples provided by the residents were largely constituted of the mineral rutile sand. Although the major constituent of this mineral is titanium dioxide, the material also contains a proportion of ferrous oxide which would vary by supplier. Although airborne distribution of this material is apparent, the specific source of the material is difficult to categorise, whether by distribution by ship loading by cross-contamination or by direct wind blow of loose materials on site;
- Personnel exposure on the site is generally within acceptable limits as compared to HSE Workplace Exposure Limits, although personnel in close contact with ship loading should be

advised to wear simple particulate filter masks as and when necessary, especially when directly over the loading bay observing and directing drop positions to crane operators;

- Generally, the rapid loading of the ship would be expected to present a worst case scenario in terms of particulate flux density. Using measured data from the sampling exercise and conducting a conservative assessment of emissions using the Environment Agency H1 modelling software (see section 6.2) the emissions were found to be below levels of environmental significance for health screening; and
- The cross-contamination of the site by rutile sand is clear, and apparently ongoing. The site and operators of the rutile sand operation are strongly advised to act in co-operation to develop a cleanup regime for the site, and an ongoing working plan to improve the management of rutile sand to prevent subsequent cross contamination of the site. The presence of rutile sand (which contains a variable proportion of Ferrous Oxide) makes it difficult to determine the exact process contribution of Van Dalen's activities to overall particulate levels.

Our recommendations are:

- The client is advised to contact the operators of the rutile sand operation to request action to limit cross-contamination of its stock from its activities;
- The client is advised that once the above action plan is completed a cleandown of stock and residual sand should be completed;
- Once the above actions are completed we would suggest a further monitoring exercise to examine the effectiveness of the cleanup and the resulting environmental contribution of the site to ambient particulate levels; and

We would also recommend additional personnel monitoring for COSHH purposes during a period of non-ship loading to evaluate the more common exposure to on-site particulates.

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Appendix B	-	Chain of Custody – Sampling and Analysis Certification
Appendix C	-	Reference Photograph slides

REPORT NUMBER: 08-1072.02

DUST AND PARTICULATE MONITORING

METAL LOADING OF 'BLUE BAY' - 2ND MAY 2008

ON BEHALF OF

VAN DALEN (HARTLEPOOL) LTD

1.0 INTRODUCTION AND COMMISSION

1.1 Commission

Envoy was commissioned by Van Dalen (Hartlepool) Ltd (hereafter referred to as "the client") to conduct dust and particulate monitoring during a metal loading event at their metal export terminal located at Irvines Quay, Hartlepool, TS24 0UZ (hereafter referred to as "the site"). The commission followed the submission of a monitoring plan to the Port Public liaison group and attendance of Envoy personnel at the last meeting of the group on 22nd April 2008. The client has requested a fully interpretive report comparing their emissions to relevant statutory instruments and guidelines.

1.2 Introduction

The client operates a dockside metal recycling facility at this location to facilitate the export of ferrous and non-ferrous metals for recycling. The site has been in existence for approximately twenty years and was acquired by Van Dalen in 2001. The site is leased from the Port Authority, and has not, until a recent High Court ruling, required a Waste Management Licence. An application for a licence has been duly made to the Environment Agency and is currently under review.

It is understood that the site has received numerous complaints regarding dust and particulates from site activities from local residents. The frequency of complaints has escalated in recent months. Site staff are co-operating with a local liaison committee, comprising representatives of the Local Authority, Port Authority, members of the public and local environmental and safety regulators. It is understood that complainants consider that general site activities present a dust problem, and specifically that export ship loading of metals in particular gives rise to unacceptable levels of particulates.

We understand that the complainants allege that the particulates cause deposition on surfaces at their properties, and may cause adverse health effects. During the last such

meeting (dated 6th March 2008) the client representatives agreed to evaluate suitable methodologies and proposals for particulate monitoring, with the aim of identifying hazard potential, quantitatively measure the impact of the sites activities, and develop or refine, where applicable, further control techniques.

1.3 Objectives and Goals

The objectives of this study were to:

- Perform personnel monitoring works of site operators in accordance with Control of Substances Hazardous to Health Regulations (as amended);
- Perform targeted ambient air monitoring works in general accordance with Environment Agency Technical Document MR17 – "Monitoring Dust and Particulates around waste facilities;
- Maintain a visual record of loading and maintain monitoring diary;
- Identify potential sources of particulates in the surrounding environment which may impact upon the monitoring exercise;
- Perform appropriate analysis on collected samples in accordance with statutory guidance; and
- Provide interpretive report comparing analysed results to appropriate statutory standards or, where unavailable, derive such standards using accepted methodologies.

Further, the client wishes to use the information gathered with respect to material composition and particle size to develop control techniques to reduce any identified impacts.

2.0 SITE DETAILS

2.1 Site Setting

The site is located within Port Authority property. The photograph below shows an aerial view of the site and immediate surroundings. Predominant wind direction is towards the NE. The nearest residential properties are found 140m to the NE of the site, located on the "Town Wall" road.

2.2 Observations from site walkover

Site Overview

During this study complete access to the operational site and the commercial ship 'Blue Bay' was given to Envoy.

The site deals predominantly with ferrous scrap metals, although observed materials included shredded aluminium cans and other non-ferrous bearing materials such as copper. In addition, it was noted that the ground materials included a black sand material which is described as 'Rutile Sand', stored in a building to the south-west. It is understood that the material is unloaded by crane and transported by internal roads to the storage shed. It's presence on site is presumably due to wind spread of the material.

The metal recycling site uses mobile plant to move, sort and segregate metal bearing wastes delivered to site. Separating the active storage area from the dockside loading bay is an approximately 3.5m high retaining wall formed from wooden beams. This wall runs the length of the operational area.

Since the previous visit by Envoy a change in stock control has been initiated by the site and three distinct stockpiles have arisen. To the south east corner of the operational area is stored 'pellet' grade materials. In the centre of the operational area is a stockpile regarded as legacy material (older materials stored for a greater duration). The stockpile to the northwest is considered new material, recently received.

The loading schedule for the Blue Bay was to remove all the historical materials from the central stockpile and complete the load with new materials to full load specification. The original loading schedule indicated loading would commence on Friday 2nd May, and be

completed on Saturday 3rd May. On Friday 2nd May more rapid progress was made than expected and the loading was completed by 19:00 hours. For the monitoring schedule this is beneficial, as more rapid loading would be expected to present a more concentrated particulate flux, and present a worse case scenario for a loading event.

The Blue Bay

The Blue Bay is a commercial haulage ship with a loading capacity of 3000 metric tonnes (approximately 500m^3 volumetrically).

Site Surroundings – Port Property

Approximately 300m northwest of the site is an enclosed storage facility for sand. Although enclosed, it was noted during the site walkover that doors to the north facing sides and south facing sides were open, and that wind spread of material was clear around the building. The ground to the west of the site is largely unsurfaced and granular which may present another potential source of upwind windblown particulates. To the south of the site is a building storing the mineral rutile sand.

Site Surrounding – Residential Area

The Headland is a peninsula area to the North-East of the site, and encompasses commercial buildings to the west, merging into residential properties to the east. The nearest residential properties are located on the Town Wall roadway directly downwind of the site in the predominant North-East wind direction. The nearest property is approximately 140m from the site boundary.

2.3 Local History of Ambient Air Monitoring

Publicly available documents from Hartlepool Borough Council were reviewed to provide background information on air quality issues in the local area. This monitoring is conducted within a nationally required framework to determine concentrations of various 'substances of concern' defined in statutory legislation. These include particulates in the PM10 range which are noted to aggravate existing respiratory conditions such as asthma, and which may induce such conditions. Documents reviewed included:

- Progress Report 2004. Air Quality in the Tees Valley 2000-2003. Tees Valley Environmental Protection Group

- Progress Report 2005, Air Quality in the Tees Valley 2001-2004, Tees Valley Environmental Protection Group
- Supplementary Report 2005, Traffic Pollution In the Tees Valley Area, Tees Valley Environmental Protection Group
- Report A Review and Assessment of Air Quality 2006, Update and Screening Report, Hartlepool Borough Council
- Report B Annual Report 2006, Air Quality in the Tees Valley 2002 - 2005, Tees Valley Environmental Protection Group.

The purpose of reviewing these documents were to determine if the area has been defined as an Air Quality Management Area (AQMA) under relevant statutory legislation and evaluate the local authorities view of any difficulties or confounding variables in their own monitoring for the area.

Our review determined that the area is not defined as an AQMA. The local authority has two fixed point monitoring stations in the area, and two mobile monitoring units which are deployed on a planned basis to monitor emissions in other areas. Monitoring of 2003 included monitoring of the Headland from January to June. All documents note that while areas within the monitoring area meet current legislative standards for PM10, revised Government targets set for implementation in 2010 will be difficult to meet and note the effects of coastal sand and salt particulates on monitoring results. The port is referenced in the documentation, but is not thought to present a major source of PM10 particulate matter.

Records available from previous liaison group meetings indicate that complaints regarding dust emissions were made in 1990 and were investigated by local Environmental Health. Their conclusions were that the site did not present a problem, but an acknowledgment is made that meteorological conditions at the time of the investigation were not conducive to visualising particulates.

2.4 Submissions by local residents

Materials submitted by the residents included Photographs of particulate matter deposited on surfaces and of ship loading activities, and in addition Material Safety Data Sheets (MSDSs) for various Oxides of Iron.

With respect to the MSDSs, extreme caution should be taken when using these sources to predict health effects. The MSDSs refer to industrial, anhydrous materials for industrial use. These compounds tend to be milled to reduce particle size to the respirable range. This size,

in conjunction with being anhydrous (without water) is the predominant cause of many of the health impacts noted in the sheet. In contact with skin, they absorb moisture from the skin and may initiate dermatitis. On inhalation, the water is absorbed from soft tissues in the respiratory tract which causes extreme irritation and longer term chronic disorders.

The materials generated at the site would be hydrated (either formed by iron in contact with water or by absorbing ambient moisture), and more granular in nature formed by crystalline accretion.

In addition, samples were presented to Envoy submitted by local residents. Although no verification or official chain of custody for sampling exists, the samples were described as being collected from windows and other surfaces at the residents property. These samples were taken and analysed to confirm morphology and chemical composition.

3.0 MONITORING METHODOLOGY

3.1 Equipment Used

The equipment used during the sampling event is given below:

Table 3.1.1 – Specifications for Equipment

Item	Purpose	Factory Calibration (if applicable)
SKC Sidekick pump serial number 08520560	Fitted with 5 stage cyclone sampling head for ambient monitoring.	See Appendix A
SKC Sidekick pump serial number 08520359	Fitted with 5 stage cyclone sampling head for ambient monitoring.	See Appendix A
SKC Sidekick pump serial number 08520561	Fitted with 5 stage cyclone sampling head for ambient monitoring.	See Appendix A
SKC Sidekick pump serial number 08520562	Fitted with 2 stage IOM air sampling head for personnel monitoring	See Appendix A
SKC Sidekick pump serial number 08520558	Fitted with 2 stage IOM air sampling head for personnel monitoring	See Appendix A
Defender Calibrator	Calibration air flow for pumping equipment	See Appendix A
Sampling media	Whatman pre-weighed Filter media at 2.5micron, 5micron, 10 micron, 25 micron	N/A
Meteorological conditions	Mobile weather station with integral data logging capability.	N/A

3.2 Monitoring Locations

Fixed point monitoring locations were decided on viewing the loading arrangements on the specific day and arrangement of site equipment, with regard to encountered meteorological conditions.

3.3 Records

During the loading event a diary was maintained to highlight the works undertaken at the site, visual inspection of the loading regime and potential off-site impacts to monitoring the site loading event.

In this context, Envoy wishes to view the operations with an independent perspective and did not intervene at any point if elements of concern were noted. The purpose of this exercise was to establish risks 'as is and ongoing' and not try to arrange ideal conditions for monitoring.

4.0 MONITORING WORKS

4.1 Calibration Data

Factory calibration certificates for pump and on-site calibration equipment are presented as appendix A.

On attendance at the site, pump equipment was calibrated to manufacturer's standards in accordance with Envoy Standard Operating Procedure (SOP) 201. Details of calibration are given below:

Table 4.1.1 On-Site Calibration data for air sampling pumps

Serial Number	Sampling head	Recommended Target Flow	Calibrated Flow	Error potential
08520560	Cyclone	2500 ml/minute	2502.3	+/- 1%
08520559	Cyclone	2500 ml/minute	2502.5	+/- 1%
08520561	Cyclone	2500 ml/minute	2500.7	+/- 1%
08520562	IOM	2200 ml/minute	2201.3	+/- 1%
08520558	IOM	2200 ml/minute	2202.8	+/- 1%

As loading proceeded a potential to differentiate between 'old' and 'new' stock was realised. During this transitional event the sampling heads and media were changed to obtain a clear differentiation between the two. Calibration of subsequent sampling is given below:

Table 4.1.2 On-Site re-calibration data for ambient air sampling pumps

Serial Number	Final Flow	Recommended Target Flow	Calibrated Flow	Error potential
08520560	2478.2	2500 ml/minute	2501.7	+/- 1%
08520559	2482.3	2500 ml/minute	2500.9	+/- 1%
08520561	2488.7	2500 ml/minute	2502.1	+/- 1%

Finally, on collection of samplers a final calibration of all samplers was initiated to gauge end of process flow. This data is given below:

Table 4.1.3 Final calibration Data for air sampling pumps

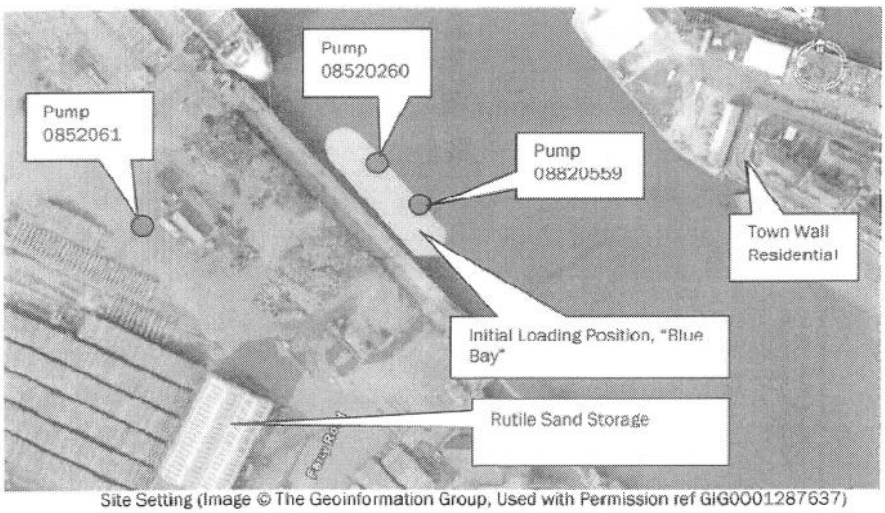
Serial Number	Final Flow	Recommended Target Flow	Error potential
08520560	2492.3	2500 ml/minute	+/- 1%
08520559	2490.5	2500 ml/minute	+/- 1%
08520561	2492.1	2500 ml/minute	+/- 1%
08520562	2184.3	2200 ml/minute	+/- 1%
08520558	2192.8	2200 ml/minute	+/- 1%

4.2 Monitoring Positions/Locations

Monitoring periods reflected standard industrial and commercial models in accordance with statutory methodologies. A summary of these is given below, and Figure 1 shows the locations of fixed point monitors diagrammatically:

Table 4.2.1 Monitoring periods

Pump Serial Number	Location	Monitoring Purpose	Period
08520560	Fixed Point, NE Bay	Emissions from loading	11 hours
08520559	Fixed Point, SE Bay	Emissions from loading	11 hours
08520561	Fixed Point, Site Offices	Background Levels	11 hours
08520562	Mobile - Employee 1	Personnel Exposure	6 hours
08520558	Mobile - Employee 2	Personnel Exposure	6 hours



Site Setting (Image © The GeoInformation Group, Used with Permission ref GIG0001287637)

During the monitoring the operators attached to the monitors conducted the following activities:

1 Employee 1 - Loading supervisor, close contact with stockpiles of waste on site and on ship. Occasional works in loading shovel (approximately 25 minutes throughout day);

2 Employee 2 - Terex grab driver, majority of time spent inside vehicle. Some external works (approx 80:20 split).

4.3 Meteorological conditions

Metrological conditions were monitored throughout the sampling exercise. Generally, conditions started with clear skies and a light breeze generally headed north-east, swinging between NEE and NNW. Cloud cover intensified in the afternoon and a brief shower occurred at 17:00 which also signalled a general reverse of wind direction to the south.

4.4 Site Diary

A site diary was maintained throughout the loading which highlights key events and methodology throughout the monitoring period. The diary is highlighted in the table 4.4.1:

Table 4.4.1 Site Monitoring Diary 2/5/08

Time	Action	Monitoring status
0547	Arrival on site. Pumping equipment calibrated in site offices.	Inactive
0605	Loading of ship by PD Cranes Commences	Inactive
0630	Pumps placed	Active
0911	One Crane withdraws to East allowing entry of site Terex loading crane	Active
0915	Both Cranes stop operation	Active
0920	Terex used to fill void beneath central stanchion of ship loading bay	Active
0945	Terex completes work and withdraws to site	Active
1015	Cranes recommence operations	Active
1130	Dust in immediate area of site noted to increase as bottom of historical stockpile is approached.	Active
1135	Volvo loading shovel used to arrange base pile materials. At this point saturation of the remaining material appears to completely suppress dust.	Active
1148	Rig 1 Pulled out to east and moves around the site to the south to redeploy for new materials.	Active
1204	Rig 1 in new position.	Active
1210	End of old material – break.	Active
1230	Terex used to rearrange and level materials.	Active
1330	Terex completes work	Active
1345	Ambient monitoring pumps deactivated and sampling heads removed from position to avoid crushing as load bay lids are moved to central stanchion.	Inactive
1350	Pumps recalibrated and sampling head changed to allow monitoring of new materials.	Inactive
1406	Loading bay covers moved to centre of loading bay	Inactive
1425	Blue Bay moves northwest to new loading location.	Inactive
1448	Pumps placed into position and restarted	Active
1449	Loading by Cranes recommences	Active
1558	Significant change in wind direction noted – now gently blowing south.	Active
1650	Mechanical failure on Crane 2 – Crane 1 continues	Active
1700	Rain 1700-1710	Active

1720	Crane 2 back on line	Active
1735	Pumps Deactivated	Inactive
1814	Loading by port cranes ceases	Inactive
1820	Site Terex used to level load	Inactive
1900	Loading Bays on Blue Bay closed. End of operations.	Inactive

4.5 Other noted sources of particulate emissions

The wider port is an operational loading/unloading facility and previous discussions with the Port Operator and Environmental Health highlighted other materials on site which have the potential to impact the monitoring exercise. During the monitoring exercise observations were made of the site and surroundings to ensure other potential sources of particulates were accounted for, wherever possible. These other potential sources are catalogued below:

Rutile Sand

Occurrence: Imported Material

General Description: Natural Titanium Dioxide. May contain up to 10% iron. Colour: red/reddish brown to black; lustre: adamantine to submetallic; as with most refined mineral sands, rutile sand presents slightly elevated readings of radioactivity when compared with background levels. Considered Non-Hazardous.

Ability to affect study: HIGH due to prevalence on site and Iron Oxide content.

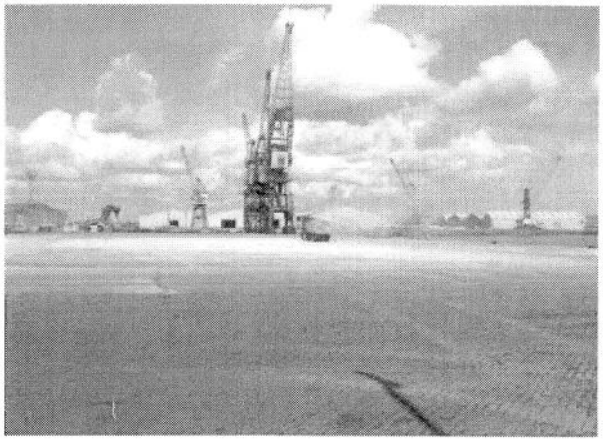
Dolomite

Occurrence: Imported Material
General Description: Combined carbonate of calcium and magnesium, non-combustible, non-toxic.
Ability to affect study: NEGLIGABLE, no activity noted.

Talc

Occurrence: Imported Material
General Description: a naturally occurring magnesium silicate. Toxicity moderate by inhalation, EH40 WEL of 1mg/m^3 in air. Between 11:00 – 12:45 a road-sweeper was deployed to the northwest of the site to clear an area of white powder (presumed Talc). The cleaning operation liberated an unusual amount of particulates but, as the wind direction of

the plume was to the north the event was unlikely to have had an impact on ambient or personnel monitoring pumps.



Ability to affect study: LOW, although noted, wind direction carried material away from monitors.

Coal

Occurrence: Imported Material

General Description: A natural solid combustible material consisting of amorphous elemental carbon with low percentages of hydrocarbons, complex organic compounds and inorganic constituents.

Ability to affect study: NEGLIGABLE due to no noted activity on site.

Salt

Occurrence: Background material

General Description: white crystalline deposit composed primarily of sodium and potassium chlorides with traces of calcium and magnesium chlorides with additional levels of bromide.

Ability to affect study: MEDIUM, as a common airborne background material which contributes to overall particulate levels.

5.0 ANALYTICAL RESULTS

5.1 Resident Submitted Samples

The samples submitted by residents were variable in quantity gathered, but wherever possible samples were analysed by polarised light microscopy to enable basic characterisation, followed by acid digestion and chemical analysis.

During characterisation the samples were noted to follow common granular morphology for combined minerals, with irregular crystalline structures of low porosity. These properties are inconsistent with simple ferrous oxide deposition of rusts, which have more regularity and relatively high porosity. The samples apparently share base morphology with lighter fractions of rutile sand found at ground level on the site and surroundings. To confirm this, Titanium was added to the analytical schedule (being the major constituent of rutile sands).

Chemical results of three samples are given below:

*bdl - Below Detectible limits

Table 5.1.1 Results of Resident Submitted Samples - Metals by Fraction

Determinand	Sample1	Sample 2	Sample 3	Units
Aluminium	bdl	bdl	bdl	mg/kg
Cadmium	bdl	bdl	bdl	mg/kg
Chromium	bdl	bdl	bdl	mg/kg
Copper	bdl	bdl	bdl	mg/kg
Iron, as oxide	99,840	87,350	83,520	mg/kg
Lead	bdl	bdl	Bdl	mg/kg
Mercury	bdl	bdl	Bdl	mg/kg
Nickel	bdl	bdl	Bdl	mg/kg
Tin	bdl	bdl	bdl	mg/kg
Titanium, as oxide	780,010	781,010	792,200	mg/kg
Zinc	bdl	bdl	bdl	mg/kg

5.2 Personnel Monitoring

Results of personnel particulate monitoring are presented in table 5.2.1:

Table 5.2.1 Results of Personnel Particulate monitoring (COSHH)

Determinand	08520558	08520562	Units
Total inhalable particulates	5.52	3.82	mg/m³
Total respirable Particulates	2.12	1.87	mg/m³

5.3 Ambient Air Monitoring

Results of particle size distribution for Ambient Air Monitoring are presented below:

Table 5.3.1 Results of Ambient Air monitoring – Particulate Size Distribution

Determinand	08520560 Head 1	08520560 Head 2	08520559 Head 1	08520559 Head 2	08520561 Head 1	08520561 Head 2
<2.5	5.4%	3.7%	3.3%	6.7%	14.5%	12.3%
>2.5 - <5.0	6.7%	8.8%	5.8%	12.7%	12.7%	19.6%
>5.0 - <10.0	27.7%	15.5%	25.7%	26.1%	18.5%	23.1%
>10.0 - <25.0	39.4%	24.7%	48.0%	19.0%	18.3%	18.0%
>25.0	20.8%	47.3%	17.2%	35.5%	36.0%	27.0%

These fractions were subject to chemical analysis, full details of which are presented in Appendix B, and interpreted in section 6.2.

6.0 COMPARISON AGAINST RELEVENT STANDARDS

6.1 Personnel Monitoring

Exposure to workplace hazardous materials is governed by the Control of Substances Hazardous to Health (COSHH) Regulations (as amended). The HSE document EH/40 is periodically revised to provide guidance on monitoring exposure and gives guideline exposure limits for various chemical substances (Workplace Exposure Limits or WELs).

Two substances found in the study are directly attributed WELs with a time weighted averaging period of 8hrs. Both Ferrous Oxide (worst case Ferric Foundry particulates) and Titanium Dioxide have respirable limits of 4mg/m^3, and total inhalable limits of 10mg/m^3. Both Zinc Oxide and Aluminium Oxide have no directly attributed WELs, but for this assessment a worst case scenario of using the common ferric foundry particulates and titanium dioxide levels has been used.

As the employees worked for a period of 13 hours (an unusual period which only occurs during ship loading) the WELs are adjusted downwards to compensate for longer exposure. An overall level of 2.5 mg/m^3 for respirable fractions and 6.5mg/m^3 for inhalable fractions is derived using the EH40 methodology.

Comparison of actual results of testing s given below:

Table 6.1.1 Comparison of personnel monitoring against EH/40 derived WELs

Employee	Actual Repirable mg/m^3	Respirable WEL mg/m^3	Actual Inhalable mg/m^3	Inhalable WEL mg/m^3
1	2.12	2.5	5.52	6.5
2	1.87	2.5	2.12	6.5

This worst case comparison assumes that all inhaled particulates (including pollens, etc) are treated as hazardous material.

6.2 Ambient Monitoring

The fixed point monitoring positions were used to profile emissions directly from the loading bay and compare them to an upwind location.

To derive a level of environmental significance for these emissions, Environment Agency guidance H1 for IPPC installations was used, as the electronic screening tools for airborne emissions enable an easy methodology of deriving levels of significance for such installations.

For this assessment a number of assumptions were made. All assumptions are conservative, and designed to present to worst-case scenario for environmental significance:

- It has been assumed that all particulates are within the PM10 inhalable range (as opposed to the real proportion, which has a statistical average of 37%);
- It has further been assumed that all particulates (including natural background pollens, salts, etc) are ferrous particulates;
- Although the average emission detected at source by the monitors was 16.7mg/m³, the peak value of 21.5mg/m³ was used; and
- Both ferrous foundry particulates and titanium dioxide have listings of 10mg/m³ for long term exposure levels. If we derived specific Environment Action Levels (EALs) for the species within the framework outlined by document H1 we derive a long term EAL of 100µg/m³ and a short term EAL of 3000µg/m³ for PM10 particulate ranges. These are significantly higher than the default PM10 particulate settings of long term EAL of 40µg/m³ and short term EAL of 50µg/m³. For this assessment the lower EALs have been used for comparison.

Using these criteria and assumptions, air emissions were entered into the Environment Agency H1 spreadsheet to examine the emissions in the context of Environmental Significance for Human Health.

The spreadsheet demonstrates the emission characteristics as being insignificant against long term and short term EALs using conservative criteria.

7.0 CONCLUSIONS AND RECOMMENDATIONS

7.1 Conclusions

With respect to the loading observed and monitored on the 2nd May 2008, the following conclusions have been drawn;

Samples provided by the residents were largely constituted of the mineral rutile sand. Although the major constituent of this mineral is titanium dioxide, the material also contains a proportion of ferrous oxide which would vary by supplier. Although airborne distribution of this material is apparent, the specific source of the material is difficult to categorise, whether by distribution by ship loading by cross-contamination or by direct wind blow of loose materials on site;

Personnel exposure on the site is generally within acceptable limits as compared to HSE Workplace Exposure Limits, although personnel in close contact with ship loading should be advised to wear simple particulate filter masks as and when necessary, especially when directly over the loading bay observing and directing drop positions to crane operators.

Generally, the rapid loading of the ship would be expected to present a worst case scenario in terms of particulate flux density. Using measured data from the sampling exercise and conducting a conservative assessment of emissions using the Environment Agency H1 modelling software (see section 6.2) the emissions were found to be below levels of environmental significance for health screening; and

The cross-contamination of the site by rutile sand is clear, and apparently ongoing. The site and operators of the rutile sand operation are strongly advised to act in co-operation to develop a cleanup regime for the site, and an ongoing working plan to improve the management of rutile sand to prevent subsequent cross contamination of the site. The presence of rutile sand (which contains a variable proportion of Ferrous Oxide) makes it difficult to determine the exact process contribution of Van Dalen's activities to overall particulate levels.

7.2 Recommendations

Our recommendations are:

The client is advised to contact the operators of the rutile sand operation to request action to limit cross-contamination of its stock from its activities;

The client is advised that once the above action plan is completed a cleandown of stock and residual sand should be completed;

Once the above actions are completed we would suggest a further monitoring exercise to examine the effectiveness of the cleanup and the resulting environmental contribution of the site to ambient particulate levels; and

We would also recommend additional personnel monitoring for COSHH purposes during a period of non-ship loading to evaluate the more common exposure to on-site particulates.

8.0 LIMITATIONS OF ENVIRONMENTAL ASSESSMENT

Envoy has prepared this report for its client with full regard to standard industry and regulatory guidelines. No offer or warranty is made to any third party.

In the course of this report third party information was reviewed and interpreted in accordance with standard industry and regulatory guidelines. No offer or warranty is offered by Envoy on the reliability of such information.

envoy report

Appendix A

Factory Calibration Data

SKC

SKC Limited

SKC CERTIFICATE OF COMPLIANCE

This is to certify that the item listed below is in accordance with factory specifications. SKC test equipment is calibrated in accordance with ISO/IEC 17025 utilising UKAS traceability standards.

Model Number 224-50 **Serial Number** 08520558

Settings		Acceptance Criteria		
Flow ml/min	BP Inches of water	Minimum ml/min	Maximum ml/min	
3000	0	3000	3000	✓
	15	2850	3150	✓
2000	0	2000	2000	✓
	25	1900	2100	✓
1000	0	1000	1000	✓
	25	950	1050	✓
750	0	750	750	✓
	25	712.5	787.5	✓

Check Points	
Battery	✓
Flow Fault	✓

SKC Technician #

SKC

SKC Limited

SKC CERTIFICATE OF COMPLIANCE

This is to certify that the item listed below is in accordance with factory specifications. SKC test equipment is calibrated in accordance with ISO/IEC 17025 utilising UKAS traceability standards.

Model Number 224-50 **Serial Number** 08520560

Settings		Acceptance Criteria		
Flow ml/min	BP Inches of water	Minimum ml/min	Maximum ml/min	
3000	0	3000	3000	✓
	15	2850	3150	✓
2000	0	2000	2000	✓
	25	1900	2100	✓
1000	0	1000	1000	✓
	25	950	1050	✓
750	0	750	750	✓
	25	712.5	787.5	✓

Check Points	
Battery	✓
Flow Fault	✓

SKC Technician #

SKC Limited
11 Sunrise Park
Higher Shaftesbury Road
Blandford Forum
Dorset DT11 8ST
UK
Tel: +44 (0) 1258 480168
Fax: +44 (0) 1258 480184
www.skcltd.com

SKC CERTIFICATE OF COMPLIANCE

This is to certify that the item listed below is in accordance with factory specifications. SKC test equipment is calibrated in accordance with ISO/IEC 17025 utilising UKAS traceability standards.

Model Number 224-50 **Serial Number** 08520562

Settings		Acceptance Criteria		
Flow ml/min	BP Inches of water	Minimum ml/min	Maximum ml/min	
3000	0	3000	3000	✓
	15	2850	3150	✓
2000	0	2000	2000	✓
	25	1900	2100	✓
1000	0	1000	1000	✓
	25	950	1050	✓
750	0	750	750	✓
	25	712.5	787.5	✓

Check Points	
Battery	✓
Flow Fault	✓

SKC Technician # [illegible]

SKC Limited
11 Sunrise Park
Higher Shaftesbury Road
Blandford Forum
Dorset DT11 8ST
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Tel: +44 (0) 1258 480168
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www.skcltd.com

SKC CERTIFICATE OF COMPLIANCE

This is to certify that the item listed below is in accordance with factory specifications. SKC test equipment is calibrated in accordance with ISO/IEC 17025 utilising UKAS traceability standards.

Model Number 224-50 **Serial Number** 08520561

Settings		Acceptance Criteria		
Flow ml/min	BP Inches of water	Minimum ml/min	Maximum ml/min	
3000	0	3000	3000	✓
	15	2850	3150	✓
2000	0	2000	2000	✓
	25	1900	2100	✓
1000	0	1000	1000	✓
	25	950	1050	✓
750	0	750	750	✓
	25	712.5	787.5	✓

Check Points	
Battery	✓
Flow Fault	✓

SKC Technician # [illegible]

SKC Limited

SKC CERTIFICATE OF COMPLIANCE

This is to certify that the item listed below is in accordance with factory specifications. SKC test equipment is calibrated in accordance with ISO/IEC 17025 utilising UKAS traceability standards

Model Number 224-50 **Serial Number** 08520559

Settings		Acceptance Criteria		
Flow ml/min	BP Inches of water	Minimum ml/min	Maximum ml/min	
3000	0	3000	3000	✓
	15	2850	3150	✓
2000	0	2000	2000	✓
	25	1900	2100	✓
1000	0	1000	1000	✓
	25	950	1050	✓
750	0	750	750	✓
	25	712.5	787.5	✓

Check Points	
Battery	✓
Flow Fault	✓

SKC Technician # [illegible]

Bios International Calibration Certificate

Cert No. 105586
Product Defender 510-M
Serial No. 113854
Cal. Date 28 February 2008
Sale Date 04 March 2008
Annual Maint. Recommended

Asset Number	Description	Cal Date	Due Date
ML-500-24 101114	ML-500 Medium Flow Cell	10/22/2007	10/22/2008

All units tested in accordance with Bios International Corporation test number PR18-13 Rev C using high-purity bottled nitrogen or dry filtered laboratory air

Technician Zenaida Ortiz **Lab. Pressure** 753 mmHg
Lab. Temperature 22.3 °C

Instrument Reading (ml/min)	Lab Standard Reading (ml/min)	Lab Standard Unit No.	Deviation	Allowable Deviation	Condition Shipped
100.44	100.27	101114	0.17 %	1.00%	in tolerance
1004.4	1004.3	101114	0.01 %	1.00%	in tolerance
5007.4	5007.5	101114	0.00 %	1.00%	in tolerance

Calibration Notes

Bios is an ISO 17025-accredited metrology laboratory. Each Bios primary gas flow standard is dynamically verified by comparing it to one of our laboratory standards, which is a Proven DryCal® Technology volumetric piston prover of much higher accuracy (±0.25% or better) but of similar operating principles. For this purpose, a flow generator of ±0.03% stability is used. Throughout testing, the stability of the flow generator is maintained due to the similar operating principles and construction of our laboratory standards and the devices under test (DUT), assuring the flow generator's validity as a transfer standard. Our laboratory standards are qualified by direct measurement of their dimensions (diameter, length of measured path, time base) using NIST-traceable precision gauges and instruments, such as depth micrometers and laser micrometers. NIST numbers for these gauges and instruments are available upon request. Rigorous analyses of our laboratory standards' uncertainties have been performed, in accordance with The Guide to the Expression of Uncertainty in Measurement (the GUM), assuring their traceable accuracy.

Harvey Padden, President

Bios International Corporation
10 Park Place, Butler, NJ 07405 USA
www.biosint.com

Printed 04 March 2008

envoy report

Appendix B

Sampling and Analysis Datasheets

25th May 2008

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Sampling & Analysis Report
Paul Bain, Principal Consultant
12 Cherry Hills, Barnsley, S75 5NZ
Mobile: +44 (0) 797 976 8080
Fax: +44 (0) 870 052 6543
www.envoy-environmental.co.uk

Private and confidential
Ian Baxter
Van Dalen (Hartlepool) Ltd
Irvines Quay
Hartlepool
TS24 0UZ

By E-Mail (ibaxter@vandalen.co.uk)

Our Ref: PB/08.1072.01/IB/250508

Dear Mr. Baxter

Re: **Certificate of Sampling and Testing**
Samples arising from Sampling of 'Blue Bay' Commercial Transport Ship, 02/05/08

Results of Analysis for:	Van Dalen (Hartlepool) Ltd	**WML Reference Number:**	N/A
Date Samples Obtained:	See Schedule of Sampling Below		

Sampling Declaration:

I, the undersigned, confirm that the samples referred to in this report were independently collected and submitted for analysis in confirmation with general Standard Operating Procedure (SOP) reference 07-1050.SOP1.0 on the above date.

Name of Sampler: Paul Bain

Signature: P. Bain. **Date:** 25-05-08

Schedule of Sampling

Sample Ref	Sample Description/Method	Sample Location	Status
1072.020508. 8520560A Number of Samples: 1 13:45 02/04/08 Method: SOP 13.0	5 Stage Cyclone Sample Metals by ICP Q3 Organics by TEM and GCMS	NE Loading Bay - Morning	Complete
1072.020508. 8520560B Number of Samples: 1 17:35 02/04/08 Method: SOP 13.0	5 Stage Cyclone Sample Metals by ICP Q3 Organics by TEM and GCMS	NE Loading Bay - Afternoon	Complete
1072.020508. 8520559A Number of Samples: 1 13:48 02/04/08 Method: SOP 13.0	5 Stage Cyclone Sample Metals by ICP Q3 Organics by TEM and GCMS	SE Loading Bay - Morning	Complete
1072.020508. 8520559B Number of Samples: 1 17:49 02/04/08 Method: SOP 13.0	5 Stage Cyclone Sample Metals by ICP Q3 Organics by TEM and GCMS	SE Loading Bay - Afternoon	Complete
1072.020508. 8520561A Number of Samples: 1 13:58 02/04/08 Method: SOP 13.0	5 Stage Cyclone Sample Metals by ICP Q3 Organics by TEM and GCMS	Site Offices - Morning	
1072.020508. 8520561B Number of Samples: 1 17:58 02/04/08 Method: SOP 013.0	5 Stage Cyclone Sample Metals by ICP Q3 Organics by TEM and GCMS	Site Offices - Afternoon	
1072.020508. 8520562 Number of Samples: 1 14:35 02/04/08 Method: SOP 25.0	IOM sampler Gravimetric analysis of respirable/ inhalable fractions	Personnel Monitoring Employee 1	
1072.020508. 8520558			

Number of Samples: 1 04:48 02/04/08 Method: SOP 25.0	IOM sampler Gravimetric analysis of respirable/ inhalable fractions	Personnel Monitoring Employee 1	
End of List. 8 Samples.			

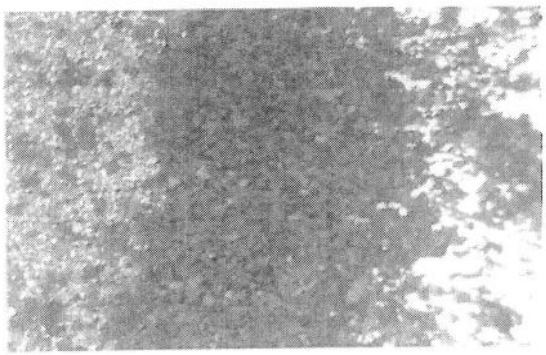
		8520880 (old Material)							852081 (new Material)							
		Analytical Result (mg)	Adjusted Weight (mg)	Flow Rate ml/minute	Duration Minute	Volume air m3	Concn in air mg/m3	f	Analytical Result (mg)	Adjusted Weight (mg)	Flow Rate ml/minute	Duration Minute	Volume air m3	Concn in air mg/m3	f	
>2.5	Aluminium	0.032	0.060	2490.25	434	1.081		0.051			2497.1	162	0.4045302			
	Cadmium	-	-	2490.25	434	1.081	-				2497.1	162	0.4045302	-		
	Chromium	-	-	2490.25	434	1.081	-				2497.1	162	0.4045302	-		
	Copper	-	-	2490.25	434	1.081	-				2497.1	162	0.4045302	-		
	Iron	0.004	0.008	2490.25	434	1.081		0.001			2497.1	162	0.4045302	-		
	Lead	-	-	2490.25	434	1.081	-				2497.1	162	0.4045302	-		
	Mercury	-	-	2490.25	434	1.081	-				2497.1	162	0.4045302	-		
	Nickel	-	-	2490.25	434	1.081	-				2497.1	162	0.4045302	-		
	Tin	-	-	2490.25	434	1.081	-				2497.1	162	0.4045302	-		
	Titanium	0.002	0.003	2490.25	434	1.081		0.00			2497.1	162	0.4045302	-		
	Zinc	0.001	0.001	2490.25	434	1.081		0.00								
	TEM	0.812	0.812	2490.25	434	1.081		0.75	536	0.112	0.112	2497.1	162	0.4045302	0.277	
	Oil	-	-	2490.25	434	1.081	-				2497.1	162	0.4045302	-		
	Phenol	-	-	2490.25	434	1.081	-				2497.1	162	0.4045302	-		
	Formaldehyde	-	-	2490.25	434	1.081	-				2497.1	162	0.4045302	-		
	PCB	-	-	2490.25	434	1.081	-				2497.1	162	0.4045302	-		
	Total							0.81	330						0.277	
	Total collected	0.92	0.92	2490.25	434	1.081		0.92	589	0.179	0.179	2497.1	162	0.4045302	0.442	
	% identified							88	81.0						62.6	
>2.5 - <5.0	Aluminium	0.052	0.060	2490.25	434	1.081		0.05	060			2497.1	162	0.4045302	-	
	Cadmium	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Chromium	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Copper	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Iron	0.114	0.153	2490.25	434	1.081		0.16	129	0.005	0.007	2497.1	162	0.4045302	0.018	
	Lead	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Mercury	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Nickel	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Tin	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Titanium	0.062	0.087	2490.25	434	1.081		0.08		0.01	0.017	2497.1	162	0.4045302	0.043	
	Zinc	0.024	0.030	2490.25	434	1.081		0.03				2497.1	162	0.4045302	-	
	TEM	0.93	0.93	2490.25	434	1.081		0.86	849	0.18	0.18	2497.1	162	0.4045302	0.445	
	Oil	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Phenol	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Formaldehyde	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	PCB	-	-	2490.25	434	1.081	-									
	Total							1.07	039						0.504	
	Total collected	1.24	1.24	2490.25	434	1.081		1.14	120	0.287	0.287	2497.1	162	0.4045302	0.709	
	% identified							93	92.7						71.0	
>5.0 - <10.0	Aluminium	0.025	0.047	2490.25	434	1.081		0.04	251			2497.1	162	0.4045302	-	
	Cadmium			2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Chromium			2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Copper			2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Iron	0.582	0.803	2490.25	434	1.081		0.74	107	0.18	0.257	2497.1	162	0.4045302	0.636	
	Lead	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Mercury	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Nickel	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Tin	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Titanium	0.96	1.433	2490.25	434	1.081		1.33	123			2497.1	162	0.4045302	-	
	Zinc	0.026	0.032	2490.25	434	1.081		0.03								
	TEM	1.86	1.86	2490.25	434	1.081		1.72	560	0.22	0.22	2497.1	162	0.4045302	0.544	
	Oil	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Phenol	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Formaldehyde	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	PCB	-	-	2490.25	434	1.081	-									
	Total							3.89	840						1.179	
	Total collected	4.602	4.602	2490.25	434	1.081		4.25	914	0.58	0.58	2497.1	162	0.4045302	1.434	
	% identified							90	92.2						82.3	
>5.0 - <10.0	Aluminium	0.012	0.023	2490.25	434	1.081		0.02				2497.1	162	0.4045302	-	
	Cadmium			2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Chromium			2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Copper			2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Iron	1.095	1.564	2490.25	434	1.081		1.44	209	0.372	0.503	2497.1	162	0.4045302	0.254	
	Lead	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Mercury	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Nickel	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Tin	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Titanium	0.94	1.567	2490.25	434	1.081		1.29	370	0.664	0.940	2497.1	162	0.4045302	0.346	
	Zinc			2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	TEM	1.165	1.165	2490.25	434	1.081		1.52	491	0.057	0.057	2497.1	162	0.4045302	0.141	
	Oil	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Phenol	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Formaldehyde	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	PCB	-	-	2490.25	434	1.081	-									
	Total							4.26	078						0.741	
	Total collected	5.126	5.126	2490.25	434	1.081		4.74	301	0.337	0.337	2497.1	162	0.4045302	0.833	
	% identified							90	89.2						89.0	
>10.0 - <25.0	Aluminium	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Cadmium	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Chromium	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Copper	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Iron	2.02	2.866	2490.25	434	1.081		2.67	084			2497.1	162	0.4045302	-	
	Lead	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Mercury	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Nickel	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Tin	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Titanium	2.08	3.467	2490.25	434	1.081		3.20	048	0.072	0.120	2497.1	162	0.4045302	0.297	
	Zinc			2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	TEM	0.52	0.52	2490.25	434	1.081		0.67	478	0.08	0.08	2497.1	162	0.4045302	0.198	
	Oil	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Phenol	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Formaldehyde	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	PCB	-	-	2490.25	434	1.081	-									
	Total							6.45	609						0.494	
	Total collected	7.283	7.283	2490.25	434	1.081		6.73	860	0.253	0.253	2497.1	162	0.4045302	0.650	
	% identified							95	95.8						78.0	
>25.0	Aluminium	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Cadmium	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Chromium	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Copper	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Iron	0.32	0.497	2490.25	434	1.081		0.42	464	0.097	0.124	2497.1	162	0.4045302	0.307	
	Lead	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Mercury	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Nickel	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Tin	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Titanium	1.57	2.617	2490.25	434	1.081		2.42	070	0.05	0.082	2497.1	162	0.4045302	0.126	
	Zinc			2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	TEM	0.33	0.33	2490.25	434	1.081		0.30	645	0.055	0.055	2497.1	162	0.4045302	0.136	
	Oil	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Phenol	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	Formaldehyde	-	-	2490.25	434	1.081	-					2497.1	162	0.4045302	-	
	PCB	-	-	2490.25	434	1.081	-									
	Total							3.14	933						0.549	
	Total collected	3.84	3.84	2490.25	434	1.081		3.66	131	0.395	0.395	2497.1	162	0.4045302	0.976	
	% identified							99	99.7						68.5	
Respirable Fraction								2.041	709						1.152	
Inhalable Fraction (incl Resp Fraction)								6.614	010						1.986	
> Inhalable Fraction								10.29	4 811						1.527	
Total								17.32	8 820						9.613	

envoy report

Appendix C

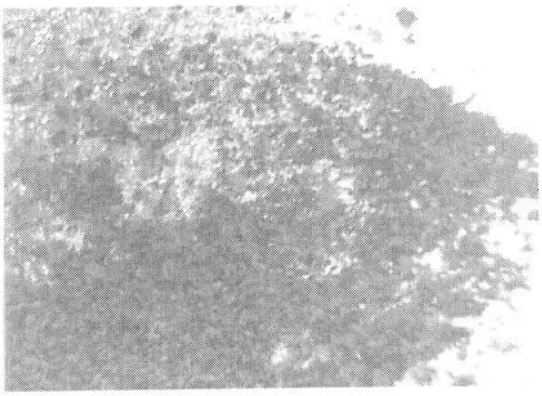
Photographic References

Appendix C – Reference Slides and Photographs



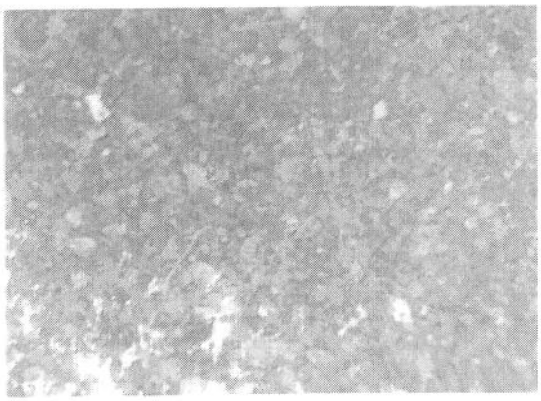
Slide Example:

Sample collected 29.2.07 from Bow Window, 3 Town Wall.



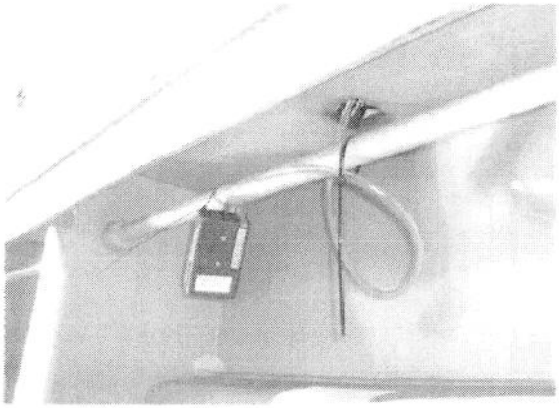
Slide Example:

Rust deposits collected 02.5.07 from old stock material.



Slide Example:

Sample of accumulated rutile sand from site collected 02.5.07



Slide 1:

Placement of sidekick pumps against loading bay door. Cyclone sampling heads are positioned on holding bay rails.

Slide 2:

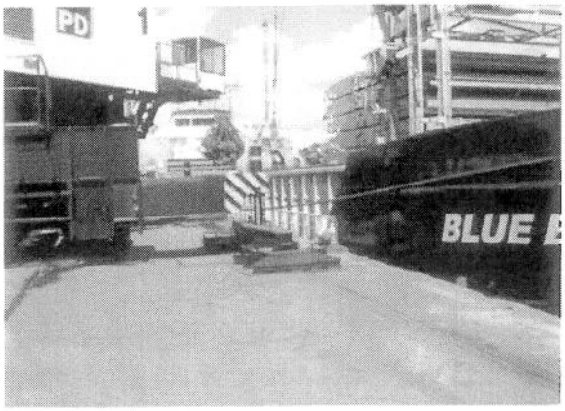
Loading proceeds from the middle of the bay, and the site Terex is used to level material below the central stanchion highlighted.

Slide 3:

Site Terex in operation to level ship. No visual evidence of dust.

Slide 4:

On-site, dust becomes more slightly more significant as load collection works towards the base of the pile.

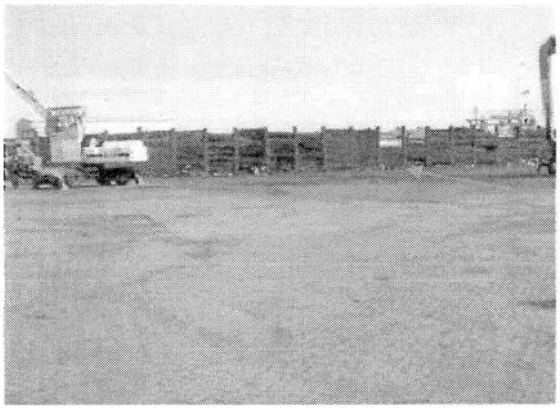


Slide 5:

However, suppression techniques appear successful in suppressing emissions during loading.

Slide 6:

A point is reached when optimal saturation by water spray is reached. Subsequent crane loads do not produce particulates.

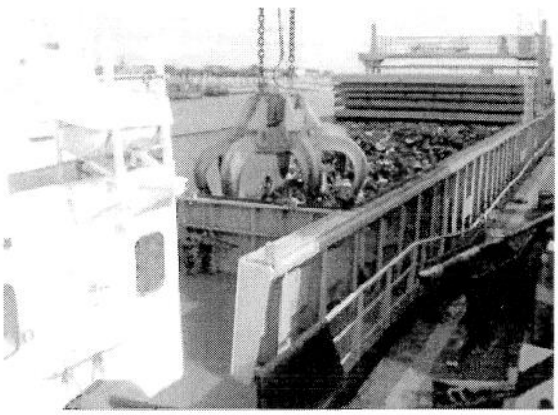


Slide 7:

End of old stockpile. In addition note accumulations of rutile sand (darker material highlighted).

Slide 8:

New Stockpile.



Slide 8:

Deposit of new stockpile. No dust noted.

Feedback from Visits to Properties on the Headland

Members of the Neighbourhood Services Scrutiny Forum visited residents on the Headland to speak to them about their concerns and view their properties in relation to the possible environmental impacts of dust deposits. A short questionnaire was prepared for the visits and detailed below are the responses to each of the questions:-

1) Was there any dust deposits inside or outside of the property?

(a) Only slight

(b) Yes

(c) dust around and sharp particles

2) If yes, had these dust deposits caused damage to the property?

(a) Yes

(b) Not sure

(c) difficult to say as do not have expert knowledge in this area

3) If yes, can you give a brief description of the damage?

(a) There was dust around but do not have expert knowledge to conclude that the dust was causing the damage.

(b) One resident highlighted that a service road at the back of his house used by Heerema was not tarmaced and this caused a lot of dust on his property.

(c) There was not very much dust around, a ship came into dock while I was visiting one property on the Town Wall. I am not sure dust causes as much damage as resident's state. There was certainly no dust on cars in fact they were really clean. However, there was a small amount of metal type dust in window frames. I was shown rusty window hinges but I felt it could have been caused by the salty sea air. I visited the Headland at approx 9.30am 1/3/10 and again approx 3pm it was a lovely day no dust anywhere. Again visited Tues 2/2/10 the ship was being unloaded of its cargo which I believe could have been white powder, the crane lowered the cargo into the hopper, it was not dropped from a height, the lorries were filled then drove off. My husband and I watched this process for quite a while, no evidence of dust anywhere.

(d) Rusted hinges on windows. Interior damaged P.V.C window sills and door frames. Garages filled with brown / grey abrasive dust. Black mould marks on furnishings and laundry. Rutile sand creates black pitted markings and grime on plaster work and paintwork.

(i) Minutes of Liaison and Officer meetings.

Multi-Agency Liaison Meeting
Port Authority Conference Room, Cleveland Road, Hartlepool
Corrected minutes of 6 March 2008 at 2.30 pm

PRESENT

Ian Baxter	Van Dalen
Nigel Boothby	Van Dalen
Dave Ashby	Van Dalen
Adrian Hurst	Hartlepool Borough Council
Stephanie Landles	Hartlepool Borough Council
Zoe Feather	HSE
Cllr John Marshall	Elected Ward Member, St Hilda's
Cllr Steve Allison	Elected Ward Member, St Hilda's
Sean Beach	Port Authority
Nathan Atkinson	Environment Agency
Stan Rennie	Resident
John Graham	Resident
Peter Mathwin	Resident
Alan Cook	Resident

APOLOGIES

Peter Cook	Resident

1. Brief Updates on Activities/Issues

Adrian Hurst supplied a brief background on the issues that are the subject of the meeting.

Historically there have always been problems and regular resident meetings took place up until 6-7 years ago. A petition regarding the dust was received by HBC on the 2nd March 1995 and passed to the Environmental Committee and minuets of the Liaison Group regarding dust stated that sprinkling was considered but not an easy option and also there was no evidence that the dust was of a toxic nature.

Mr Hurst informed the meeting that the Council started receiving its latest complaints about dust affecting Town Wall around 2 to 3 weeks ago. The houses in that vicinity are on the prevailing wind and the paintwork and windows become covered by dust, often containing fine filings.

The Council have spoken to Van Dalen to try to resolve the situation, hence the reason for today's meeting. As it is recognised that there is a definite problem, different agencies were represented to cover specific issues: HSE for the health and safety aspect, The Environment Agency for waste management and Hartlepool Borough Council regarding the nuisance problem caused by dust.

The main aim is to resolve the dust problem without causing further environmental complications.

John Graham pointed out that the resident meetings stopped around 6/7 years ago. However, Sean Beach said that the Port Authority held regular meetings with Van Dalen, EMR and previous companies and residents were informed of the ship movements.

Stan Rennie, as a resident representative, was in possession of a pack put together by the residents' group, which contained photographs and documents.

Photographs were passed around. These included pictures of 1 day's build up of dust, both externally and internally; pictures of the scrap heap and of the sprinkler system in action.

Whilst Mr Rennie appreciated Van Dalen's efforts in trying to put some measures into place to control the problem, he felt that the photographs showed that damping down made no difference and the residents feel that it is not only Town Wall suffering from prevailing winds and the dust carried on it.

Ian Baxter tried to determine which day the photographs were taken because, whilst the hoses had been turned on and ran all day on the Thursday, they hadn't been running on Friday morning until they'd been asked to be put on. The photos were taken to demonstrate lack of spray affect and that there was still run-off going into the docks.

Mr Rennie reiterated that the damping down measures didn't make much of an impact on the dust. Residents had watched the operation and, although the hoses were on, they could still see clouds of dust. He added that the sprinkler system may have seemingly stopped the dust coming off the stockpile but there was no reduction at Town Wall.

Mr Rennie then drew attention to the health concerns of the residents and produced documents outlaying symptoms that can occur if the dust is inhaled or ingested. Due to dust being an irritant to the respiratory tract, it can cause coughing, chest and muscle pain and flu-like symptoms. Swallowing may cause liver damage, pain, nausea, diarrhoea and shock. The source of this information is a Material Safety Data Sheet. Mr Rennie then asked members of the meeting to turn to the International Chemical Safety Cards document and quoted from it the inhalation risk of ferric oxide as being "a nuisance-causing concentration of airborne

particles can be reached quickly when dispersed, especially if powdered." The effects of short-term exposure are that it may cause mechanical irritation and long-term or repeated exposure can result in siderosis.

A document from the Environment Agency (Monitoring of Particulate Matter in Ambient Air around Waste Facilities) was then referred to and discussion ensued as to who is responsible for monitoring and whether there is a legislative framework regarding air quality and whether it is being met.

Sean Beach said that Van Dalen lease the site from the Port Authority in order to carry out their operations. The HSE have noted the dust issues and the Council wish to ensure that residents don't endure nuisance.

The meeting was told that an application had been lodged by Van Dalen for a Waste Management Licence, which would, hopefully be issued within the next 2 to 3 weeks. The licence does not contain specific limits in relation to dust but will contain general conditions in relation to controlling dust.

There was concern by the residents as to whether or not Van Dalen were operating with a licence and whether planning permission was needed in order for a licence to be granted. It emerged that the delay in obtaining a licence was due to a question surrounding whether Van Dalen's activities involved waste or not and whether a license was required. It was a national issue whereby an argument raised as to whether scrap was waste. The High Court was of the opinion that as scrap was being processed, then waste was being processed. Van Dalen have a lease with the Port Authority allowing them to export scrap from the quay which has recently been extended.

Mr Baxter explained that at the moment there are two operations in process; shipping steel and loading ships but processing scrap. The main process was loading ships.

Adrian Hurst said that the port has planning permission to carry out Port related activities and that Van Dalen's activities would fall within this remit.

John Graham was concerned that no licence had been in place since the early 1990s, to which Van Dalen responded by saying that they hadn't need one then.

Ian Baxter wondered how many monitoring positions should be brought in and said that the company had used spray systems to try to alleviate the problems.

Sean Beach added that whatever measures should be in place were in the process of being put in place. He considered it important that the

right questions were being asked and that each agency familiarised itself with the relevant information to take away from the meeting.

John Graham pointed out that the Environmental Health had been asked to monitor the problem in 1990. However, on the day they carried out the monitoring there was no wind and therefore concluded there wasn't a problem. John Graham added that the residents had taken a video at the time, footage of which has now been lost, which showed clouds of red dust. The residents informed the meeting that it was a 24/7 problem and so bad that cars and windows needed to be washed daily. The nearest houses are 100 – 150 metres away and had been bombarded with dust for 20 years.

The discussion returned to the health effects of air inhalation and dermal contact of general particle matter exposure and Mr Baxter asked whether any of the residents suffered any of these problems, to which Cllr Marshall responded that his grand-daughter suffered from asthma and dermatitis.

The Port Authority was asked whether it could demonstrate monitoring measures and responded by saying that when they had been contacted, the calls had concerned noise problems. When this was the case, Van Dalen reduced the hours and no longer loaded at night, only from 8am until 8pm. Mr Rennie stated that this was not really monitoring but only reducing the loading hours.

Mr Baxter tried to assure the residents that Van Dalen were willing to try to alleviate the problems suffered and pointed out that they were an inherited legacy. He informed the meeting that the company would take professional advice on air monitoring and make this advice available and also that an effort would be made to clear out all the scrap which had gone rusty. The company would initially try hosing and use specialised equipment to see how it worked in combating the problem. Stan Rennie asked the Environment Agency if they would be happy with Van Dalen spraying the scrap without proper bunding to protect the dock waters.

The residents did not feel that this would stop the environment issue with regards to dirty water contaminating the harbour and Sean Beach felt it advisable to tackle the dust issue first and then water.

Discussion then turned to Risk Assessments and whether they are required by law and who is responsible for putting them in place. It was felt that Van Dalen are responsible as they are leasing the site from the Port Authority.

Stan Rennie then read out an email which he'd written to Sean Beach and which contained photograph attachments. Mr Beach had not received this. However, it had been copied and seen by Stephanie Landles and Mr Rennie agreed to send it again. The email concerned questions the residents had as to what legislations the Local Authority

stipulated risk assessments should have, whether the Port Authority had any responsibility in making sure risk assessments were in place, whether they should be in place before a licence is granted and, if they're not, whether the company should be allowed to operate.

There were questions as to whether the Borough Council had done any tests and the residents were informed that their involvement was mainly from a dust aspect.

Mr Rennie returned to the health issue and felt that it would be beneficial for a survey to be carried out to find out what symptoms are being suffered by inhabitants of the area. He himself suffers from a brown substance in his lungs and has had x-rays and lung function tests done for 7 years. Doctors assume, in his case, that he must work with dust. Other neighbours suffer from sore eyes and liver dysfunction. Other residents also suffer from asthma and dermatitis.

Mr Rennie then showed the meeting dust samples from 1 day's collection. Houses within closer proximity to Van Dalen's operations contained bigger particles.

It was suggested that only a small amount of dust was needed to analyse for content and that prevailing wind conditions are very significant in the problem. However, Cllr Marshall stated that there are 2 junior schools in the area and that these should be taken into consideration. He said that health problems are not uncommon in the area.

The residents called upon the HSE for a prohibition notice to stop operations. Zoe Feather, the HSE representative, informed all present that this was the first the HSE had heard about the issue and therefore further investigations and facts would be needed before they could issue anything like that.

Mr Rennie stressed the scale of damage the dust caused to property, saying that it was not just a case of washing dust from window; residents were having to scour dust off. Mr Cook added that his brother had had new windows fitted within the last fortnight and these were already severely damaged.

A question was directed towards Zoe Feather as to whether the HSE would investigate the environmental impact and impact on residents' lifestyles. Again, the representative agreed to take all the information back to her office to discuss with her colleague and assured that the HSE would stay involved.

Peter Mathwin asked whether, when granting a licence, the close proximity of residents would be taken into consideration and the response was that it would automatically be taken into consideration.

Nathan Atkinson from the Environment Agency said that the concern of the residents had only fairly recently been drawn to the attention of the Environment Agency. He was asked whether there was any possibility of a licence being refused to which the reply was that this would be unlikely, however there would be stipulation to consider the effects of operations on the environment. He said that the Environment Agency would work with Van Dalen with regards to finding out what controls they will take.

Mr Atkinson was asked whether a clause could be written into the licence to ask the company not to load ships in certain, adverse conditions, to which he responded that there was a possibility but that it was not likely.

Adrian Hurst then told the meeting that he had been on site the day before when it was not windy and there was no ship in. He observed that every time the grabber dug into the stockpile there was dust everywhere. He then went to Town Wall to see the tipping, where he saw a cloud of dust. He said that there were no controls in place or watering down occurring to lessen the problem and questioned what it must be like during days of severe weather.

Mr Baxter said that that had not been a normal situation and would not normally happen. He also stated that the company were down to the last 2 ships to get rid of old stock, that they had started last week with hoses and were now looking at equipment to hire. He also asked of the residents what would happen to the scrap if Van Dalen didn't use it and pointed out that the company were exporting for the economy.

Stan Rennie asked would Mr. Baxter be able to put a sprinkler system into the holds of the ships as spraying had not made any difference to the stockpile.

At 3.40pm, Cllr Allison left the meeting to attend another.

Nigel Boothby assured the meeting that the primary aim of Van Dalen was to use a misting system which used little water, in order to minimise pollution into the harbour. It was very much trial and error, though if it was found that the misting system was not working, something else would be introduced.

Mr Rennie was worried that the residents had endured the problem for so long that they were now building up intolerance to the dust.

Mr Baxter assured him that the stockpiles were being reduced and that they wouldn't have them on a long-term basis.

Mr Rennie felt that doctors should be aware of the health problems and side effects the dust was causing and Councillor Marshall suggested taking the information to the PCT for their involvement.
Nathan Atkinson stated that at the moment there is no proof of any link.

It was agreed that the agencies and Van Dalen would work together on this problem now that it had come to a head.

Cllr Marshall summed up that the meeting was a starting point where risk assessments had been discussed and there was a willingness for further meetings to be held.

Sean Beach said that the residents group had found out a lot of information recently and presented their case well, though he felt that their concerns had risen since obtaining information from the Internet. He agreed, however, that there was a serious problem in relation to the dust and said that a licence needed to be issued which would say what regulations needed following, including control measures. Stan Rennie wanted to make the statement that the information from the internet was not exasperating the public's concerns but informing them of possible links to their ill health and living arrangements.

Mr Baxter told the meeting that Van Dalen was a Dutch family business, established 60 years ago. He assured that the company was a caring one, which was willing to work with people and willing to listen and to respond. He said that the problem was aggravated by wind and was perhaps not a 24/7 problem. Mr Rennie responded that it had the potential to be. Mr Baxter said that the monitoring station would be in place all the time, on both windy and non-windy days, taking consideration of all aspects.

Zoe Feather felt that the residents should not perhaps lay great store in all the documents they read on the Internet as things can sometimes be exaggerated.

Stephanie Landles added that the meeting had brought together the appropriate people to tackle the problem and felt that positive steps could now be taken. She agreed to act as a representative to liaise between agencies and residents in order to make sure that information is transferred to everyone. She appreciated the residents limiting themselves to a small group to keep the meeting under control.

4. Action Plan and Future Progressions

(a) Stephanie Landles to organise a meeting between Hartlepool Borough Council and regulatory bodies, i.e. EA and HSE, as soon as possible, in order to determine roles and actions.

(b) A full meeting to be arranged with all attendees of today's meeting, to take place within 5 weeks.

5. Feedback Requirements

To distribute the minutes to all involved.

6. Any Other Business

7. Date of Next Meeting

Date to be agreed within 5 weeks.

Proposed date of next meeting
2:00pm on the 15th April 2008 at the PD Ports Offices Conference Room.

OFFICER MEETING

MINUTES OF MEETING HELD 8th April 2008

Attendance

Adrian Hurst	HBC
Stephanie Landles	HBC
Chris Gillies	HSE
Zoe Feather	HSE
Graham Hull	EA
Nathan Atkinson	EA

Action

1. **Apologies**

All Present

2. **Minutes of Previous Meeting**

N/A as first meeting

3. **Matters Arising**

N/A as first meeting

There was a round of introductions and SL passed all present a copy of the monitoring plans provided by Van Dalen UK's consultant from envoy, Mr Paul Baines. There was a general discussion around the proposed monitoring issue and GH asked why monitor? What were they expecting to get from monitoring? especially as all parties around the table were aware that there was a problem.

SL stated that the present feeling was that this situation could be a reoccurring Statutory Nuisance and the only holding back from service of notice was that Van Dalen were around the table working to help solve the situation.

CG stated that the HSE was able to look at monitoring figures for the work force (Workforce Exposure Limits) but these had no relation to the exposure allowances for members of the public. GH asked if the WEL onsite was low, would that automatically mean the exposure to

the public was lower. CG stated that it could not be determined that if it was safe for a worker to work onsite for 8hrs per day that it would be safe for a member of the public to live in the vicinity.

AH raised the issue that previous air quality monitoring had shown the Headland location to have low PM10 figures, but that he was not expecting the monitoring to show a high level of particulates as the material itself was heavy and not able to travel great distances.

AH gave a brief history to the site and how the complaints for dust and noise were dealt with in the past.

GH stated that the Waste Management License was pending but eminent and that it would have some conditions within it but there would be limitations.

GH asked whether Van Dalen were open to recommendations for action at this stage and SL stated after conversations with the area manager and the Environmental Consultant that she felt they were and that was the only reason for none Service of Notice.

All parties were in agreement that a Dust Management Plan was needed to prevent dust rising at source rather than just at the boundary.

It was thought that monitoring to establish the activities causing the dust would be better.

It was suggested that water dosing of the stock piles both before and during any activity would benefit the solution and that water run off needed to be taken into consideration when doing so. If water supply was to be a problem in this location the EA would investigate an application for an Abstraction License and water could then be removed directly from the docks.

The general consensus was that PD Ports should not take a back seat during this situation and should be looking to provided dockside sweepers to help prevent dockside dust accumulation.

SL was asked to approach Van Dalen and envoy to work towards a Dust Management Plan and ask them

- What are the current control techniques?
- What additional techniques are planned?
- What is the timescale for the additional controls to be in place? SL

CG will take the monitoring proposal to his Occupational Hygiene expert for further comments. The comments are to be reported back to the main group. CG

In conclusion it was agreed there was a dust problem coming from the Van Dalen site and that action was required. The proposed monitoring was a good start but action plans would be better at this stage rather than monitoring.

Any other business

The minutes of this meeting will be taken to the next multi agency meeting for an update of the members of the public and elected members. SL to have minutes checked by attendee. SL

ZF will not be able to attend the next meeting so CG will try to cover, GH will attend and so NA will not be required.

Date and Time of Next Meeting

Full Meeting 22nd April 2008 at 2:00pm
PD Ports Conference Room,
Cleveland Road,
Hartlepool.

Multi-Agency Liaison Meeting
Port Authority Conference Room, Cleveland Road, Hartlepool
Draft minutes for meeting on the 22nd April 2008 at 2.00 pm

Present

Ian Baxter	Van Dalen UK Ltd
Nigel Boothby	Van Dalen UK Ltd
Dave Ashby	Van Dalen UK Ltd
Adrian Hurst	Hartlepool Borough Council
Stephanie Landles	Hartlepool Borough Council
Cllr John Marshall	Elected Ward Member, St Hilda's
Sean Beach	Port Authority
Graham Hull	Environment Agency
Stan Rennie	Resident
John Graham	Resident
Peter Cook	Resident
Jamie Bond	Health Protection Agency
Peter Atchison	Health Protection Agency
Paul Bain	envoy environmental consultants

Apologies

Peter Mathwin	Resident
Cllr Stephen Allison	Elected Ward Member, St Hilda's

1. Corrections to last minutes

Corrections to the last minutes were made. **SL to correct and re-circulate.**

2. Brief Updates on Activities/Issues

The draft minutes from the officers meeting were passed to all present at the meeting and Stephanie Landles apologised to the officers for not having them checked before distribution but lack of time due to ill health made this impossible. If any corrections are required please contact SL as soon as possible for there correction and update.

Ian Baxter then updated the meeting of the actions currently undertaken to progress the complaint. They have had 3 shipments which have had the stockpiles sprayed before loading to ship and 2 shipments which were carried out in ideal weather conditions. Sean Beach has produced working procedures for loading the shipments and hosing the stockpiles.

Stan Rennie requested what was meant by ideal weather conditions and stated that just because the wind was blowing off the sea and not causing

the town wall a problem didn't mean that it wasn't causing a problem to someone else in the other direction.

Ian Baxter had taken some photographs of the loading procedures and found that even though there was some dust produced it was staying within the ship's hold.

John Marshall requested clarification that the on site monitoring was that of a visual nature rather than an actual monitored issue.

Paul Bain from envoy then updated the meeting with his involvement, he has visited the site and the Headland to evaluate for monitoring points and procedures. It was agreed that the waste criteria needed to be improved and the amount of loose material present needed to be reduced. Training the staff on site to monitor the supplies and 4 loads have been refused on the grounds of extra dusty material present. Suppliers have also been informed that dirty waste will no longer be accepted. The regulation will fall within the Waste Management License by the Environment Agency and the reporting requirements and rejected loaded are then recorded in the site diary.

The Waste Management Application has been made presuming the issue of technical competency and the management interview is cleared the permit can then be issued. Transfer notes can then be checked against EA records and regulated further.

Site controls segregate new & old stock with an ongoing preference for the old stock to clear it from site. I is thought that there is only one shipment of old stock left on site and following it's removal a full stock rotation system will be maintained to help reduce the accumulation of old dusty materials on site. This will all help with the reduction of dust produced. **SL to distribute the envoy monitoring proposal.**

Paul Bain continued to discuss the monitoring system proposed and was saying that he would be looking to work towards MR17 Guidance on monitoring Particulates produced by the EA, but he would need to modify the proposal slightly as there is an issue with land to sea transfer. MR17 does state that monitoring can be ongoing with more sites, but community monitoring is difficult due to vandalism. Peter Cook stated he would be happy for monitoring equipment to be put at his property.

Paul Bain then clarified the Health Information Data Sheets were for industrial chemical industries where the substances were artificially dried and becoming good at extracting moisture from the environment. However hydrite material would never be found on the weathered dockside.

A general discussion was the made around the table for the type of substances that the samples should be analysed for. It was discussed that the sample size of the dust collected to date was very small and this

may cause a very limited analyse list. It was thought that laboratory analysis for size, chemical composition, organic carbons, mineral oils, phenols, formaldehydes and total PCB's may be considered.

Stan Rennie then wanted to clarify that by reading information from the internet he had not jumped to conclusions but was concerned as anyone would be for the amount that he was finding applicable to him, his family and friends. Ian Baxter stated that he was looking into health monitoring his staff.

Jamie Bond stated that he would tend to look at the material as general particulate (PM10) under the Air Quality Standards. Adrian Hurst stated that the air quality of the headland was monitored in 2003 and was way bellow any requirements. The location was best fit as to power supply, control and access and was finally located behind the Borough Hall. Peter Cook would be happy to see advancement to extra procedure and monitoring systems.

John Marshall stated that this whole situation was in 2 halves, the historical and present. We need to draw a line to the historical issues and focus on the situation now. We want to make the headland a cleaner place to live now. We need to be doing this though a fully open and accessible working plan and although there have been communication problems in the past we need to ensure the future is sustainable. Looking at the health implications for the area may need to be enhanced and monitored, including areas such as Spion Cop and other areas not just Van Dalen.

Peter Atchison then stated that issues around health are very complicated, the plans will improve the dust issues. The problem is with pinning down the cause of health implications is extremely difficult. Would it be beneficial to find out if the headland is statistically worse off for the likes of asthma, what would come from information of that type. If that information was thought to be of benefit then the PCT would be the better organisation to deal with the survey.

Stan Rennie then updated that he suffered from lung function problems and after the last meeting he was able to give his doctor better information and therefore receive better treatment with an inhaler to help his health problems.

Peter Atchison then reiterated that even if a study was carried out and was able to prove that there was a health problem he was not sure of the benefit because the causing factor was then so difficult to prove, especially as there is a strong link between health and deprivation. The PCT have been approached but the timing for them is not good as they have just got a new director and he may need some time to settle in to his post.

Paul Bain did then state that dust is not just being blown from the Van Dalen site and it can be coming from anywhere on the dock land. He thought that outline monitoring would depend on boat activity and weather but he thought the total report could be achieved and ready within 4 weeks. **Paul Bain to email an updated monitoring action plan to SL for distribution.**

Adrian Hurst stated that general port land was cleaned regularly with bowsers and sweepers and in dry spells equipment is hired in. The port have a lot of material going through the docks, dolomite from hart quarry, sand, talc for Omya and Coal. These materials can be difficult to remove as they cake when wet and then dust when they dry out.

Sean Beach stated that when the port carried out its emergency procedures checks, Diesel spills were identified as the highest risk and fires were not identified as a risk.

Paul Bain is to take the samples for analysis to see if there is enough to get appropriate results from.

Ian Baxter then discussed how the general housekeeping and stock rotation will improve both the quality of the product and the dust issues from the Van Dalen site and how the changes that have been made have a cost implication for Van Dalen. The new procedure means that the ship takes up to 4hours longer to fill and the water now being used is an additional charge.

It was decided that members of the public need to initially contact Van Dalen or the ports if there is a problem but ensure that the regulators are made aware of the complaint to ensure notification and actions are recorded. The EA needs also to be informed and it was recommended that the hotline number was used as it was recorded and available 24hrs a day.

John Marshall was interested in disseminating the information to all members of the public perhaps by the means of a leaflet drop with the contact numbers. **SL to look in to forming a small liaison group to take this further.**

3. **Action Plan and Future Progressions**

(a) SL to look at creating a leaflet.

(b) PB to look at monitoring plan and sample analysis.

© IB to look at dust control action plan

4. **Feedback Requirements**

SL to distribute the corrected minutes of 6/3/8 meeting

Draft minutes of 22/4/8 meeting
envoy's monitoring proposal
copies of PD Teesport procedures
Updated contact lists

5. **Any Other Business**

None raised

6. **Date of Next Meeting**

Proposed date of next meeting
4:00pm on the 2nd June 2008
at the PD Ports Offices Conference Room.

Multi-Agency Liaison Meeting
Port Authority Conference Room, Cleveland Road, Hartlepool
Draft minutes for meeting on the 2nd June 2008 at 4.00 pm

Present

Ian Baxter	Van Dalen UK Ltd
Dave Ashby	Van Dalen UK Ltd
Stephanie Landles	Hartlepool Borough Council
Cllr John Marshall	Elected Ward Member, St Hilda's
Sean Beach	Port Authority
Graham Hull	Environment Agency
John Graham	Resident
Jamie Bond	Health Protection Agency
Peter Acheson	Health Protection Agency
Paul Bain	envoy environmental consultants
Peter Mathwin	Resident
Cllr Stephen Allison	Elected Ward Member, St Hilda's
Madeleine Johnson	Hartlepool Primary Care Trust/HBC

Apologies

Adrian Hurst	Hartlepool Borough Council
Stan Rennie	Resident
Peter Cook	Resident

1. **Corrections to last minutes**

   None

2. **Brief Updates on Activities/Issues**

   Paul Bain distributed a copy of his monitoring report and continued to discuss the major issues raised and the concluding findings. The monitoring was carried out on the 2nd of May 2008 on the ship THE BLUE BAY. The monitoring point locations were established to be worst case scenario and best environmental collection, so the locations were two monitor's ship side and one downwind. Paul also explained that apart from the environmental monitoring that was carried out, the staff also wore personal sampling monitors. The initial monitoring highlighted the presence of Titanium Dioxide. The whole monitoring process was carried out in an 11hr period and a timetable found on Page 11 of the report shows the monitoring diary. Paul continued to conclude that his findings were under regulated limits for personnel monitoring and insignificant for environmental monitoring.

Cllr Marshall then asked is the health implications have been monitored and analysed as insignificant, what about the damage to property. There followed a general discussion about chemical attacks on uPVC windows and property and the general agreement was that once the material becomes oxidised it would then become chemically inert. There did follow another round of debates about life expectancy of cars and windows and how natural coastal weathering can also have an affect.

SL explained the process of investigation of dust complaints under the Environmental Protection Act 1990. Where the issue is how dust is affecting the person making the complaint, the evidence required is not physically sampling the dust but to look at the whole picture, time, frequency, weather conditions, activities within the greater area and environment.

Peter Acheson then reiterated that the monitoring that was carried out was worse case and that under no circumstances could it get worse.

SB then raised a new issue, that the photographs showing the dust raising activities on the docksides should have been reported to get the activities stopped or in the case of the leaking grab, an explanation of the task being undertaken. The grab was being used to demonstrate to the manufacturers that the grab was not working to its specification and would need alterations to be made.

Cllr Marshall reiterated that contact should be continued and everyone had a role to keep the evidence fresh and actions appropriate for the current situation. SL confirmed that reported incidences weeks later were totally unusable.

SB went on to state that the sweeper was not paid for his work as the quality of the job was not satisfactory.

Cllr Marshall then recommended that the envoy monitoring report was to be taken away by everyone and any queries or feedback to be sent to SL for future dissemination to the group. He also took the opportunity to thank PB for all his hard work and help with the monitoring report and its explanation.

It was decided that the resident reps need to initially contact Van Dalen or the ports if there is a problem but if they don't feel happy to do so they can contact SL and the other regulators of the complaint to ensure notification and actions are recorded.

John Marshall was interested in disseminating the information to all members of the public perhaps by the means of a leaflet drop with the contact numbers. SL proposed that if anyone was interested in being on the working group to contact her by Friday 6th June so that an invitation could then be sent for the working party attendance to meet.

Following general discussion around the table of where the tasking group was going it was decided that the full group should meet on a 6 monthly basis unless an issues was raised but the working group would meet more appropriately depending on the actions and activities given.

3. **Action Plan and Future Progressions**

(a) SL to establish a working group to look at creating posters and leaflets.

(b) IB to look at dust control action plan.

(c) Resident reps to report any incidences witnessed on the dockside.

4. **Feedback Requirements**

SL to distribute the draft minutes of 02/06/08 meeting
Updated contact list

5. **Any Other Business**

None raised

7. **Date of Next Meeting**

Proposed date of next meeting
4:00pm on Monday the 8th September 2008
at the PD Ports Offices Conference Room.

Multi-Agency Liaison Meeting
Port Authority Conference Room, Cleveland Road, Hartlepool
Minutes of meeting on the 8th September 2008 at 4.00 pm

Present

Ian Baxter	Van Dalen UK Ltd
Dave Ashby	Van Dalen UK Ltd
Stephanie Landles	Hartlepool Borough Council
Adrian Hurst	Hartlepool Borough Council
Shirley Jones	Hartlepool Borough Council
Stan Rennie	Resident
Peter Cook	Resident
Cllr John Marshall	Elected Ward Member, St Hilda's
Sean Beach	Port Authority
John Graham	Resident
Peter Acheson	Health Protection Agency
Peter Mathwin	Resident
Madeleine Johnson	Hartlepool Primary Care Trust/HBC

Apologies

Graham Hull	Environment Agency
Jamie Bond	Health Protection Agency
Paul Bain	envoy environmental consultants
Cllr Stephen Allison	Elected Ward Member, St Hilda's

1. Corrections to last minutes

PM and JG had not received a copy of the last minutes or a letter notifying of meeting, SL apologised and will send addition copies with next minutes

2. Brief Updates on Activities/Issues

Draft copy of newsletter leaflet was distributed to the table by SL. SL asked for comments on the leaflet and any comments or changes to be made to the leaflet to be passed to SL within one week.

- Cll. Marshall wants the leaflet to link health to environmental issues, and then talk about peoples own health and how they can have an impact.
- Cll. Marshall, wants the public to be given easy accessible contact details of relevant personnel, were they can direct their concerns.
- MJ suggested focusing on people tackling their own health and health of the community.

- Cll. Marshall would like all interested parties to make a statement in the leaflet stating that in their opinion there is no problem with the environment and health of the community.

PM distributed a sample of a UPVC windowsill, he went on to explain that he had used a new sample of UPVC windowsill and sprinkled it with 'dust' which had been collected previously from windowsills in the area. He then put the windowsill outside and placed in on his own windowsill and left it for seven days, after washing the sill it can be seen that orange discolouration had occurred, which Cllr Marshall said had burnt into the UPVC sill.

SL explained that we should not say at this stage that the dust had burnt into the UPVC sill, however the sill was discoloured.

Cllr. Marshall stated that the Envoy report said that the dust was inert but he said that looking at the sill example it does not appear to be. Cllr. Marshall wants an expert to clarify the cause of the discolouration.

AH stated that he was unsure what could be done with the sample by the Environmental Protection Team. However he will attempt to get the plastic analysed, finding out why the material discolouration/burning could have occurred.

There followed general discussion about inert materials, and finding out what is causing the problems with window frames in the area, with questions on possible heath effects of the rutile sand.

PA said that data sheets state that rutile sand has no major health effects.

AH explained that there had been no significant health implications from rutile. SR had previously mentioned Natural Occurring Radioactive Materials (NORM) Regulations. However AH confirmed that he was unable to find any reference to these Regulations.

Cllr Marshall was insistent that we find out what the dust is, and were it is coming from, and also if there are any health implications, as young people on the Headland are suffering from asthma and dermatitis. He queried whether there were any links and asked whether the high incidence of asthma is related.

PA said the Headland is a deprived area and there are links with the health of the people with regards to the deprivation in the area. PA also explained that the HPA can identify the health effects of any chemical and exposure limits; however he did state that the public is exposed to a much lower level than the workforce actually working on site.

General discussion followed re workforce PPE and levels of exposure.

Cllr Marshall says we need to find out if there are other links to the poor health rather than just saying it's a deprived area.

MJ explained that lots of analysis has been carried out regarding the substances from the port and the analysis had found nothing that could cause any significant health implications. At present the problems at the Headland cannot be linked to the environment.

Cllr Marshall would like to see statements to that effect put into the newsletter leaflet, to alleviate residents concerns in the area.

PA said that working with companies to reduce the dust is only one of the ways forward and approves the joint working of PCT and HBC to improve the general health and the environment.

SB would like to know what the report actually achieved.

PA said the report had achieved what was intended to be studied and was reassuring.

Cllr. Marshall questioned the integrity of the report insisting that the report did nothing to alleviate the concerns of the residents.

Cllr.Marshall however pointed out that the report pointed a way forward, as work had been carried out to improve the situation, although it did not identify health implications or problems with the materials.

SL and AH pointed out that there had been major improvements at the dock side including hoppers cleaning etc, SL also went on to explain that she has a legal duty to investigate complaints, however at present there is no evidence available to initiate legal action, if that was the way forward.

All interested parties have agreed to make a statement, which will be passed on to SL to be put into newsletter leaflet.

SR would like contact details to report incidents occurring at the dock.

Cllr Marshall thinks that it would be a good idea to include, 'out of hours' telephone numbers of Council, ASBU and police.

AH said that incidents of anti-social behaviour should be reported to the police etc. as the calls are logged and the hot spots can be identified by looking at the statistics.

3. **Action Plan and Future Progressions**

(a) SL to establish a working group to look at creating posters and leaflets.

(b) IB to look at dust control action plan.

(c) Resident reps to report any incidences witnessed on the dockside.

4. **Any Other Business**

None raised

5. **Date of Next Meeting**

To be arranged