gardenscape

Dust Management Plan

Gardenscape Direct Ltd

Newenden Bridge Depot

Station Road

Northiam

East Sussex

TN31 6QA

January 2020

CONTENTS

1. Introduction

1.1 GardenscapeDirect Ltd operate a site in Northiam, East Sussex. This Dust Management Plan (DMP) outlines the dust management mitigation and controls for operation of the site and forms part of the Environmental Management System;

1.2 The purpose of this DMP is to provide detailed mitigation measures to ensure dust, mud and debris are controlled, removed and mitigated during the operation of the site as a whole;

1.3 The DMP considers day to day operations and all foreseeable circumstances (eg adverse weather conditions) which may exacerbate dust conditions on the site;

1.4 The DMP includes:

- Consideration and identification of all activities capable of generating dust;
- Identification of sensitive receptors;
- Site and activity specific mitigation measures

2. Site description and activities

Description

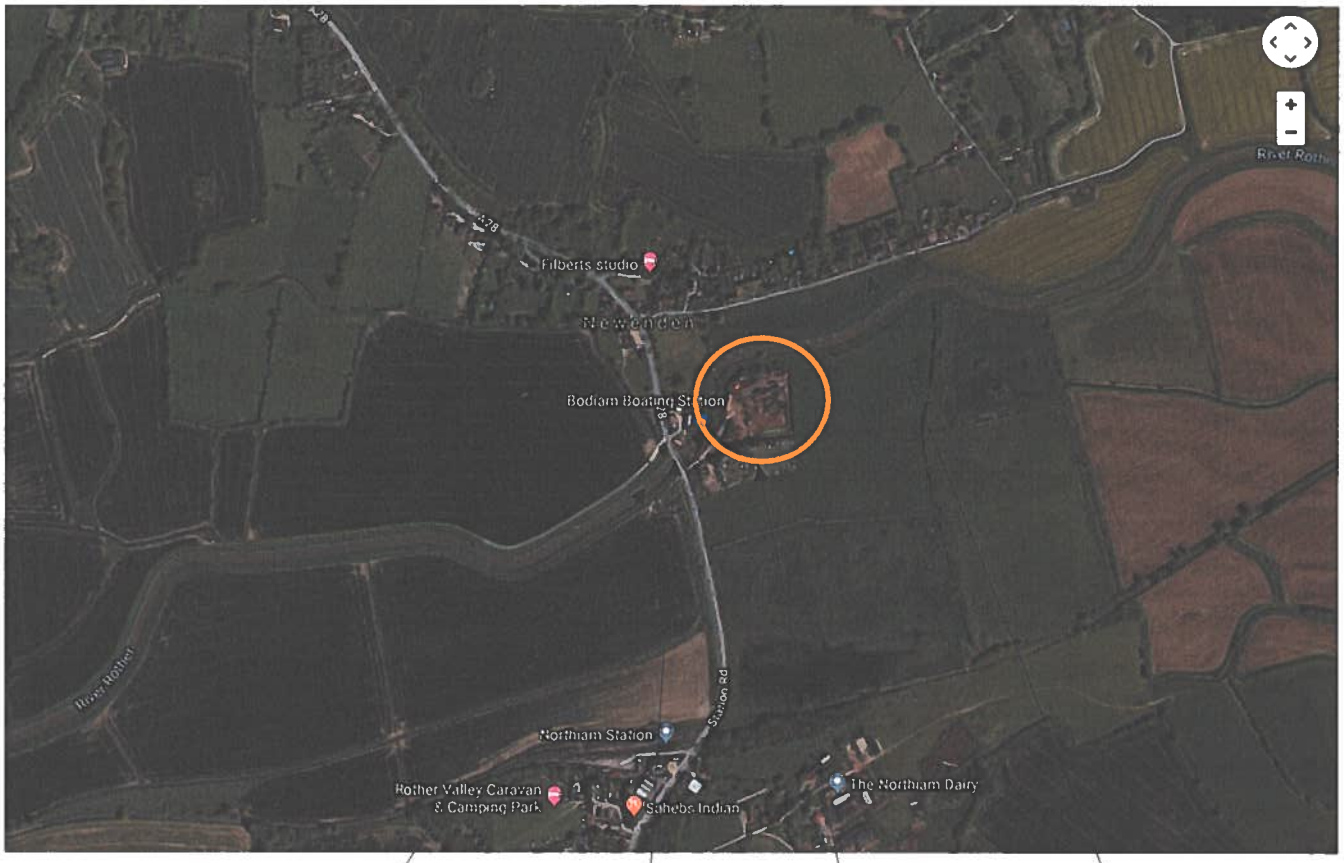
2.1 The site is located just off the A268 on Station Road, Northiam, to the south of the River Rother;

2.2 The site is bordered on three sides by a well established line of leylandii, and beyond that is pastoral land bar a small café/campsite to the south. To the north of the site is the River Rother, beyond which are residential properties on Lossenham Lane;

2.3 A map of the site and immediate area is shown in Figure 1;

2.4 Dust generation in the immediate vicinity of the site is influenced by road traffic on the adjacent A268.

Figure 1: Map of site and nearby receptors



Activities

2.5 The site is currently used for the storage, processing and sale of natural horticultural products such as soils, composts and barks. Aggregates are also kept in concrete bays on the site. There currently exist some buildings on the site used to store horticultural products in bays;

2.6 As part of the proposal an area of the site is to be used for ancillary waste operations, namely the separating of DIY/Construction waste for recycling or disposal, and the storage of manure, garden waste and soil for either sale or disposal. For these purposes, and in accordance with Planning Permission RR/2018/3144/P, an additional building is to be erected along with 2 new sealed concrete bays. All DIY/Construction waste (entering the site via hiab lorry in bulk bags) will be deposited and processed inside the building. Manure and green waste will be stored in the 2 new bays ready for sale or disposal;

2.7 Bays will be located on site to take sorted waste, ready for disposal or recycling off site;

2.8 Natural soils, composts and barks are stored in a mixture of undercover and open bays. Aggregates are stored in open bays to the North West of the site;

2.9 The materials and approximate volumes brought into the Gardenscape yard for processing are shown in Table 1 of Appendix 1;

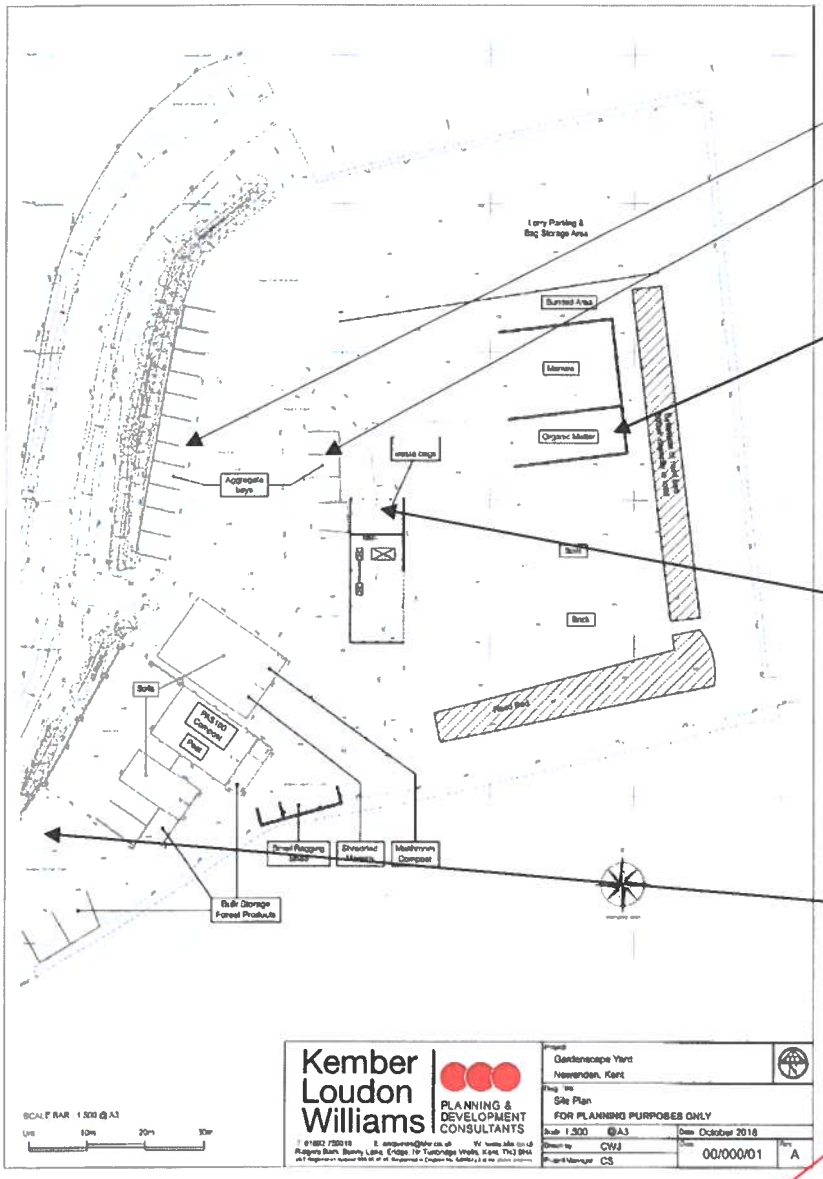
2.10 These materials are either bagged up / loaded loose onto lorries and private vehicles / trailers using wheeled loaders and forklift trucks;

2.11 All materials are held in storage bays, some internal and some external, all on concrete. All vehicles are loaded on concrete aprons;

2.12 The number of lorry movements for deliveries/collections each day (over 250 working days) is up 10 and up to 20 respectively. In addition there is local customer traffic in cars (some with trailers), and staff vehicles, totaling up to 80 movements per day. There are also approximately 100-120 movements per day (average - seasonal as with our business) associated with the next door café and campsite which share the access road from the A268;

2.13 The site layout is shown in Drawing 1. This shows the locations of the buildings, concrete bays, aggregate bays and storage areas;

Drawing 1: Site Plan and potential dust sources



Aggregate bays

Green waste/organic matter storage

Waste processing building

Entrance into yard

Prevailing wind direction

3. Working Hours

3.1 The site operates between the hours of 0700 to 18.00 Monday to Friday and 0800 to 1300 on Saturdays. The site does not operate on Sundays or Bank Holidays;

4. Potentially Sensitive Receptors

4.1 The site is located on the edge of the village of Newenden over 125m away from the main residential area on Lossenham Lane. There is a campsite, café and single residence to the south of the site. To the west is the River Rother, and across the river are the offices of The Bourne Group (of which Gardenscape is a part);

4.2 The receptors considered sensitive for dust are shown in Table 2 of Appendix 1.

5. Potential Emissions from Site Activities

5.1 The site historically received local comments/complaints in regards to dust emissions. These came during a time when clean brick hardcore was being crushed on a small scale on the site. This activity has now ceased and should it ever recommence would be subject to an Environmental Permit and associated updated DMP. No further complaints have been received by the Operator since this activity was stopped;

5.2 The ancillary waste operation will handle DIY/Construction waste and inert material. These include DIY waste, hardcore, garden waste, soil, wood, metal etc. No hazardous waste will be brought onto site;

5.3 DIY/Construction waste will be brought onto the site in bulk bags on our own lorries and unloaded via crane into the waste separation building. The waste will be sorted inside this building. Telehandlers will be used to move the separated waste to the appropriate holding area (ie green waste bay, metal bay etc) to be removed from site;

5.4 Green waste will be temporarily transferred to / stored in a concrete floored bay (indicated on Drawing 1). Once the bay is full the material will be loaded into a lorry by a front loading shovel and taken to a composting site;

5.5 All manure brought onto the site is well rotted. It will be stored in the manure bays before being bagged / loaded for delivery;

5.6 Manure will be brought onto the site in one of our own bulkers. This will be tipped in close proximity to the manure bay and then a telehandler/ shovel used to push the manure into the bay;

5.7 In addition soil / compost / forest products are brought in loose and tipped into storage bays before being bagged up / loaded loose into lorries / trailers for delivery;

5.8 Aggregates are brought onto site in loose loads which are tipped in front of the aggregate bays and then pushed into them with a telehandler. They are then bagged / loaded loose into lorries / trailers for sale;

5.9 Dust generation may arise from:

- Lorries loading and unloading;
- Telehandlers / front loading shovels moving / bagging products;
- Stockpiles;
- Surface of the yard

6 Additional Sources of dust / emissions

6.1 In the wider context of local air quality management, the main dust sources in the area are from vehicles travelling on the local road network, including the A268 Station Road which is adjacent to the site and a main road running from the coast through Newenden towards the M25 to the North;

7 Dust Risk Assessment

7.1 There is no baseline information available for the site, although the baseline airborne particulate dust environment is influenced by local road traffic;

7.2 The level of risk attached to the site is dependent not only on the size and scope of the activities, but also the timing of the works (seasonality) and the sensitivity of the surrounding area;

7.3 When defining the sensitivity of the area, consideration is given to three main factors: sensitivities of people to dust soiling, sensitivities of people to the health effects and sensitivity of receptors to ecological effects;

7.4 A list of potentially sensitive receptors is shown in Table 2 in Appendix 1 including approximate distances to the worksite. Figure 1 shows the location of the site and nearby receptors;

7.5 The distance from the source to sensitive receptors is a key factor for determining the potential dust effects from the site. As a general guide the main effects are at distances of less than 100m, with exponential decline in dust with distance from dust generating activities. It is considered that for receptors more than 350m from the site boundary the risk is negligible. Furthermore the risks at over 100m only have potential to be significant in certain weather conditions eg downwind of source during dry conditions;

7.6 The distances from source that dust effects are felt is also dependent on the extent and nature of mitigation measures, prevailing wind conditions and the presence of natural screening, for example vegetation or bunker walls etc;

7.7 The residential receptors on Lossenham Lane are located 125m+ north of the centre of the site. As the distance to the receptors is less than 350m there is potential for the site's operations to have a medium impact, although at this distance it is likely to be weather specific (dry conditions, wind direction etc). In addition the boundary of the site is lined with a large mature Leylandii trees which provide a good degree of physical screening that would mitigate the potential for dust to be spread outside the boundary of the site. An example of the screening on the site already can be seen in Figure 2;

7.8 The River Rother runs along the boundary of the site within 100m although this feature is not designated as a Special Area of Conservation (SAC) or Site of Specific Scientific Interest (SSSI) and would therefore be classed as a low sensitivity receptor;

7.9 Bodiam Boating Station (and associated residence) / Lime Wharf Café and Campsite are located to the south of the site. They are located within 100m of the site and would be considered medium sensitivity receptors. The prevailing wind direction is south west, away from the campsite/café/residence, and there is also an established leylandii hedge and/or closed panel fencing which provide screening;

7.10 Whilst there are medium sensitivity receptors in the area, with appropriate mitigation the level of dust impact from the site can be reduced to low risk;

7.11 Further details on the management and mitigation of dust are presented in the following chapter, while full details of the risk assessment, with and without mitigation, are shown in Table 3 of Appendix 1.

8 Dust Management Plan

8.1 The control measures detailed in this section have been developed on the basis of the on-site plant and activities which are summarised in Section 2 of this document;

Existing topography and screening

8.2 The area around the site is relatively flat pastureland, and the site boundary is lined for the most part with large, mature leylandii hedges which act as a strong buffer for dust dispersion with the foliage trapping dust leaving the site. More planting is also planned.

Figure 2: Google maps image showing vegetation around site

Storage bays

8.3 The storage bays used to hold all materials are made from solid wooden sleepers which are strong enough to hold the materials and contain the spread of dust;

8.4 Some of the bays are contained within buildings (Photo 1). The inside bays hold products that are more likely to contain fine particles such as PAS100 compost and peat;

8.5 The external bays hold products which contain heavier particles such as aggregates and forest products. The particles contained within these products are larger and therefore less susceptible to dispersion in air;

8.6 All storage bays have concrete bases and all lorries are loaded on concrete aprons;

8.7 Some external bays currently are filled with product piles which come up higher than the wall of the bays, These bay walls will be increased in height and a 'fill line' marked on the inside 0.5m from the top to ensure that no material comes up higher than the bay wall thereby minimising the risk of wind blown dust dispersal. In addition the leylandii hedge behind provides a strong buffer against dust dispersion. The existing bays are shown in Photo 2. Work has already started to increase the height of the walls as shown in Photo 3;

Photo 1: Product bays in building

Photo 2: Existing aggregate bays with leylandii hedge behind

Photo 3: Example of bay where walls have been increased in height already

Volume of Processing

8.8 The site and processing operation is relatively small and therefore the level of dust generated will be controlled by the limited amount of product processed. The estimated amount of product on site is shown in Table 1 of Appendix 1;

Access Road

8.9 The access road into site is not made up of a concrete surface and therefore when dry does have the potential for dust to become airborne. Given the distance between the access road and the nearest residential receptors on Lossenham Lane, and the influence of the local road running through the village, the risk of dust impact from the access road is not high enough to warrant the introduction of a concrete surface however, during dry periods the damping down of the surface of the road will be regularly undertaken.

Dust suppression

8.10 A mobile water bowser will be kept on site all year round, but for specific use during the dry periods to allow for dampening down of the material to minimise dust generation;

8.11 The access road and site surfaces, along with storage bay aprons, will be dampened down during the dry periods to minimise dust generation and dispersal.

Site Specific Dust Control Measures / Dust Monitoring Procedure

8.12 Below is a list of dust management controls which will be implemented as part of the DMP:

- The highest source of dust generation on site, and the source of the complaints, was the brick crushing operation and this has been suspended for the foreseeable future. Should it recommence at any point it would be strictly subject to an Environmental Permit which would include a DMP for the activity;
- Damping down of the access road, site surface and loading surfaces will be undertaken during dry periods using the mobile water bowser;
- Similarly during dry periods there will be a regular damping down of external stockpiles using the mobile water bowser;
- Stockpiles of finer materials will be kept in covered bays;
- The walls of the external aggregate bays will be raised in height and a 'fill line' painted on the inside 0.5m from the top of the bay walls;
- Drop heights will be minimised during the loading and unloading of materials;
- Immediate clean-up of spillages of dusty materials;
- Wet brushing techniques will be used for cleaning loading areas during dry periods;
- Some additional planting will be added to the perimeter of the site to further enhance the screen provided by the existing established hedge surrounding the site;
- Regular checks for visual observation of dust and soiling from the site will be undertaken;
- A complaint log will be kept and made available to the LPA/EA on request;
- Routine monitoring of dust at the site boundary and sensitive receptors during dry periods (see dust monitoring procedure below) will be undertaken and;
- No vehicle / plant will be left idling on site at any time.

8.13 The site specific mitigation measures set out above are shown in Table 3 of Appendix 1 which details the dust risk assessment prior to and following the implementation of mitigation measures;

8.14 The results of the risk assessment undertaken for site activities, including the mitigation measures and cessation of brick crushing activities, indicate that dust can be adequately controlled and therefore significant impact on sensitive receptors from dust generated on the site should be avoided;

8.15 The Site Manager (or designated employee on site) will be responsible for the management of dust emissions, including completion of a regular 'Dust Management Report' following visual inspection of the site (template shown in Appendix 2). All site operatives will be trained in best practice to show due consideration for sensitive receptors. Relevant aspects of this DMP will be relayed to all site operatives, and a copy of the same kept available on site.

9. Complaints

9.1 In the event that complaints are received, details of the same will be recorded in the Environmental Logbook kept on site;

9.2 On receipt of a complaint the Site Manager will conduct an assessment in the vicinity of the complainant location. The results of this assessment will be recorded in a Dust Complaint Form (a copy of which is shown in Appendix 3). The results of the investigation, along with any mitigation measures that may have been taken, will be conveyed to the complainant.

10. Review and Responsibility

10.1 The DMP will be reviewed by the Site Manager annually. New versions of the DMP will be issued as and when necessary with the mitigation and/or operational changes highlighted;

10.2 It is the responsibility of the Site Operator and Site Manager to ensure that the DMP is enforced and that all employees are suitably trained.

11. Conclusion

10.1 This Dust Management Plan has been prepared by GardenscapeDirect Ltd to assess the risk of dust dispersal associated with the storage and processing of horticultural materials and aggregates, as well as waste transfer, at their site in Newenden, East Sussex. This has been prepared both to accompany an application for an Environmental Permit, as part of the Environmental Management System, and to satisfy Condition 12 of Planning Permission RR/2018/3144/P;

10.2 The outcome of the Dust Risk Assessment presented in Section 7 shows the risk to the closest sensitive receptor, being Bodiam Boating Station, café and campsite, is medium without appropriate dust management measures in place. Therefore, site specific mitigation measures have been developed, along with appropriate management and monitoring procedures.

10.3 The implementation of these control measures will minimise the dust generation from the site and ensure that the risk of dust impact is low at the closest sensitive receptors.

Appendix 1

Table 1: Materials brought into site					
Product	**Process**	**Max stored (volume)**	**Annual Quantity (maximum)**	**Associated lorry movements in per day (max)**	**Associated lorry movements out per day (max)**
Manure (m^3)	Storage	300	2000	0.5	4
Soils (m^3)	Screening/storing /mixing	300	10,000	2	4
Forest products (m^3)	Storing	300	2000	1.5	3
Compost (m^3)	Storing/mixing	300	3000	0.5	3
Aggregate (t)	Storing	300	7000	1	4
Waste bags	Sorting/recycling	30	500	0.5	1
Garden waste (t)	Storing for disposal	40	3000	4	1

Table 2: Receptors in proximity of the site		
Name of Receptor	**Type of Receptor**	**Approx distance from site**
Lime Wharf Café/ Bodiam Boating Station/ campsite	Commercial	40m+
Bourne Group Offices	Commercial (offices)	100m
Residence at Lime Wharf Café	Residential dwelling	100m
Residential Properties on Lossenham Lane	Residential Dwellings	125m+
River Rother	Ecological	20m

Table 3: Site activity dust risk assessment					
Hazard	**Receptor**	**Pathway**	**Scale of Dust Emission Risk Potential**	**Activity Specific Mitigation**	**Dust Risk Category After Mitigation**
Storage/ handling of materials	Residential receptors on Lossenham Lane, Bodiam Boating station café and campsite	Wind blown emissions to air	Low/medium risk. Storage of materials at top of open storage bays has potential to cause dust deposits particularly in strong winds during dry weather. Risk limited due to small scale of operation.	Increase height of storage bays and introduce 'fill lines' 0.5 metres from top of bays. Storage piles regularly dampened during dry periods. Mature conifers line the boundary of the site which trap most of the dust, more planting planned. Regular visual dust monitoring. Drop heights minimised.	Low risk
Sorting/ storage of waste	Residential receptors on Lossenham Lane, Bodiam Boating station café and campsite	Wind blown emissions to air	Low/medium risk. Risk of dust deposits only during dry weather in strong wind conditions. Risk limited due to small scale of operation.	Mature conifers line the boundary of the site which trap most of the dust, more planting planned. Regular visual dust monitoring. Drop heights minimised. Brick crushing suspended.	Low risk
Vehicle movements	Bodiam Boating station café and campsite.	Wind blown emissions to air	Medium risk. Limited number of lorry / car movements per day however access road not solid surface therefore potential for dust generation.	Access road to be dampened during dry weather. Lorries carrying potential dust dispersing material will be sheeted. Lorries cleaned regularly to minimise dust build up. Drop heights minimised when loading / unloading.	Low risk
Emissions from plant	Residential receptors on Lossenham Lane, Bodiam Boating station café and campsite	Wind blown emissions to air	Low risk. Diesel emissions from plant could affect sensitive receptors, especially if plant allowed to idle although small operation so limited amount of plant on site during the day. Maximum 4 vehicles.	No plant to be left idling while not in use. All plant regularly serviced and maintained.	Low risk

Appendix 2

DUST MONITORING REPORT – GardenscapeDirect Ltd		
Newenden Yard Site		
Assessor:		**Week No:**
Position in Company:		**Report Date:**
Signed:		**Report Time:**
Weather Conditions	**Wind Speed**	
	Wind Direction	
	Temperature	
	Humidity	
	General Comments	
Activity / plant	*(ie what is happening that day, location, details of dust related issues)*	
Monitoring location	**Observations**	
Access Road		
Northern Boundary		
Southern Boundary		
Mitigation review	*(review of control measures employed at the time of monitoring)* *(Where appropriate state any measures not adopted)*	
Corrective Actions	*(Where appropriate state actions / measures employed to rectify any observations of high dust generation)*	

ppendix 3

Dust Complaint Form	
Date complaint reported	
Name and address of complainant (if obtained)	
Time seen / experienced	
Duration (if appropriate)	
Description (eg dust cloud, dust settling on car etc)	
Any other comments	
Weather conditions at time of complaint	
Wind direction if known	
Details of any other complaints relating to same dust	
Any other relevant information	
Operation at time of complaint (ie what was going on – mixing, loading etc)	
Potential source of dust (on or off site – could be neighbor?)	
Follow up actions taken	
Date and time complainant was contacted and reaction of complainant	
Any follow up or further comment	