DOCUMENT REVIEW HISTORY

DUST MANAGEMENT PLAN V1.0

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Date	Description	Summary of Changes
JULY 2021	Version 1.0	Original issue

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1.0 INTRODUCTION

This Dust Management Plan (DMP) is a working document, intended to be used as a reference document for operational staff at **EAST CRAMLINGTON RECYCLED AGGREGATES LTD** (ERP/BB3400HW/T001) on a day-to-day basis. **EAST CRAMLINGTON RECYCLED AGGREGATES LTD** will implement the plan to ensure that all reasonable measures are taken to control dust emissions and in theevent that an adverse impact is caused then prompt action will be taken to identifythe source and apply corrective measures. It provides a schedule of actions that will be taken to minimise dust impact and details site management procedures for the management and monitoring of dust. **This DMP will only refer to the impact the proposed soil washing activities may have, unless other ancillary activities impact upon the primary activity.**

This DMP has been produced with reference to the Environment Agency's guide on 'Control and monitor emissions for your environmental permit. Technical Guidance Document (Monitoring) M17.

2.0 BACKGROUND

EAST CRAMLINGTON RECYCLED AGGREGATES LTD is an established, successful waste management business. It holds an environmental permit under a SR2008 No 11: 75kte inert and excavation waste transfer station with treatment on permit (**ERP/BB3400HW/T001**), which was transferred to EAST CRAMLINGTON RECYCLED AGGREAGTES on 11th June 2014. It can accept up to 75,000 tonnes of inert waste per annum.

PROCESS DESCRIPTION

3.0 PROCESS DESCRIPTION – EXISTING OPERATIONS

The site is currently permitted to carry out both manual and mechanical treatment of waste, including the screening of soils, compaction, and manual and physical sorting. A variation has been submitted to the EA to add the soil washing activity.

Both clean (inert) and mixed construction and demolition waste streams are loaded into a hopper where they are mechanically treated on a trommel / vibrating screen.

All finer material (<20mm) is collected below. This material then awaits further processing to recover aggregates and is moved to the eastern area of the site ***(this is the waste stream that will undergo further treatment in the soil washing plant)***.

The remaining waste will then undergo manual separation via a picking belt if required and to separate any residual materials such as ferrous metals using an over band magnet, the inert waste will be sorted accordingly into grades of recycled aggregates.

A small proportion of the residues produced from this activity may go to landfill.

3.1 PROCESS DESCRIPTION - SOIL WASHING PLANT

The proposed plant and machinery is a fully automated system. It will filter the waste soil and break it down into nontoxic, re-useable sand and aggregates, which are vital materials to the construction industry.

All waste will be loaded into the wash plant onto a screen positioned at ground level.
- **Clean (inert) waste stream:** the washing process will separate materials to recover sands, gravel, stones and clay. These will then be tested in-line with the WRAP Quality Protocol to meet end of waste status.

This scenario will enable **EAST CRAMLINGTON RECYCLED AGGREAGTES LTD** to recover a greater proportion of aggregates from mechanically treated waste.
The machinery will be ancillary to the existing inert waste treatment activity of the business and will be used to recycle waste **already** collected at the site. The plant & machinery will, in combination, facilitate an additional processing phase of existing waste materials rather than an entirely separate form of waste management and **will not result in additional forms of waste being carried in to the site.** Therefore, the provision of the new plant and machinery will not materially alter the vehicular movements at the site. The number of vehicle movements is likely to reduce as the company currently purchases in some grades of aggregate which are sold, when the wash facility is operational, the site will produce these grades from the process. Therefore, resulting in few vehicle movements.

It is considered that the proposed plant and machinery will reduce the reliance on landfill within Northumberland and the Northeast of England, it will provide recycled building materials to

the local construction industry and it will support the diversification of an existing local business whilst causing little impact or alteration to the existing operation on site.

4.0 DUST INVENTORY

The permit does not allow the importation of dusts, fibres or loose powders. The waste streams permitted under SR2008 No11: 75kte inert and excavation waste transfer station with treatment are listed below:-

17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)
17 01	concrete, bricks, tiles and ceramics
17 01 01	Concrete
17 01 02	Bricks
17 01 03	tiles and ceramics
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 02	wood, glass and plastic
17 02 02	Glass
17 03	bituminous mixtures, coal tar and tarred products
17 03 02	bituminous mixtures other than those mentioned in 17 03 01
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 04	soil and stones other than those mentioned in 17 05 03
17 05 08	track ballast other than those mentioned in 17 05 07
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 02	garden and park wastes (including cemetery waste)
20 02 02	soil and stones

5.0 DUST GENERATION AND CONTROL MEASURES

The key aspects of the process of accepting, handling, processing and storing wastes which may lead to dust emissions are identified in the table below:

Process	Location	Activity & materials	Possible Release point(s)	Control Measures
1) Transportation (importation to site) ***the new process will not increase vehicular movements to or from site***	Roads on approach to site, site entrance and weighbridge	Emissions from surface of dry and inert wastes being transported.	Fugitive emissions may be generated from bodies and trailers of vehicles, particularly if they are inadequately enclosed or covered.	• The wastes detailed will be delivered to site in vehicles that are contained, covered, netted or sheeted. • A mobile water bowser and the site's water hoses will be used to damp down the site's impermeable surface when conditions are conducive to the production of dust. • A speed limit is in place on site to reduce the resuspension of particles by vehicle wheels. • Sweeping will be carried out as and when required when monitoring dictates by site operatives.

2) Unloading ofwaste	Waste receptionarea (all waste)	Uncovering of loads andtipping of dry and inert wastes into designated tipping areas / bays.	Emissions generated by agitation of waste during tipping.	• Waste will be tipped in the existing waste reception area. This is continuously monitored during dry periods to assess dust emissions. • A mobile water bowser and the site's water hoses will be used to damp down the area prior to tipping when conditions are conducive to the production of dust. • Site benefits from screening bund and surrounding tree line to reduce the impact from airborne dust produced from waste being deposited at the site. • In unfavourable weather conditions (ie high winds, dry weather) this activity will be monitored rigidly and if necessary, paused until conditions change.

3) Movement of waste to storage area	Inert waste storage area	Depositing inert wastes in secondary storage area prior to further treatment	Emissions generated by agitation of waste during tipping. Possible escape from the reception area over site perimeter walls.	• A mobile water bowser and the site's water hoses will be used to damp down the area prior to tipping when conditions are conducive to the production of dust. • Site benefits from screening bund and surrounding tree line to reduce the impact from airborne dust produced from waste being deposited at the site. • In unfavourable weather conditions (ie high winds) this activity will be monitored rigidly and if necessary, paused until conditions change.

4) Waste processing	Soil washing area	Deposit of soils into wash plant	Emissions may be generated when the inert load is dropped onto the soil washing plant	• The processing plant has inbuilt dust suppression which will add water to the process, in turn reducing dust emission. • A hosepipe is available in this area to supplement the suppression. • In unfavourable weather conditions (eg high winds) this activity will be monitored rigidly and if necessary, paused until conditions change.

5) Waste processing	Soil washing area	Movement of waste through the wash plant	Emissions may be generated as the waste moves through the wash plant	• The nature of the wash plant results in the waste being doused hence minimising the risk of emissions.
6) Waste processing	Soil washing area	Deposit of varying grades of aggregates from conveyor on to site surface.	Emissions may be created when aggregates 'land' on the receiving surface.	• The aggregates will be 'wet' therefore the risk of dust emissions will be minimal. • The aggregates will be deposited onto a purpose-built concrete pad into a bay providing protection from the wind, the bays have tarpaulin sheeting to cover the contents of each bay, outside of operational hours and when not in use.
7) Loading of waste		Loading of fines into vehicles ready for dispatch from site, as well as loading of construction and demolition streams.	Emissions may be generated by the physical agitation of the waste during loading. Dust generated may escape over site perimeter walls.	• A hosepipe will be used if dust becomes a visual problem.

8) Transportation (dispatch from the site)	Site entrance and weighbridge, roads around the site.	Emissions from surface of dry and inert waste being transported.	Fugitive emissions from bodies and trailers of vehicles, particularly if they are inadequately enclosed or covered.	• The wastes will be removed from site in vehicles that are contained, covered, netted or sheeted. • A mobile water bowser and the site's water hoses will be used to damp down the site's impermeable surface when conditions are conducive to the production of dust. • A speed limit is in place on site to reduce the resuspension of particles. by vehicle wheels, the site benefits from a wheel wash to reduce the volume of dust produced from vehicle movements.

6.0 SENSITIVE RECEPTORS

PLEASE REFER TO MAP IN APPENDIX 1

6.1 EAST CRAMLINGTON NATURE RESERVE (LNR)

The East Cramlington Local Nature Reserve (LNR) is located 212m from the site boundary at the nearest point, the site benefits from a screening bund to separate the site from the LNR. The soil washing plant is fully automated and self-contained with regards to water usage, dust control and is situated on an impermeable surface with sealed drainage, therefore there will be no impact on the nature reserve. (Shown in appendix 1 – reference 6.1)

6.2 RESIDENTIAL RECEPTORS

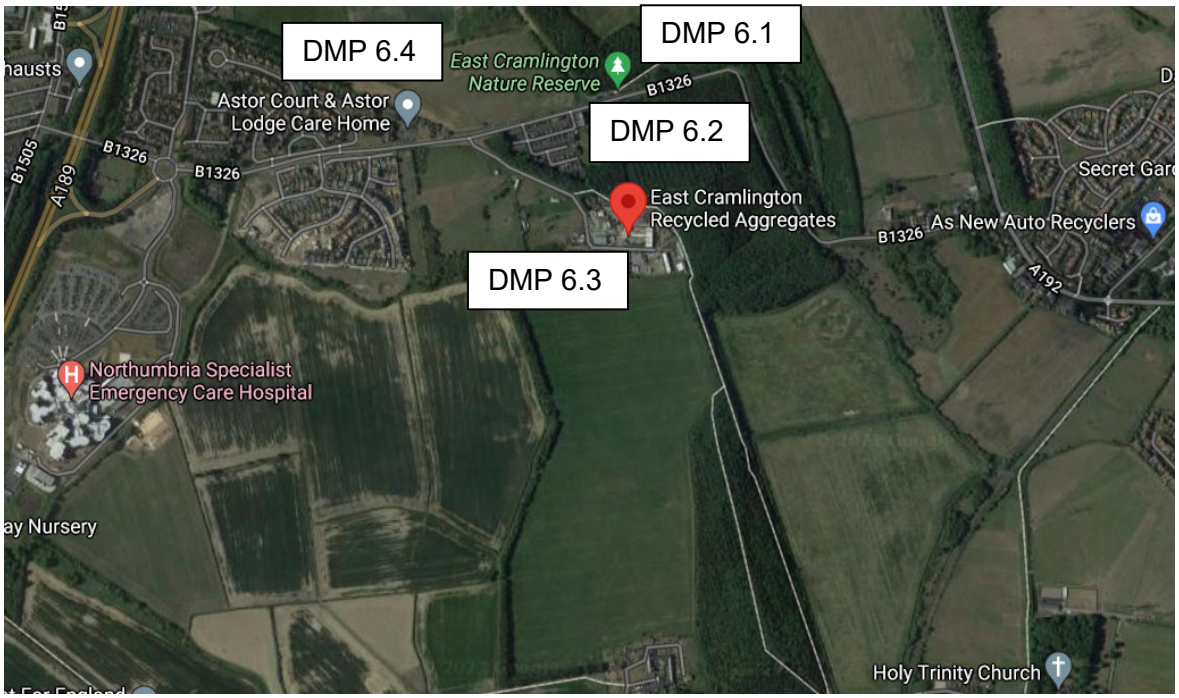
The nearest residential receptor is located to the Northwest of the site and is 62m from the site boundary or 165m from the proposed wash plant location. The soil washing plant is fully automated and self-contained with regards to water usage, dust control and is situated on an impermeable surface with sealed drainage, therefore there will be no impact on the local residential area. (Shown in appendix 1 – reference 6.2)

6.3 INDUSTRIAL / COMMERCIAL RECEPTORS

There are other industrial / commercial businesses on the industrial estate and surrounding roads, which include a vehicle repair shop, a boarding cattery, commercial and industrial office buildings. The soil washing plant is fully automated and self-contained with regards to water usage, dust control and is situated on an impermeable surface with sealed drainage, therefore there will be no impact on the local industrial / commercial receptors. (Shown in appendix 1 – reference 6.3)

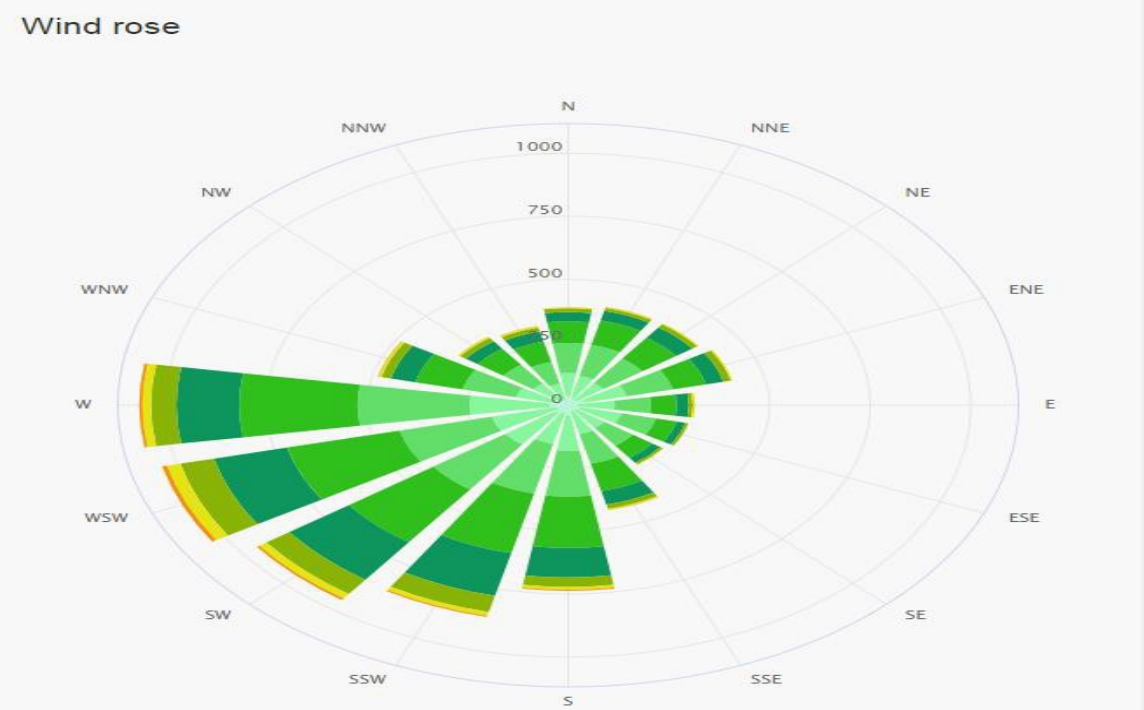
6.4 ASTOR COURT / ASTOR LODGE CARE HOME & ASSISTED LIVING

The Astor Court Care facility is located 500 meters to the Northwest of the site. The soil washing plant is fully automated and self-contained with regards to water usage, dust control and is situated on an impermeable surface with sealed drainage, therefore there will be no impact on the Astor Court Care facility. (Shown in appendix 1 – reference 6.4)



7.0 PREVAILING WIND

Wind rose data (taken from Meto-blue) shows the prevailing wind direction to bewesterly to south westerly.



8.0 TRIGGER LEVELS

The potential for dust risk will be influenced by operations carried out on site, and associated dust mitigation measures but also through external factors such as weather conditions. It is therefore recommended that trigger levels be adopted as a threshold to indicate where increased vigilance should be made in respect of dust or when enhanced mitigation measures should be adopted.

In providing this DMP, distinction is drawn between those measures which should be adopted all the time, termed **'base measures'** and those that should be adopted when one or more trigger levels are exceeded. These are termed **'enhanced measures'.** Enhanced measures will be used when dust is observed during the daily checks, when a complaint is received, and when the following trigger levels are breached. Quantitative trigger levels (relating to temperature, wind speed and wind direction) for the implementation of enhanced measures have not been specified. Instead, the trigger levels for the site will be weather conditions likely to increase the risk of a dust impact. It will be the responsibility of the site manager or the senior member of staff on site to decide when this level has been reached. The following factors will be taken into account:

- Wind speed
- Wind direction
- Temperature
- Waste on site (quantity and type)

Weather forecasts and visual assessments will be used to provide weather data to guide the implementation of the enhanced measures.

9.0 BASE MEASURES V ENHANCED MEASURES

9.1.1 Housekeeping

As a base measure, routine high standards of housekeeping will be maintained. This will include:

- Maintenance of impermeable surfaces within the site, roadways, drainage system, buildings, fencing, dust netting and covering of aggregates storage bays outside of operational hours and when not in use. These parts of the site are assessed as part of the Daily/Weekly checks.

- Sweeping the site with a road sweeper to keep non-storage areas clean and free of particulate matter/dusty wastes. The entire site will be swept regularly using the road sweeper to ensure there is minimal dust on the site surfaces.

- Storage bays and areas will be cleaned out and washed down on a monthly basis to avoid accumulation of dusty deposits.

- The use of a wheel wash for vehicle movements both accessing and egressing will further reduce the omission of dust.

- Regular and high-quality maintenance to all plant and equipment.

The Site Manager, where practicable, will ensure that any infrastructure or equipment issues that cannot be resolved within 24 hours of detection are logged on in the site diary.

9.1.2 Tipping

Once the inert waste has gone through its initial processing, it will be taken to its secondary storage area at the waste plant facility and will be tipped undersupervision.

ENHANCED MEASURE - A high-pressure hosepipe will be used to ensure that waste can be sprayed with water whilst it is being tipped if necessary.

9.1.3 Waste Storage

Inert waste destined for the soil washing plant is stored in a designated tipping bays, which are covered with tarpaulin outside of operational hours and when not in use to control.

area which benefits from elevated bund protection the southeast flank of thesite below an established, elevated earth mound. This provides a natural, protective barrier to stored waste when the wind is blowing from the east and it also acts as a physical barrier and buffer zone (to dust) when the wind is travelling from the west. This will be monitored throughout the day to ensure windblown emissions are kept to a minimum.

ENHANCED MEASURE - the surface of the waste will be doused with water using a high-pressure hose pipe.

9.1.4 Waste Loading

Waste is loaded into the plant at ground level onto a vibrating screen to remove the oversized material. Visual assessments will determine whether or not enhanced measures need to be implemented.

ENHANCED MEASURE – the feedstock will be doused before loading. If the problem persists, operations will be paused until the weather conditions are suitable.

9.1.5 Other enhanced measures

- The site's mobile bowser and hosepipes will be used to dampen down the site surface and stockpiles of dusty waste until the problem subsides.
- The site will carry out increased monitoring, especially during the loading of dusty wastes.
- The road sweeper will be mobilised to sweep the site surface.
- Site operative cleaning frequency will increase.
- Dust Monitoring Assessments will occur (see below).
- If necessary, operations will cease until conditions are suitable.

10.0 MONITORING

10.1 SITE MONITORING - DUST

Baseline monitoring at **EAST CRAMLINGTON RECYCLAED AGGREGATES LTD** consists of daily onsite dust checks which are recorded in the site diary. These checks are carried out by the TCM or a nominated member of staff who has received the relevant training and is competent to carry out the inspection. Whether dust is detected or not will be clearly indicated in the diary.

In the event that dust is detected leaving the site during the daily checks or following a public or regulator complaint the TCM or delegated member of staff must complete the dust assessment form included in the Appendix I. It will be clearly indicated on the detailed assessment form whether or not dust was detected. Where applicable, the location where the complaint was received will be visited, together with 4 other specified dust monitoring points (see dust monitoring points on map below). The Environment Agency will be informed of the outcome of the investigation and any measures put in place. Enhanced measures will be implemented if dust is detected leaving the site.

All site staff must remain vigilant for other potential dust sources and report them immediately to the TCM or Site Manager. Any other potential dust sources must be recorded in the site diary.

10.2 SITE MONITORING – WEATHER CONDITIONS

The TCM will be responsible for monitoring forecast weather conditions, in particular forecast wind speed, wind direction and temperature. The potential for high-risk weather conditions with reference to the trigger levels specified in Section 7 will be noted.

Site activities will be planned with respect to the forecast levels and where it is anticipated that trigger levels will be exceeded then enhanced measures will be adopted.


CDE
DMP 6.4
DMP 6.1
East Cramlington
Nature Reserve
B1326
Astor Court & Astor
Lodge Care Home
DMP 6.2
B1505
B1326
A1789
B1326
East Cramlington
Recycled Aggregates
As New Auto Recyclers
B1326
A192
DMP 6.3
Northumbria Specialist
Emergency Care Hospital
Holy Trinity Church

11.0 REPORTS / COMPLAINT PROCEDURE

The measures outlined in this DMP are aimed at preventing dust emissions occurring to the extent where complaints may be made regarding dust by neighbours to the site. Nevertheless, it is recognised that having an established complaints procedure is a necessary part of the DMP.

The primary role of the dust complaint procedure is to ascertain whether any dust complaints are linked to the site and associated operations and if so, to identify the cause(s) and what action may be taken to prevent or minimise the probability of recurrence.

The TCM must ensure that all complaints or Regulator non-compliances relating to dust management are:

(i) recorded in the site daily diary.

(ii) investigated with all findings recorded and submitted to the Environment Agency (where appropriate).

(iii) where substantiated, the route cause must be identified and acted upon before operations continue.

11.1 SOURCE IDENTIFICATION

The routine monitoring and complaints procedure are intended to allow corrective action to be applied before a more widespread impact can be caused. Key to this will be identifying the dust source(s) as quickly as possible and identifying what activity has given rise to the unacceptable monitoring result or complaint.

Dust events may also be related to a particular set of weather conditions (for example, sustained warm, windy weather), and hence recorded and forecast weather conditions will be referred to.

The first step will be to investigate the monitoring result or dust complaint and reference the time of the complaint to the daily diary, in particular to the nature of the operations ongoing at the time, the results of any dust monitoring carried out on site and the wind and weather conditions. This will allow a broad assessment to be made whether the site was likely to be principally responsible, or whether other sources were involved.

In the event of a complaint, the complainant's location or property will also be assessed to characterise the dust and its likely source (if possible). This couldinclude a basic analysis of any dust visible on surfaces, off-site observations, or as a

desk exercise with a site map and wind direction data (recorded or observed at the time of the incident).

Once the source is identified, appropriate remedial actions can be taken.

11.2 CORRECTIVE ACTION

Once the source has been identified, corrective action will be applied by the site manager in liaison with the regulatory authority as necessary. The ultimate corrective action should a dust impact be experienced is that the site will cease the operation of the source until corrective action can be applied. The site, through the control measures documented in this DMP, will often be best equipped to handle it without causing an unacceptable impact. Cessation of operations will only be adopted as a last resort.

12.0 RECORD KEEPING

The daily diary and any dust assessments (in the event of a complaint) will be kepton file at site and made available for inspection by the Environment Agency on request.

13.0 STAFF TRAINING

Staff training will be a key aspect of ensuring that dust can be controlled through effective management during daily operations. All site operatives will therefore be trained to deal with dust management issues. This will be recorded in training logs. The TCM and nominated staff member will be trained to carry out the daily checks which will be recorded in the site diary.

14.0 REVIEW

This Dust Management Plan will be subject to an annual review (as a minimum). It will also be reviewed following a change in relevant site activities or following prolonged instances of substantiated dust pollution.

APPENDIX 1 – SENSITIVE RECEPTOR PLAN

APPENDIX 2

DUST ASSESSESSMENT REPORT FORM					
DATE		**TIME OF ASSESSMENT**		**TIME OF REPORT**	
NIRS REFERENCE (IF APPLICABLE)					
APPROX LOCATION OF REPORT (IF KNOWN)					
WEATHER CONDITIONS					
TEMP					
WIND DIRECTION					
WIND STRENGTH					
CURRENT SITE ACTIVITIES					
ASSESSMENT AT POINT OF COMPLAINT					
SUBSTANTIATED Y/N?					
DMP1					
SUBSTANTIATED Y/N?					
DMP2					
SUBSTANTIATED Y/N?					
DMP3					
SUBSTANTIATED Y/N?					
DMP4					