Appendix K

Noise Assessment

Noise Impact Assessment – Resource Recovery and Recycling Facility (Rutherford, NSW)

January 2006

Transpacific Industries Pty Ltd

PARSONS BRINCKERHOFF

Parsons Brinckerhoff Australia Pty Limited ACN 078 004 798 and
Parsons Brinckerhoff International (Australia) Pty Limited ACN 006 475 056
trading as Parsons Brinckerhoff ABN 84 797 323 433

PPK House
9 Blaxland Road
Rhodes NSW 2138
Locked Bag 248
Rhodes NSW 2138
Australia
Telephone +61 2 9743 0333
Facsimile +61 2 9736 1568
Email sydney@pb.com.au

ABN 84 797 323 433
NCSI Certified Quality System ISO 9001

2118506A
PR_2489Iss3 100106

Author: ..... Shane Harris

Reviewer: .....Shane Harris / Carlos Olles

Approved by: .....Carlos Olles

Signed: .....

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Executive summary

Parsons Brinckerhoff (PB) was commissioned by Transpacific Industries Pty Ltd to undertake an environmental noise and vibration impact assessment for the proposed construction and operation of the Rutherford Waste Recovery and Recycling Facility.

The proposed plant incorporates green waste, liquid waste and waste oil processing and a vehicle servicing workshop. The facility would store, treat, recycle, recover and transport industrial wastes generated within the region.

Background noise levels for the area were assessed in accordance with current guidelines and standards. Existing local noise environs where characterised based on long-term (unattended) and short-term (attended) baseline noise levels measured at five noise monitoring locations. Monitoring locations are presented in Figure ES-1.

Operational noise criteria were established with reference to the NSW Industrial Noise Policy (INP). Sleep disturbance and construction noise planning goals were determined based on the methodologies presented in the Environmental Noise Control Manual (ENCM). Road traffic noise impacts were qualitatively assessed with reference to the Environmental Criteria for Road Traffic Noise document (ECRTN). A number of standards and guidelines were considered in the assessment of construction related vibration impact potential.

Noise criteria was established for the anticipated site construction works (L_{A10} level of 51 dB(A)). A L_{Aeq} criterion of 46 dB(A) (day time), 45 dB(A) (evening) and 38 dB(A) (night time) were established for the operations of the proposed site. The noise criteria set down in this report are planning levels only. Factors such as social impacts (annoyance) and other environmental effects of the development need to be considered in regard to the approval process.

Indicative construction noise impacts were predicted using a simplified and conservative approach of calculating noise attenuation with distance. Indicative A-weighted sound power levels were adopted in the assessment of construction noise impacts.

During the construction phase, manual works would be primarily carried out. Construction noise sources would include hand tools and short-term movement of mobile sources throughout each daily period. Noise emissions from the construction works would be sporadic and intermittent, dependent on the activities conducted. Primary noise generating works were assumed to require less than a six month -construction period.

Worse case received noise levels of up to 50 dB(A) were reported. Typical mid-point received noise levels satisfied the construction noise design goal. Cumulative construction noise impacts were not assessed.

Noise controls and management practices were recommended for the construction works.

The NSW Department of Environment and Conservation recognised Environmental Noise Model (ENM) was used to assess the potential for operational noise impacts. The noise impact potential from the site was assessed at the adopted 16 reference locations provided on Figure ES-1.

Operational noise source data was adopted from existing data. One / one octave band data was adopted.

During peak operations, a worse case predicted noise level of 30 dB(A) (L_{Aeq}) was predicted for a residential receiver located to the south east with still isothermal conditions. With noise enhancing gradient wind flows, received noise levels up to 36.5 dB(A) (L_{Aeq}) were reported.

Boundary nose levels of less than 70 dB(A) (L_{Aeq}) are expected.

The established noise model predicted that the operations of the facility would meet the requirements of the Department of Environment and Conservations Industrial Noise Policy. Existing ambient noise profiles are not expected to be affected by the operations of the site. Under worse case conditions, the site is not expected to be audible throughout the local residential community during the day time, evening or night time periods.

No sleep disturbance, road traffic noise or vibration impacts are anticipated.

With reference to the recommendations of this report, no long-term degradation to the existing noise environs or loss of local acoustic amenity is expected form the operations of the proposed waste resource recovery and recycling facility. It is recommended that post-commissioning noise source validation measurements be carried out to verify the assumptions made, and subsequent conclusions provided, within this report.

It is expected that a performance based approach would be applied during the final design and construct stage of the site. Conceptually, the proposed site is not expected to result in future socio-acoustic land use incompatibility.

Figure ES-1: Noise monitoring locations and potentially affected receivers

1. Introduction

1.1 Background

This report has been prepared by Parsons Brinckerhoff (PB) on behalf of Transpacific Industries Pty Ltd (Transpacific) to assess the potential noise and vibration impacts of the proposed construction and operation of the Rutherford Waste Recovery and Recycling Facility. The study has been prepared for inclusion within the Environmental Impact Statement (EIS) being prepared by PB.

This assessment has been completed in accordance with the guidelines presented in, the *Industrial Noise Policy* (NSW DEC INP 2000), the *Environmental Noise Control Manual* (NSW DEC ENCM 1994) and the document *Environmental Criteria for Road Traffic Noise* (NSW DEC ECRTN 1999) and other relevant guidelines.

The study assessed the potential for noise and vibration impacts from the proposed construction works and operational activities. Short-term construction activities would be undertaken within the subject site. Operational noise emissions from the proposal have the potential to influence to impact a number of existing nearby residences.

1.2 Scope

The scope of works for this study was to prepare a noise and vibration impact assessment for the proposed construction and operations of the Rutherford Waste Recovery and Recycling Facility. This required completion of the following tasks:

- assess existing ambient noise environment in the study area
- establish reasonable and feasible noise design objectives and assessment criteria for the study area
- provide a detailed assessment of potential noise impacts associated with the proposal (operations, sleep disturbance, construction and road traffic noise)
- provide a qualitative assessment of potential vibration impacts associated with the proposal
- assess potential impacts against relevant legislation and guidelines
- provide a concise statement of potential noise and vibration impact
- develop noise and vibration impact mitigation measures.

2. Site description and proposal details

2.1 Site location and surrounding environs

The proposed waste resource recovery and recycling facility is located at Kyle Street, Rutherford. The site is approximately 10 hectares (25 acres) in size and has dimensions of 435 metres by 235 metres.

The proposed facility would be located within the existing industrial area, zoned 4(a) (General Industry) within the Maitland Local Environmental Plan. The township of Rutherford is 1,500 metres east of the site. A number of existing receivers are located to the north west, north east and east of the proposed site. The New England Highway lie approximately 250 metres to the north of the subject site.

The study area and nearest potentially affected receivers considered for operational noise impacts are shown in *Figure 2.1*. Identified noise catchment areas adopted within this assessment have been outlined in *Table 2.1*.

Table 2.1: Adopted noise catchment areas

Catchment	Distance	Bearing	Description
1	≈ 1,300 metres	north west	Receivers A and B
			Dent Street. Elevated receivers
2	≈ 1,000 metres	north west	Receivers C and D
			Located adjacent New England Highway
3	≈ 1,000 metres	south	Receivers E and F
			Isolated semi-rural allotments. Elevated receivers
4	≈ 1,000 metres	south east	Receivers G, H, I and J
			Rutherford South
5	≈ 1,100 metres	north east	Receivers K, L and M
			Rutherford South
6	≈ 1,000 metres	north	Receivers N, O and P
			Anambah

Noise catchment areas were identified and selected with consideration to existing land use(s) and noise sources influencing existing background noise levels.

2.2 Description of proposal

2.2.1 Overview

The proposed plant incorporates green waste, liquid waste and waste oil processing and a vehicle servicing workshop. The facility would store, treat, recycle, recover and transport industrial wastes generated within the region.

Potential noise and vibration impacts may be associated with both the construction and operational phases of the development.

2.2.2 Construction works

Where possible, components of the proposed development would be constructed and operated with existing site buildings and using existing infrastructure. Renovation of existing buildings and infrastructure would be undertaken. Demolition of existing site infrastructure, including a steel tank, existing waste water treatment facilities stormwater lagoon and an existing dwelling would be carried out.

Components of the facility that would increase the footprint of the development include hydrogenation process, oily water treatment, waste water treatment plant, truck parking, fuel bowsers, truck and tanker wash and tank farms for waste treatments.

Noise generating construction works (not including internal fit outs and associated) is expected to be completed in less than six months.

2.2.3 Operations

The waste resource recovery and recycling facility would incorporate the following treatment processes:

- oily water treatment and waste oil recovery
- treatment of non-sewerable aqueous wastes by neutralisation, chemical fixation, stabilisation and solidification (CFS)
- hydrogenation of re-refined base lube oils.

Each above process has the potential to influence the ambient noise environs for nearby receivers.

The proposed site layout, with each is process area identified, is provided as *Figure 2.2*.

Figure 2.1: Study area location and surrounding landscapes

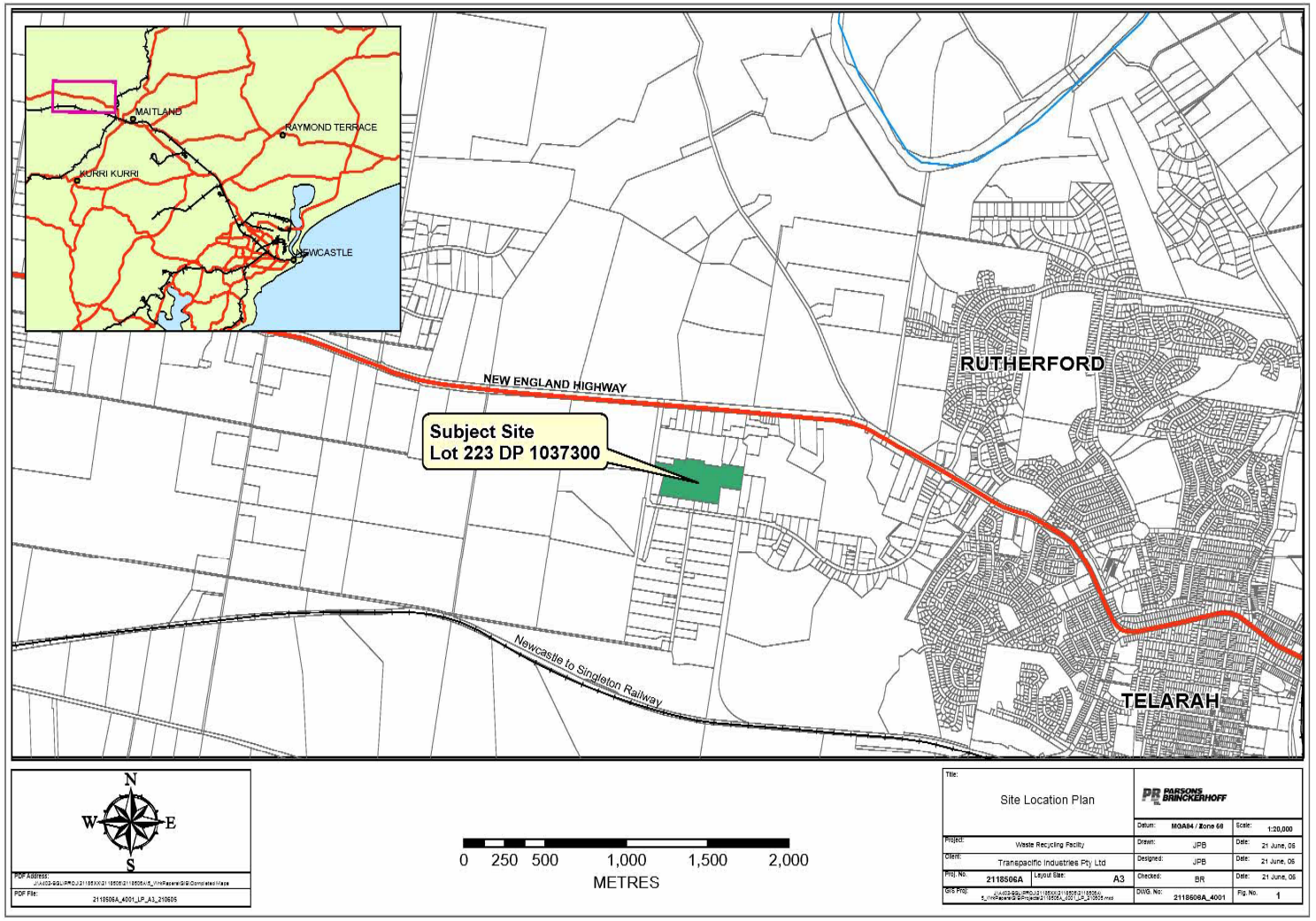
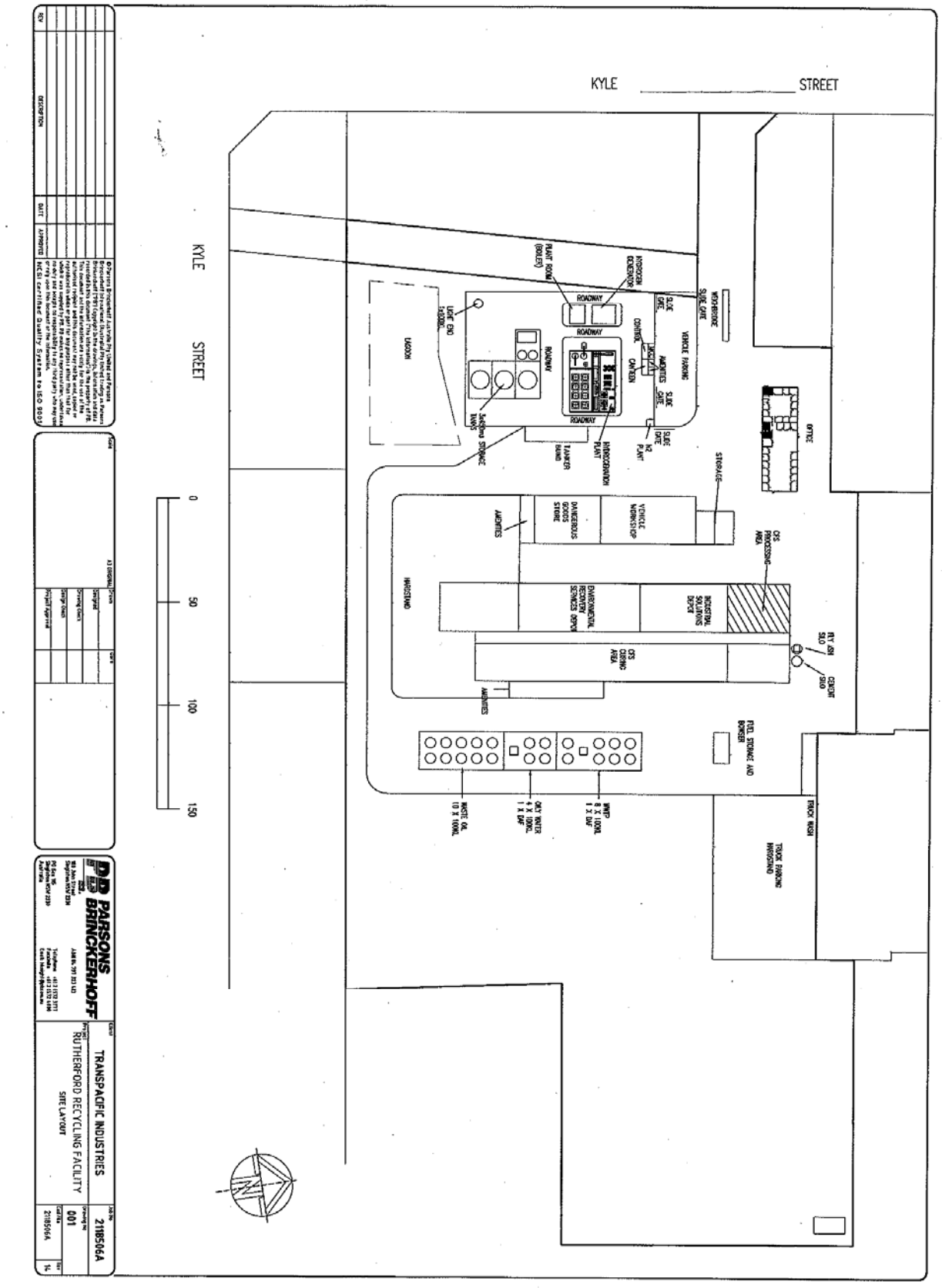


Figure 2.2: Indicative site layout (process areas idientified)



3. Existing noise environment

3.1 Overview

This section of the report presents the results of ambient noise measurements carried out in the study area. The results have been used to characterise current ambient noise profiles and establish project-specific noise design objectives.

Noise monitoring was carried out for the assessment of the primary issue of environmental noise impacts. Detailed assessment of existing road traffic noise levels was not undertaken.

3.2 Noise monitoring methodology

Background noise measurements were carried out using a RION NA27 Precision Sound Level Meter (operator attended noise monitoring) and Acoustic Research Laboratories statistical environmental noise loggers, type EL-215 (long-term unattended noise monitoring). The instrument sets comply with AS 1259.

Instrument sets were calibrated by a NATA accredited laboratory within two years of the measurement period. Copies of the instrument set calibration certificates have been included with *Appendix A*.

Microphones were positioned at 1.2 metres above ground level and were fitted with windsocks. Each instrument was calibrated before and after the measurement period to ensure the reliability and accuracy of the results. No significant variances were noted.

The instruments were set on A-weighted fast response and logged noise levels over fifteen minute statistical intervals. Observations of source influencing the current ambient noise environment were made during logger placement and the attended noise monitoring intervals.

Long term monitoring was conducted between Friday 17/06/2005 and Monday 27/06/2005. Attended noise monitoring was carried out during the day on Monday 27/06/2005.

3.3 Measurement locations

Noise measurement locations were selected for each nominated noise catchment area (representative locations with the potential to be influenced by noise impacts for the proposal). The information obtained during the noise monitoring program provides an adequate characterisation of existing ambient noise profiles for the study area.

The noise monitoring reference locations have been presented in the local context as *Figure 3.1*. A description of the selected locations follows.

Table 3.1: Selected background noise monitoring locations

Location	Address	Form of Monitoring	Comments
1	9 Denton Close	Long Term	Elevated with respect to subject site.
		Day Time Attended	Suburban noise amenity. No constant day time industry observed. Road traffic noise present.
			Receiver elevated.
			≈ 1,300 metres north west of Transpacific site.
			≈ 350 metres from New England Highway.
			Environmental noise monitoring location.
2	96 Anambah Road	Long Term	Suburban noise setting. Nearby New England Highway audible. No day time industrial noise influence noted.
		Day Time Attended	
			≈ 1,000 metres north east of Transpacific site.
			≈ 900 metres from New England Highway.
			Environmental noise monitoring location.

3.4 Data exclusion

Hourly meteorological data was obtained from the nearest Bureau of Meteorology operated all-weather station to the noise monitoring locations (Paterson-Tocal AWS, #61250). Although not ideal, the use of this data is generally considered to be slightly conservative – and therefore acceptable.

Data obtained from the unattended noise monitoring during periods of inclement weather conditions, such as wind speeds greater than five metres per second or during rainfall were not included in the analysis of unattended noise levels. Periods of noted anomalies were also excluded from the recorded unattended noise levels.

Approximately 55 percent of the noise measurements were excluded. Periods excluded from recorded noise levels are shown as shaded on the compiled daily noise logger graphs (*Appendix B*).

Given the amount of data excluded, a conservative approach has been applied to criterion establishment.

Figure 3.1: Monitoring locations and receivers considered

3.5 Measured background noise levels

3.5.1 Unattended noise monitoring

The results of the ambient noise monitoring program are presented in *Table 3.2*.

Table 3.2: Unattended noise monitoring results

Period	L_{A10}		L_{Aeq}		L_{A90}	
	Average	Range	Median	Range	Median	Range
Location 1: 9 Denton Close (north west) ARL EL 215 noise logger #194447						
Day Time (7am – 6pm)	54.5	52.5 – 57.5	55.0	52.0 – 56.5	44.0	38.5 – 49.0
Evening (6pm – 10pm)	51.5	48.5 – 55.5	50.5	45.5 – 53.0	41.5	38.0 – 45.5
Night Time (10pm – 7am)	49.0	45.5 – 53.5	47.0	42.5 – 53.5	35.0	28.5 – 42.5
Location 2: 96 Anambah Road (north east) ARL EL 215 noise logger #194446						
Day Time (7am – 6pm)	55.5	50.5 – 61.0	57.0	55.0 – 64.5	41.0	32.0 – 47.0
Evening (6pm – 10pm)	52.0	46.5 – 66.0	54.5	51.0 – 64.0	40.5	34.0 – 47.0
Night Time (10pm – 7am)	50.0	44.0 – 62.0	51.5	46.5 – 63.5	34.0	29.0 – 45.0

Notes to *Table 3.2*:
Values expressed as dB(A) and rounded to nearest 0.5 dB(A)
Range based on analysed daily levels
L_{A10} = Noise level 10% of time
L_{Aeq} = Equivalent noise level (average)
L_{A90} = Noise level 90% of time (background)

The unattended noise monitoring was carried out continuously between the dates of Monday 17/06/2005 through to Thursday 27/06/2005.

The daily noise logger graphs compiled for unattended noise monitoring Locations 1 and 2 (*Appendix B*) were found to fluctuate throughout each daytime, evening and night-time period.

Background noise levels for the area are typical of a suburban or urban environment. Variations of 5 dB(A) to 10 dB(A) in the analysed day, evening and night time noise levels is noted (L_{Aeq} and L_{A90}).

A slight increase in measured noise levels was apparent between the hours of 06:00 – 22:00. This is likely to be the result of noise impacts associated with traffic movements along the New England Highway.

The measured L_{Aeq} and L_{A90} median noise levels varied between 10 dB(A) to 15 dB(A) for each period. The night time period shows the greatest difference between L_{Aeq} and L_{A90} levels indicating the sporadic nature of existing local noise environs. The difference observed can be largely attributed to the characteristics of local noise sources impacting the local ambient noise environment (such as fauna and traffic pass-by).

The median L_{Aeq} and L_{A90} values presented in *Table 3.2* were used to set the project-specific noise design goals (*Section 4*).

3.5.2 Attended noise monitoring

Attended noise monitoring was carried out at each noise monitoring locations during daytime hours. Meteorological conditions during the attended noise monitoring program were observed to be satisfactory for noise monitoring purposes with a slight northerly breeze, some cloud cover and a temperature of approximately 16 °C. *Table 3.3* presents the results of the attended noise monitoring.

Table 3.3: Operator attended noise monitoring results (27/06/05)

Location	Address	Time	Measured Noise Level			Comment
			L_{A10}	L_{Aeq}	L_{A90}	
1	9 Denton Close (north west)	13:05 – 13:20	53.5	51.0	46.0	No industry audible during monitoring interval New England Highway audible throughout, road transport trucks observed at 52 – 54 dB(A) at pass by Local fauna (birds) observed at 49 – 57 dB(A) S.S. ≈ 44 – 46 dB(A) minimal traffic S.S. ≈ 48 – 49 dB(A) standard traffic
2	96 Anambah Road (north)	13:35 – 13:50	55.0	52.5	42.5	No industry audible during monitoring interval New England Highway audible throughout, road transport trucks observed at 45 – 46 dB(A) at pass by S.S. ≈ 42 – 43 dB(A)

Notes to *Table 3.3*: Values expressed as dB(A) and rounded to nearest 0.5 dB(A)]

S.S.: observed steady state noise level

L_{A10} = Noise level 10% of time

L_{Aeq} = Equivalent noise level (average)

L_{A90} = Noise level 90% of time (background).

Noise levels measured at each location were consistent during the day time attended noise monitoring period. Day time measurements for each descriptor were generally within 2 dB(A).

4. Adopted criteria and guidelines

4.1 Overview

The *Protection of the Environment Operations Act, 1997* (POEO Act) regulates noise generation and prohibits the generation of "offensive noise" as defined by the *POEO Act*.

In addition to the regulatory requirements under the *POEO Act*, NSW Department of Environment and Conservation provides guidelines in relation to acoustic criteria and noise controls.

4.2 Construction noise

Noise criteria for construction sites are established in accordance with Chapter 171 of the *Environmental Noise Control Manual* (NSW DEC ENCM, 1994). It is important to note that the recommended criteria are planning goals only. Numerous other factors need to be considered when assessing potential noise impacts from construction works such as the social worth of the activity, economic constraints, nature and duration of a proposed construction program.

The NSW Department of Environment and Conservation recognise that individuals accept higher perceived noise impacts for emission sources with a limited duration and identified end date.

Table 4.1: Acoustic design objectives for construction activities

Construction Period	Acoustic Design Objective
<4 weeks	Received $L_{A10} \leq L_{A90}$+ 20 dB(A)
>4 weeks and <26 weeks	Received $L_{A10} \leq L_{A90}$ + 10 dB(A)
>26 weeks	Received $L_{A10} \leq L_{A90}$ + 5 dB(A)

Notes to *Table 4.1*: L_{A10} = Noise level 10% of time

L_{A90} = Noise level 90% of time (background)

Although the final construction schedule and construction methods statements have not been determined at the writing of this document, construction activities and indicative time frames are expected to require between 4 weeks and 26 weeks.

The appropriate constriction criteria for the Transpacific site is likely to be the following:

Received $L_{A10} \leq L_{A90}$ + 10 dB(A)

Day time L_{A90} noise levels ranged from of 38.5 dB(A) – 49 dB(A), with a median of 44 dB(A) reported for Location 1. Day time L_{A90} noise levels at Location 2 ranged from of 32 dB(A) – 47 dB(A), with a median of 41 dB(A) reported for Location 2. The following resultant constructive noise design goals would therefore apply:

- 'medium term' construction work: **51 dB(A)** [L_{A10} impacts], $L_{A90, median}$ + 10 dB(A).

Construction works with the potential to generate noise impacts would be undertaken during the day time period only (7am – 6pm, weekdays, 7am – 1pm Saturdays and no work on Sundays or public holidays).

4.3 Operational noise

Noise emissions from the operations of the site would require adherence to the NSW *Industrial Noise Policy* (NSW DEC INP, 2000).

The policy sets out two criteria that are used to assess potential off-site noise impacts. The first criterion aims at controlling intrusive short-term noise impacts for residences (intrusive criterion). The second criterion aims at maintaining the long-term amenity of particular land uses (amenity criterion). The more conservative of the two limits are established as project-specific operational noise goals.

The relevant intrusive criterion can be summarised as follows:

$L_{Aeq\ (15\ min)} \leq$ rating background levels + 5 dB(A)

The amenity criterion is determined based on guidelines presented in the INP. The acceptable amenity limits for a rural area are listed in *Table 4.2*.

Table 4.2: NSW INP amenity criteria – suburban setting

Type of Receptor	Period of day/ day of week	Acceptable Noise Level (L_{Aeq})
Residential-Day-Time interval	7am – 6pm, Monday to Saturday	55 dB(A)
	8am – 6pm, Sundays and Public Holidays	
Residential-Evening interval	6pm – 10pm	45 dB(A)
Residential-Night-Time interval	remaining periods	40 dB(A)
Commercial Premises	when in use	65 dB(A)
Industrial Premises	when in use	70 dB(A)

Notes to *Table 4.2*: L_{Aeq} = Equivalent noise level (average)

Source Table 2.1 NSW DEC INP

Amenity criterion is established with reference made to the L_{Aeq} noise levels for the area and the existing industrial noise influence. The amenity criterion is then corrected with reference being made to Table 2.2 of the INP.

No industrial noise influence was noted for the setting. Referencing the attended noise monitoring results, the existing industrial noise influence can be conservatively set at less than 36 dB(A) (Location 1 attended L_{A90} of 46 dB(A) – 10 dB(A)). Therefore, NSW DEC recommended acceptable night time noise levels have been modified (to account for the existing level of stationary industrial noise).

Based on the existing noise environs, amenity limits consistent with the NSW DECs recommended acceptable noise levels would apply:

- Day Time Amenity Noise Limit (7am – 6pm): 55 dB(A) [$L_{Aeq, day}$]
- Evening Time Amenity Noise Limit (6pm – 10pm): 45 dB(A) [$L_{Aeq, evening}$]
- Night Time Amenity Noise Limit (10pm – 7am): **38 dB(A) [$L_{Aeq, night}$].**

Referencing the RBL (L_{A90}) values measured at Location 2 during the unattended noise monitoring program and the formula to assess the intrusive noise criterion, the following intrusive noise limits would apply:

- Day Time Intrusive Noise Limit (7am – 6pm): **46 dB(A) [$L_{Aeq, 15 min}$]**
- Evening Time Intrusive Noise Limit (6pm – 10pm): **45 dB(A) [$L_{Aeq, 15 min}$]**
- Night Time Intrusive Noise Limit (10pm – 7am): 39 dB(A) [$L_{Aeq, 15 min}$].

The day time and evening intrusive noise criterion is more stringent and would therefore govern. Amenity limits would likely apply during the night time period. The values assume there would be no annoying characteristics associated with site-related operational noise impacts.

Boundary noise limits should not exceed a level of **70 dB(A)** [$L_{Aeq, 15 min}$]. Compliance with the adopted design goals would maintain the acoustic amenity for the area.

The established operational noise design objectives are consistent with the requirements of the NSW INP. The noise limits have been established to minimise the potential for degradation to local ambient noise levels.

4.4 Sleep disturbance

The emission of peak noise levels for an instant or very short time period may cause sleep disturbance to residents. In accordance with the *Environmental Noise Control Manual* (NSW DEC ENCM, 1994), the L_{A1} level of any specific noise source should not exceed the background noise level (L_{A90}) by more than 15 dB(A) when measured outside the bedroom window of the nearest potentially affected receptor.

A night time L_{A90} noise level of 34 dB(A) was measured at Location 2. Adopting this level provides a sleep disturbance criterion of **49 dB(A)** [L_{A1} impacts].

4.5 Road traffic noise

Road traffic noise criteria have been established for the project. It is considered the primary road traffic noise generating activities would be associated with the proposed construction program. Criterion establishment is generally applied for long-term planning purposes only.

The *Environmental Criteria for Road Traffic Noise* (NSW DEC ECRTN, 1999) recommended 'base' and 'allowance' criteria.

The recommended 'base' criteria for land use developments with the potential to create additional traffic on existing freeways / arterials are day time $L_{Aeq, 15hr}$ levels of **60 dB(A)** and night time $L_{Aeq, 9hr}$ levels of **55 dB(A)**.

The recommended 'base' criteria for land use developments with the potential to create additional traffic on existing collector roads are day time $L_{Aeq, 1hr}$ levels of **60 dB(A)** and night time $L_{Aeq, 1hr}$ levels of **55 dB(A)**.

The 'allowance' criteria is generally established where the 'base' criteria are already exceeded. In such circumstances, traffic arising from a development should not lead to an increase in existing noise levels of more than 2 dB. The base criterion is unlikely to be exceeded in the study area, and therefore the allowance criteria would not apply.

4.6 Vibration

In establishing vibration limits (particularly for the construction works), it is common practice to set vibration limits to protect buildings against damage in accordance with German Standard DIN 4150-3 1999 *Structural Vibration Part 3 Effects of Vibration on Structures*. Typical vibration limits for building damage are as follows:

- residences: **10 millimetres per second**
- heritage buildings and sensitive structures: **3 millimetres per second.**

The criteria outlined to protect occupants of buildings from discomfort are more stringent. A number of British, German and Australian standards have been referenced with respect to protecting amenity including: ENCM (Chapter 174); AS 2670 *Evaluation of Human Exposure to Whole-body Vibration*; BS 6472 1992 *Evaluation of Human Exposure to Vibration in Buildings (1 Hz to 80 Hz);* BS 7385 1990 *Evaluation and Measurement for Vibration in Buildings*; and DIN 4150-3 1999 *Structural Vibration Part 3 Effects of Vibration on Structures*. Vertical (as opposed to horizontal) limits would be established consistent with the following:

- residential levels (night time): **0.14 – 0.2 millimetres per second**
- residential levels (day time): **0.28 – 0.56 millimetres per second.**

The 'comfort' limits vary across the frequency spectrum, although they are generally a constant level across the frequency range generated by most construction activities.

5. Predicted impact profiles

5.1 Construction noise

Calculations were undertaken to investigate the impact of the primary noise sources during their operation. Sound power levels were drawn from existing data to represent the expected construction and equipment noise sources.

Construction noise sources would include, but not be limited to, the itemised equipment presented in *Table 5.1*.

Table 5.1: Typical sound power levels for construction equipment

Construction Phase	Equipment Type	A-weighted Range	Adopted L_{A10}
Preparatory Works	Excavator	108 – 118 dB(A)	112 dB(A)
	Grader	114 – 120 dB(A)	117 dB(A)
	Backhoe	100 – 108 dB(A)	103 dB(A)
	Concrete Supply Truck (24t)	107 – 116 dB(A)	110 dB(A)
	Crane (10t, lorry mounted)	118 – 120 dB(A)	118 dB(A)
Installation / Fit Out	Hand held tools	94 – 118 dB(A)	105 dB(A)
	Semi-Trailers (10t / 20t)	103 – 120 dB(A)	108 dB(A)

It is recommended that the above sound power levels are validated during the initial stages of the construction program. Assessment of annoying characteristics would also be required.

Predictions were carried out for the proposed peak noise generating activities. The requirement for plant and equipment would depend on the stage of construction. It is unlikely that all plant listed would be on site at any given time.

Noise emissions from the construction works would be sporadic and intermittent, depending on the activities conducted. Significant variations in noise emission potential would be present throughout each daily period. Received noise levels would likely be lower than predicted for the majority of the time.

To provide a conservative construction noise impact assessment, acoustic shielding due to natural topography and intervening structures was not included in the calculation of potential noise levels at nearby receivers. Atmospheric absorption values were not considered in the calculations. Noise enhancing meteorological conditions were not assessed due to the temporary nature of the construction works.

Potential noise impacts from each nominated source have been considered. Based on the intermittent nature of noise emissions, cumulative impacts have not been assessed in detail as part of this study.

The distance attenuation was calculated by assuming unidirectional hemispherical propagation. Indicative calculations of received noise levels from each nominated source are outlined in *Table 5.2*.

Table 5.2: Predicted construction noise impacts (indicative values)

Noise Source	SWL	Received Noise Level (dB(A))					
		Noise Catchment					
		1 - NW	2 – NW	3 - S	4 - SE	5 - NE	6 - NE
		Receiver					
		A, B	C, D	E, F	G, H, I, J	K, L, M	N, O, P
Preparatory Works							
Excavator	**112**	40	42	43	43	42	44
Graders	**117**	45	47	48	48	47	49
Backhoes	**103**	31	33	34	34	33	35
Concrete Supply Truck (24t)	**110**	38	40	41	41	40	42
Crane (10t, lorry mounted)	**118**	46	48	49	49	48	50
Installation / Fit Out							
Hand held tools	**105**	33	35	36	36	35	37
Semi-Trailers (10t / 20t)	**108**	36	38	39	39	38	40
Anticipated Range of Impacts		**31 – 46**	**33 – 48**	**34 – 49**	**34 – 49**	**33 – 48**	**35 – 50**
Typical Mid-Point		**38**	**40**	**41**	**41**	**40**	**42**
Impact Potential – Preparatory Works							
Adopted Day Time Planing Goal = 51 dB(A) [L_{A10}]		Low	Moderate	Moderate	Moderate	Moderate	Moderate
Impact Potential – Installation / Fit Out							
Adopted Day Time Planing Goal = 51 dB(A) [L_{A10}]		Low	Low	Low	Low	Low	Low

During the construction phase, works would be primarily manual. Construction noise emissions would include the use of hand tools and short term movements of mobile sources throughout the site.

Noise emissions from the construction works would be sporadic and intermittent, and would depend on the activities conducted. Significant variations in noise emissions may be present throughout each daily period.

Exceedances of the recommended L_{A10} construction noise planning goal of 51 dB(A) may occur for the closest residential receivers without suitable noise control measures or construction management practices. Note that no allowance for ground effects, topographical shielding or atmospheric absorption has been made in the above calculations. Considering these items may slightly reduce the reported range of noise impacts, the resultant construction noise impact potential (and recommendations made) would remain consistent however.

5.2 Operational noise

5.2.1 Model inputs

A noise propagation model was established in the assessment of potential operational noise impacts from the proposed Waste Resource Recovery and Recycling Facility. Noise modelling was undertaken through the use of the ENM Noise Prediction Software (Version 3.06). The modelling was based on the following:

- linear weighted 1/1 octave band noise source data [L_{Aeq}]
- topographical contours (approximate 3,500 metres x 2,000 metres at 10 metre intervals) for local area
- mobile source heights of 1.5 metre
- rural land use category
- ground type consistent with grass / rough pasture
- predictions presented for ground level receivers (reduced level + 1.2 metres)
- indicative source locations based on site layout presented as *Figure 2.1*.

5.2.2 Modelling techniques and scenarios

Noise modelling scenarios were developed based on anticipated 'peak' site operating conditions. Constant noise emissions from the adopted site sources were assumed. Noise modelling was carried out for L_{Aeq} (operational) noise emissions in accordance with the NSW INP.

Scenarios considered, and source sound power levels adopted (SWLs) have been outlined in *Table 5.3*.

Operational noise modelling was carried out for the following atmospheric conditions:

- condition A: still isothermal conditions, temperature 25°C, relative humidity 50 percent
- condition B: 3 metres per second south easterly wind at 10 metres metres above ground level, temperature 25°C, relative humidity 50 percent

  potential increase in site noise impacts to noise catchment 1 (receivers A, B) and noise catchment 2 (receivers C, D)
- condition C: 3 metres per second northerly wind at 10 metres metres above ground level, temperature 25°C, relative humidity 50 percent

  potential increase in site noise impacts to noise catchment 3 (receivers E, F)
- condition D: 3 metres per second westerly wind at 10 metres metres above ground level, temperature 25°C, relative humidity 50 percent

  potential increase in site noise impacts to noise catchment 4 (receivers G, H, I, J)

- condition E: 3 metres per second south westerly wind at 10 metres above ground level, temperature 25°C, relative humidity 50 percent

  potential increase in site noise impacts to noise catchment 5 (receivers K, L, M) and noise catchment 6 (receivers N, O, P)

- condition F: 3°C per 100 metre radiative temperature inversion, temperature 10°C, relative humidity 25 percent

  potential increase in site noise impacts to all noise catchments.

Drainage flows, being wind movement 'down hill', were not considered in the noise predictions because selected receivers are generally not located down gradient of the site.

Table 5.3: Noise propagation modelling scenarios considered

Scenario	Process	Source(s)	SWL (dB(A)) L_{Aeq}
A-1	oily water treatment and waste oil recovery	road transport truck manoeuvring	106
		tanker unload	106
		wash press / screen conveyors	79.5
		transfer pump x 3	70.5
A-2	hydrogenation of re-refined base lube oils	dehydrator – internal	not assessed
		compressor – internal	88.5
		boiler – internal	95.5
		boiler pump – internal	93 X
		flare stack (assumed)	100 X
		backhoe – internal	102 X
		FEL – internal	105
A-3	treatment of non-sewerable aqueous wastes by neutralisation, chemical fixation, stabilisation and solidification (CFS)	conveyor belt / motor – internal x 6	84.5
		road transport truck manoeuvring	106
		road transport truck reversing	96.5
		dust collector / fan	107
		forklift	98
		aggregate unload	109
		silo vent x 2	87

Notes to *Table 5.3*:

X – even distribution of 1/1 octave band data (equivalent summation to reported SWL) assumed

The adopted source data is considered suitable for this noise impact assessment. All additional plant items and processes within the proposed site would likely be insignificant and not contribute to noise emissions from the site.

Of the sources presented in *Table 5.3*, the external stationary and mobile sources were considered to have the greatest potential to influence the off-site ambient noise environment.

Post commissioning source validation measurements would be used to verify the assumed data.

Note on Internal Noise Sources

Where internal sources have been considered, an insertion loss of 10 dB(A) from the structure façade has been conservatively assumed. The attenuation achieved from building facades could be expected in the order of 15 dB(A) to 20 dB(A).

Note on Flare Stack Noise Emissions

When compared to other site emissions, noise from the flare is not expected to be a primary noise source for the site. Further, high pressure flaring is not expected.

The adopted sound power level is higher than anticipated and would be confirmed through monitoring after commissioning. If the adopted sound power level exceeds the adopted specification, then mitigation would be considered.

5.2.3 Modelled operational noise impact

Predicted point-to-point noise levels for each identified receiver are provided in *Table 5.4.*

The operational noise criteria were achieved at each location under each scenario. The proposed facility is expected to be inaudible in the surrounding residential areas for all periods of the day.

A sample ENM source ranking file, and ENM output file, has been included as *Appendix C* and *Appendix D* respectively.

Examination of the ENM ranking file and output files indicated which sources are the primary contributors to the predicted levels. These sources and their relative contributions are identified in *Table 5.5*.

The treatment of non-sewerable aqueous wastes by neutralisation and chemical fixation, stabilisation and solidification (CFS) were key sources for the site.

The movement of mobile sources throughout the site were noted to be the primary contributor to potential off-site noise impacts.

To aid in the assessment of results, a noise contour impact isopleth has been prepared for Scenario A (all sources, still isothermal conditions) and is presented as *Figure 5.1*. The contour plot has been provided to aid visual interpretation only.

Table 5.4: Predicted operational noise impacts (all operations)

Meteorological Condition	Received Noise Level (dB(A))															
	Noise Catchment															
	1 - NW		2 – NW		3 - S		4 - SE				5 - NE			6 - NE		
	Receiver															
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
A – neutral	28	26.5	23.5	22	24.5	23	19.5	26	22.5	20	20.5	19.5	23	25.5	24	21
B – 3 m/s SEly	34.5	36.5	28	26.5	21	19	16	22.5	19.5	16.5	18.5	18	21.5	26	28	23
C – 3 m/s Nly	26.5	24	22	21	33	32	24	30	24.5	22	19.5	18	21.5	22	20	16.5
D – 3 m/s Wly	25.5	23	19.5	18.5	28	28	26.5	32.5	31.5	30	27.5	26	30.5	29	26.5	21
E – 3 m/s SWly	27.5	25	22	20	22	21.5	21	27	26.5	24.5	26.5	26.5	31	33	31	24
F – Inversion	30.5	32.5	25.5	24	30	28.5	22.5	29	25.5	23.5	23	22	26	28	27.5	22.5
Criteria																
- Day Time 46 dB(A)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
- Evening 45 dB(A)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
- Night Time 38 dB(A)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Notes to *Table 5.4*: L_{Aeq} levels presented

values rounded to nearest 0.5 dB(A)

✓ - criterion satisfied

✗ - potential exceedance

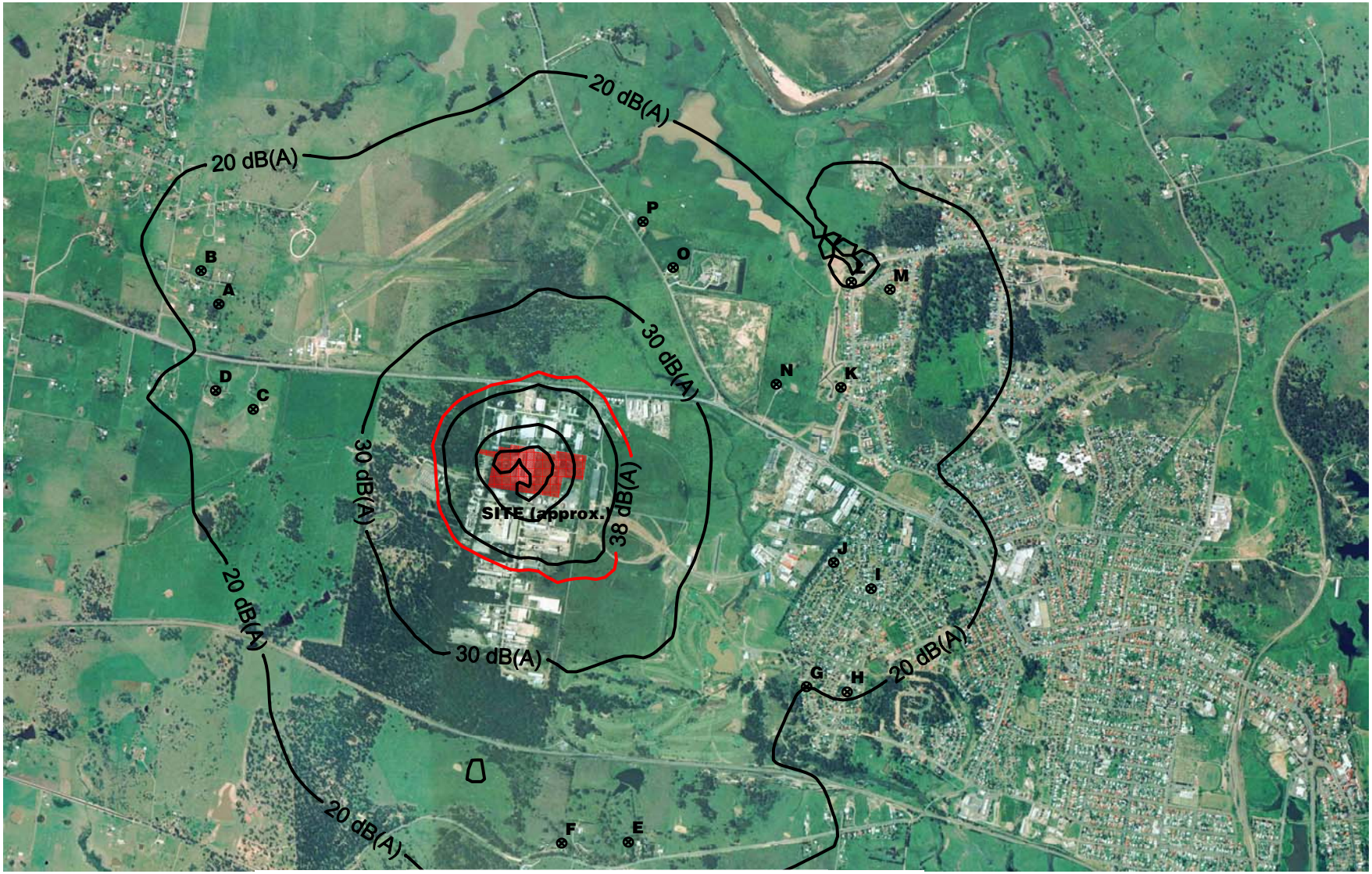
Table 5.5: Primary noise sources (neutral conditions)

Scenario	Received Noise Level (dB(A))															
	Noise Catchment															
	1 - NW		2 – NW		3 - S		4 - SE				5 - NE			6 - NE		
	Receiver															
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
A-1 oily water treatment and waste oil recovery	<10	<10	10.5	<10	20.5	19.5	15	18.5	18	15.5	15	14	17	21	19	15.5
A-2 hydrogenation of re-refined base lube oils	14.5	10.5	17.5	15.5	10.5	10	12	12.5	12	12.5	11.5	10.5	<10	12	12.5	<10
A-3 treatment of non-sewerable aqueous wastes by neutralisation, chemical fixation, stabilisation and solidification (CFS)	28	26.5	22	21	22.5	20	16.5	24.5	20.5	17.5	18.5	17.5	21.5	23	22	19
Σ	**28**	**26.5**	**23.5**	**22**	**24.5**	**23**	**19.5**	**26**	**22.5**	**20**	**20.5**	**19.5**	**23**	**25.5**	**24**	**21**

Notes to *Table 5.4*: L_{Aeq} levels presented

values rounded to nearest 0.5 dB(A)

Figure 5.1: Noise contour impact isopleth (all sources, still isothermal conditions)



5.3 Sleep disturbance

An L_{A1} sound power level of 111 dB(A) has been adopted for a road transport truck air break release. Impact noise on site from forklift tighnes or similar could be expected at an L_{A1} sound power level of 115 dB(A). These values have been measured by PB previously.

Assuming noise attenuation for distance alone (no allowance for ground effects, topographical shielding or atmospheric absorption) the following received noise levels would be expected under still isothermal conditions:

- 1,000 metres separation

  Air break Release - 43 dB(A)

  Impact Noise - 47 dB(A)

The adopted L_{A1} sleep disturbance criterion of 49 dB(A) would be expected to be readily achieved throughout.

5.4 Road traffic noise

An average of 7 trucks per hour, resulting in a total of 14 truck movements, would be reasonably expected from the proposed facility. This is equivalent to approximately one truck every five minutes. Peak hour movements (8am to 9am and 3pm to 4pm) were indicated to be 22 trips / 44 movements in the a.m. and 17 / 34 movements in the p.m.

The haulage route to and from the site would be via the New England Highway.

Existing (2005) peak hour flows along the New England Highway were reported by Northern Transport Planning and Engineering Pty Ltd at 1305 light vehicles and 213 heavy vehicles (AM peak hour) and 1433 light vehicles and 153 heavy vehicles (PM peak hour).

Information contained in the Roads and Traffic Authority (RTA) *Traffic Volume Data for Northern Region* (1998), and projected to the year 2008, and reported by Bridges Acoustics (2002) provides the following existing traffic flow data:

- New England Highway East (RTA station 05-147)

  day time 26460 cars, 6615 trucks

  night time 6615 cars, 4410 trucks

- New England Highway West (RTA station 05-030)

  day time 14160 cars, 3540 trucks

  night time 3540 cars, 2360 trucks

5.4.1 Existing Levels

No baseline road traffic noise monitoring has been undertaken as part of this technical paper, nor is it considered necessary given the magnitude id the existing road traffic movements along the New England Highway and the minor contribution the site would have to existing traffic numbers.

Calculated traffic noise levels for the year 2008 were reported within the Bridges Acoustics *National Ceramic Insutries Australia Pty Ltd Ceramic Tile Manufacturing Facility, Rutherford Technical Paper Mo. 1 – Noise* (Report J0028-11-R1, dated December 2002). The following existing noise levels were calculated at an approximate distance of 15 metres from the roadway:

- New England Highway East

  $L_{Aeq,15hr}$ (day time) 71 – 72 dB(A)

  $L_{Aeq, 9hr}$ (night time) 69 – 70 dB(A)

- New England Highway West

  $L_{Aeq,15hr}$ (day time) 69 – 70 dB(A)

  $L_{Aeq, 9hr}$ (night time) 67 dB(A)

The number presented above indicate that noise levels from existing road traffic flows along the New England Highway would be well in excess of DEC base criteria at the nearest residential facades.

The Bridges Acoustic report did not include validation measurements for calculated existing road traffic noise levels.

5.4.2 Proposed Levels

At a distance of 20 metres between a given façade and the middle of the near side road carriage way, assuming a sound exposure pass-by level of 110 dB(A), anticipated hourly incremental L_{Aeq} levels follow:

- am peak (44 movements): $L_{Aeq, 1hr}$ 59.5 dB(A)
- pm peak (34 movements): $L_{Aeq, 1hr}$ 58 dB(A)
- standard hour day / night (14 movements): $L_{Aeq, 1hr}$ 54.5 dB(A).

Day time $L_{Aeq,15hr}$ impacts (260 movements adopted [am peak + pm peak + 13 standard hours]) would be expected in the range of 55 dB(A) to 56 dB(A).

Night time $L_{Aeq,9hr}$ impacts (126 movements adopted [9 standard hours]) would be expected in the range of 54 dB(A) to 55 dB(A).

5.4.3 Change in Road Traffic Noise Profiles

No measurebale increase in existing road traffic noise levels is expected. That is, truck movements would not result in any cumulative road traffic noise impacts for the area.

Although a number of existing sensitive receptors are located along the proposed route, and road truck noise may be audible, the potential for adverse impacts is not considered likely given the existing nature of road traffic noise profiles for the area.

Sleep disturbance issues and L_{AMax} noise impacts have not been considered in detail (outlined with the RTAs *Environmental Noise Management Manual* and NSW DECs *Environmental Criteria for Road Traffic Noise*) given the elevated number of existing road transport movements for the New England Highway. However, night time impacts due to air brake release (up to a noise emission level of 115 dB(A)) and impact noise (up to a noise emission level of 120 dB(A)) may be expected in the range of 70 – 85 dB(A) for the nearest receivers to the roadside carriageway of the New England Highway. The short term impacts, where evident, are not expected to result in a loss of sleep amenity. Any perceived impacts would be comnsistent with existing profiles.

Negligible change is expected to existing traffic noise profiles. The heavy vehicle movement schedule outlined within the Traffic Impact Assessment (prepared by Northern Transport Planning and Engineering Pty Ltd) indicates a total equivalent weekday daily movement number of 163 truck movements.

No significant cumulative increases in existing road traffic noise impacts would occur due to the proposal. The plant would likely reduce total network movements as movements to Branxton, Singleton Newcastle, Sydney and Queensland would not be required as frequently.

In considering portential road traffic noise impacts, it is important to note that the historical growth of the New England Highway be considered. A growth rate of three percent through Rutherford and Maitland would be expected to result in an increase in the range of 1000 to 1500 vehicles per day, of which between 250 – 500 would be expected to be road transport trucks. Compared to the proposed increase of approximately 260 day time movements and 126 night time movements through Rutherford and Maitland related directly to the proposal. At final design capacity, the waste resource and recovery facility would not be a significant contributor to existing road traffic movements for the area.

It is therefore considered that a more detailed road traffic noise impact assessment is not deemed necessary.

Several road traffic noise management practices have been recommended (*Section 6.4*).

5.5 Vibration

A qualitative assessment of potential vibration impacts has been presented within this section of the report. No targeted impact calculations have been carried out.

Vibration issues are not likely to be associated with the construction or operation of the facility.

Worse case vibration levels may be associated with the site preparation works and the movement of road transport trucks. There is negligible potential for off-site structural damage, and regenerated noise issues.

Potential annoyance and comfort impacts associated with vibration have been detailed below.

Typical vibration levels for an excavator range from one – two millimetres per second at a distance of five metres and generally decreases to less than 0.2 millimetres per second at distances greater than 20 metres. Typical vibration levels from heavy trucks passing over normal (smooth) road surfaces generate relatively low vibration levels in the range of 0.01 – 0.2 millimetres per second at the footings of buildings located 10 – 20 metres from a roadway.

Vibration impacts are expected to be insignificant at a distance of 10 metres and immeasurable beyond 50 metres.

Vibration emission levels from the site (construction and operation phases) would be negligible given the separation distances to the nearest potentially affected receivers. No structural damage is expected. Furthermore, annoyance due to vibration is not likely to be experienced.

6. Statement of potential impact

6.1 Construction noise

6.1.1 Potential impacts

Construction noise impacts are not expected to exceed the adopted noise design goals. The adopted goal of 51 dB(A) (L_{A10}) was achieved for each receiver.

However, short term construction noise impacts may occur if appropriate construction noise controls and management practices are not implemented.

A number of economically reasonable and technically feasible noise mitigation options that would be considered by the construction contractor have been provided in *Section 6.1.2*.

6.1.2 Mitigation measures and safeguards

The contractor would address each of the following items to ensure every reasonable effort is made to meet the identified noise design goals, and so that no unnecessary exceedances occur:

- intensive construction activities (with the potential to be audible off site) would be scheduled between Monday to Friday, 7.00 am to 6.00 pm, and Saturdays, 8.00 am to 1.00 pm. No audible works would be undertaken on Sundays or Public holidays
- construction activities would be undertaken in accordance with Australian Standard AS 2436-1981 *Guide to Noise Control on Construction, Maintenance and Demolition Sites*. All equipment used on site would be required to demonstrate compliance with the noise levels recommended within AS 2436-1981.

It is also recommended that noise monitoring be undertaken during the initial construction works. The noise compliance monitoring would ensure that any assumptions made in the calculations are verified and would also allow an opportunity for liaison with the local community. The compliance monitoring would provide the contractor with feedback relating to operating practices and the adoption of technically feasible and/or economically reasonable noise control measures for key sources affecting residential noise levels.

A noise management plan would be developed as part of the construction environmental management plan to be prepared by the construction contractor prior to the commencement of construction activities.

The management plan would identify and address noise impact for all potentially affected receivers and provide procedures, noise mitigation measures and noise management practices proposed throughout the duration of the works.

6.2 Operational noise

6.2.1 Potential impacts

The operation of the proposed facility is unlikely to result in a degradation of the existing ambient noise environment.

Received noise levels were calculated at ground level for 16 adjacent existing residential receivers (a total of six noise catchments).

Residential L_{Aeq} predictions of 30 dB(A) and below were reported for still conditions. Under noise enhancing meteorological conditions, residential L_{Aeq} noise impact of 36.5 dB(A) and below were predicted.

Boundary noise levels of less than 70 dB(A) are anticipated.

Compliance with the noise design objectives established for this proposal were achieved for all assessed operations.

Background (median L_{A90}) noise levels at Location 1, Dent Street to the north west, were reported at 44 dB(A), 41.5 dB(A) and 35 dB(A) (for the day time, evening and night time periods respectively). Background (median L_{A90}) noise levels at Location 2, Anambah Road to the north east, were reported at 41 dB(A), 40.5 dB(A) and 34 dB(A) (for the day time, evening and night time periods respectively).

No increase in long-term degradation to the existing off-site residential noise profiles is expected, that is, the site would be inaudible to barely audible at each nearest potentially affected receiver during all periods of operations.

Potential intrusive noise impacts during the night time period may occur from the short term movement of mobile sources throughout the site. Recommendations have been made to minimise these impacts within *Section 6.2.2*.

6.2.2 Mitigation measures and safeguards

The works carried out as part of this assessment has been based on conservative factors and all potential operating conditions, with an emphasis being placed on worse case events.

Given the potential for short-term elevated site operations (particularly vehicle movements) and nature of the existing ambient noise environment, several environmental management procedures have been recommended aimed at limiting potential noise emission issues.

Analysis of the ENM output files has shown that auxiliary equipment such as an articulated semi-trailer significantly contribute to the noise emissions from the site when operating on the internal access road. Therefore, the use of this equipment would be carried out in a reasonable manner, with the associated off-site noise impacts considered at all times.

Scheduling of truck movements would be undertaken. No more than six road transport trucks would be in operation (manoeuvring or idling) on the site at any one time. This was the number assumed in the modelling carried out.

Each item outlined below would minimise the potential for adverse off-site noise impacts.

- a contact number would be provided to the public so that information can be received or complaints made in relation to noise. A log of complaints would be maintained and actioned by the contractor. A complaint handling procedure would be formulated and adhered to
- residential class mufflers and where applicable, engine shrouds (acoustic lining) to permanent on site mobile sources engine would be used. Noise emissions are to be an important consideration when selecting equipment for the site. All equipment would be maintained in good order including mufflers, enclosures and bearings to ensure unnecessary noise emissions are eliminated
- appropriate use of all plant and equipment. Reasonable work practices are to be applied with no extended periods of 'revving', idling or 'warming up' within the proximity of existing residential receivers. Any excessively loud activities would be scheduled during periods of the day when an increase in general ambient noise levels is apparent. This would reduce the potential for cumulative noise impacts (relating to worst-case elevated operations) and extended periods of off-site annoyance.

The final design of the plant is to consider the impact potential presented within this report. Source selection and noise emission levels have been assumed in the assessment of impact potential. Process operations additional to, or that emit noise at levels higher than, those adopted in the predictive modelling may result in changes to received operational noise impacts.

Post commissioning source emission and ambient background monitoring would be undertaken prior to each stage of the developed to confirm the noise source levels and associated received noise levels. An assessment of annoying characteristics would need to be undertaken at this stage.

An operational environmental management plan (noise issues) would outline procedures that specifically address potential noise impacts and the requirements for corrective measures in the event of elevated off-site noise levels or residential complaints.

6.3 Sleep disturbance

6.3.1 Potential impacts

No sleep disturbance issues are anticipated from the operations of the facility. L_{A1} impacts of less than 49 dB(A) were reported.

6.3.2 Mitigation measures and safeguards

No site-specific mitigation measures or safeguards are deemed necessary. The operational environmental management plan (noise issues) would outline procedures that specifically address the requirements for corrective measures in the event that sleep disturbance noise impacts occur.

6.4 Road traffic noise

No operational road traffic noise issues are anticipated.

Detailed assessment of road traffic noise impacts for the operations works has not been undertaken due to existing heavy traffic flows along the New England Highway and negligible incrementral impacts from the proposal.

As the distance of separation from the New England Highway increases, road traffic noise impacts would reduce significantly. Further attenuation would also be provided by existing structures located along the noise transmission path (being the façade of the residential dwellings).

Existing road traffic noise impacts would be well above the NSW DECs 'base' criterion. The NSW DEC road traffic noise 'allowance' criterion would be readily achieved.

Controlling existing road traffic noise impacts from a source such as the New England Highway is considered beyond the principles of reasonable and feasible for a single industrial development.

6.4.1 Mitigation measures and safeguards

A road traffic noise management plan would be completed as part of the construction and operational noise management plan. Factors such as route selection, preferred movement times, scheduling of movements, speed limits and 'community friendly' driving practices would be clearly outlined.

Truck movements would be limited to no more than six movements per hour (excluding peak hour flows). This would provide a safeguard for protecting local residential noise amenity. Site management is to ensure that the necessary timetabling and organisation of contractors is conducted in a manner that accommodates this need.

It is proposed that trucks entering the site during the night time period have air bag suspensions. Engine brakes would not be used. Access would be via Kyle Street with a creep speed of 5 km/hr. Limiting the potential for night time noise impacts would significantly reduce the potential for local residential annoyance and potential sleep disturbance issues.

No queuing of road transport trucks along Kyle Street are to take place at any time. The following practical on-site vehicle movement practices are also recommended:

- low on-site speed limits
- no use of horns or engine brakes
- adequate access road design.

6.5 Vibration

6.5.1 Potential impacts

No construction vibration issues are anticipated. Similarly, minimal potential for operational related vibration impacts are expected. Given the separation distances between the nearest resident and the site, no vibration impact is considered likely.

The intermittent and transient activities would not result in structural damage. Minimal potential for annoyance is anticipated.

6.5.2 Mitigation measures and safeguards

No site-specific mitigation measures or safeguards are deemed necessary.

7. Conclusion

This report documents as assessment of environmental noise issues for the proposed construction and operation of the waste resource recovery and recycling facility located at Rutherford.

A number of source emission scenarios were considered with impact potential (and loss of residential amenity / noise intrusion) compared with site-specific noise design goals derived in accordance with NSW Department of Environment and Conservation guidelines.

Short-term construction impacts may occur for the closest residential receivers without suitable noise control measures or construction management practices. External construction activities have the greatest potential for construction noise impacts in residential areas.

It is important to note that with respect to construction noise planning goals, the NSW Department of Environment and Conservation recognise that individuals accept higher perceived noise impacts for emission sources with a limited duration and identified end date. A number of construction noise management options have been recommended.

No operational noise issues are anticipated. The adopted operational noise design goals were achieved throughout. With the adoption of the recommended management practices, the operations of the site are expected to be generally inaudible within the surrounding residential areas for all periods of the day.

No sleep disturbance, construction-related road traffic noise or construction-related vibration impacts are anticipated.

It is recommended that post-commissioning noise source validation measurements be carried out to verify the assumptions made, and subsequent conclusions provided, within this report.

It is expected that a performance based approach would be applied during the final design and construct stage of the site. Conceptually, the proposed site is not expected to result in future socio-acoustic land use incompatibility.

With adherence to the recommendations made within this report, no long-term loss or degradation to the existing local acoustic amenity is expected from the construction and operation of the proposed waste resource recovery and recycling facility.

8. References

AS 2436-1981 *Guide to Noise Control on Construction, Maintenance and Demolition Sites*

AS 2670 *Evaluation of Human Exposure to Whole-body Vibration*

Bridges Acoustics *National Ceramic Insutries Australia Pty Ltd Ceramic Tile Manufacturing Facility, Rutherford Technical Paper Mo. 1 – Noise* (Report J0028-11-R1, dated December 2002)

BS 6472 1992 *Evaluation of Human Exposure to Vibration in Buildings (1 Hz to 80 Hz)*

BS 7385 1990 *Evaluation and Measurement for Vibration in Buildings*

DIN 4150-3 1999 *Structural Vibration Part 3 Effects of Vibration on Structures*.

Northern Transport Planning and Engineering Pty Ltd *Transpacific Industries Pty Ltd Proposed Resource Recovery and Recycling Facility, Rutherford Traffic Impact Study* (Report 05908, dated April 2005)

NSW DEC *Industrial Noise Policy* (2000)

NSW DEC *Environmental Noise Control Manual* (1994)

NSW DEC *Environmental Criteria for Road Traffic Noise* (1999)

Protection of the Environment Operations Act (1997)

9. Limitations

Scope of Services and Reliance of Data

This environmental impact study ("the study") has been prepared in accordance with the scope of work/services set out in the contract, or as otherwise agreed, between Parsons Brinckerhoff (PB) and the Client. In preparing this environmental impact study, PB has relied upon data, surveys, analyses, designs, plans and other information provided by the Client and other individuals and organisations, most of which are referred to in the environmental impact study ("the data"). Except as otherwise stated in the environmental impact study, PB has not verified the accuracy or completeness of the data. To the extent that the statements, opinions, facts, information, conclusions and/or recommendations in this environmental impact study ("conclusions") are based in whole or part on the data, those conclusions are contingent upon the accuracy and completeness of the data. PB will not be liable in relation to incorrect conclusions should any data, information or condition be incorrect or have been concealed, withheld, misrepresented or otherwise not fully disclosed to PB.

Study for Benefit of Client

This environmental impact study has been prepared for the exclusive benefit of the Client and no other party. PB assumes no responsibility and will not be liable to any other person or organisation for or in relation to any matter dealt with in this environmental impact study, or for any loss or damage suffered by any other person or organisation arising from matters dealt with or conclusions expressed in this environmental impact study (including without limitation matters arising from any negligent act or omission of PB or for any loss or damage suffered by any other party relying upon the matters dealt with or conclusions expressed in this environmental impact study). Other parties should not rely upon the environmental impact study or the accuracy or completeness of any conclusions and should make their own inquiries and obtain independent advice in relation to such matters.

Other Limitations

To the best of PBs knowledge, the proposal presented and the facts and matters described in this environmental impact study reasonably represent the Client's intentions at the time of printing of the environmental impact study. However, the passage of time, the manifestation of latent conditions or the impact of future events (including a change in applicable law) may have resulted in a variation of the Proposal and of its possible environmental impact.

PB will not be liable to update or revise the environmental impact study to take into account any events or emergent circumstances or facts occurring or becoming apparent after the date of the environmental impact study.

Appendix A

Instrument set calibration certificates

EL 215 Noise Logger – unattended noise monitoring

(Location 1, 9 Denton Close)

Acoustic Research Laboratories
Proprietary Limited A.B.N. 47 050 100 804
Noise and Vibration Monitoring Instrumentation for Industry and the Environment

Sound Level Meter Test Certificate

Report Number : 03230

Date of Test : 17th October 2003

Report Issue Date : 17th October 2003

Equipment Tested: **ARL Noise Logger**

Model Number: EL-215

Serial Number: 194447

Client Name : Acoustic Research Laboratories

Contact Name : Robyn Hastings

Tested by : Will Ford

Approved Signatory :

Date : **17th October 2003**

Reg Lab 14172
Acoustics & Vibration
Measurement

- The tests, calibrations or measurements covered by this document have been performed in accordance with NATA requirements which include the requirements of ISO/IEC 17025:1999 and are traceable to national standards of measurement.
- This Report may not be published except in full, unless permission has been granted in writing from Acoustic Research Laboratories Pty Ltd.

A **SOUND THINKING GROUP** Company
Level 7 ♦ Building 2 ♦ 423 Pennant Hills Rd ♦ Pennant Hills ♦ NSW 2120 ♦ AUSTRALIA
Telephone +61 2 9484 0800 ♦ Facsimile +61 2 9484 0884
www.soundthinking.com.au

EL 215 Noise Logger – unattended noise monitoring

(Location 2, 96 Anambah Denton Road)

Acoustic Research Laboratories
Proprietary Limited A.B.N. 47 050 100 804
Noise and Vibration Monitoring Instrumentation for Industry and the Environment

Sound Level Meter Test Certificate

Report Number : 05077.doc

Date of Test : 18/04/2005

Report Issue Date : 20/04/2005

Equipment Tested: **Environmental Noise Logger**

Model Number: EL-215

Serial Number: 194446

Client Name : Acoustic Research Laboratories

Contact Name : Katie Fairjones

Tested by : Will Ford

Approved Signatory :

Ken Williams

Date : **20th April 2005.**

NATA Accredited Laboratory Number: 14172

The tests, calibrations or measurements covered by this document have been performed in accordance with NATA requirements which include the requirements of ISO/IEC 17025:1999 and are traceable to Australian national standards of measurement. This document shall not be reproduced except in full.

A **SOUND THINKING GROUP** Company
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www.soundthinking.com.au

RION NA 27 – attended day time monitoring

Acoustic Research Laboratories
Proprietary Limited A.B.N. 47 050 100 804
Noise and Vibration Monitoring Instrumentation for Industry and the Environment

Sound Level Meter Test Report

Report Number : 03277

Date of Test : 2nd December 2003

Report Issue Date : 2nd December 2003

Equipment Tested: **Rion**

Model Number: NA-27

Serial Number: 00601291

Client Name : Acoustic Research Laboratories

Contact Name : Robyn Hastings

Tested by : Will Ford

Approved Signatory :

Date : **2nd December 2003**

Reg Lab 14172
Acoustics & Vibration
Measurement

- The tests, calibrations or measurements covered by this document have been performed in accordance with NATA requirements which include the requirements of ISO/IEC 17025:1999 and are traceable to national standards of measurement.
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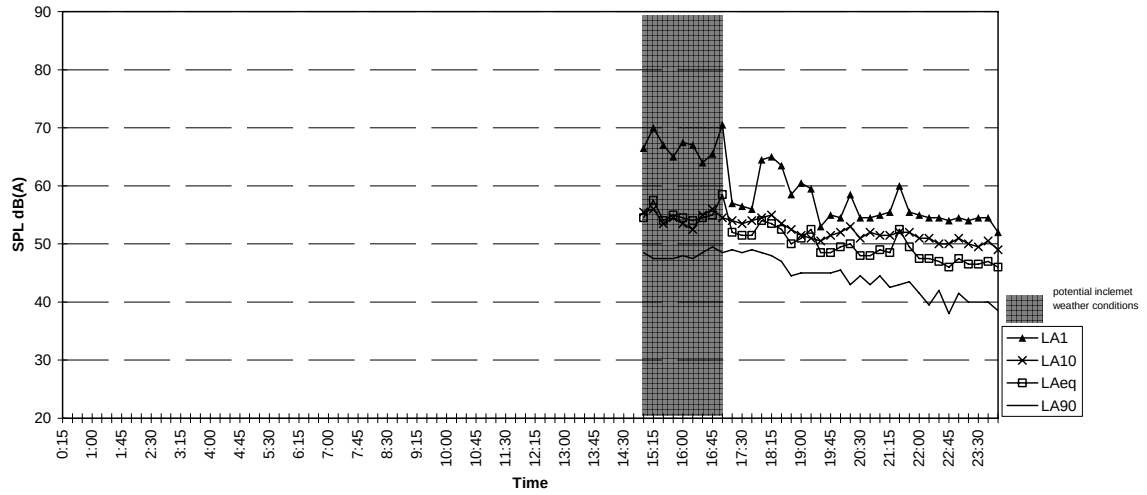
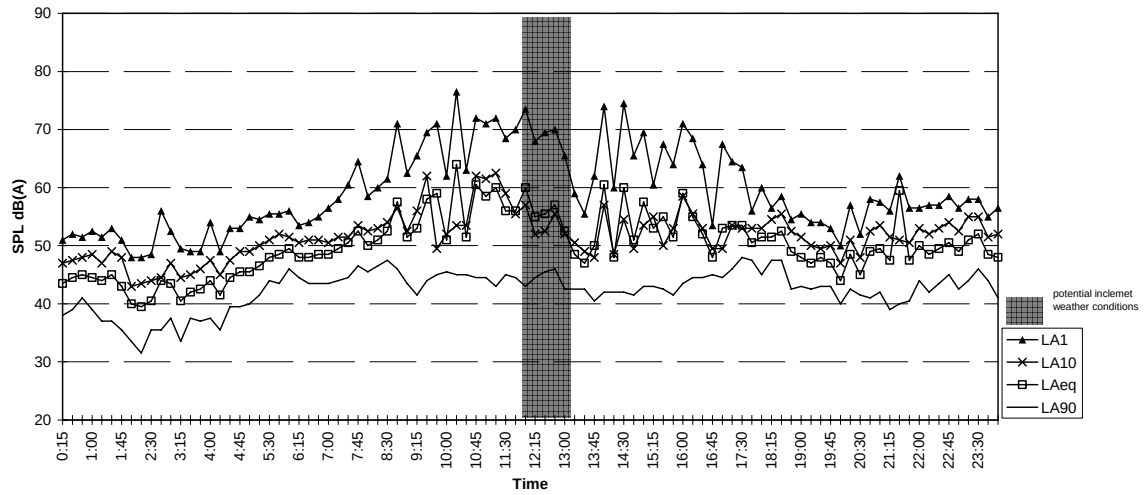
Appendix B

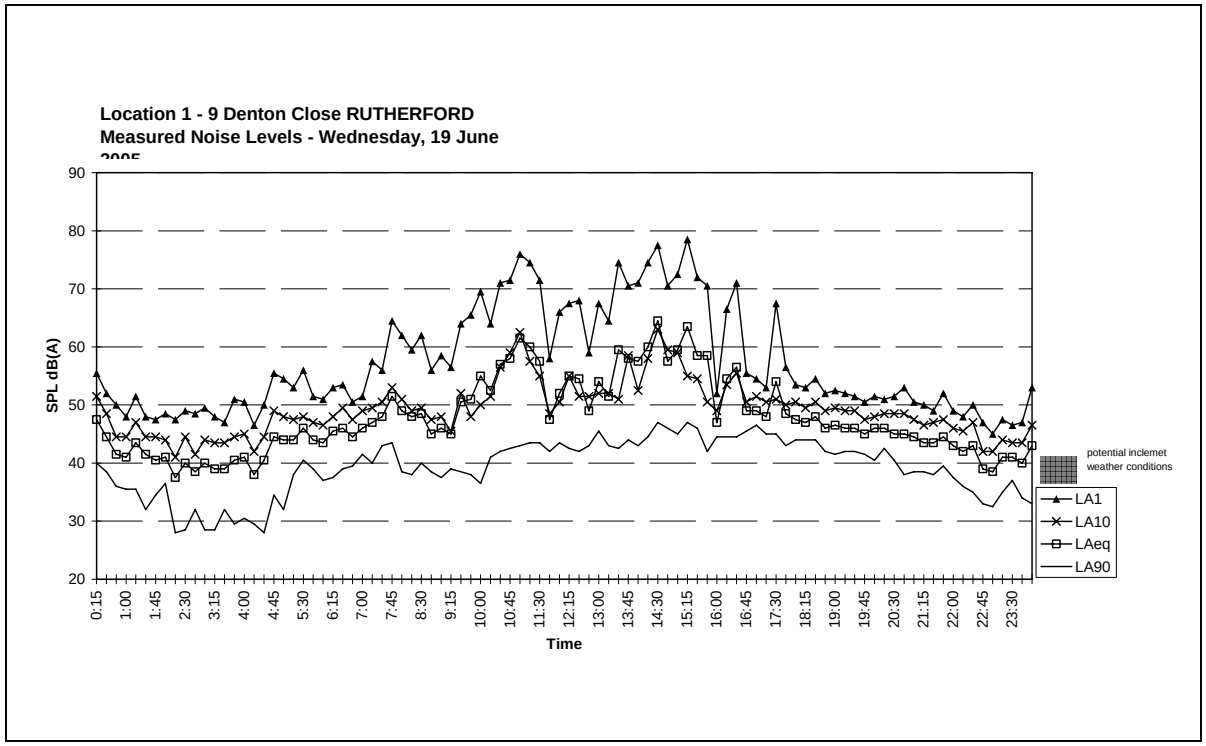
Compiled daily noise logger graphs

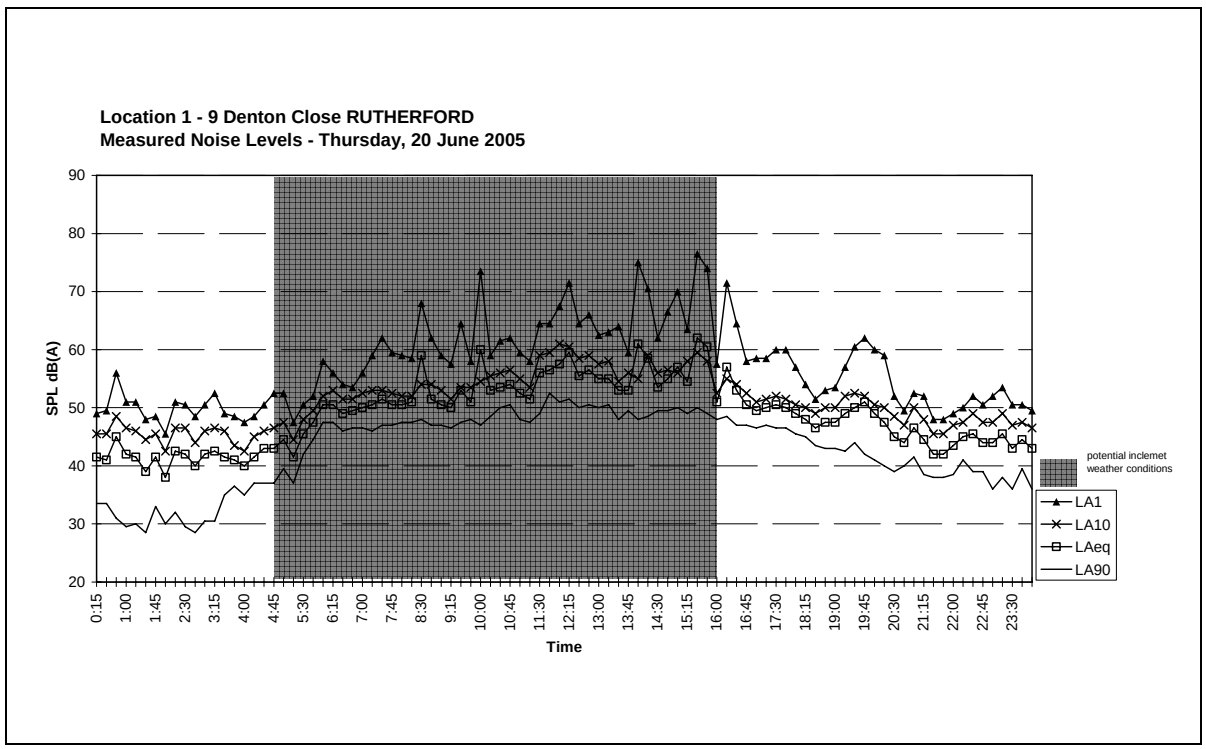
Location 1 - 9 Denton Close RUTHERFORD
Measured Noise Levels - Monday, 17 June 2005



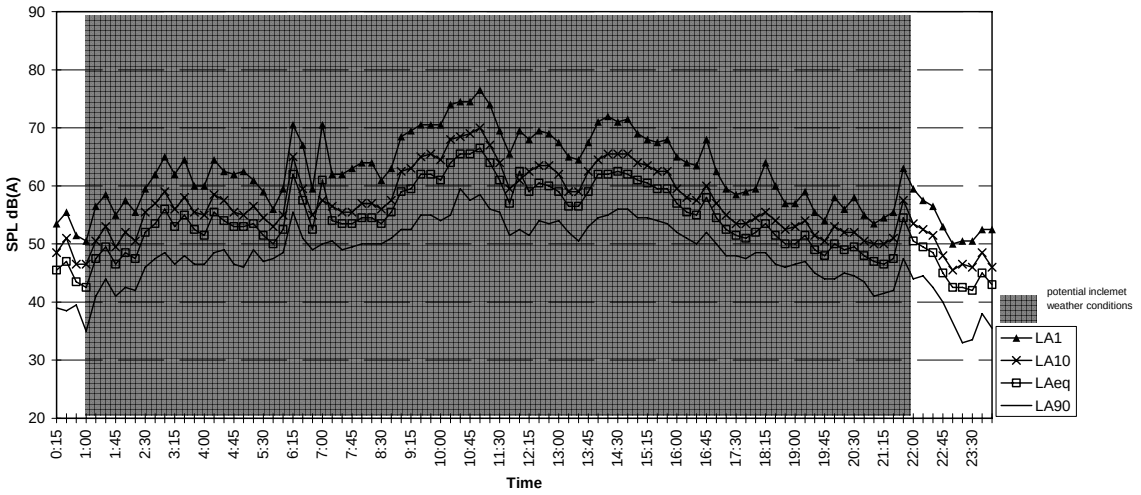
Location 1 - 9 Denton Close RUTHERFORD
Measured Noise Levels - Tuesday, 18 June 2005



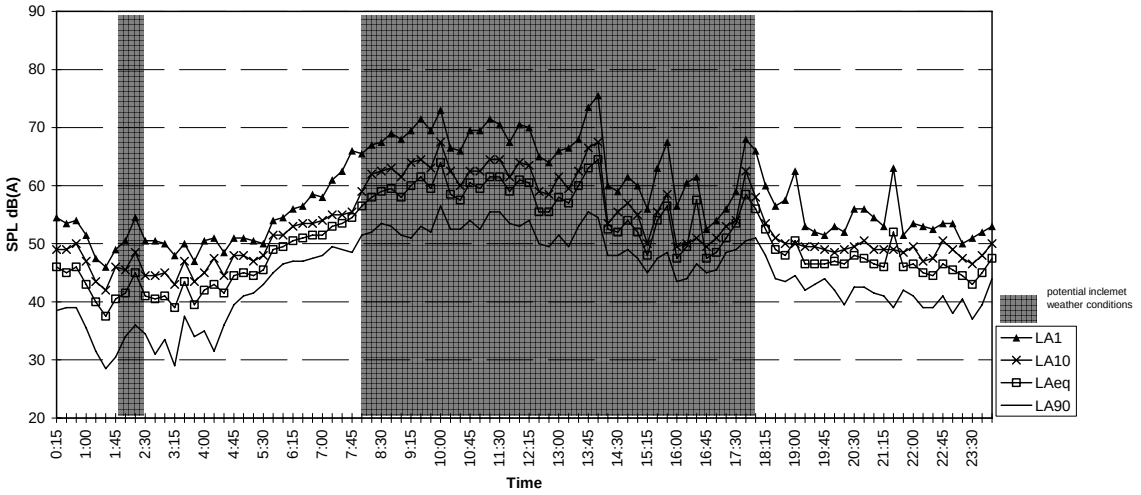

Location 1 - 9 Denton Close RUTHERFORD
Measured Noise Levels - Wednesday, 19 June
2005
SPL dB(A)
90
80
70
60
50
40
30
20
0:15
1:00
1:45
2:30
3:15
4:00
4:45
5:30
6:15
7:00
7:45
8:30
9:15
10:00
10:45
11:30
12:15
13:00
13:45
14:30
15:15
16:00
16:45
17:30
18:15
19:00
19:45
20:30
21:15
22:00
22:45
23:30
Time
potential inclemet weather conditions
LA1
LA10
LAeq
LA90


Location 1 - 9 Denton Close RUTHERFORD
Measured Noise Levels - Thursday, 20 June 2005
SPL dB(A)
90
80
70
60
50
40
30
20
0:15
1:00
1:45
2:30
3:15
4:00
4:45
5:30
6:15
7:00
7:45
8:30
9:15
10:00
10:45
11:30
12:15
13:00
13:45
14:30
15:15
16:00
16:45
17:30
18:15
19:00
19:45
20:30
21:15
22:00
22:45
23:30
Time
potential inclemet weather conditions
LA1
LA10
LAeq
LA90

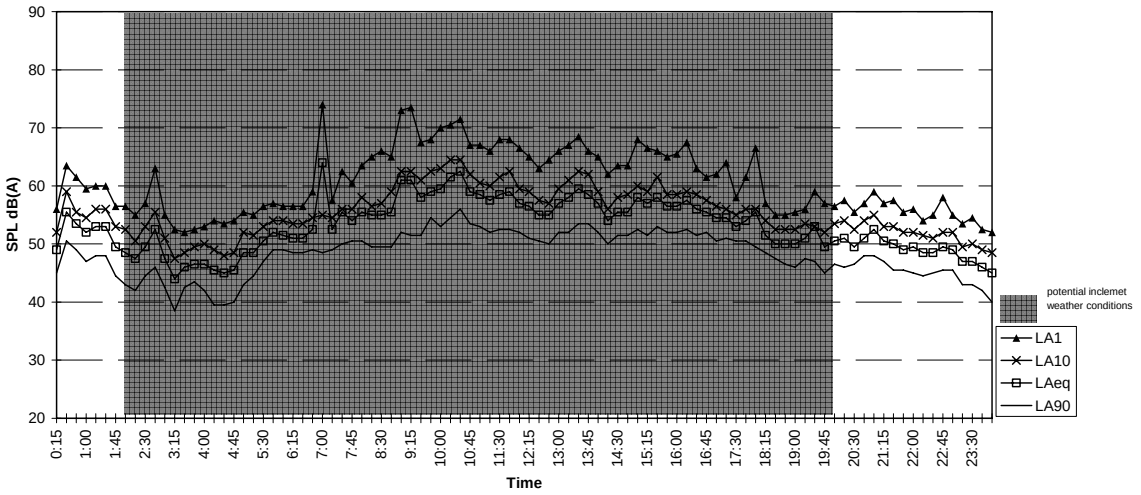
Location 1 - 9 Denton Close RUTHERFORD
Measured Noise Levels - Friday, 21 June 2005



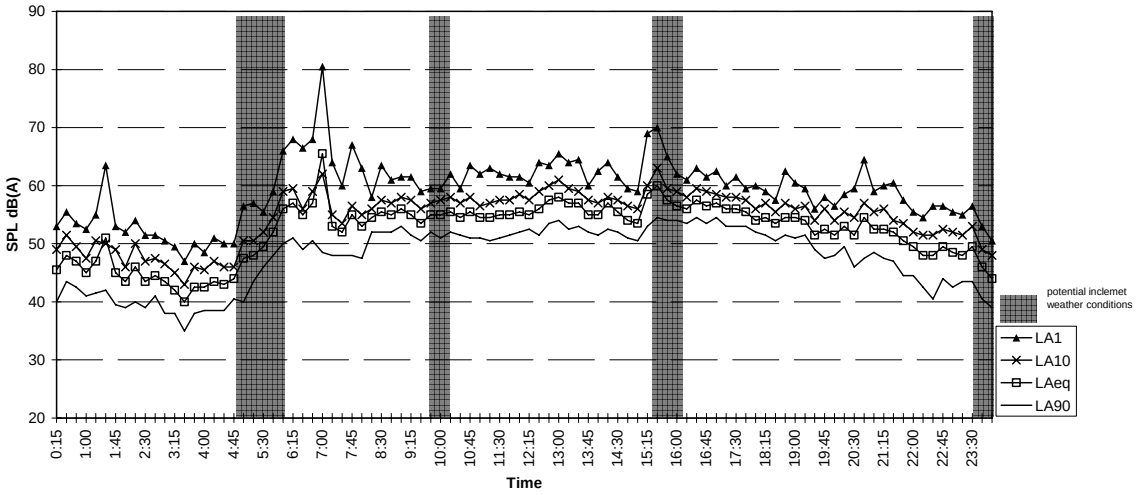
Location 1 - 9 Denton Close RUTHERFORD
Measured Noise Levels - Saturday, 22 June 2005



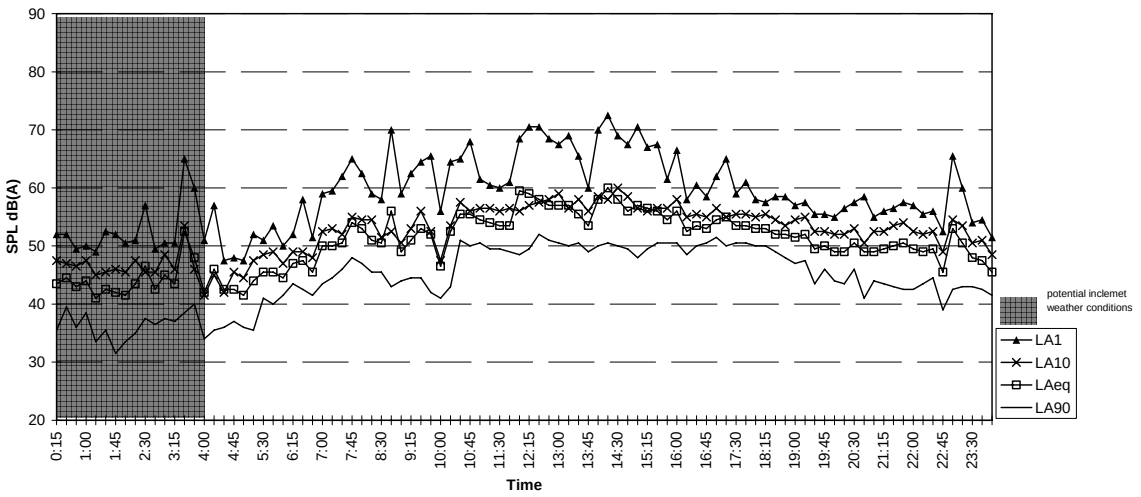
Location 1 - 9 Denton Close RUTHERFORD
Measured Noise Levels - Sunday, 23 June 2005



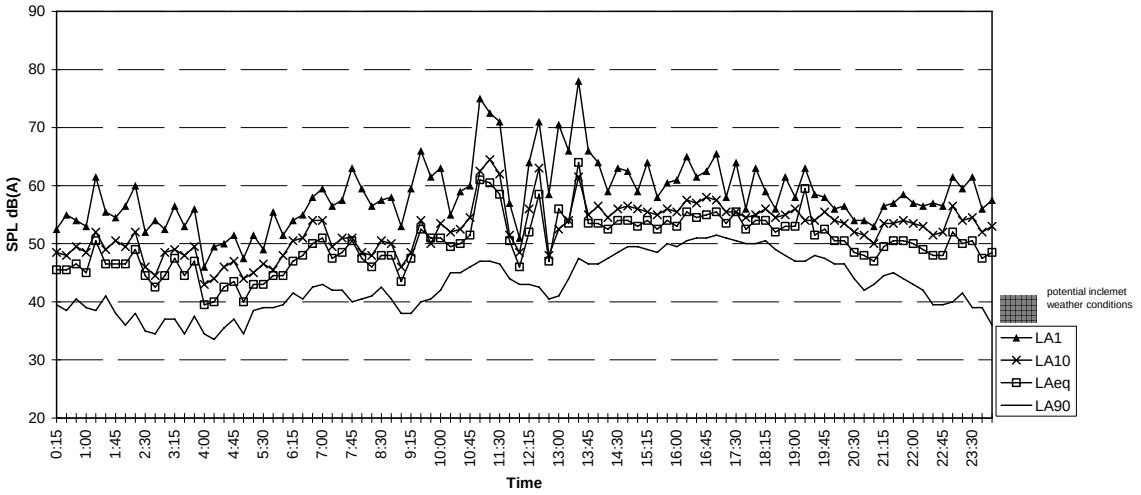
Location 1 - 9 Denton Close RUTHERFORD
Measured Noise Levels - Monday, 24 June 2005

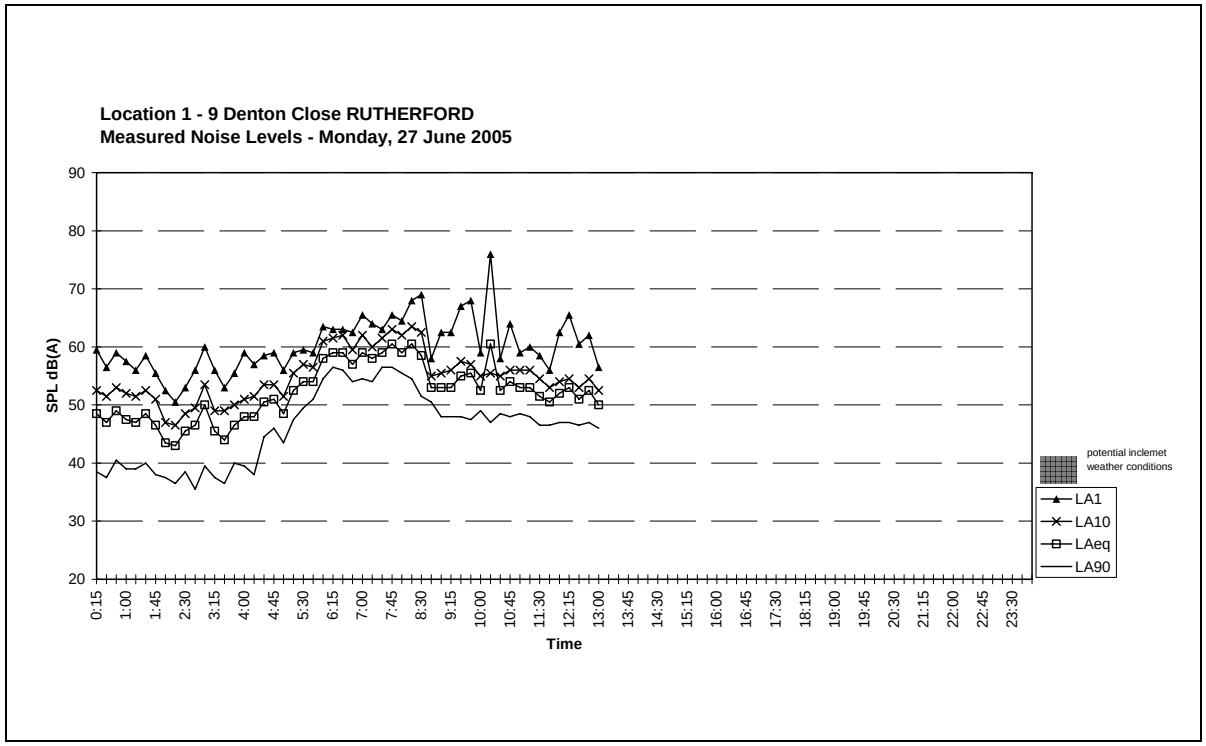


Location 1 - 9 Denton Close RUTHERFORD
Measured Noise Levels - Saturday, 25 June 2005

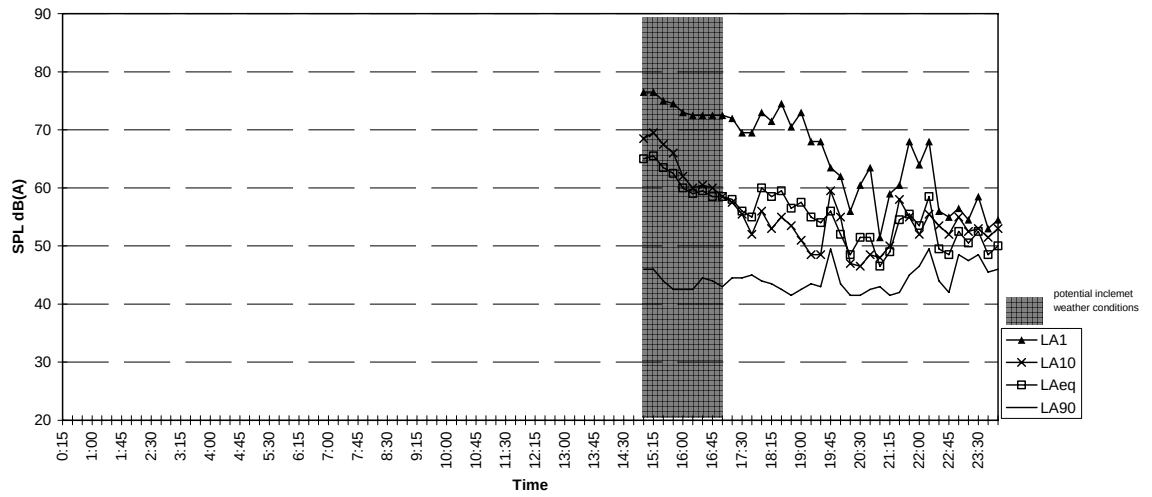


Location 1 - 9 Denton Close RUTHERFORD
Measured Noise Levels - Sunday, 26 June 2005

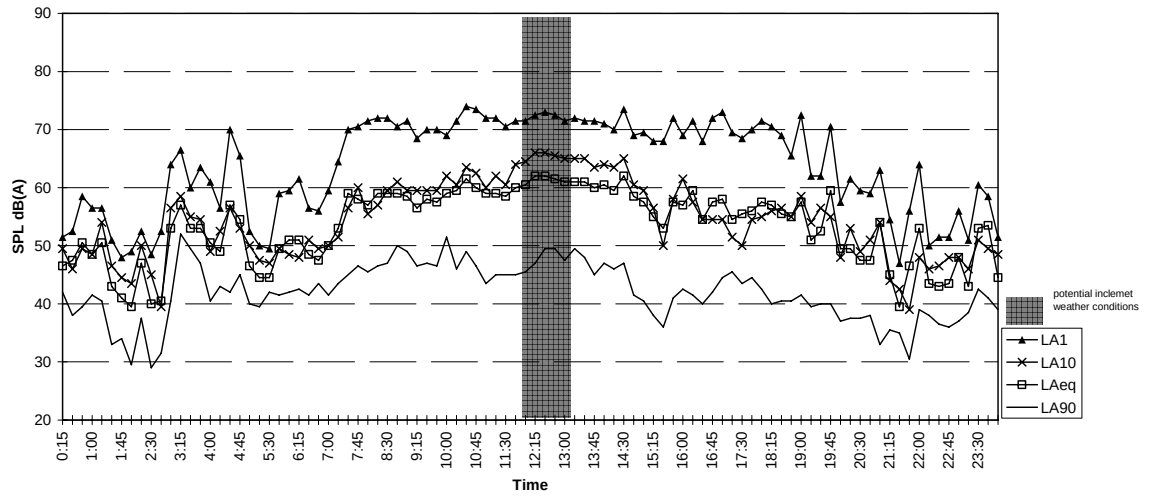



Location 1 - 9 Denton Close RUTHERFORD
Measured Noise Levels - Monday, 27 June 2005
SPL dB(A)
90
80
70
60
50
40
30
20
0:15
1:00
1:45
2:30
3:15
4:00
4:45
5:30
6:15
7:00
7:45
8:30
9:15
10:00
10:45
11:30
12:15
13:00
13:45
14:30
15:15
16:00
16:45
17:30
18:15
19:00
19:45
20:30
21:15
22:00
22:45
23:30
Time
potential inclemet weather conditions
LA1
LA10
LAeq
LA90

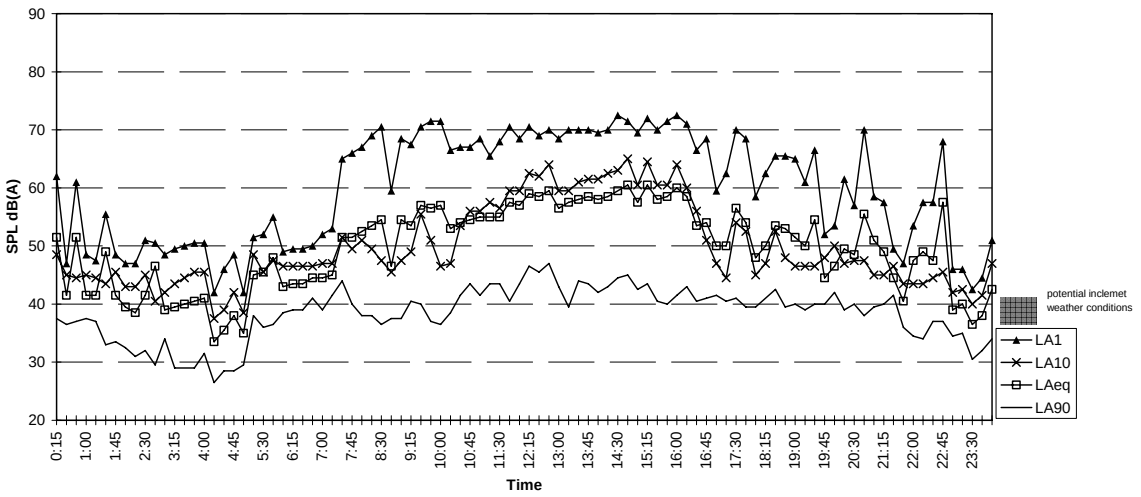
Location 2 - 96 Anambah Road RUTHERFORD
Measured Noise Levels - Monday, 17 June 2005



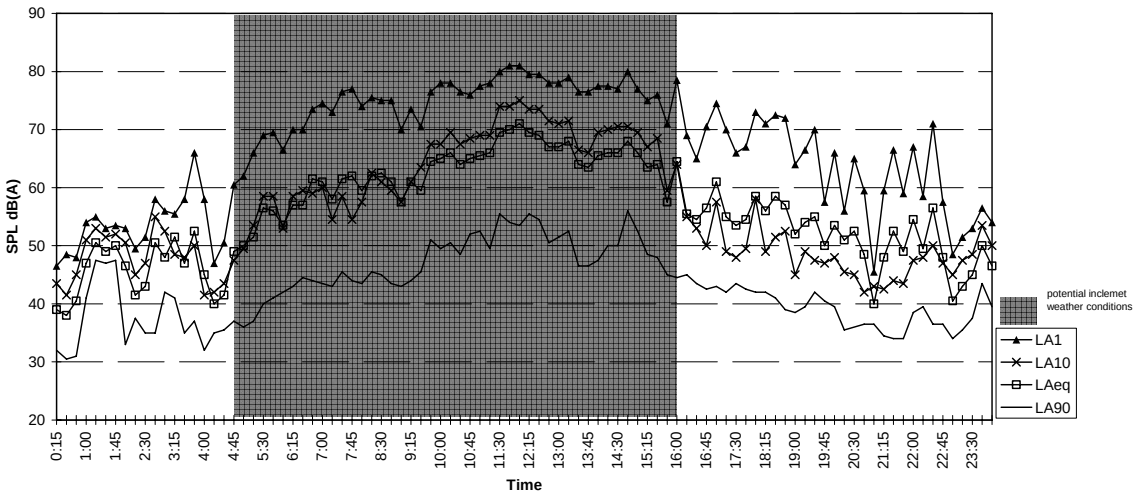
Location 2 - 96 Anambah Road RUTHERFORD
Measured Noise Levels - Tuesday, 18 June 2005



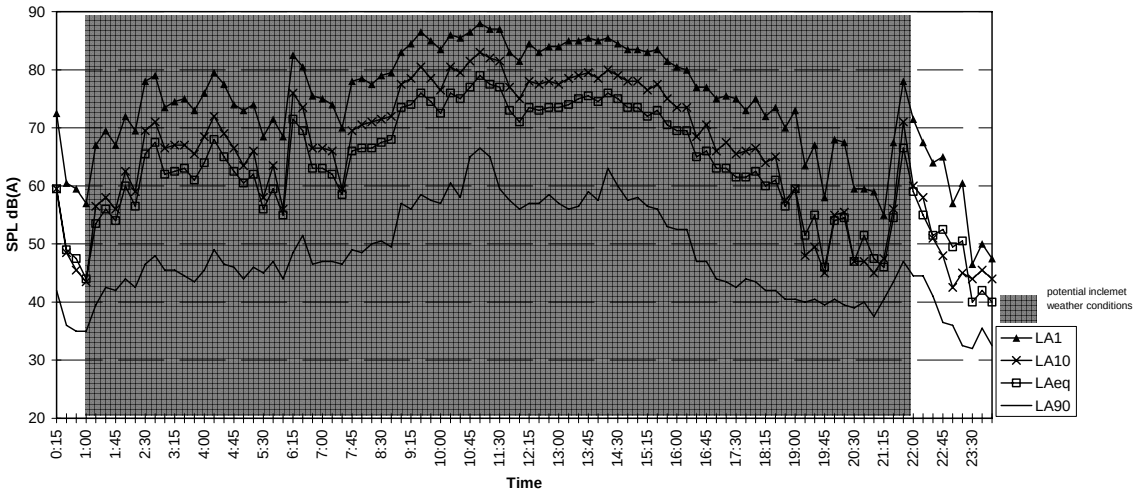
Location 2 - 96 Anambah Road RUTHERFORD
Measured Noise Levels - Wednesday, 19 June 2005



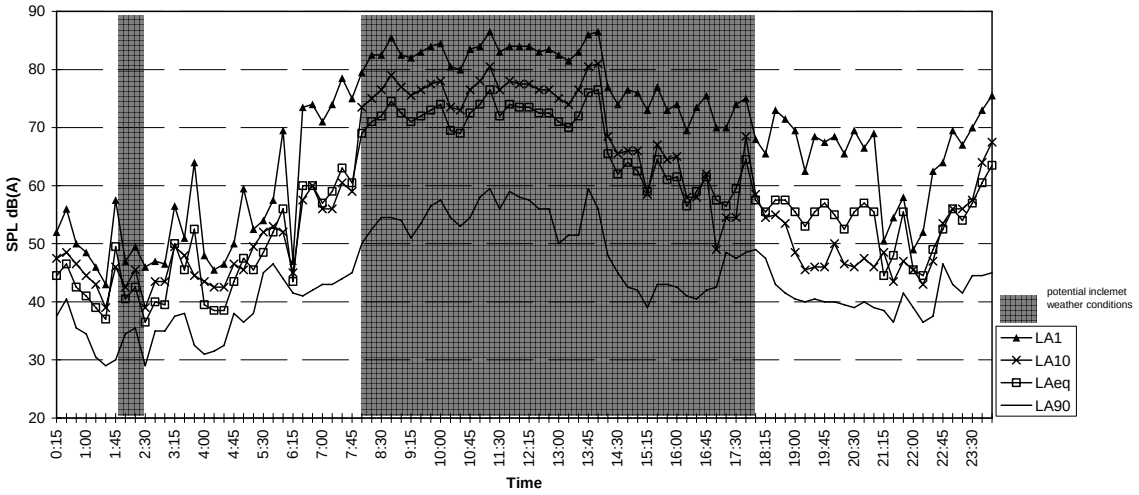
Location 2 - 96 Anambah Road RUTHERFORD
Measured Noise Levels - Thursday, 20 June 2005



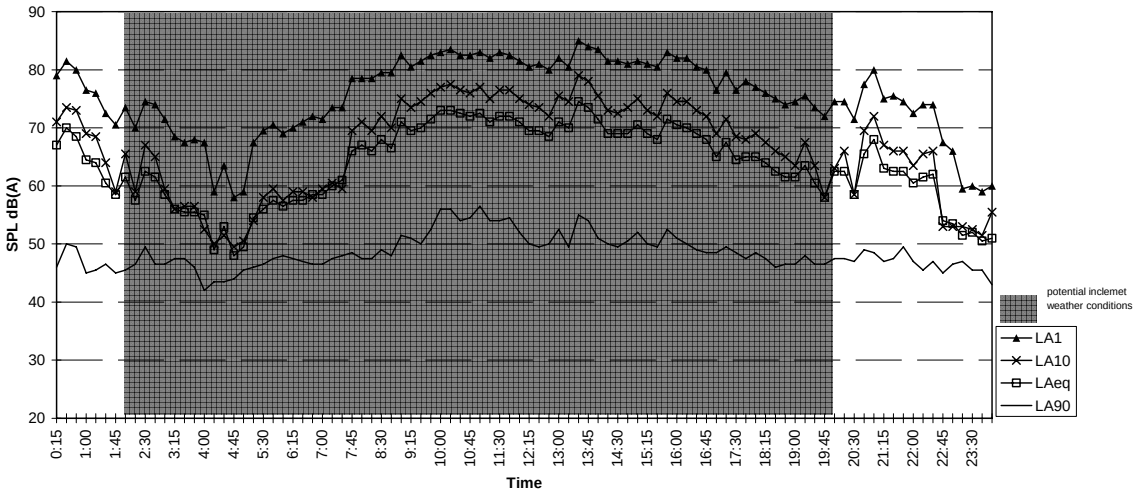
Location 2 - 96 Anambah Road RUTHERFORD
Measured Noise Levels - Friday, 21 June 2005



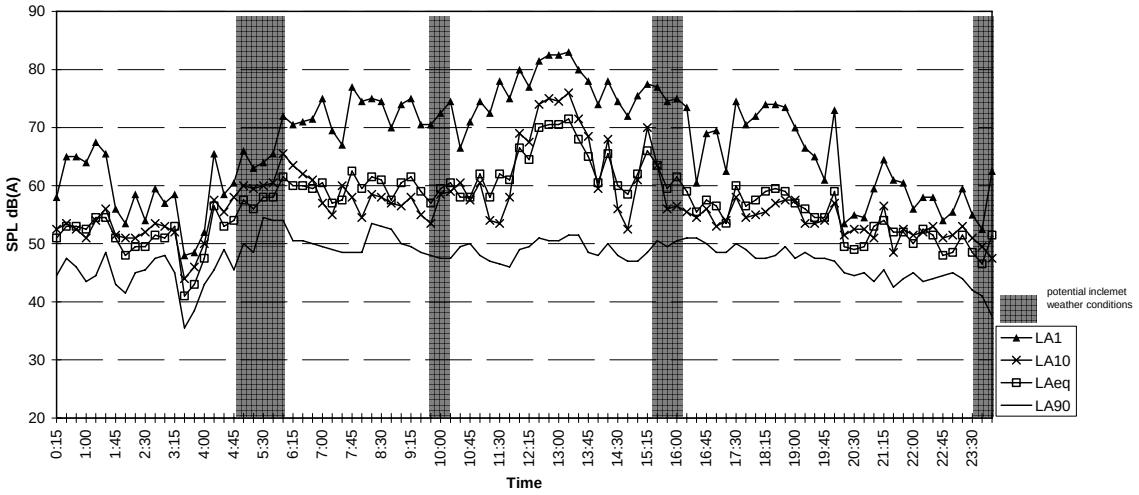
Location 2 - 96 Anambah Road RUTHERFORD
Measured Noise Levels - Saturday, 22 June 2005



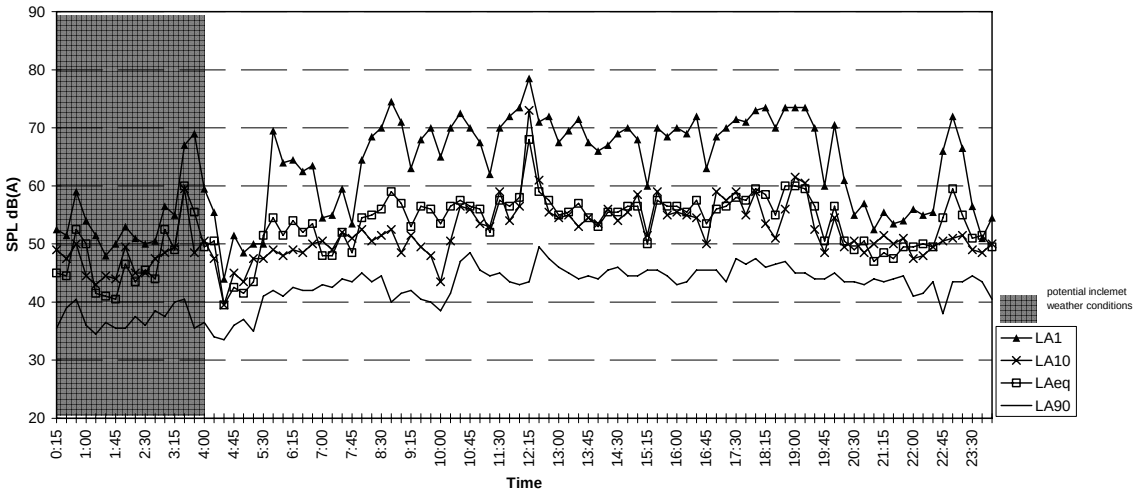
Location 2 - 96 Anambah Road RUTHERFORD
Measured Noise Levels - Sunday, 23 June 2005



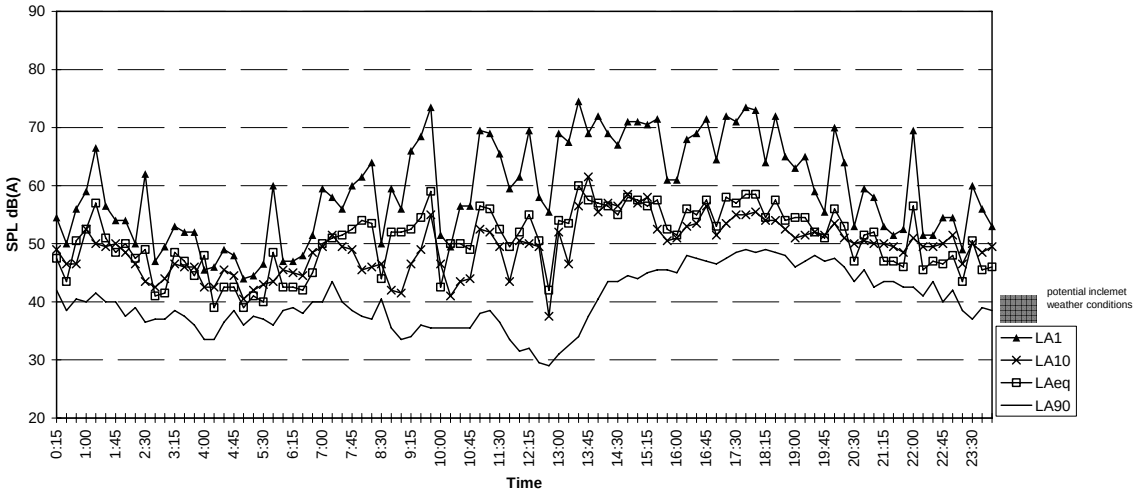
Location 2 - 96 Anambah Road RUTHERFORD
Measured Noise Levels - Monday, 24 June 2005

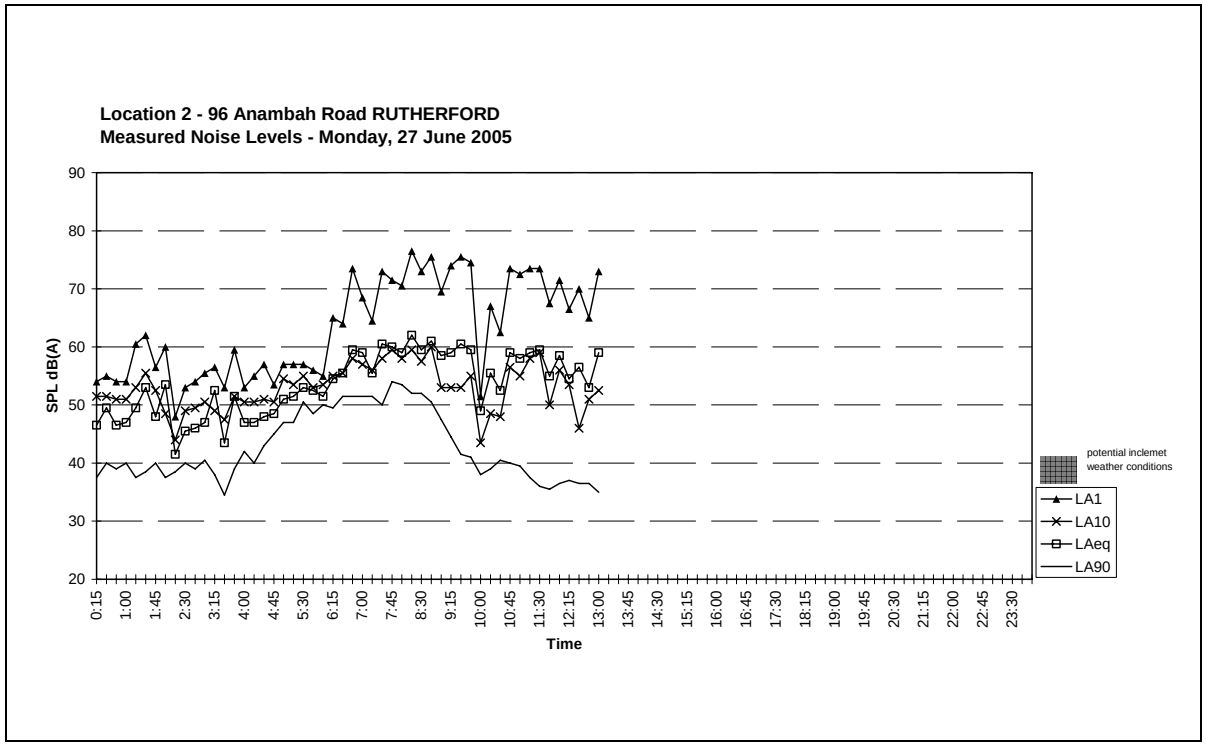


Location 2 - 96 Anambah Road RUTHERFORD
Measured Noise Levels - Saturday, 25 June 2005



Location 2 - 96 Anambah Road RUTHERFORD
Measured Noise Levels - Sunday, 26 June 2005




Location 2 - 96 Anambah Road RUTHERFORD
Measured Noise Levels - Monday, 27 June 2005
SPL dB(A)
90
80
70
60
50
40
30
20
0:15
1:00
1:45
2:30
3:15
4:00
4:45
5:30
6:15
7:00
7:45
8:30
9:15
10:00
10:45
11:30
12:15
13:00
13:45
14:30
15:15
16:00
16:45
17:30
18:15
19:00
19:45
20:30
21:15
22:00
22:45
23:30
Time
potential inclemet weather conditions
LA1
LA10
LAeq
LA90

Appendix C

Sample ENM output file

OUTPUT FOR (.out) Rutherford Waste Revocey - Scn A-3 (CFS) neutral
SINGLE POINT CALCULATION
ENM CALC MODULE

FILENAMES
C:\ENM\SOURCES\2118506A\506A-3
2118506A.GEN
C:\ENM\MAPS\2118506A\506A

OUT1 file and RNK1 file

TEMP (deg C) HUMIDITY (%)
25.0 50.0

WIND SPEED (m/sec) WIND DIR (deg)
.0 .0

TEMP GRAD (deg C/100m)
.0

X= 647.000 Y= 3483.000 Z= 46.200

SOURCE : 13
CFS - processing (external) - backhoe

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2
BARRIER	12.8	15.6	18.6	21.6	24.6	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.6	2.1	5.7	11.0	18.9	37.0	99.0	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.7	1.7	3.2	-3.6	-.3	-2.8	-2.5	-1.7	-1.3	-3.7
TOTAL AWT -7.1	9.6	1.3	-3.7	-1.4	-11.3	-14.4	-22.6	-41.5	-100.0	-100.0

SOURCE : 14
CFS - processing (external) - FEL

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	94.0	100.0	100.0	106.0	98.0	101.0	98.0	92.0	86.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2
BARRIER	13.4	16.4	19.4	22.4	25.0	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.6	2.1	5.7	11.0	18.9	37.0	99.1	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.7	1.6	3.6	-3.5	-.3	-3.0	-2.0	-3.1	-2.9	-1.8
TOTAL AWT 1.1	8.0	5.6	.2	8.7	-8.7	-8.2	-20.1	-43.2	-100.0	-100.0

SOURCE : 15
CFS - curing (intenral) - FEL

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	90.0	90.0	96.0	88.0	91.0	88.0	82.0	76.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4
BARRIER	12.9	15.8	18.8	21.8	24.8	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.6	2.2	5.8	11.1	19.1	37.4	100.2	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.7	1.8	3.1	-3.6	-.3	-2.8	-2.5	-2.1	-1.2	-2.9
TOTAL AWT -8.5	-1.6	-4.1	-8.9	-.7	-18.6	-18.7	-29.9	-54.6	-100.0	-100.0

SOURCE : 16
CFS - curing (intenral) - conveyor belt / motor 1

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4
BARRIER	12.7	15.4	18.4	21.4	24.4	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.6	2.2	5.8	11.2	19.2	37.6	100.7	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.8	1.4	4.4	-3.3	-.9	-2.7	-2.6	-2.7	.9	-1.6

TOTAL AWT -24.6 -8.3 -.4 -19.9 -22.7 -33.7 -41.9 -52.9 -74.3-100.0-100.0

SOURCE : 17
CFS - curing (intenral) - conveyor belt / motor 2

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4
BARRIER	12.6	15.2	18.2	21.2	24.2	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.6	2.2	5.8	11.3	19.3	37.8	101.2	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.8	1.4	4.3	-3.3	-.8	-2.8	-2.5	-2.6	-1.2	-2.9
TOTAL AWT	-24.4	-8.3	-.2	-19.6	-22.5	-33.7	-42.0	-53.2	-74.6	-100.0-100.0

SOURCE : 18
CFS - curing (intenral) - conveyor belt / motor 3

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4
BARRIER	11.1	12.8	15.6	18.6	21.6	24.6	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.6	2.2	5.8	11.3	19.3	37.8	101.2	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.5	2.2	1.9	-3.5	-1.2	-1.3	-2.8	-1.1	-.8	-2.9
TOTAL AWT	-22.1	-7.1	1.4	-14.5	-19.7	-30.7	-43.0	-52.9	-76.1	-100.0-100.0

SOURCE : 19
CFS - curing (intenral) - conveyor belt / motor 4

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4
BARRIER	9.8	12.0	13.8	16.8	19.8	22.9	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.6	2.2	5.8	11.2	19.2	37.6	100.7	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.4	2.4	1.3	-3.3	-1.4	-1.7	-1.9	-1.7	-2.2	-3.3
TOTAL AWT	-20.9	-5.8	2.0	-12.2	-18.1	-28.6	-40.8	-53.6	-75.3	-100.0-100.0

SOURCE : 20
CFS - curing (intenral) - conveyor belt / motor 5

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3
BARRIER	11.7	13.3	16.3	19.3	22.3	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.6	2.1	5.7	11.1	18.9	37.2	99.5	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.5	2.1	2.1	-3.5	-1.0	-1.4	-2.6	-2.8	-3.3	-3.7
TOTAL AWT	-22.6	-7.5	1.1	-15.3	-20.2	-31.3	-43.0	-52.6	-73.6	-100.0-100.0

SOURCE : 21
CFS - curing (intenral) - conveyor belt / motor 6

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2
BARRIER	11.2	12.8	15.6	18.7	21.7	24.7	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.6	2.1	5.7	11.0	18.8	36.8	98.6	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.5	2.1	1.9	-3.5	-1.2	-1.3	-2.8	-1.0	-.2	-3.4
TOTAL AWT	-21.9	-6.9	1.7	-14.4	-19.5	-30.4	-42.6	-52.2	-75.0	-100.0-100.0

SOURCE : 22

CFS - processing (external) - RTT manv

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	111.0	114.0	103.0	104.0	103.0	100.0	98.0	94.0	88.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5	75.5
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.6	2.0	5.2	10.2	17.4	34.4	91.5	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.8	-1.3	8.4	9.7	1.2	-4.3	-3.3	-2.6	-2.7	-2.9
TOTAL AWT 22.4	40.3	39.6	18.5	16.8	21.1	18.6	8.3	-13.2	-76.4	-100.0

SOURCE : 23
CFS - processing (external) - RTT reversing

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	57.0	75.0	75.0	79.0	89.0	93.0	91.0	87.0	77.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.6	2.1	5.7	11.1	19.0	37.2	99.7	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.8	-1.0	9.1	9.7	1.2	-4.3	-3.4	-2.7	-2.7	-3.0
TOTAL AWT 11.0	-14.6	-.4	-11.0	-9.1	5.8	9.9	-.9	-23.9	-96.4	-100.0

SOURCE : 24
CFS - processing (external) - dust collector / fan

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	100.0	102.0	106.0	109.0	108.0	101.0	94.0	89.0	83.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.6	2.1	5.6	10.9	18.6	36.6	97.8	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.8	-1.1	8.9	9.6	1.1	-4.3	-3.3	-2.7	-2.7	-2.9
TOTAL AWT 23.9	28.6	26.8	20.3	21.1	25.1	18.3	2.6	-21.0	-88.3	-100.0

SOURCE : 25
CFS - processing (external) - forklift

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	101.0	100.0	99.0	97.0	93.0	93.0	91.0	88.0	83.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3
BARRIER	11.4	12.9	15.9	18.9	21.9	24.9	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.6	2.1	5.7	11.1	19.0	37.2	99.6	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.5	2.1	2.1	-3.5	-1.0	-1.4	-2.6	-3.0	-3.2	-2.9
TOTAL AWT -3.6	16.8	8.5	4.0	3.2	-9.9	-17.9	-26.7	-47.5	-100.0	-100.0

SOURCE : 26
CFS - processing (external) - aggregate unload

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	110.0	111.0	102.0	100.0	101.0	104.0	101.0	97.0	105.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.6	2.1	5.7	11.0	18.8	36.8	98.6	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.8	-1.1	9.0	9.7	1.2	-4.3	-3.4	-2.7	-2.7	-3.0
TOTAL AWT 22.6	38.5	35.7	16.2	12.0	17.9	21.1	9.5	-13.4	-67.1	-100.0

SOURCE : 27
CFS - processing (external) - silo vent 1

	FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	82.0	86.0	89.0	88.0	81.0	74.0	69.0	63.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.6	2.1	5.6	10.9	18.6	36.6	97.9	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.4	-.6	7.0	2.8	-3.8	-1.9	-2.5	-3.0	-2.8	-2.1
TOTAL AWT 7.9	12.2	6.3	2.2	8.0	10.1	-4.1	-18.3	-40.8	-100.0	-100.0

SOURCE : 28
CFS - processing (external) - silo vent 2

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	82.0	86.0	89.0	88.0	81.0	74.0	69.0	63.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.6	2.1	5.6	10.9	18.7	36.7	98.1	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.4	-.6	7.0	2.8	-3.8	-1.9	-2.5	-3.0	-2.9	-2.3
TOTAL AWT 7.9	12.2	6.3	2.2	7.9	10.0	-4.1	-18.3	-40.9	-100.0	-100.0

TOTAL AWT 28.0	42.7	41.3	23.6	23.4	27.3	24.5	12.6	-9.7	-66.5	-88.0

SINGLE POINT CALCULATION
ENM CALC MODULE

FILENAMES
C:\ENM\SOURCES\2118506A\506A-3
2118506A.GEN
C:\ENM\MAPS\2118506A\506A

OUT1 file and RNK1 file

TEMP (deg C)	HUMIDITY (%)
25.0	50.0

WIND SPEED (m/sec)	WIND DIR (deg)
.0	.0

TEMP GRAD (deg C/100m)
.0

X= 510.000 Y= 3539.000 Z= 53.200

SOURCE : 13
CFS - processing (external) - backhoe

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
BARRIER	12.8	15.6	18.6	21.6	24.6	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.3	6.1	11.9	20.3	39.6	106.5	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.5	2.1	2.6	-3.7	-.5	-2.5	-2.5	-3.0	-3.3	-4.1
TOTAL AWT -8.1	8.8	.1	-3.8	-2.1	-12.2	-16.3	-24.7	-43.6	-100.0	-100.0

SOURCE : 14
CFS - processing (external) - FEL

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	94.0	100.0	100.0	106.0	98.0	101.0	98.0	92.0	86.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
BARRIER	13.4	16.4	19.4	22.4	25.0	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.3	6.1	11.9	20.3	39.6	106.6	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.6	2.0	3.0	-3.6	-.3	-2.9	-2.5	-1.7	-1.4	-3.8
TOTAL AWT .3	7.2	4.5	.0	8.0	-9.7	-9.9	-21.7	-47.8	-100.0	-100.0

SOURCE : 15
CFS - curing (intenral) - FEL

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	90.0	90.0	96.0	88.0	91.0	88.0	82.0	76.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
BARRIER	12.9	15.8	18.8	21.8	24.8	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.0	20.5	40.0	107.7	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.5	2.2	2.5	-3.7	-.5	-2.3	-2.4	-2.7	-3.6	-1.1
TOTAL AWT -9.3	-2.4	-5.2	-9.0	-1.5	-19.5	-20.7	-32.1	-57.3	-100.0	-100.0

SOURCE : 16
CFS - curing (intenral) - conveyor belt / motor 1

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
BARRIER	12.7	15.4	18.4	21.4	24.4	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.1	20.6	40.2	108.2	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.7	1.8	3.8	-3.5	-.5	-3.0	-2.0	-2.2	-3.6	-2.4
TOTAL AWT -25.5	-9.1	-1.5	-20.0	-23.3	-35.2	-43.1	-55.6	-78.0	-100.0	-100.0

SOURCE : 17
CFS - curing (intenral) - conveyor belt / motor 2

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
BARRIER	12.6	15.2	18.2	21.2	24.2	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.1	20.7	40.4	108.7	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.7	1.9	3.7	-3.5	-.4	-3.0	-1.9	-2.5	-2.0	-2.4
TOTAL AWT -25.3	-9.1	-1.3	-19.7	-23.1	-35.1	-43.2	-55.9	-78.0	-100.0	-100.0

SOURCE : 18
CFS - curing (intenral) - conveyor belt / motor 3

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
BARRIER	11.0	12.7	15.4	18.4	21.4	24.4	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.1	20.7	40.4	108.7	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.3	2.6	1.4	-3.4	-1.4	-1.4	-2.6	-3.3	-2.8	-3.0
TOTAL AWT -22.9	-7.8	.3	-14.6	-20.4	-31.4	-44.2	-55.2	-77.1	-100.0	-100.0

SOURCE : 19
CFS - curing (intenral) - conveyor belt / motor 4

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
BARRIER	9.8	12.0	13.8	16.8	19.8	22.8	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.0	20.6	40.2	108.1	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.3	2.8	.9	-3.2	-1.5	-1.9	-1.8	-3.1	-3.7	-1.6
TOTAL AWT -21.7	-6.6	1.0	-12.4	-19.0	-29.6	-42.0	-55.8	-77.1	-100.0	-100.0

SOURCE : 20
CFS - curing (intenral) - conveyor belt / motor 5

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
BARRIER	11.7	13.3	16.3	19.3	22.3	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.3	6.1	11.9	20.3	39.8	106.9	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.4	2.5	1.6	-3.5	-1.3	-1.3	-2.8	-1.2	-1.3	-2.8
TOTAL AWT -23.4	-8.3	.0	-15.6	-21.1	-32.2	-44.5	-54.5	-78.5	-100.0	-100.0

SOURCE : 21
CFS - curing (intenral) - conveyor belt / motor 6

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
BARRIER	11.2	12.8	15.6	18.6	21.7	24.7	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.3	6.1	11.8	20.2	39.5	106.1	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.4	2.5	1.4	-3.4	-1.4	-1.4	-2.6	-3.2	-3.2	-4.0
TOTAL AWT -22.8	-7.7	.6	-14.6	-20.4	-31.3	-43.9	-54.5	-76.1	-100.0	-100.0

SOURCE : 22
CFS - processing (external) - RTT manv

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	111.0	114.0	103.0	104.0	103.0	100.0	98.0	94.0	88.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2
BARRIER	5.0	5.0	4.9	4.8	4.2	3.0	1.4	.0	.0	.0
AIR ABSORPTION	.0	.2	.6	2.1	5.7	11.0	18.8	37.0	99.0	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.3	.0	8.0	-.7	-4.4	-1.0	-2.2	-2.6	-2.2	-1.7
TOTAL AWT 20.2	34.1	32.6	13.2	21.5	21.3	10.7	3.7	-16.7	-85.0	-100.0

SOURCE : 23
CFS - processing (external) - RTT reversing

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	57.0	75.0	75.0	79.0	89.0	93.0	91.0	87.0	77.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
BARRIER	5.0	4.9	4.9	4.7	3.9	2.6	.8	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.0	20.4	39.9	107.3	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.3	.3	8.2	-.7	-4.5	-.9	-2.4	-2.6	-2.5	-3.9
TOTAL AWT 6.4	-20.7	-7.4	-15.7	-4.3	6.5	2.4	-4.8	-27.3	-100.0	-100.0

SOURCE : 24
CFS - processing (external) - dust collector / fan

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	100.0	102.0	106.0	109.0	108.0	101.0	94.0	89.0	83.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
BARRIER	5.0	4.9	4.9	4.7	4.0	2.7	.9	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.1	11.7	20.0	39.2	105.3	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.3	.3	8.1	-.7	-4.5	-1.0	-2.3	-2.6	-2.2	-3.1
TOTAL AWT 23.9	22.4	19.8	15.5	25.9	25.6	10.7	-1.5	-24.4	-96.9	-100.0

SOURCE : 25
CFS - processing (external) - forklift

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k

POWER LEVEL	101.0	100.0	99.0	97.0	93.0	93.0	91.0	88.0	83.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
BARRIER	11.3	12.9	15.8	18.8	21.8	24.8	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.3	6.2	11.9	20.4	39.8	107.2	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.4	2.5	1.6	-3.5	-1.3	-1.3	-2.8	-1.5	-2.2	-2.1
TOTAL AWT -4.3	16.1	7.5	4.0	2.4	-10.7	-19.4	-28.5	-52.3	-100.0	-100.0

SOURCE : 26
CFS - processing (external) - aggregate unload

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	110.0	111.0	102.0	100.0	101.0	104.0	101.0	97.0	105.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
BARRIER	5.0	4.9	4.9	4.7	4.0	2.7	.9	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.1	11.8	20.2	39.5	106.1	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.3	.3	8.2	-.6	-4.5	-.9	-2.5	-2.6	-2.6	-3.9
TOTAL AWT 18.5	32.4	28.7	11.4	16.8	18.6	13.5	5.5	-16.7	-75.4	-100.0

SOURCE : 27
CFS - processing (external) - silo vent 1

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	82.0	86.0	89.0	88.0	81.0	74.0	69.0	63.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
BARRIER	5.0	4.9	4.7	4.1	2.9	1.2	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.1	11.7	20.1	39.2	105.4	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.7	1.7	2.9	-3.6	-.5	-2.3	-2.4	-2.8	-3.5	-2.3
TOTAL AWT 3.7	5.9	-1.5	.9	9.4	2.7	-6.4	-20.5	-44.2	-100.0	-100.0

SOURCE : 28
CFS - processing (external) - silo vent 2

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	82.0	86.0	89.0	88.0	81.0	74.0	69.0	63.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
BARRIER	5.0	4.9	4.8	4.1	2.9	1.2	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.1	11.8	20.1	39.3	105.6	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.7	1.7	2.9	-3.6	-.5	-2.4	-2.4	-2.9	-3.5	-2.8
TOTAL AWT 3.7	5.9	-1.6	.8	9.3	2.7	-6.4	-20.5	-44.3	-100.0	-100.0

TOTAL AWT 26.3	36.6	34.3	18.9	27.8	27.6	16.9	8.4	-13.2	-74.7	-88.0

SINGLE POINT CALCULATION
ENM CALC MODULE

FILENAMES
 C:\ENM\SOURCES\2118506A\506A-3
 2118506A.GEN
 C:\ENM\MAPS\2118506A\506A

 OUT1 file and RNK1 file

TEMP (deg C) HUMIDITY (%)
 25.0 50.0

WIND SPEED (m/sec) WIND DIR (deg)
 .0 .0

TEMP GRAD (deg C/100m)
 .0

X= 827.000 Y= 3006.000 Z= 22.200

SOURCE : 13
CFS - processing (external) - backhoe

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3
BARRIER	12.9	15.9	18.9	21.9	24.9	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.1	.5	1.7	4.6	8.8	15.2	30.2	79.8	264.6
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.6	-.8	8.8	1.5	-4.3	-1.0	-3.0	-3.2	-2.8	-3.1
TOTAL AWT -4.8	12.4	5.5	-7.4	-4.3	-4.4	-12.1	-16.5	-31.3	-81.3	-100.0

SOURCE : 14
CFS - processing (external) - FEL

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	94.0	100.0	100.0	106.0	98.0	101.0	98.0	92.0	86.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3
BARRIER	13.6	16.6	19.6	22.6	25.0	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.1	.5	1.7	4.6	8.8	15.2	30.2	79.8	264.6
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.7	-1.0	8.9	2.1	-4.1	-1.9	-2.6	-3.1	-2.8	-1.1
TOTAL AWT .7	10.8	9.9	-3.2	5.3	-1.7	-5.2	-13.8	-34.4	-90.3	-100.0

SOURCE : 15
CFS - curing (intenral) - FEL

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	90.0	90.0	96.0	88.0	91.0	88.0	82.0	76.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3
BARRIER	13.1	16.1	19.0	22.1	25.0	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.1	.5	1.7	4.6	8.9	15.3	30.4	80.5	266.8
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.7	-.9	8.5	1.3	-4.3	-.7	-3.1	-2.8	-2.8	-.5
TOTAL AWT -8.9	1.2	.4	-12.4	-3.4	-11.6	-16.5	-23.5	-44.9	-100.0	-100.0

SOURCE : 16
CFS - curing (intenral) - conveyor belt / motor 1

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4
BARRIER	12.8	15.7	18.7	21.7	24.7	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.1	.5	1.7	4.6	8.9	15.4	30.5	80.8	267.9
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.6	-.9	8.4	1.0	-4.4	-.4	-3.3	-2.2	-2.4	-3.8
TOTAL AWT -21.4	-5.6	3.7	-22.0	-24.8	-27.3	-39.9	-46.5	-65.7	-100.0	-100.0

SOURCE : 17
CFS - curing (intenral) - conveyor belt / motor 2

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4
BARRIER	12.7	15.5	18.4	21.5	24.5	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.1	.5	1.7	4.6	9.0	15.4	30.6	81.1	268.9
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.6	-.8	8.4	.8	-4.4	-.3	-3.4	-2.0	-2.9	-2.2
TOTAL AWT -21.2	-5.6	3.8	-21.7	-24.4	-27.1	-40.1	-46.5	-66.0	-100.0	-100.0

SOURCE : 18
CFS - curing (intenral) - conveyor belt / motor 3

	FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4
BARRIER	8.8	11.1	12.7	15.5	18.5	21.5	24.5	25.0	25.0	25.0
AIR ABSORPTION	.0	.1	.5	1.7	4.6	8.9	15.4	30.6	80.9	268.3
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.3	-.1	6.3	-2.2	-2.7	-2.1	-2.4	-2.5	-2.7	-3.3
TOTAL AWT -16.7	-1.9	7.6	-13.9	-15.4	-22.8	-34.8	-46.9	-65.4	-100.0	-100.0

SOURCE : 19
CFS - curing (intenral) - conveyor belt / motor 4

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3
BARRIER	10.3	12.3	14.4	17.5	20.5	23.5	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.1	.5	1.7	4.6	8.9	15.3	30.4	80.3	266.3
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.4	-.4	7.1	-1.4	-3.8	-2.0	-2.0	-2.1	-2.0	-2.3
TOTAL AWT -18.0	-3.2	6.6	-16.3	-18.1	-23.6	-36.7	-47.6	-65.6	-100.0	-100.0

SOURCE : 20
CFS - curing (intenral) - conveyor belt / motor 5

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
BARRIER	12.0	13.8	16.8	19.8	22.8	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.1	.5	1.7	4.5	8.8	15.1	30.1	79.4	263.2
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.5	-.6	7.9	-.2	-4.4	-.8	-2.5	-2.6	-2.7	-3.9
TOTAL AWT -19.4	-4.7	5.5	-19.4	-21.5	-25.1	-39.2	-46.9	-64.7	-100.0	-100.0

SOURCE : 21
CFS - curing (intenral) - conveyor belt / motor 6

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
BARRIER	11.5	13.2	16.1	19.1	22.2	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.1	.5	1.7	4.5	8.7	15.0	29.9	78.9	261.5
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.5	-.6	7.6	-.6	-4.3	-1.2	-1.8	-2.7	-3.4	-2.5
TOTAL AWT -18.8	-4.2	6.1	-18.4	-20.4	-24.5	-38.6	-47.4	-64.3	-100.0	-100.0

SOURCE : 22
CFS - processing (external) - RTT manv

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	111.0	114.0	103.0	104.0	103.0	100.0	98.0	94.0	88.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3	73.3
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.1	.4	1.5	4.1	7.9	13.6	27.3	71.8	236.8
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.8	-4.1	3.6	15.0	15.0	15.0	13.9	7.9	1.9	-3.2
TOTAL AWT 19.7	43.5	44.7	25.7	14.2	10.6	3.8	-2.8	-14.5	-59.0	-100.0

SOURCE : 23
CFS - processing (external) - RTT reversing

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	57.0	75.0	75.0	79.0	89.0	93.0	91.0	87.0	77.0	.0

DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.1	.5	1.7	4.6	8.9	15.3	30.5	80.6	267.4
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.8	-3.9	4.4	15.0	15.0	15.0	14.4	8.9	2.9	-2.5
TOTAL AWT -2.7	-11.6	4.4	-4.3	-12.1	-5.0	-5.3	-13.1	-26.7	-80.9	-100.0

SOURCE : 24
CFS - processing (external) - dust collector / fan

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	100.0	102.0	106.0	109.0	108.0	101.0	94.0	89.0	83.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1
BARRIER	11.0	12.7	15.4	18.4	21.4	24.4	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.1	.5	1.7	4.5	8.7	14.9	29.7	78.6	260.2
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.5	-.4	7.6	-.7	-4.3	-1.4	-1.7	-2.9	-3.5	-3.0
TOTAL AWT 11.3	19.3	15.4	8.4	15.6	12.3	-4.8	-18.4	-37.0	-91.2	-100.0

SOURCE : 25
CFS - processing (external) - forklift

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	101.0	100.0	99.0	97.0	93.0	93.0	91.0	88.0	83.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3
BARRIER	10.2	12.3	14.4	17.4	20.4	23.4	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.1	.5	1.7	4.6	8.9	15.3	30.4	80.3	266.1
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.4	-.4	7.3	-1.1	-4.0	-1.8	-1.7	-2.9	-3.0	-4.0
TOTAL AWT -.6	20.9	13.6	2.5	4.7	-2.3	-11.8	-21.9	-38.8	-93.6	-100.0

SOURCE : 26
CFS - processing (external) - aggregate unload

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	110.0	111.0	102.0	100.0	101.0	104.0	101.0	97.0	105.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.1	.5	1.7	4.5	8.8	15.1	30.1	79.4	263.3
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.8	-3.9	4.3	15.0	15.0	15.0	14.5	8.9	2.9	-2.5
TOTAL AWT 16.2	41.5	40.5	23.0	9.1	7.2	6.0	-2.8	-16.2	-51.6	-100.0

SOURCE : 27
CFS - processing (external) - silo vent 1

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	82.0	86.0	89.0	88.0	81.0	74.0	69.0	63.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.1	.5	1.7	4.5	8.7	15.0	29.8	78.7	260.9
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.0	-1.9	7.4	10.9	2.2	-3.7	-4.3	-2.6	-2.3	-2.4
TOTAL AWT 6.5	14.8	9.6	3.9	2.3	7.2	1.9	-10.8	-32.4	-87.6	-100.0

SOURCE : 28
CFS - processing (external) - silo vent 2

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	82.0	86.0	89.0	88.0	81.0	74.0	69.0	63.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2

BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.1	.5	1.7	4.5	8.7	15.0	29.9	78.9	261.5
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.0	-1.9	7.5	10.9	2.2	-3.7	-4.3	-2.6	-2.3	-2.4
TOTAL AWT 6.5	14.8	9.6	3.9	2.2	7.1	1.8	-10.8	-32.5	-87.8	-100.0

TOTAL AWT 22.1	45.7	46.1	27.7	19.1	16.6	10.2	1.3	-11.9	-50.8	-88.0

SINGLE POINT CALCULATION
ENM CALC MODULE

FILENAMES
C:\ENM\SOURCES\2118506A\506A-3
2118506A.GEN
C:\ENM\MAPS\2118506A\506A

OUT1 file and RNK1 file

TEMP (deg C)	HUMIDITY (%)
25.0	50.0

WIND SPEED (m/sec)	WIND DIR (deg)
.0	.0

TEMP GRAD (deg C/100m)
.0

X= 661.000 Y= 2957.000 Z= 22.200

SOURCE : 13
CFS - processing (external) - backhoe

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1
BARRIER	12.9	15.9	18.9	21.9	24.9	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.1	.6	1.9	5.0	9.7	16.6	32.8	87.2	289.8
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.6	-.6	9.5	2.1	-4.1	-2.2	-2.6	-2.9	-3.1	-4.6
TOTAL AWT -6.2	11.6	4.5	-9.0	-6.0	-5.9	-12.5	-19.1	-35.0	-89.2	-100.0

SOURCE : 14
CFS - processing (external) - FEL

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	94.0	100.0	100.0	106.0	98.0	101.0	98.0	92.0	86.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1
BARRIER	13.6	16.6	19.6	22.6	25.0	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.1	.6	1.9	5.0	9.7	16.6	32.8	87.2	289.7
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.7	-.8	9.5	2.7	-3.8	-3.0	-2.6	-2.6	-2.8	-3.7
TOTAL AWT -.6	9.9	8.9	-4.7	3.8	-3.2	-5.8	-16.1	-38.3	-98.5	-100.0

SOURCE : 15
CFS - curing (intenral) - FEL

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	90.0	90.0	96.0	88.0	91.0	88.0	82.0	76.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1
BARRIER	13.1	16.1	19.1	22.1	25.0	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.1	.6	1.9	5.0	9.7	16.7	33.0	87.6	291.2
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.6	-.8	9.2	2.0	-4.1	-1.9	-2.6	-3.1	-2.8	-.7
TOTAL AWT -10.3	.4	-.6	-13.9	-5.0	-13.0	-17.0	-26.2	-48.0	-100.0	-100.0

SOURCE : 16
CFS - curing (intenral) - conveyor belt / motor 1

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k

POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2
BARRIER	12.8	15.7	18.7	21.7	24.7	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.1	.6	1.9	5.0	9.7	16.7	33.1	87.9	292.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.6	-.7	9.1	1.6	-4.3	-1.4	-2.8	-3.3	-2.3	-4.0
TOTAL AWT -22.5	-6.4	2.7	-23.5	-26.4	-28.6	-40.5	-49.1	-67.9	-100.0	-100.0

SOURCE : 17
CFS - curing (intenral) - conveyor belt / motor 2

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2
BARRIER	12.8	15.5	18.5	21.5	24.5	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.1	.6	1.9	5.0	9.8	16.8	33.1	88.1	292.7
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.6	-.7	9.0	1.4	-4.3	-1.0	-2.9	-3.2	-2.7	-3.6
TOTAL AWT -22.3	-6.4	2.8	-23.2	-26.0	-28.4	-40.9	-49.0	-68.1	-100.0	-100.0

SOURCE : 18
CFS - curing (intenral) - conveyor belt / motor 3

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2
BARRIER	8.9	11.1	12.8	15.5	18.6	21.6	24.6	25.0	25.0	25.0
AIR ABSORPTION	.0	.1	.6	1.9	5.0	9.7	16.7	33.1	87.9	292.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.3	.0	6.8	-1.8	-3.5	-2.1	-2.4	-2.2	-3.7	-2.3
TOTAL AWT -17.7	-2.7	6.6	-15.3	-16.8	-23.2	-36.3	-49.1	-69.0	-100.0	-100.0

SOURCE : 19
CFS - curing (intenral) - conveyor belt / motor 4

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1
BARRIER	10.3	12.4	14.5	17.5	20.5	23.5	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.1	.6	1.9	5.0	9.7	16.6	32.9	87.3	290.1
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.4	-.2	7.7	-.9	-4.3	-1.5	-1.7	-3.0	-3.1	-3.8
TOTAL AWT -19.0	-4.1	5.6	-17.8	-19.6	-24.4	-38.8	-50.1	-68.0	-100.0	-100.0

SOURCE : 20
CFS - curing (intenral) - conveyor belt / motor 5

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
BARRIER	12.0	13.8	16.8	19.8	22.8	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.1	.5	1.9	4.9	9.6	16.5	32.6	86.5	287.5
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.5	-.4	8.7	.5	-4.5	-.3	-3.4	-2.0	-3.3	-1.9
TOTAL AWT -20.6	-5.5	4.4	-21.1	-23.2	-26.3	-41.3	-48.1	-68.5	-100.0	-100.0

SOURCE : 21
CFS - curing (intenral) - conveyor belt / motor 6

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

DISTANCE	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
BARRIER	11.6	13.2	16.2	19.2	22.2	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.1	.5	1.8	4.9	9.5	16.4	32.4	86.1	286.3
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.5	-.4	8.3	.0	-4.5	-.5	-3.0	-2.6	-2.4	-1.8
TOTAL AWT -19.9	-5.1	5.1	-20.0	-22.0	-25.6	-41.1	-48.3	-67.8	-100.0	-100.0

SOURCE : 22
CFS - processing (external) - RTT manv

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	111.0	114.0	103.0	104.0	103.0	100.0	98.0	94.0	88.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.1	.5	1.7	4.5	8.7	15.0	29.9	79.1	262.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.8	-3.9	4.3	15.0	15.0	15.0	14.5	8.9	2.9	-2.5
TOTAL AWT 18.6	42.6	43.6	24.1	13.1	9.3	2.1	-5.7	-19.0	-68.1	-100.0

SOURCE : 23
CFS - processing (external) - RTT reversing

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	57.0	75.0	75.0	79.0	89.0	93.0	91.0	87.0	77.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2
BARRIER	9.9	12.1	14.0	17.0	20.0	23.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.1	.6	1.9	5.0	9.8	16.8	33.1	88.0	292.4
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.3	-.1	7.8	-.9	-4.3	-1.4	-1.8	-2.8	-3.6	-2.5
TOTAL AWT -8.2	-23.8	-12.4	-22.5	-14.2	-6.9	-13.6	-24.2	-43.4	-100.0	-100.0

SOURCE : 24
CFS - processing (external) - dust collector / fan

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	100.0	102.0	106.0	109.0	108.0	101.0	94.0	89.0	83.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9
BARRIER	11.0	12.7	15.4	18.4	21.4	24.5	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.1	.5	1.8	4.9	9.5	16.4	32.4	85.9	285.5
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.4	-.3	8.2	-.2	-4.5	-.6	-2.8	-2.6	-3.1	-2.2
TOTAL AWT 10.1	18.4	14.4	6.9	14.0	11.2	-7.3	-19.5	-40.7	-99.7	-100.0

SOURCE : 25
CFS - processing (external) - forklift

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	101.0	100.0	99.0	97.0	93.0	93.0	91.0	88.0	83.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1
BARRIER	9.6	11.8	13.5	16.5	19.5	22.5	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.1	.6	1.9	5.0	9.7	16.7	32.9	87.5	291.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.4	-.1	7.7	-.9	-4.3	-1.5	-1.7	-3.0	-3.1	-3.9
TOTAL AWT -.9	20.7	13.1	2.1	4.4	-2.4	-12.9	-24.1	-42.1	-100.0	-100.0

SOURCE : 26
CFS - processing (external) - aggregate unload

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	110.0	111.0	102.0	100.0	101.0	104.0	101.0	97.0	105.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.1	.5	1.9	5.0	9.6	16.5	32.7	86.8	288.6

TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.8	-3.7	5.0	15.0	15.0	15.0	14.6	9.3	3.3	-2.1
TOTAL AWT 15.1	40.7	39.6	21.5	8.1	6.0	4.3	-5.2	-20.1	-60.2	-100.0

SOURCE : 27
CFS - processing (external) - silo vent 1

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	82.0	86.0	89.0	88.0	81.0	74.0	69.0	63.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.1	.5	1.8	4.9	9.5	16.4	32.4	86.1	286.2
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.0	-1.7	8.2	11.6	2.9	-3.3	-4.9	-2.0	-2.1	-3.3
TOTAL AWT 4.5	14.0	8.6	2.3	.6	5.2	-.2	-12.5	-36.4	-96.0	-100.0

SOURCE : 28
CFS - processing (external) - silo vent 2

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	82.0	86.0	89.0	88.0	81.0	74.0	69.0	63.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.1	.5	1.8	4.9	9.6	16.4	32.5	86.3	286.9
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.0	-1.7	8.2	11.6	2.9	-3.2	-4.9	-2.0	-2.1	-3.2
TOTAL AWT 4.5	14.0	8.6	2.3	.5	5.2	-.3	-12.5	-36.5	-96.2	-100.0

TOTAL AWT 20.9	44.8	45.1	26.1	17.8	15.3	8.3	-1.3	-16.3	-59.5	-88.0

SINGLE POINT CALCULATION
ENM CALC MODULE

FILENAMES
C:\ENM\SOURCES\2118506A\506A-3
2118506A.GEN
C:\ENM\MAPS\2118506A\506A

OUT1 file and RNK1 file

TEMP (deg C) HUMIDITY (%)
25.0 50.0

WIND SPEED (m/sec) WIND DIR (deg)
.0 .0

TEMP GRAD (deg C/100m)
.0

X= 2568.000 Y= 556.000 Z= 61.200

SOURCE : 13
CFS - processing (external) - backhoe

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
BARRIER	5.0	4.9	4.9	4.7	4.0	2.7	.9	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.2	11.9	20.4	39.9	107.3	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.2	3.0	.2	-2.4	-1.3	-2.0	-2.4	.3	-1.8	-3.2
TOTAL AWT 10.8	16.2	9.9	12.3	13.4	9.2	5.4	-.9	-22.1	-87.4	-100.0

SOURCE : 14
CFS - processing (external) - FEL

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	94.0	100.0	100.0	106.0	98.0	101.0	98.0	92.0	86.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

DISTANCE	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
BARRIER	5.0	4.9	4.9	4.7	3.9	2.5	.7	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.1	11.9	20.4	39.8	107.0	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.2	2.9	.2	-2.4	-1.3	-2.0	-2.4	.2	-2.1	-4.1
TOTAL AWT 18.1	15.2	15.0	17.3	24.5	12.3	11.6	2.3	-25.0	-95.9	-100.0

SOURCE : 15
CFS - curing (intenral) - FEL

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	90.0	90.0	96.0	88.0	91.0	88.0	82.0	76.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
BARRIER	5.0	4.9	4.8	4.6	3.6	2.1	.4	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.0	11.7	19.9	39.0	104.7	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.2	3.0	.3	-2.7	-1.4	-2.0	-2.3	-4.2	-1.3	-2.3
TOTAL AWT 8.8	5.4	5.2	7.4	15.0	3.0	2.5	-6.8	-29.6	-100.0	-100.0

SOURCE : 16
CFS - curing (intenral) - conveyor belt / motor 1

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
BARRIER	5.0	4.9	4.8	4.7	3.7	2.2	.5	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.2	5.9	11.5	19.7	38.6	103.5	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.2	3.0	.4	-2.6	-1.4	-2.0	-2.3	-4.1	-1.4	-2.3
TOTAL AWT -10.3	-1.5	8.3	-2.5	-6.9	-12.9	-20.3	-29.5	-49.1	-100.0	-100.0

SOURCE : 17
CFS - curing (intenral) - conveyor belt / motor 2

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6
BARRIER	5.0	4.9	4.8	4.7	3.7	2.3	.5	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.2	5.9	11.4	19.5	38.2	102.4	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.2	2.9	.4	-2.6	-1.4	-2.0	-2.3	-3.9	-1.8	-2.5
TOTAL AWT -10.2	-1.3	8.4	-2.4	-6.8	-12.8	-20.2	-29.3	-48.9	-100.0	-100.0

SOURCE : 18
CFS - curing (intenral) - conveyor belt / motor 3

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5
BARRIER	5.0	4.9	4.8	4.7	3.7	2.3	.5	.0	.0	.0
AIR ABSORPTION	.0	.2	.6	2.2	5.8	11.3	19.4	38.0	101.8	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.2	2.9	.4	-2.6	-1.4	-2.0	-2.3	-4.0	-1.6	-2.3
TOTAL AWT -10.1	-1.3	8.5	-2.4	-6.7	-12.7	-20.1	-29.1	-48.5	-100.0	-100.0

SOURCE : 19
CFS - curing (intenral) - conveyor belt / motor 4

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5
BARRIER	5.0	4.9	4.8	4.7	3.7	2.3	.6	.0	.0	.0

AIR ABSORPTION	.0	.2	.7	2.2	5.9	11.4	19.4	38.1	102.1	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.3	2.9	.5	-2.7	-1.4	-2.0	-2.4	-3.8	-2.7	-2.5
TOTAL AWT -10.1	-1.3	8.5	-2.5	-6.7	-12.7	-20.2	-29.2	-48.8	-100.0	-100.0

SOURCE : 20
CFS - curing (intenral) - conveyor belt / motor 5

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
BARRIER	11.0	12.7	15.3	18.3	21.4	24.4	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.2	6.0	11.6	19.8	38.7	103.9	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-1.9	4.8	-2.4	-.8	-1.0	-1.6	-1.8	-2.7	-.1	-2.0
TOTAL AWT -22.8	-8.8	-1.4	-10.3	-22.5	-31.0	-43.0	-54.7	-75.7	-100.0	-100.0

SOURCE : 21
CFS - curing (intenral) - conveyor belt / motor 6

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
BARRIER	10.5	12.5	14.8	17.8	20.8	23.8	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.3	6.1	11.8	20.1	39.4	105.9	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-1.9	4.8	-2.4	-.8	-1.1	-1.5	-1.0	-1.5	-2.9	-4.2
TOTAL AWT -22.5	-8.6	-1.3	-9.9	-22.2	-30.6	-43.0	-56.0	-77.7	-100.0	-100.0

SOURCE : 22
CFS - processing (external) - RTT manv

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	111.0	114.0	103.0	104.0	103.0	100.0	98.0	94.0	88.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2
BARRIER	5.0	4.9	4.8	4.7	3.7	2.2	.5	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.4	6.3	12.3	21.0	41.0	110.4	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.2	3.0	.7	-3.1	-1.5	-2.0	-2.1	-2.9	-2.4	-3.4
TOTAL AWT 18.3	32.0	28.7	19.6	22.8	17.2	10.3	1.4	-21.3	-97.2	-100.0

SOURCE : 23
CFS - processing (external) - RTT reversing

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	57.0	75.0	75.0	79.0	89.0	93.0	91.0	87.0	77.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
BARRIER	5.0	5.0	5.0	5.0	4.9	4.8	4.7	3.7	2.3	.5
AIR ABSORPTION	.0	.2	.7	2.3	6.2	11.9	20.4	39.8	107.1	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.1	3.3	-.1	-2.2	-1.3	-2.2	-2.7	-4.1	-1.7	-2.2
TOTAL AWT 3.9	-21.9	-10.4	-7.5	-3.1	2.3	1.4	-8.3	-29.5	-100.0	-100.0

SOURCE : 24
CFS - processing (external) - dust collector / fan

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	100.0	102.0	106.0	109.0	108.0	101.0	94.0	89.0	83.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
BARRIER	10.6	12.6	14.9	17.9	20.9	24.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.0	20.5	40.0	107.7	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-1.9	4.8	-2.4	-.8	-1.1	-1.6	-1.5	-2.5	-1.2	-2.0

TOTAL AWT 7.0	14.2	7.5	15.8	12.5	4.9	-10.4	-27.0	-50.6	-100.0	-100.0	

SOURCE : 25
CFS - processing (external) - forklift

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	101.0	100.0	99.0	97.0	93.0	93.0	91.0	88.0	83.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
BARRIER	5.0	5.0	4.9	4.8	4.3	3.2	1.6	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.1	11.8	20.2	39.5	106.2	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.2	3.1	.1	-2.3	-1.3	-2.1	-2.6	-2.7	-3.4	-1.6
TOTAL AWT 10.3	22.3	14.9	16.5	15.3	7.0	3.1	-5.0	-25.7	-96.7	-100.0

SOURCE : 26
CFS - processing (external) - aggregate unload

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	110.0	111.0	102.0	100.0	101.0	104.0	101.0	97.0	105.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
BARRIER	13.3	16.3	19.3	22.3	25.0	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.0	20.5	40.1	107.8	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-2.2	4.8	-2.2	-.5	-1.2	-1.8	-2.5	-2.9	-2.8	-2.8
TOTAL AWT -2.3	21.9	12.8	7.2	-1.1	-6.0	-8.2	-19.0	-42.2	-100.0	-100.0

SOURCE : 27
CFS - processing (external) - silo vent 1

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	82.0	86.0	89.0	88.0	81.0	74.0	69.0	63.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
BARRIER	5.0	5.0	5.0	5.0	5.0	5.0	4.9	4.8	4.7	3.7
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.0	20.5	40.1	107.9	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-2.2	4.8	-2.2	-.5	-1.3	-1.8	-2.2	-2.7	-2.3	-2.6
TOTAL AWT .9	4.1	-5.0	5.4	5.1	1.0	-11.3	-26.2	-50.3	-100.0	-100.0

SOURCE : 28
CFS - processing (external) - silo vent 2

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	82.0	86.0	89.0	88.0	81.0	74.0	69.0	63.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
BARRIER	5.0	5.0	5.0	5.0	5.0	5.0	4.9	4.8	4.7	3.7
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.0	20.5	40.1	107.9	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-2.2	4.8	-2.2	-.5	-1.1	-1.9	-2.8	-2.6	-3.0	-.7
TOTAL AWT .8	4.1	-5.0	5.5	5.2	.9	-11.1	-25.7	-50.4	-100.0	-100.0

TOTAL AWT 22.4	33.0	29.4	24.2	27.7	19.7	15.4	6.6	-16.6	-84.3	-88.0

SINGLE POINT CALCULATION
ENM CALC MODULE

FILENAMES
C:\ENM\SOURCES\2118506A\506A-3
2118506A.GEN
C:\ENM\MAPS\2118506A\506A

OUT1 file and RNK1 file

TEMP (deg C)	HUMIDITY (%)
25.0	50.0

WIND SPEED (m/sec)	WIND DIR (deg)
.0	.0

TEMP GRAD (deg C/100m)
.0

X= 2964.000 Y= 577.000 Z= 51.200

SOURCE : 13
CFS - processing (external) - backhoe

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
BARRIER	5.0	5.0	5.0	5.0	5.0	4.9	4.8	4.3	3.1	1.4
AIR ABSORPTION	.0	.2	.7	2.4	6.4	12.5	21.3	41.5	111.9	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.6	2.1	2.8	-3.7	-.4	-2.7	-2.5	-2.7	-2.3	-.8
TOTAL AWT 9.1	16.1	10.4	9.1	13.9	6.6	2.9	-5.9	-25.4	-95.1	-100.0

SOURCE : 14
CFS - processing (external) - FEL

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	94.0	100.0	100.0	106.0	98.0	101.0	98.0	92.0	86.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
BARRIER	5.0	5.0	5.0	5.0	4.9	4.9	4.7	3.9	2.5	.8
AIR ABSORPTION	.0	.2	.7	2.4	6.4	12.5	21.2	41.4	111.7	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.6	2.1	2.8	-3.7	-.4	-2.7	-2.5	-2.6	-2.1	-.9
TOTAL AWT 17.5	15.2	15.4	14.1	24.9	9.7	9.0	-2.7	-28.1	-100.0	-100.0

SOURCE : 15
CFS - curing (intenral) - FEL

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	90.0	90.0	96.0	88.0	91.0	88.0	82.0	76.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2
BARRIER	5.0	5.0	5.0	5.0	5.0	4.9	4.8	4.3	3.1	1.4
AIR ABSORPTION	.0	.2	.7	2.4	6.3	12.2	20.8	40.7	109.5	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.6	1.9	3.0	-3.6	-.3	-2.8	-2.5	-2.2	-1.3	-2.7
TOTAL AWT 7.8	5.4	5.7	4.2	15.1	-.1	-.5	-12.3	-37.9	-100.0	-100.0

SOURCE : 16
CFS - curing (intenral) - conveyor belt / motor 1

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
BARRIER	5.0	4.9	4.8	4.6	3.5	2.0	.3	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.1	20.6	40.3	108.5	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.7	1.9	3.5	-3.6	-.3	-3.1	-1.9	-3.2	-1.9	-3.1
TOTAL AWT -10.8	-1.4	9.0	-6.1	-6.5	-14.6	-20.1	-31.1	-52.2	-100.0	-100.0

SOURCE : 17
CFS - curing (intenral) - conveyor belt / motor 2

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
BARRIER	5.0	4.9	4.8	4.6	3.6	2.0	.3	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.0	20.4	40.0	107.5	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

	31.5	63	125	250	500	1k	2k	4k	8k	16k
GROUND	-3.7	1.8	3.5	-3.6	-.3	-3.1	-1.9	-3.2	-2.2	-3.3
TOTAL AWT -10.7	-1.3	9.1	-6.0	-6.4	-14.4	-19.9	-30.8	-51.8	-100.0	-100.0

SOURCE : 18
CFS - curing (intenral) - conveyor belt / motor 3

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
BARRIER	5.0	4.9	4.8	4.6	3.6	2.1	.4	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.1	11.9	20.4	39.8	107.0	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.7	1.8	3.5	-3.6	-.3	-3.1	-1.9	-3.2	-2.3	-3.1
TOTAL AWT -10.6	-1.3	9.1	-5.9	-6.3	-14.4	-19.9	-30.7	-51.6	-100.0	-100.0

SOURCE : 19
CFS - curing (intenral) - conveyor belt / motor 4

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
BARRIER	5.0	4.9	4.8	4.6	3.6	2.1	.4	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.0	20.4	39.9	107.4	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.7	1.8	3.5	-3.6	-.3	-3.1	-1.9	-3.2	-2.1	-3.4
TOTAL AWT -10.7	-1.3	9.1	-6.0	-6.4	-14.4	-19.9	-30.8	-51.7	-100.0	-100.0

SOURCE : 20
CFS - curing (intenral) - conveyor belt / motor 5

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
BARRIER	12.0	13.8	16.8	19.8	22.8	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.4	6.3	12.2	20.8	40.5	109.1	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-2.7	4.1	-1.2	-.9	-2.2	-1.8	-2.2	-4.1	-1.5	-2.1
TOTAL AWT -24.7	-9.4	-2.2	-13.4	-24.4	-32.0	-44.5	-55.7	-76.6	-100.0	-100.0

SOURCE : 21
CFS - curing (intenral) - conveyor belt / motor 6

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
BARRIER	11.7	13.4	16.3	19.4	22.4	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.4	6.4	12.4	21.1	41.2	110.9	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-2.7	4.1	-1.3	-.9	-2.2	-1.8	-2.1	-4.2	-2.0	-2.2
TOTAL AWT -24.4	-9.3	-2.0	-13.1	-24.2	-31.8	-44.9	-56.2	-77.3	-100.0	-100.0

SOURCE : 22
CFS - processing (external) - RTT manv

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	111.0	114.0	103.0	104.0	103.0	100.0	98.0	94.0	88.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7
BARRIER	6.1	7.2	8.8	11.1	12.8	15.5	18.5	21.5	24.6	25.0
AIR ABSORPTION	.0	.2	.7	2.5	6.7	13.0	22.1	43.0	116.3	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-2.3	4.7	-2.0	-.4	-1.8	-1.8	-2.3	-3.2	-2.7	-2.2
TOTAL AWT 9.1	29.4	24.3	17.8	13.1	7.6	-4.4	-18.1	-45.1	-100.0	-100.0

SOURCE : 23
CFS - processing (external) - RTT reversing

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	57.0	75.0	75.0	79.0	89.0	93.0	91.0	87.0	77.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
BARRIER	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.9	4.9	4.7
AIR ABSORPTION	.0	.2	.7	2.4	6.4	12.4	21.2	41.4	111.5	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.5	2.2	2.6	-3.7	-.5	-2.5	-2.5	-3.0	-3.3	-4.2
TOTAL AWT 2.9	-21.9	-9.7	-10.7	-2.1	.7	.7	-10.0	-33.6	-100.0	-100.0

SOURCE : 24
CFS - processing (external) - dust collector / fan

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	100.0	102.0	106.0	109.0	108.0	101.0	94.0	89.0	83.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
BARRIER	11.8	13.6	16.5	19.5	22.6	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.4	6.5	12.6	21.4	41.7	112.6	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-2.9	3.7	-.5	-1.9	-1.5	-2.4	-2.4	-.7	-4.1	2.2
TOTAL AWT 5.3	13.6	7.2	11.9	11.5	3.0	-11.6	-27.5	-54.4	-100.0	-100.0

SOURCE : 25
CFS - processing (external) - forklift

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	101.0	100.0	99.0	97.0	93.0	93.0	91.0	88.0	83.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
BARRIER	5.0	5.0	5.0	5.0	5.0	5.0	4.9	4.8	4.6	3.4
AIR ABSORPTION	.0	.2	.7	2.4	6.4	12.4	21.1	41.1	110.9	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.6	2.1	2.7	-3.7	-.4	-2.5	-2.5	-3.0	-3.0	-3.6
TOTAL AWT 9.5	22.2	15.4	13.3	16.0	4.8	.9	-9.8	-32.3	-100.0	-100.0

SOURCE : 26
CFS - processing (external) - aggregate unload

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	110.0	111.0	102.0	100.0	101.0	104.0	101.0	97.0	105.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
BARRIER	13.2	16.2	19.2	22.2	25.0	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.4	6.5	12.5	21.4	41.7	112.4	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.1	3.3	.2	-2.8	-1.5	-2.1	-2.4	-3.8	-2.8	-2.6
TOTAL AWT -2.5	22.5	13.9	4.5	.8	-6.4	-8.8	-20.4	-43.3	-100.0	-100.0

SOURCE : 27
CFS - processing (external) - silo vent 1

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	82.0	86.0	89.0	88.0	81.0	74.0	69.0	63.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
BARRIER	5.0	5.0	5.0	5.0	5.0	5.0	4.9	4.8	4.6	3.6
AIR ABSORPTION	.0	.2	.7	2.4	6.5	12.6	21.4	41.8	112.7	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.1	3.4	.1	-2.7	-1.4	-2.1	-2.4	-4.2	-1.3	-2.3
TOTAL AWT 1.2	4.6	-4.0	2.7	6.8	.5	-11.9	-27.4	-50.9	-100.0	-100.0

SOURCE : 28
CFS - processing (external) - silo vent 2

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	82.0	86.0	89.0	88.0	81.0	74.0	69.0	63.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
BARRIER	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
AIR ABSORPTION	.0	.2	.7	2.4	6.5	12.6	21.4	41.8	112.7	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.0	3.4	.0	-2.6	-1.4	-2.1	-2.4	-2.2	-3.3	-2.0
TOTAL AWT 1.1	4.5	-4.0	2.8	6.7	.5	-11.9	-27.5	-53.0	-100.0	-100.0

TOTAL AWT 19.9	31.2	26.2	21.5	26.6	14.7	11.5	.4	-22.4	-87.4	-88.0

SINGLE POINT CALCULATION
ENM CALC MODULE

FILENAMES
C:\ENM\SOURCES\2118506A\506A-3
2118506A.GEN
C:\ENM\MAPS\2118506A\506A

OUT1 file and RNK1 file

TEMP (deg C)	HUMIDITY (%)
25.0	50.0

WIND SPEED (m/sec)	WIND DIR (deg)
.0	.0

TEMP GRAD (deg C/100m)
.0

X= 3712.000 Y= 1349.000 Z= 22.200

SOURCE : 13
CFS - processing (external) - backhoe

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.2	5.9	11.5	19.6	38.4	103.0	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.6	-3.0	7.2	15.0	15.0	15.0	10.5	4.2	-1.4	-5.3
TOTAL AWT 1.2	23.9	21.2	10.5	1.2	-2.5	-8.0	-11.7	-24.2	-83.2	-100.0

SOURCE : 14
CFS - processing (external) - FEL

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	94.0	100.0	100.0	106.0	98.0	101.0	98.0	92.0	86.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.2	5.9	11.5	19.6	38.4	102.9	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.6	-3.0	7.2	15.0	15.0	15.0	10.6	4.4	-1.3	-5.2
TOTAL AWT 7.4	23.0	26.2	15.5	12.2	.5	-2.0	-8.8	-27.3	-92.3	-100.0

SOURCE : 15
CFS - curing (intenral) - FEL

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	90.0	90.0	96.0	88.0	91.0	88.0	82.0	76.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5
BARRIER	5.0	5.1	5.1	5.1	5.3	5.5	5.9	6.8	8.3	10.4
AIR ABSORPTION	.0	.2	.6	2.2	5.8	11.3	19.4	37.9	101.7	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.0	-1.5	10.1	11.5	3.0	-3.0	-5.2	-1.5	-2.9	-2.8

TOTAL AWT	2.6	7.5	9.8	-2.3	.7	-2.6	.7	-8.6	-37.8	-100.0	-100.0

SOURCE : 16
CFS - curing (intenral) - conveyor belt / motor 1

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4
BARRIER	5.0	5.1	5.1	5.1	5.3	5.5	6.0	6.8	8.3	10.5
AIR ABSORPTION	.0	.2	.6	2.2	5.8	11.2	19.2	37.7	101.1	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.0	-1.5	10.0	11.4	2.9	-3.1	-5.2	-1.5	-2.8	-2.8
TOTAL AWT	-12.0	.5	12.9	-12.2	-21.2	-18.4	-22.1	-31.4	-57.4	-100.0	-100.0

SOURCE : 17
CFS - curing (intenral) - conveyor belt / motor 2

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4
BARRIER	5.0	5.1	5.1	5.1	5.3	5.5	5.9	6.8	8.2	10.4
AIR ABSORPTION	.0	.2	.6	2.2	5.8	11.2	19.1	37.5	100.6	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.0	-1.5	10.0	11.3	2.8	-3.1	-5.2	-1.7	-2.6	-2.8
TOTAL AWT	-11.9	.6	12.9	-12.1	-21.0	-18.2	-21.9	-31.3	-57.0	-100.0	-100.0

SOURCE : 18
CFS - curing (intenral) - conveyor belt / motor 3

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.6	2.2	5.8	11.2	19.1	37.5	100.6	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.6	-3.0	7.0	15.0	15.0	14.9	10.2	4.0	-1.6	-5.3
TOTAL AWT	-6.5	6.2	19.5	-4.1	-19.6	-25.2	-34.5	-40.8	-55.9	-100.0	-100.0

SOURCE : 19
CFS - curing (intenral) - conveyor belt / motor 4

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.6	2.2	5.8	11.3	19.3	37.7	101.1	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.6	-3.0	7.1	15.0	15.0	14.9	10.2	4.0	-1.6	-5.3
TOTAL AWT	-6.5	6.1	19.4	-4.2	-19.6	-25.2	-34.6	-40.9	-56.2	-100.0	-100.0

SOURCE : 20
CFS - curing (intenral) - conveyor belt / motor 5

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5
BARRIER	12.7	15.4	18.4	21.4	24.4	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.2	5.9	11.4	19.5	38.2	102.3	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.4	.0	9.9	1.5	-4.3	-1.7	-2.8	-3.3	-2.5	-.5
TOTAL AWT	-24.3	-7.9	.9	-25.5	-27.6	-30.5	-43.3	-53.3	-74.4	-100.0	-100.0

SOURCE : 21

CFS - curing (intenral) - conveyor belt / motor 6

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6
BARRIER	12.6	15.1	18.0	21.1	24.1	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.2	5.9	11.5	19.7	38.5	103.3	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.4	.1	9.9	1.3	-4.4	-1.4	-2.8	-3.3	-2.4	-3.4
TOTAL AWT -24.1	-7.9	1.0	-25.2	-27.2	-30.3	-43.7	-53.5	-74.8	-100.0	-100.0

SOURCE : 22
CFS - processing (external) - RTT manv

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	111.0	114.0	103.0	104.0	103.0	100.0	98.0	94.0	88.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2
BARRIER	7.1	8.8	11.0	12.7	15.4	18.4	21.4	24.4	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.4	6.3	12.3	21.0	40.9	110.3	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.0	.9	6.2	-2.4	-3.1	-2.2	-2.5	-2.7	-2.9	-3.6
TOTAL AWT 8.9	30.7	27.0	7.9	14.0	7.1	-5.7	-19.1	-45.9	-100.0	-100.0

SOURCE : 23
CFS - processing (external) - RTT reversing

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	57.0	75.0	75.0	79.0	89.0	93.0	91.0	87.0	77.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.2	5.9	11.4	19.5	38.2	102.3	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.6	-3.0	7.2	15.0	15.0	15.0	10.3	4.1	-1.5	-5.3
TOTAL AWT -6.6	-14.0	1.3	-9.4	-14.7	-8.4	-9.9	-15.4	-31.8	-100.0	-100.0

SOURCE : 24
CFS - processing (external) - dust collector / fan

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	100.0	102.0	106.0	109.0	108.0	101.0	94.0	89.0	83.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
BARRIER	12.7	15.3	18.3	21.3	24.3	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.2	6.0	11.6	19.8	38.8	104.2	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.4	.1	10.1	1.6	-4.3	-1.9	-2.7	-3.2	-2.8	-.9
TOTAL AWT 4.0	15.0	9.7	.3	7.2	5.3	-10.4	-24.8	-48.3	-100.0	-100.0

SOURCE : 25
CFS - processing (external) - forklift

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	101.0	100.0	99.0	97.0	93.0	93.0	91.0	88.0	83.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5
BARRIER	5.0	5.1	5.1	5.2	5.3	5.6	6.1	7.0	8.6	10.9
AIR ABSORPTION	.0	.2	.7	2.2	5.9	11.4	19.5	38.1	102.3	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.0	-1.5	10.2	11.7	3.2	-2.9	-5.3	-1.2	-3.1	-2.8
TOTAL AWT 5.3	24.4	19.7	6.6	1.4	2.1	2.4	-5.8	-32.5	-100.0	-100.0

SOURCE : 26
CFS - processing (external) - aggregate unload

	FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	110.0	111.0	102.0	100.0	101.0	104.0	101.0	97.0	105.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.2	5.9	11.5	19.7	38.6	103.5	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.6	-3.0	7.2	15.0	15.0	15.0	10.7	4.5	-1.1	-5.2
TOTAL AWT 12.5	38.9	37.2	17.4	6.1	3.4	.8	-6.1	-22.7	-74.0	-100.0

SOURCE : 27
CFS - processing (external) - silo vent 1

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	82.0	86.0	89.0	88.0	81.0	74.0	69.0	63.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
BARRIER	5.0	5.0	5.0	5.0	5.0	5.1	5.1	5.1	5.3	5.5
AIR ABSORPTION	.0	.2	.7	2.2	6.0	11.6	19.8	38.8	104.1	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.3	.2	9.7	1.0	-4.5	-.9	-3.1	-3.2	-2.9	-1.4
TOTAL AWT 2.7	6.6	-.1	-6.0	4.1	4.8	-11.4	-24.5	-48.5	-100.0	-100.0

SOURCE : 28
CFS - processing (external) - silo vent 2

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	82.0	86.0	89.0	88.0	81.0	74.0	69.0	63.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
BARRIER	5.0	5.0	5.0	5.0	5.0	5.1	5.1	5.1	5.1	5.3
AIR ABSORPTION	.0	.2	.7	2.2	6.0	11.6	19.8	38.7	103.9	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.3	.3	9.4	.6	-4.6	-.5	-3.3	-2.5	-2.5	-4.2
TOTAL AWT 2.9	6.6	-.2	-5.8	4.4	4.9	-11.8	-24.2	-49.0	-100.0	-100.0

TOTAL AWT 16.5	39.9	38.2	20.7	17.8	13.2	7.4	-.5	-19.1	-73.3	-88.0

SINGLE POINT CALCULATION
ENM CALC MODULE

FILENAMES
C:\ENM\SOURCES\2118506A\506A-3
2118506A.GEN
C:\ENM\MAPS\2118506A\506A

OUT1 file and RNK1 file

TEMP (deg C)	HUMIDITY (%)
25.0	50.0

WIND SPEED (m/sec)	WIND DIR (deg)
.0	.0

TEMP GRAD (deg C/100m)
.0

X= 3827.000 Y= 1335.000 Z= 31.200

SOURCE : 13
CFS - processing (external) - backhoe

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
BARRIER	4.9	4.7	4.0	2.7	1.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.1	20.6	40.2	108.2	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.6	-.2	11.5	4.4	-2.7	-4.9	-1.7	-2.2	-3.0	-3.8
TOTAL AWT 13.9	17.6	13.3	1.7	8.5	13.4	10.8	-.9	-20.1	-87.3	-100.0

SOURCE : 14
CFS - processing (external) - FEL

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	94.0	100.0	100.0	106.0	98.0	101.0	98.0	92.0	86.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
BARRIER	4.9	4.7	4.0	2.7	1.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.0	20.6	40.2	108.1	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.6	-.2	11.5	4.4	-2.7	-4.9	-1.7	-2.2	-3.0	-3.8
TOTAL AWT 19.2	16.6	18.3	6.7	19.5	16.4	16.8	2.1	-23.0	-96.2	-100.0

SOURCE : 15
CFS - curing (intenral) - FEL

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	90.0	90.0	96.0	88.0	91.0	88.0	82.0	76.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
BARRIER	5.0	5.0	5.1	5.1	5.1	5.3	5.5	6.0	6.8	8.3
AIR ABSORPTION	.0	.2	.7	2.3	6.1	11.9	20.3	39.8	106.9	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.4	.2	10.0	1.4	-4.3	-1.7	-2.8	-3.3	-2.5	-.4
TOTAL AWT 5.5	6.4	7.7	-2.7	10.2	4.1	-1.5	-12.0	-37.4	-100.0	-100.0

SOURCE : 16
CFS - curing (intenral) - conveyor belt / motor 1

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
BARRIER	5.0	5.0	5.1	5.1	5.1	5.3	5.5	6.0	6.9	8.4
AIR ABSORPTION	.0	.2	.7	2.3	6.1	11.8	20.2	39.6	106.4	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.4	.2	10.0	1.4	-4.3	-1.6	-2.8	-3.3	-2.4	-1.4
TOTAL AWT -11.3	-.6	10.7	-12.6	-11.7	-11.8	-24.4	-34.9	-57.2	-100.0	-100.0

SOURCE : 17
CFS - curing (intenral) - conveyor belt / motor 2

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
BARRIER	5.0	5.0	5.1	5.1	5.1	5.3	5.5	6.0	6.8	8.3
AIR ABSORPTION	.0	.2	.7	2.3	6.1	11.8	20.1	39.4	105.9	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.4	.1	9.9	1.3	-4.4	-1.5	-2.8	-3.3	-2.4	-2.9
TOTAL AWT -11.2	-.5	10.8	-12.5	-11.6	-11.7	-24.4	-34.7	-56.9	-100.0	-100.0

SOURCE : 18
CFS - curing (intenral) - conveyor belt / motor 3

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.1	11.8	20.2	39.4	105.9	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.9	-1.1	9.9	12.6	4.0	-2.4	-5.3	-.7	-3.6	-2.5
TOTAL AWT -7.9	5.0	17.1	-7.4	-17.7	-15.0	-18.3	-26.7	-53.5	-100.0	-100.0

SOURCE : 19
CFS - curing (intenral) - conveyor belt / motor 4

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.1	11.9	20.3	39.6	106.5	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.9	-1.1	9.9	12.6	4.1	-2.3	-5.3	-.7	-3.7	-2.5
TOTAL AWT -8.0	4.9	17.0	-7.5	-17.8	-15.1	-18.4	-26.8	-53.8	-100.0	-100.0

SOURCE : 20
CFS - curing (intenral) - conveyor belt / motor 5

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
BARRIER	12.7	15.4	18.4	21.4	24.4	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.0	20.5	40.0	107.6	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.8	1.5	4.9	-3.1	-1.6	-2.3	-2.9	-2.4	-.8	.2
TOTAL AWT -25.3	-9.0	-1.1	-20.9	-23.6	-33.9	-43.7	-54.5	-77.7	-100.0	-100.0

SOURCE : 21
CFS - curing (intenral) - conveyor belt / motor 6

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
BARRIER	12.6	15.1	18.0	21.1	24.1	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.1	20.6	40.3	108.5	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.8	1.6	4.7	-3.2	-1.5	-2.4	-3.0	-2.2	-2.7	-3.7
TOTAL AWT -25.1	-8.9	-.9	-20.6	-23.3	-33.9	-43.8	-54.7	-78.2	-100.0	-100.0

SOURCE : 22
CFS - processing (external) - RTT manv

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	111.0	114.0	103.0	104.0	103.0	100.0	98.0	94.0	88.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7
BARRIER	7.0	8.6	10.8	12.6	15.2	18.2	21.2	24.2	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.5	6.6	12.9	22.0	42.8	115.6	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.6	2.0	3.3	-3.6	-.3	-3.1	-2.1	-3.0	-3.3	-2.3
TOTAL AWT 8.4	29.9	25.5	10.5	14.8	3.8	-5.7	-20.7	-47.7	-100.0	-100.0

SOURCE : 23
CFS - processing (external) - RTT reversing

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	57.0	75.0	75.0	79.0	89.0	93.0	91.0	87.0	77.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
BARRIER	4.9	4.7	4.0	2.8	1.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.0	20.5	40.0	107.5	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.6	-.3	11.4	4.4	-2.7	-4.8	-1.8	-2.2	-3.0	-3.8
TOTAL AWT 10.4	-20.3	-6.6	-18.2	-7.4	7.5	8.9	-4.7	-27.8	-100.0	-100.0

SOURCE : 24
CFS - processing (external) - dust collector / fan

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k

POWER LEVEL	100.0	102.0	106.0	109.0	108.0	101.0	94.0	89.0	83.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
BARRIER	12.7	15.3	18.3	21.3	24.3	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.4	6.3	12.2	20.8	40.6	109.4	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.8	1.6	4.9	-3.1	-1.8	-2.3	-2.9	-2.6	-.2	-3.3
TOTAL AWT 4.5	13.9	7.8	5.0	11.3	2.1	-11.0	-26.1	-51.2	-100.0	-100.0

SOURCE : 25
CFS - processing (external) - forklift

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	101.0	100.0	99.0	97.0	93.0	93.0	91.0	88.0	83.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
BARRIER	5.0	5.0	5.1	5.1	5.2	5.3	5.6	6.2	7.3	9.1
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.0	20.5	40.0	107.5	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.4	.2	10.1	1.5	-4.3	-1.8	-2.7	-3.2	-2.6	.3
TOTAL AWT 8.5	23.3	17.6	6.2	11.1	9.0	.5	-9.4	-32.0	-100.0	-100.0

SOURCE : 26
CFS - processing (external) - aggregate unload

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	110.0	111.0	102.0	100.0	101.0	104.0	101.0	97.0	105.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
BARRIER	4.9	4.7	4.0	2.8	1.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.1	20.7	40.4	108.7	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.6	-.2	11.5	4.4	-2.7	-4.9	-1.7	-2.2	-2.9	-3.7
TOTAL AWT 21.6	32.6	29.2	8.6	13.4	19.3	19.7	4.9	-18.2	-77.8	-100.0

SOURCE : 27
CFS - processing (external) - silo vent 1

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	82.0	86.0	89.0	88.0	81.0	74.0	69.0	63.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
BARRIER	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
AIR ABSORPTION	.0	.2	.7	2.4	6.3	12.2	20.8	40.6	109.3	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.7	1.7	4.3	-3.3	-1.0	-2.6	-2.8	-2.7	-1.5	-3.5
TOTAL AWT 1.7	5.5	-2.1	-1.2	7.8	.6	-10.7	-26.1	-51.1	-100.0	-100.0

SOURCE : 28
CFS - processing (external) - silo vent 2

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	82.0	86.0	89.0	88.0	81.0	74.0	69.0	63.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
BARRIER	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.9	4.9
AIR ABSORPTION	.0	.2	.7	2.4	6.3	12.2	20.8	40.5	109.1	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.7	1.8	4.1	-3.4	-.7	-2.8	-2.4	-2.5	-2.8	-3.7
TOTAL AWT 1.7	5.5	-2.1	-.9	7.9	.3	-10.5	-26.5	-51.1	-100.0	-100.0
TOTAL AWT 24.6	35.0	31.7	15.4	23.0	22.4	22.1	7.8	-14.9	-77.0	-88.0

SINGLE POINT CALCULATION
ENM CALC MODULE

FILENAMES
C:\ENM\SOURCES\2118506A\506A-3
2118506A.GEN

C:\ENM\MAPS\2118506A\506A

OUT1 file and RNK1 file

TEMP (deg C) HUMIDITY (%)
25.0 50.0

WIND SPEED (m/sec) WIND DIR (deg)
.0 .0

TEMP GRAD (deg C/100m)
.0

X= 4143.000 Y= 1967.000 Z= 31.200

SOURCE : 13
CFS - processing (external) - backhoe

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.1	20.7	40.4	108.7	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.0	-1.4	10.0	14.6	7.3	.3	-4.6	-3.8	-2.8	-2.7
TOTAL AWT 8.7	22.9	19.1	7.2	.9	4.4	5.5	1.8	-18.7	-88.0	-100.0

SOURCE : 14
CFS - processing (external) - FEL

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	94.0	100.0	100.0	106.0	98.0	101.0	98.0	92.0	86.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.1	20.7	40.4	108.7	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.0	-1.4	10.0	14.6	7.2	.3	-4.6	-3.8	-2.8	-2.7
TOTAL AWT 13.8	21.9	24.1	12.2	12.0	7.4	11.5	4.8	-21.7	-97.0	-100.0

SOURCE : 15
CFS - curing (intenral) - FEL

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	90.0	90.0	96.0	88.0	91.0	88.0	82.0	76.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
BARRIER	5.0	5.0	5.1	5.1	5.2	5.3	5.6	6.2	7.2	8.9
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.1	20.6	40.3	108.4	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.5	-.1	11.2	3.5	-3.3	-4.3	-2.5	-2.2	-2.5	-3.2
TOTAL AWT 4.9	6.4	7.8	-4.0	8.0	2.8	.8	-12.8	-39.3	-100.0	-100.0

SOURCE : 16
CFS - curing (intenral) - conveyor belt / motor 1

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
BARRIER	5.0	5.0	5.1	5.1	5.2	5.3	5.6	6.2	7.2	8.9
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.1	20.6	40.2	108.2	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.5	-.1	11.1	3.5	-3.3	-4.3	-2.5	-2.2	-2.5	-3.1
TOTAL AWT -11.8	-.6	10.9	-14.0	-14.0	-13.2	-22.1	-35.8	-59.2	-100.0	-100.0

SOURCE : 17
CFS - curing (intenral) - conveyor belt / motor 2

	FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.0	20.6	40.2	108.1	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.0	-1.4	10.0	14.6	7.2	.3	-4.6	-3.7	-2.8	-2.7
TOTAL AWT -8.3	4.9	17.2	-7.7	-20.0	-18.5	-21.4	-28.0	-51.5	-100.0	-100.0

SOURCE : 18
CFS - curing (intenral) - conveyor belt / motor 3

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
BARRIER	5.0	5.0	5.0	5.1	5.1	5.2	5.4	5.8	6.5	7.7
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.1	20.6	40.3	108.5	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.5	-.2	11.1	3.5	-3.3	-4.3	-2.5	-2.2	-2.5	-2.8
TOTAL AWT -11.8	-.6	10.9	-13.9	-14.0	-13.1	-22.1	-35.6	-58.9	-100.0	-100.0

SOURCE : 19
CFS - curing (intenral) - conveyor belt / motor 4

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
BARRIER	5.0	5.0	5.0	5.0	5.1	5.1	5.2	5.4	5.9	6.6
AIR ABSORPTION	.0	.2	.7	2.3	6.3	12.2	20.7	40.5	109.0	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.5	-.2	11.1	3.5	-3.3	-4.3	-2.5	-2.2	-2.5	-3.2
TOTAL AWT -11.9	-.7	10.9	-13.9	-14.1	-13.2	-22.1	-35.6	-58.9	-100.0	-100.0

SOURCE : 20
CFS - curing (intenral) - conveyor belt / motor 5

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2
BARRIER	12.8	15.6	18.6	21.6	24.6	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.4	6.3	12.2	20.9	40.7	109.6	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.9	1.2	6.5	-2.2	-3.6	-2.2	-2.4	-2.2	-3.7	-3.1
TOTAL AWT -25.6	-9.0	-1.1	-22.9	-24.9	-32.4	-44.1	-55.6	-78.7	-100.0	-100.0

SOURCE : 21
CFS - curing (intenral) - conveyor belt / motor 6

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2
BARRIER	12.7	15.3	18.3	21.3	24.3	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.4	6.3	12.2	20.9	40.8	109.8	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.9	1.3	6.3	-2.3	-3.5	-2.3	-2.5	-2.5	-2.9	-2.8
TOTAL AWT -25.4	-9.0	-.9	-22.5	-24.6	-32.3	-44.2	-55.6	-78.5	-100.0	-100.0

SOURCE : 22
CFS - processing (external) - RTT manv

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	111.0	114.0	103.0	104.0	103.0	100.0	98.0	94.0	88.0	.0

DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8	77.8
BARRIER	6.2	7.3	9.1	11.4	12.9	15.9	18.9	21.9	24.9	25.0
AIR ABSORPTION	.1	.2	.7	2.5	6.7	13.0	22.2	43.2	116.8	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.6	2.1	2.8	-3.7	-.4	-2.7	-2.5	-2.7	-2.3	-.8
TOTAL AWT 9.8	30.5	26.6	12.6	16.0	6.1	-4.0	-18.3	-46.2	-100.0	-100.0

SOURCE : 23
CFS - processing (external) - RTT reversing

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	57.0	75.0	75.0	79.0	89.0	93.0	91.0	87.0	77.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.0	20.5	40.1	107.9	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.0	-1.4	10.0	14.6	7.2	.3	-4.6	-3.7	-2.8	-2.7
TOTAL AWT 5.5	-15.1	-.8	-12.7	-14.9	-1.4	3.7	-2.0	-26.4	-100.0	-100.0

SOURCE : 24
CFS - processing (external) - dust collector / fan

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	100.0	102.0	106.0	109.0	108.0	101.0	94.0	89.0	83.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2
BARRIER	12.8	15.5	18.5	21.5	24.5	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.4	6.3	12.3	20.9	40.8	110.0	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.9	1.2	6.5	-2.2	-3.6	-2.2	-2.4	-2.2	-3.7	-3.2
TOTAL AWT 4.2	13.9	7.8	3.1	10.1	3.6	-11.2	-26.7	-51.9	-100.0	-100.0

SOURCE : 25
CFS - processing (external) - forklift

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	101.0	100.0	99.0	97.0	93.0	93.0	91.0	88.0	83.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.1	20.6	40.3	108.4	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.0	-1.4	10.0	14.6	7.3	.3	-4.6	-3.8	-2.8	-2.7
TOTAL AWT 7.2	28.9	24.2	11.2	3.0	2.4	3.5	-2.1	-25.6	-99.6	-100.0

SOURCE : 26
CFS - processing (external) - aggregate unload

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	110.0	111.0	102.0	100.0	101.0	104.0	101.0	97.0	105.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.4	6.3	12.2	20.7	40.5	109.1	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.0	-1.4	10.1	14.6	7.3	.3	-4.6	-3.8	-2.8	-2.7
TOTAL AWT 17.0	37.8	35.1	14.1	5.9	10.3	14.4	7.7	-16.9	-78.4	-100.0

SOURCE : 27
CFS - processing (external) - silo vent 1

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	82.0	86.0	89.0	88.0	81.0	74.0	69.0	63.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2

BARRIER	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
AIR ABSORPTION	.0	.2	.7	2.4	6.3	12.2	20.9	40.8	109.8	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.6	2.1	3.0	-3.7	-.3	-3.0	-2.4	-1.8	-2.8	-2.1
TOTAL AWT 1.6	5.3	-2.5	.1	8.1	-.2	-10.5	-26.7	-52.2	-100.0	-100.0

SOURCE : 28
CFS - processing (external) - silo vent 2

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	82.0	86.0	89.0	88.0	81.0	74.0	69.0	63.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.4	6.3	12.2	20.8	40.7	109.6	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.5	-.4	8.6	6.3	-1.6	-5.0	-.6	-3.4	-2.7	-2.1
TOTAL AWT 4.4	11.2	5.1	-.5	3.2	6.1	-3.4	-23.4	-45.5	-100.0	-100.0
TOTAL AWT 20.4	39.2	36.4	19.2	19.5	15.4	17.2	10.7	-13.4	-77.5	-88.0

SINGLE POINT CALCULATION
ENM CALC MODULE

FILENAMES
C:\ENM\SOURCES\2118506A\506A-3
2118506A.GEN
C:\ENM\MAPS\2118506A\506A

OUT1 file and RNK1 file

TEMP (deg C)	HUMIDITY (%)
25.0	50.0

WIND SPEED (m/sec)	WIND DIR (deg)
.0	.0

TEMP GRAD (deg C/100m)
.0

X= 3948.000 Y= 2044.000 Z= 22.200

SOURCE : 13
CFS - processing (external) - backhoe

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.6	2.1	5.6	10.9	18.7	36.6	98.0	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.6	-3.1	6.7	15.0	15.0	15.0	10.8	4.5	-1.1	-5.2
TOTAL AWT 2.0	24.4	21.8	11.5	1.7	-1.8	-7.0	-10.6	-22.3	-78.0	-100.0

SOURCE : 14
CFS - processing (external) - FEL

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	94.0	100.0	100.0	106.0	98.0	101.0	98.0	92.0	86.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.6	2.1	5.6	10.9	18.7	36.6	98.0	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.6	-3.1	6.7	15.0	15.0	15.0	10.6	4.4	-1.3	-5.2
TOTAL AWT 8.1	23.4	26.8	16.5	12.7	1.2	-1.0	-7.4	-25.2	-86.9	-100.0

SOURCE : 15
CFS - curing (intenral) - FEL

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k

POWER LEVEL	84.0	90.0	90.0	96.0	88.0	91.0	88.0	82.0	76.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
BARRIER	5.0	5.1	5.1	5.2	5.3	5.6	6.1	7.0	8.6	10.8
AIR ABSORPTION	.0	.2	.6	2.1	5.6	10.9	18.6	36.5	97.7	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.1	-1.6	9.7	11.4	2.9	-3.1	-5.2	-1.6	-2.7	-2.8
TOTAL AWT 3.4	7.9	10.3	-1.6	1.2	-1.9	1.6	-7.6	-36.0	-100.0	-100.0

SOURCE : 16
CFS - curing (intenral) - conveyor belt / motor 1

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
BARRIER	5.0	5.1	5.1	5.2	5.3	5.6	6.1	7.0	8.6	10.8
AIR ABSORPTION	.0	.2	.6	2.1	5.6	10.8	18.6	36.5	97.5	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.1	-1.6	9.7	11.4	2.9	-3.1	-5.2	-1.6	-2.7	-2.8
TOTAL AWT -11.5	.9	13.3	-11.5	-20.8	-17.9	-21.4	-30.6	-56.0	-100.0	-100.0

SOURCE : 17
CFS - curing (intenral) - conveyor belt / motor 2

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
BARRIER	5.0	5.1	5.1	5.2	5.3	5.6	6.1	7.0	8.6	10.8
AIR ABSORPTION	.0	.2	.6	2.1	5.6	10.8	18.6	36.4	97.5	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.1	-1.6	9.8	11.5	3.0	-3.0	-5.2	-1.5	-2.8	-2.8
TOTAL AWT -11.5	.9	13.3	-11.6	-20.9	-18.0	-21.5	-30.5	-56.1	-100.0	-100.0

SOURCE : 18
CFS - curing (intenral) - conveyor belt / motor 3

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
BARRIER	5.0	5.0	5.1	5.1	5.2	5.4	5.8	6.6	7.9	10.0
AIR ABSORPTION	.0	.2	.6	2.1	5.6	10.9	18.6	36.6	97.8	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.1	-1.6	9.7	11.3	2.8	-3.2	-5.1	-1.7	-2.5	-2.9
TOTAL AWT -11.5	.8	13.3	-11.5	-20.7	-17.8	-21.3	-30.5	-55.6	-100.0	-100.0

SOURCE : 19
CFS - curing (intenral) - conveyor belt / motor 4

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2
BARRIER	5.0	5.0	5.1	5.1	5.2	5.3	5.7	6.3	7.4	9.2
AIR ABSORPTION	.0	.2	.6	2.1	5.6	10.9	18.7	36.8	98.4	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.1	-1.7	9.6	11.3	2.8	-3.2	-5.1	-1.7	-2.5	-2.9
TOTAL AWT -11.5	.8	13.3	-11.5	-20.7	-17.8	-21.3	-30.5	-55.5	-100.0	-100.0

SOURCE : 20
CFS - curing (intenral) - conveyor belt / motor 5

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

DISTANCE	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2
BARRIER	12.8	15.6	18.6	21.6	24.6	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.6	2.1	5.7	11.0	18.8	37.0	99.0	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.4	-.1	9.9	1.6	-4.3	-1.7	-2.7	-3.2	-2.6	.2
TOTAL AWT -24.1	-7.6	1.1	-25.3	-27.5	-30.2	-42.5	-52.4	-73.0	-100.0	-100.0

SOURCE : 21
CFS - curing (intenral) - conveyor belt / motor 6

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3
BARRIER	12.7	15.3	18.3	21.3	24.3	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.6	2.1	5.7	11.0	18.9	37.0	99.1	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.4	.0	9.7	1.3	-4.4	-1.4	-2.9	-3.3	-2.4	-4.1
TOTAL AWT -23.8	-7.6	1.3	-24.9	-27.1	-29.9	-42.9	-52.3	-73.0	-100.0	-100.0

SOURCE : 22
CFS - processing (external) - RTT manv

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	111.0	114.0	103.0	104.0	103.0	100.0	98.0	94.0	88.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
BARRIER	6.4	7.6	9.4	11.7	13.4	16.4	19.4	22.4	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.3	6.1	11.8	20.2	39.5	106.1	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.0	.8	5.8	-2.6	-2.5	-2.2	-2.5	-2.7	-.4	-2.1
TOTAL AWT 10.7	31.7	28.6	10.2	15.7	9.1	-2.9	-15.9	-42.0	-100.0	-100.0

SOURCE : 23
CFS - processing (external) - RTT reversing

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	57.0	75.0	75.0	79.0	89.0	93.0	91.0	87.0	77.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.6	2.1	5.6	10.8	18.5	36.3	97.2	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.6	-3.1	6.7	15.0	15.0	15.0	10.6	4.4	-1.3	-5.2
TOTAL AWT -5.6	-13.5	1.9	-8.4	-14.2	-7.6	-8.9	-14.2	-29.8	-95.0	-100.0

SOURCE : 24
CFS - processing (external) - dust collector / fan

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	100.0	102.0	106.0	109.0	108.0	101.0	94.0	89.0	83.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3
BARRIER	12.8	15.6	18.6	21.6	24.6	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.6	2.1	5.7	11.0	18.9	37.1	99.3	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.4	-.1	9.9	1.6	-4.3	-1.8	-2.7	-3.2	-2.6	.3
TOTAL AWT 4.4	15.4	10.1	.7	7.4	5.7	-9.5	-23.4	-46.1	-100.0	-100.0

SOURCE : 25
CFS - processing (external) - forklift

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	101.0	100.0	99.0	97.0	93.0	93.0	91.0	88.0	83.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.6	2.1	5.6	10.9	18.6	36.5	97.6	300.0

TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.6	-3.1	6.7	15.0	15.0	15.0	10.5	4.3	-1.4	-5.3
TOTAL AWT 4.6	30.5	26.9	15.5	3.8	-3.7	-9.0	-14.2	-28.9	-89.4	-100.0

SOURCE : 26
CFS - processing (external) - aggregate unload

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	110.0	111.0	102.0	100.0	101.0	104.0	101.0	97.0	105.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.6	2.1	5.6	10.9	18.7	36.8	98.3	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.6	-3.1	6.8	15.0	15.0	15.0	10.6	4.4	-1.3	-5.2
TOTAL AWT 13.2	39.4	37.8	18.4	6.7	4.2	1.9	-4.5	-20.3	-68.3	-100.0

SOURCE : 27
CFS - processing (external) - silo vent 1

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	82.0	86.0	89.0	88.0	81.0	74.0	69.0	63.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2
BARRIER	5.0	5.0	5.0	5.0	5.0	5.1	5.1	5.1	5.3	5.5
AIR ABSORPTION	.0	.2	.6	2.1	5.7	11.0	18.9	37.0	99.1	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.0	.8	6.3	-2.3	-3.2	-2.2	-2.5	-2.7	-1.1	-2.3
TOTAL AWT 3.5	6.7	-.3	-2.2	7.9	4.2	-9.1	-23.6	-46.7	-100.0	-100.0

SOURCE : 28
CFS - processing (external) - silo vent 2

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	82.0	86.0	89.0	88.0	81.0	74.0	69.0	63.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.6	2.1	5.7	11.0	18.8	36.9	98.9	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.9	-1.3	9.1	11.7	3.0	-3.1	-5.0	-1.8	-2.3	-3.0
TOTAL AWT 2.1	12.6	6.9	.0	-1.0	3.1	-3.1	-16.0	-42.4	-100.0	-100.0

TOTAL AWT 17.3	40.7	39.0	22.5	19.0	13.5	7.4	-.3	-16.8	-67.7	-88.0

SINGLE POINT CALCULATION
ENM CALC MODULE

FILENAMES
C:\ENM\SOURCES\2118506A\506A-3
2118506A.GEN
C:\ENM\MAPS\2118506A\506A

OUT1 file and RNK1 file

TEMP (deg C) HUMIDITY (%)
25.0 50.0

WIND SPEED (m/sec) WIND DIR (deg)
.0 .0

TEMP GRAD (deg C/100m)
.0

X= 3985.000 Y= 2886.000 Z= 22.200

SOURCE : 13
CFS - processing (external) - backhoe

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

DISTANCE	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.6	2.1	5.7	11.0	18.8	36.9	98.7	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.6	-3.1	6.9	15.0	15.0	14.9	10.0	3.8	-1.8	-5.4
TOTAL AWT 1.9	24.3	21.7	11.3	1.7	-1.9	-7.1	-10.0	-21.9	-78.1	-100.0

SOURCE : 14
CFS - processing (external) - FEL

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	94.0	100.0	100.0	106.0	98.0	101.0	98.0	92.0	86.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.6	2.1	5.7	11.0	18.8	36.9	98.9	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.6	-3.1	6.9	15.0	15.0	14.9	10.0	3.8	-1.8	-5.4
TOTAL AWT 8.0	23.3	26.7	16.2	12.6	1.1	-1.1	-7.0	-24.9	-87.3	-100.0

SOURCE : 15
CFS - curing (intenral) - FEL

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	90.0	90.0	96.0	88.0	91.0	88.0	82.0	76.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3
BARRIER	5.0	5.1	5.1	5.1	5.3	5.5	6.0	6.9	8.4	10.6
AIR ABSORPTION	.0	.2	.6	2.1	5.7	11.1	19.0	37.2	99.6	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.0	-1.6	10.0	11.3	2.8	-3.1	-5.2	-1.7	-2.6	-2.8
TOTAL AWT 3.1	7.7	10.0	-2.0	1.1	-2.1	1.2	-8.1	-36.7	-100.0	-100.0

SOURCE : 16
CFS - curing (intenral) - conveyor belt / motor 1

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3
BARRIER	5.0	5.1	5.1	5.1	5.3	5.5	6.0	6.9	8.4	10.6
AIR ABSORPTION	.0	.2	.6	2.2	5.7	11.1	19.1	37.4	100.1	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.0	-1.6	10.0	11.4	2.8	-3.1	-5.2	-1.6	-2.6	-2.8
TOTAL AWT -11.9	.6	13.0	-12.0	-21.0	-18.2	-21.9	-31.2	-57.0	-100.0	-100.0

SOURCE : 17
CFS - curing (intenral) - conveyor belt / motor 2

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4
BARRIER	5.0	5.1	5.1	5.1	5.3	5.5	6.0	6.9	8.4	10.6
AIR ABSORPTION	.0	.2	.6	2.2	5.8	11.2	19.1	37.5	100.5	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.0	-1.5	10.0	11.4	2.9	-3.1	-5.2	-1.6	-2.7	-2.8
TOTAL AWT -11.9	.6	12.9	-12.1	-21.1	-18.3	-22.0	-31.3	-57.2	-100.0	-100.0

SOURCE : 18
CFS - curing (intenral) - conveyor belt / motor 3

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4
BARRIER	5.0	5.0	5.1	5.1	5.2	5.4	5.8	6.5	7.8	9.8

AIR ABSORPTION	.0	.2	.6	2.2	5.8	11.3	19.3	37.8	101.2	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.0	-1.5	10.0	11.3	2.8	-3.1	-5.2	-1.7	-2.6	-2.8
TOTAL AWT -12.0	.5	12.9	-12.2	-21.1	-18.3	-22.0	-31.4	-57.1	-100.0	-100.0

SOURCE : 19
CFS - curing (intenral) - conveyor belt / motor 4

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5
BARRIER	11.3	12.9	15.8	18.8	21.9	24.9	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.6	2.2	5.8	11.3	19.4	37.9	101.7	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.3	.3	8.8	.0	-4.6	-.3	-3.4	-2.3	-2.8	-3.4
TOTAL AWT -21.8	-6.6	3.1	-21.8	-23.5	-27.6	-44.4	-52.5	-75.1	-100.0	-100.0

SOURCE : 20
CFS - curing (intenral) - conveyor belt / motor 5

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5	76.5
BARRIER	12.7	15.4	18.4	21.4	24.4	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.6	2.2	5.8	11.3	19.3	37.8	101.5	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.4	.0	9.9	1.5	-4.3	-1.6	-2.8	-3.3	-2.5	-.9
TOTAL AWT -24.2	-7.8	.9	-25.4	-27.5	-30.4	-43.1	-53.0	-74.0	-100.0	-100.0

SOURCE : 21
CFS - curing (intenral) - conveyor belt / motor 6

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4	76.4
BARRIER	12.6	15.2	18.1	21.2	24.2	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.6	2.2	5.8	11.2	19.2	37.6	100.7	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.4	.0	9.7	1.2	-4.4	-1.1	-2.9	-3.3	-2.6	-4.4
TOTAL AWT -23.9	-7.7	1.2	-24.9	-26.9	-29.9	-43.5	-52.6	-73.7	-100.0	-100.0

SOURCE : 22
CFS - processing (external) - RTT manv

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	111.0	114.0	103.0	104.0	103.0	100.0	98.0	94.0	88.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.1	11.9	20.2	39.6	106.4	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.6	-2.9	7.5	15.0	15.0	15.0	10.6	4.4	-1.3	-5.2
TOTAL AWT 14.6	39.6	39.8	17.9	9.8	5.0	-3.7	-9.7	-26.8	-94.0	-100.0

SOURCE : 23
CFS - processing (external) - RTT reversing

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	57.0	75.0	75.0	79.0	89.0	93.0	91.0	87.0	77.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1	76.1
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.6	2.1	5.6	10.9	18.6	36.6	97.9	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.6	-3.1	6.8	15.0	15.0	14.8	9.6	3.4	-2.1	-5.5

TOTAL AWT -5.5	-13.6	1.8	-8.6	-14.2	-7.8	-8.9	-13.4	-29.2	-95.0	-100.0	

SOURCE : 24
CFS - processing (external) - dust collector / fan

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	100.0	102.0	106.0	109.0	108.0	101.0	94.0	89.0	83.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3
BARRIER	12.7	15.5	18.4	21.5	24.5	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.6	2.1	5.7	11.1	19.0	37.3	99.9	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.4	.0	9.8	1.4	-4.3	-1.5	-2.8	-3.3	-2.4	-2.6
TOTAL AWT 4.5	15.3	10.0	.8	7.7	5.8	-9.9	-23.6	-46.3	-100.0	-100.0

SOURCE : 25
CFS - processing (external) - forklift

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	101.0	100.0	99.0	97.0	93.0	93.0	91.0	88.0	83.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.6	2.1	5.7	11.0	18.8	36.9	98.9	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.6	-3.1	6.9	15.0	15.0	14.9	9.9	3.7	-1.9	-5.4
TOTAL AWT 4.4	30.3	26.7	15.2	3.6	-3.9	-9.1	-13.9	-28.8	-90.2	-100.0

SOURCE : 26
CFS - processing (external) - aggregate unload

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	110.0	111.0	102.0	100.0	101.0	104.0	101.0	97.0	105.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.6	2.1	5.7	11.0	18.8	36.9	98.9	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.6	-3.1	6.9	15.0	15.0	14.9	10.0	3.8	-1.8	-5.4
TOTAL AWT 13.1	39.3	37.7	18.2	6.6	4.1	1.9	-4.0	-19.9	-68.3	-100.0

SOURCE : 27
CFS - processing (external) - silo vent 1

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	82.0	86.0	89.0	88.0	81.0	74.0	69.0	63.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.6	2.1	5.7	11.1	19.0	37.2	99.6	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.8	-1.2	9.1	11.6	2.9	-3.2	-5.0	-1.9	-2.2	-3.1
TOTAL AWT 2.1	12.5	6.8	.0	-1.0	3.1	-3.2	-16.3	-42.5	-100.0	-100.0

SOURCE : 28
CFS - processing (external) - silo vent 2

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	82.0	86.0	89.0	88.0	81.0	74.0	69.0	63.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3	76.3
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.6	2.1	5.7	11.1	18.9	37.1	99.4	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.9	-1.2	9.1	11.6	2.9	-3.2	-5.0	-1.9	-2.2	-3.1
TOTAL AWT 2.2	12.5	6.8	.0	-1.0	3.1	-3.1	-16.2	-42.4	-100.0	-100.0

TOTAL AWT 18.4 42.9 42.2 23.4 16.5 12.2 7.5 .4 -16.1 -67.8 -88.0

SINGLE POINT CALCULATION
ENM CALC MODULE

FILENAMES
C:\ENM\SOURCES\2118506A\506A-3
2118506A.GEN
C:\ENM\MAPS\2118506A\506A

OUT1 file and RNK1 file

TEMP (deg C) HUMIDITY (%)
25.0 50.0

WIND SPEED (m/sec) WIND DIR (deg)
.0 .0

TEMP GRAD (deg C/100m)
.0

X= 3971.000 Y= 3280.000 Z= 22.200

SOURCE : 13
CFS - processing (external) - backhoe

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.2	6.0	11.6	19.8	38.8	104.2	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.6	-2.9	7.4	15.0	15.0	15.0	10.5	4.3	-1.4	-5.3
TOTAL AWT 1.0	23.8	21.0	10.2	1.0	-2.7	-8.3	-12.0	-24.8	-84.5	-100.0

SOURCE : 14
CFS - processing (external) - FEL

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	94.0	100.0	100.0	106.0	98.0	101.0	98.0	92.0	86.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.2	6.0	11.6	19.9	38.9	104.4	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.6	-2.9	7.4	15.0	15.0	15.0	10.3	4.1	-1.5	-5.3
TOTAL AWT 7.2	22.8	26.0	15.2	12.0	.3	-2.3	-8.9	-27.7	-93.6	-100.0

SOURCE : 15
CFS - curing (intenral) - FEL

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	90.0	90.0	96.0	88.0	91.0	88.0	82.0	76.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
BARRIER	5.0	5.0	5.1	5.1	5.3	5.5	5.9	6.7	8.2	10.3
AIR ABSORPTION	.0	.2	.7	2.3	6.1	11.8	20.1	39.3	105.6	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.0	-1.4	10.5	11.7	3.2	-2.8	-5.3	-1.2	-3.2	-2.8
TOTAL AWT 1.7	7.1	9.3	-3.1	.1	-3.4	-.2	-9.5	-39.7	-100.0	-100.0

SOURCE : 16
CFS - curing (intenral) - conveyor belt / motor 1

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
BARRIER	5.0	5.0	5.1	5.1	5.3	5.5	5.9	6.7	8.2	10.3
AIR ABSORPTION	.0	.2	.7	2.3	6.1	11.8	20.2	39.5	106.3	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

GROUND	-5.0	-1.4	10.5	11.7	3.2	-2.9	-5.3	-1.2	-3.2	-2.8
TOTAL AWT -12.7	.0	12.3	-13.1	-22.0	-19.4	-23.3	-32.7	-60.0	-100.0	-100.0

SOURCE : 17
CFS - curing (intenral) - conveyor belt / motor 2

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
BARRIER	5.0	5.0	5.1	5.1	5.2	5.5	5.9	6.7	8.1	10.3
AIR ABSORPTION	.0	.2	.7	2.3	6.1	11.9	20.3	39.8	106.9	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.0	-1.4	10.5	11.7	3.2	-2.8	-5.3	-1.1	-3.2	-2.8
TOTAL AWT -12.8	.0	12.2	-13.2	-22.1	-19.6	-23.5	-32.9	-60.3	-100.0	-100.0

SOURCE : 18
CFS - curing (intenral) - conveyor belt / motor 3

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
BARRIER	5.0	5.0	5.1	5.1	5.2	5.4	5.7	6.4	7.6	9.5
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.0	20.5	40.0	107.7	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.0	-1.4	10.5	11.7	3.2	-2.8	-5.3	-1.2	-3.2	-2.8
TOTAL AWT -12.8	-.1	12.2	-13.2	-22.1	-19.6	-23.5	-32.9	-60.3	-100.0	-100.0

SOURCE : 19
CFS - curing (intenral) - conveyor belt / motor 4

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
BARRIER	12.2	14.2	17.1	20.2	23.2	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.0	20.6	40.2	108.1	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.3	.4	9.8	1.0	-4.5	-1.1	-3.0	-3.3	-2.7	-4.1
TOTAL AWT -23.8	-8.0	1.2	-24.7	-26.6	-30.0	-45.0	-54.6	-76.9	-100.0	-100.0

SOURCE : 20
CFS - curing (intenral) - conveyor belt / motor 5

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
BARRIER	12.6	15.2	18.1	21.2	24.2	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.0	20.5	40.0	107.5	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.4	.2	10.2	1.6	-4.3	-2.0	-2.7	-3.1	-3.0	-2.8
TOTAL AWT -24.7	-8.3	.4	-26.0	-28.1	-31.1	-44.0	-54.8	-76.9	-100.0	-100.0

SOURCE : 21
CFS - curing (intenral) - conveyor belt / motor 6

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
BARRIER	12.5	14.9	17.9	20.9	23.9	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.3	6.1	11.9	20.2	39.6	106.4	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.4	.2	9.9	1.3	-4.4	-1.5	-2.8	-3.3	-2.4	-3.1
TOTAL AWT -24.3	-8.1	.8	-25.4	-27.4	-30.5	-44.3	-54.3	-76.1	-100.0	-100.0

SOURCE : 22
CFS - processing (external) - RTT manv

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	111.0	114.0	103.0	104.0	103.0	100.0	98.0	94.0	88.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.4	6.4	12.4	21.1	41.2	111.2	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.6	-2.8	8.0	15.0	15.0	15.0	10.9	4.6	-1.0	-5.1
TOTAL AWT 14.1	39.2	39.3	17.0	9.3	4.3	-4.7	-11.3	-29.2	-99.4	-100.0

SOURCE : 23
CFS - processing (external) - RTT reversing

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	57.0	75.0	75.0	79.0	89.0	93.0	91.0	87.0	77.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6	76.6
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.2	5.9	11.5	19.7	38.5	103.5	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.6	-2.9	7.3	15.0	15.0	14.9	10.2	4.0	-1.6	-5.3
TOTAL AWT -6.7	-14.1	1.1	-9.6	-14.9	-8.6	-10.1	-15.6	-32.2	-100.0	-100.0

SOURCE : 24
CFS - processing (external) - dust collector / fan

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	100.0	102.0	106.0	109.0	108.0	101.0	94.0	89.0	83.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
BARRIER	12.7	15.2	18.2	21.2	24.2	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.3	6.0	11.7	20.0	39.2	105.3	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.4	.2	10.1	1.5	-4.3	-1.8	-2.7	-3.2	-2.8	-.4
TOTAL AWT 3.9	14.9	9.6	.2	7.2	5.2	-10.7	-25.1	-48.8	-100.0	-100.0

SOURCE : 25
CFS - processing (external) - forklift

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	101.0	100.0	99.0	97.0	93.0	93.0	91.0	88.0	83.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.0	11.6	19.9	38.9	104.6	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.6	-2.9	7.4	15.0	15.0	14.9	10.2	4.0	-1.6	-5.4
TOTAL AWT 3.6	29.8	26.0	14.2	3.0	-4.8	-10.3	-15.9	-31.7	-96.7	-100.0

SOURCE : 26
CFS - processing (external) - aggregate unload

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	110.0	111.0	102.0	100.0	101.0	104.0	101.0	97.0	105.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7	76.7
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.2	6.0	11.6	19.8	38.8	104.2	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.6	-2.9	7.4	15.0	15.0	14.9	10.1	3.9	-1.7	-5.4
TOTAL AWT 12.4	38.8	37.0	17.2	6.0	3.3	.8	-5.6	-22.4	-74.3	-100.0

SOURCE : 27
CFS - processing (external) - silo vent 1

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	82.0	86.0	89.0	88.0	81.0	74.0	69.0	63.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.0	11.7	20.0	39.1	104.9	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.8	-1.1	9.6	11.9	3.2	-3.0	-5.1	-1.5	-2.7	-2.8
TOTAL AWT 1.0	12.0	6.1	-1.0	-1.9	2.0	-4.5	-17.6	-45.3	-100.0	-100.0

SOURCE : 28
CFS - processing (external) - silo vent 2

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	82.0	86.0	89.0	88.0	81.0	74.0	69.0	63.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.0	11.7	19.9	39.0	104.7	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.8	-1.1	9.6	11.8	3.2	-3.0	-5.1	-1.6	-2.6	-2.8
TOTAL AWT 1.0	12.0	6.1	-1.0	-1.9	2.0	-4.4	-17.6	-45.2	-100.0	-100.0

TOTAL AWT 17.7	42.4	41.6	22.5	15.9	11.4	6.3	-1.3	-18.7	-73.7	-88.0

SINGLE POINT CALCULATION
ENM CALC MODULE

FILENAMES
C:\ENM\SOURCES\2118506A\506A-3
2118506A.GEN
C:\ENM\MAPS\2118506A\506A

OUT1 file and RNK1 file

TEMP (deg C)	HUMIDITY (%)
25.0	50.0

WIND SPEED (m/sec)	WIND DIR (deg)
.0	.0

TEMP GRAD (deg C/100m)
.0

X= 4129.000 Y= 3329.000 Z= 31.200

SOURCE : 13
CFS - processing (external) - backhoe

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.4	6.5	12.6	21.4	41.8	112.7	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.9	-1.1	10.4	13.6	5.4	-1.3	-5.2	-1.3	-3.1	-3.5
TOTAL AWT 9.2	22.4	18.5	6.4	1.5	5.7	6.3	1.4	-22.9	-91.9	-100.0

SOURCE : 14
CFS - processing (external) - FEL

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	94.0	100.0	100.0	106.0	98.0	101.0	98.0	92.0	86.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.4	6.5	12.6	21.5	41.8	112.9	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.9	-1.1	10.4	13.6	5.4	-1.3	-5.2	-1.3	-3.1	-3.5

TOTAL AWT	14.4	21.4	23.4	11.4	12.5	8.7	12.2	4.3	-26.0	-100.0	-100.0

SOURCE : 15
CFS - curing (intenral) - FEL

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	90.0	90.0	96.0	88.0	91.0	88.0	82.0	76.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5
BARRIER	5.0	5.0	5.1	5.1	5.2	5.3	5.5	6.0	7.0	8.5
AIR ABSORPTION	.0	.2	.7	2.5	6.6	12.7	21.7	42.3	114.1	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.4	.2	10.9	2.4	-3.9	-3.2	-2.6	-2.6	-2.9	-4.1
TOTAL AWT	4.3	5.8	7.0	-4.2	8.5	2.7	-1.3	-14.1	-41.2	-100.0	-100.0

SOURCE : 16
CFS - curing (intenral) - conveyor belt / motor 1

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6
BARRIER	5.0	5.0	5.1	5.1	5.1	5.3	5.5	6.0	6.8	8.3
AIR ABSORPTION	.0	.2	.7	2.5	6.6	12.8	21.8	42.5	114.7	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.4	.3	10.9	2.5	-3.9	-3.3	-2.7	-2.6	-2.9	-3.2
TOTAL AWT	-12.5	-1.3	9.9	-14.3	-13.6	-13.5	-24.3	-37.2	-61.4	-100.0	-100.0

SOURCE : 17
CFS - curing (intenral) - conveyor belt / motor 2

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6
BARRIER	5.0	5.0	5.1	5.1	5.1	5.3	5.5	6.0	6.8	8.4
AIR ABSORPTION	.0	.2	.7	2.5	6.6	12.9	21.9	42.7	115.3	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.4	.3	11.0	2.5	-3.8	-3.4	-2.7	-2.6	-2.9	-2.1
TOTAL AWT	-12.6	-1.3	9.9	-14.4	-13.7	-13.6	-24.4	-37.4	-61.7	-100.0	-100.0

SOURCE : 18
CFS - curing (intenral) - conveyor belt / motor 3

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7
BARRIER	5.0	5.0	5.0	5.1	5.1	5.2	5.3	5.6	6.1	7.1
AIR ABSORPTION	.0	.2	.7	2.5	6.7	13.0	22.1	43.0	116.1	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.4	.3	11.0	2.5	-3.8	-3.4	-2.7	-2.6	-2.9	-1.9
TOTAL AWT	-12.6	-1.4	9.8	-14.4	-13.8	-13.6	-24.4	-37.4	-61.6	-100.0	-100.0

SOURCE : 19
CFS - curing (intenral) - conveyor belt / motor 4

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7
BARRIER	12.1	14.1	17.0	20.1	23.1	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.5	6.7	13.0	22.1	43.1	116.5	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.7	1.8	5.1	-3.0	-2.2	-2.2	-2.7	-3.0	-4.3	-2.5
TOTAL AWT	-25.0	-9.2	-.8	-20.6	-23.3	-33.3	-45.5	-57.2	-80.9	-100.0	-100.0

SOURCE : 20

CFS - curing (intenral) - conveyor belt / motor 5

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7	77.7
BARRIER	12.6	15.2	18.1	21.1	24.1	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.5	6.7	12.9	22.0	42.9	116.0	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.8	1.6	5.6	-2.7	-2.8	-2.3	-2.6	-2.6	-4.0	-2.4
TOTAL AWT -26.0	-9.6	-1.7	-22.2	-24.6	-33.7	-45.4	-57.2	-81.0	-100.0	-100.0

SOURCE : 21
CFS - curing (intenral) - conveyor belt / motor 6

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6	77.6
BARRIER	12.5	14.9	17.8	20.9	23.9	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.5	6.6	12.8	21.8	42.5	114.9	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.8	1.6	5.4	-2.8	-2.5	-2.2	-2.6	-2.7	.0	-1.7
TOTAL AWT -25.6	-9.4	-1.3	-21.6	-24.1	-33.5	-45.2	-56.8	-80.4	-100.0	-100.0

SOURCE : 22
CFS - processing (external) - RTT manv

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	111.0	114.0	103.0	104.0	103.0	100.0	98.0	94.0	88.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.1	.2	.8	2.6	6.9	13.4	22.7	44.2	119.7	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.8	-.9	11.0	13.7	5.6	-1.1	-5.2	-1.6	-3.0	-3.6
TOTAL AWT 15.3	37.8	36.7	13.3	9.7	12.6	9.8	2.5	-26.5	-100.0	-100.0

SOURCE : 23
CFS - processing (external) - RTT reversing

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	57.0	75.0	75.0	79.0	89.0	93.0	91.0	87.0	77.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.4	6.4	12.5	21.3	41.5	111.9	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.9	-1.1	10.3	13.6	5.4	-1.3	-5.2	-1.3	-3.2	-3.5
TOTAL AWT 6.0	-15.5	-1.5	-13.4	-14.4	-.2	4.4	-2.4	-30.6	-100.0	-100.0

SOURCE : 24
CFS - processing (external) - dust collector / fan

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	100.0	102.0	106.0	109.0	108.0	101.0	94.0	89.0	83.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5
BARRIER	12.7	15.2	18.2	21.2	24.2	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.5	6.5	12.7	21.6	42.2	113.8	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-3.8	1.6	5.5	-2.8	-2.7	-2.2	-2.6	-2.6	-1.5	-3.0
TOTAL AWT 4.1	13.6	7.5	4.1	10.6	2.4	-12.0	-27.6	-53.0	-100.0	-100.0

SOURCE : 25
CFS - processing (external) - forklift

	FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	101.0	100.0	99.0	97.0	93.0	93.0	91.0	88.0	83.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.4	6.5	12.6	21.5	41.9	113.0	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.9	-1.1	10.4	13.7	5.4	-1.2	-5.2	-1.4	-3.1	-3.6
TOTAL AWT 7.5	28.4	23.4	10.4	3.5	3.6	4.2	-2.7	-30.0	-100.0	-100.0

SOURCE : 26
CFS - processing (external) - aggregate unload

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	110.0	111.0	102.0	100.0	101.0	104.0	101.0	97.0	105.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.4	6.5	12.6	21.4	41.8	112.7	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.9	-1.1	10.4	13.6	5.4	-1.2	-5.2	-1.3	-3.1	-3.6
TOTAL AWT 17.5	37.4	34.5	13.4	6.5	11.7	15.2	7.4	-20.9	-82.0	-100.0

SOURCE : 27
CFS - processing (external) - silo vent 1

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	82.0	86.0	89.0	88.0	81.0	74.0	69.0	63.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.4	6.5	12.6	21.6	42.0	113.4	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.4	-.3	8.5	5.7	-2.0	-4.9	-1.2	-2.6	-2.7	-2.2
TOTAL AWT 4.2	10.9	4.6	-.7	3.4	6.0	-4.2	-23.8	-47.9	-100.0	-100.0

SOURCE : 28
CFS - processing (external) - silo vent 2

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	82.0	86.0	89.0	88.0	81.0	74.0	69.0	63.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5	77.5
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.4	6.5	12.6	21.5	41.9	113.2	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.4	-.3	8.5	5.7	-2.0	-4.9	-1.2	-2.6	-2.7	-2.2
TOTAL AWT 4.2	10.9	4.6	-.7	3.4	6.1	-4.2	-23.8	-47.8	-100.0	-100.0

TOTAL AWT 21.6	41.0	39.0	18.9	17.7	17.7	18.5	11.0	-17.0	-80.8	-88.0

SINGLE POINT CALCULATION
ENM CALC MODULE

FILENAMES
C:\ENM\SOURCES\2118506A\506A-3
2118506A.GEN
C:\ENM\MAPS\2118506A\506A

OUT1 file and RNK1 file

TEMP (deg C)	HUMIDITY (%)
25.0	50.0

WIND SPEED (m/sec)	WIND DIR (deg)
.0	.0

TEMP GRAD (deg C/100m)
.0

X= 3079.000 Y= 3574.000 Z= 22.200

SOURCE : 13
CFS - processing (external) - backhoe

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.1	.5	1.6	4.3	8.3	14.4	28.7	75.8	250.6
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.7	-3.6	4.8	15.0	15.0	14.3	8.1	1.9	-3.3	-5.4
TOTAL AWT 6.7	26.9	24.7	15.9	4.6	1.9	-1.4	-1.3	-9.5	-51.3	-100.0

SOURCE : 14
CFS - processing (external) - FEL

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	94.0	100.0	100.0	106.0	98.0	101.0	98.0	92.0	86.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.1	.5	1.6	4.3	8.4	14.5	28.8	76.0	251.5
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.7	-3.6	4.8	15.0	15.0	14.3	8.2	2.0	-3.2	-5.5
TOTAL AWT 12.2	25.8	29.7	20.9	15.6	4.9	4.5	1.5	-12.7	-60.6	-100.0

SOURCE : 15
CFS - curing (intenral) - FEL

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	90.0	90.0	96.0	88.0	91.0	88.0	82.0	76.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.1	.5	1.7	4.5	8.6	14.8	29.6	78.1	258.6
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.7	-3.6	5.0	15.0	15.0	14.5	8.5	2.3	-3.0	-5.5
TOTAL AWT 1.7	15.6	19.4	10.4	5.3	-5.5	-6.1	-9.4	-23.9	-73.1	-100.0

SOURCE : 16
CFS - curing (intenral) - conveyor belt / motor 1

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.1	.5	1.7	4.5	8.7	15.1	30.0	79.1	262.2
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.7	-3.5	5.1	15.0	15.0	14.5	8.7	2.5	-2.8	-5.5
TOTAL AWT -3.6	8.4	22.2	.2	-16.9	-21.7	-29.5	-32.9	-44.6	-92.5	-100.0

SOURCE : 17
CFS - curing (intenral) - conveyor belt / motor 2

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3
BARRIER	5.0	5.0	5.1	5.1	5.2	5.3	5.6	6.1	7.1	8.7
AIR ABSORPTION	.0	.1	.5	1.7	4.6	8.9	15.2	30.3	80.1	265.7
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.2	-2.2	7.8	10.5	1.8	-3.9	-4.3	-2.6	-2.4	-2.3
TOTAL AWT -8.5	2.8	15.8	-7.6	-17.6	-13.9	-16.6	-25.8	-46.1	-100.0	-100.0

SOURCE : 18
CFS - curing (intenral) - conveyor belt / motor 3

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4
BARRIER	12.4	14.6	17.6	20.6	23.6	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.1	.5	1.7	4.6	9.0	15.4	30.6	81.0	268.7
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.7	-.9	9.1	2.2	-4.0	-2.2	-2.6	-2.9	-3.1	-4.5
TOTAL AWT -20.4	-5.2	4.8	-21.6	-24.9	-26.6	-38.2	-47.2	-65.1	-100.0	-100.0

SOURCE : 19
CFS - curing (intenral) - conveyor belt / motor 4

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4	74.4
BARRIER	12.7	15.4	18.4	21.4	24.4	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.1	.5	1.7	4.6	9.0	15.5	30.7	81.2	269.5
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.5	-.5	8.3	.1	-4.5	-.4	-3.1	-2.5	-1.9	-2.5
TOTAL AWT -21.4	-5.7	3.5	-21.6	-23.7	-27.0	-40.0	-46.8	-65.6	-100.0	-100.0

SOURCE : 20
CFS - curing (intenral) - conveyor belt / motor 5

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3
BARRIER	11.9	13.7	16.7	19.7	22.7	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.1	.5	1.7	4.6	8.8	15.2	30.2	80.0	265.1
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.4	-.3	7.4	-1.1	-4.1	-1.7	-1.6	-3.1	-1.7	-1.7
TOTAL AWT -19.5	-4.8	5.2	-18.8	-20.6	-25.5	-38.4	-47.9	-64.5	-100.0	-100.0

SOURCE : 21
CFS - curing (intenral) - conveyor belt / motor 6

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1	74.1
BARRIER	11.7	13.4	16.4	19.4	22.4	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.1	.5	1.7	4.5	8.6	14.9	29.6	78.2	258.9
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.4	-.3	7.1	-1.3	-3.8	-2.0	-1.9	-2.3	-2.9	-3.1
TOTAL AWT -19.0	-4.4	5.8	-18.0	-19.8	-25.1	-37.7	-47.0	-64.4	-100.0	-100.0

SOURCE : 22
CFS - processing (external) - RTT manv

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	111.0	114.0	103.0	104.0	103.0	100.0	98.0	94.0	88.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.1	.5	1.7	4.6	8.9	15.3	30.3	80.2	266.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.7	-3.5	5.2	15.0	15.0	14.6	8.8	2.6	-2.8	-5.5
TOTAL AWT 18.1	42.3	43.1	23.0	13.0	9.1	2.2	-.4	-13.3	-63.8	-100.0

SOURCE : 23
CFS - processing (external) - RTT reversing

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k

POWER LEVEL	57.0	75.0	75.0	79.0	89.0	93.0	91.0	87.0	77.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.1	.5	1.6	4.3	8.3	14.3	28.6	75.3	248.9
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.7	-3.6	4.8	15.0	15.0	14.3	8.1	1.9	-3.3	-5.4
TOTAL AWT .5	-11.1	4.8	-4.0	-11.3	-4.0	-3.3	-5.1	-17.2	-68.7	-100.0

SOURCE : 24
CFS - processing (external) - dust collector / fan

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	100.0	102.0	106.0	109.0	108.0	101.0	94.0	89.0	83.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.1	.5	1.6	4.4	8.4	14.5	29.0	76.4	252.9
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.7	-3.6	4.9	15.0	15.0	14.4	8.3	2.1	-3.1	-5.5
TOTAL AWT 16.3	31.8	31.6	26.8	18.5	14.8	4.3	-2.7	-16.0	-64.2	-100.0

SOURCE : 25
CFS - processing (external) - forklift

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	101.0	100.0	99.0	97.0	93.0	93.0	91.0	88.0	83.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.1	.5	1.6	4.4	8.4	14.6	29.0	76.6	253.4
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.7	-3.6	4.9	15.0	15.0	14.4	8.4	2.2	-3.1	-5.5
TOTAL AWT 8.2	32.8	29.6	19.8	6.5	-.2	-3.7	-5.8	-17.1	-64.4	-100.0

SOURCE : 26
CFS - processing (external) - aggregate unload

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	110.0	111.0	102.0	100.0	101.0	104.0	101.0	97.0	105.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.1	.5	1.6	4.3	8.3	14.4	28.7	75.6	249.9
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.7	-3.6	4.8	15.0	15.0	14.2	7.9	1.8	-3.4	-5.4
TOTAL AWT 17.0	41.9	40.7	23.0	9.6	7.9	7.8	5.0	-7.2	-40.9	-100.0

SOURCE : 27
CFS - processing (external) - silo vent 1

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	82.0	86.0	89.0	88.0	81.0	74.0	69.0	63.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.1	.5	1.6	4.3	8.4	14.4	28.8	76.0	251.4
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.0	-1.9	6.9	9.5	.9	-4.4	-2.6	-2.6	-2.8	-2.9
TOTAL AWT 8.1	15.1	9.9	4.9	4.1	8.9	3.2	-11.7	-31.1	-84.0	-100.0

SOURCE : 28
CFS - processing (external) - silo vent 2

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	82.0	86.0	89.0	88.0	81.0	74.0	69.0	63.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

DISTANCE	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8	73.8
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.1	.5	1.6	4.3	8.4	14.4	28.8	75.9	250.9
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.0	-1.9	6.8	9.5	.9	-4.4	-2.6	-2.6	-2.8	-2.9
TOTAL AWT 8.1	15.1	10.0	4.9	4.1	9.0	3.3	-11.6	-31.0	-83.9	-100.0

TOTAL AWT 23.0	45.7	45.6	30.6	21.8	18.2	12.9	8.8	-3.2	-40.4	-88.0

SINGLE POINT CALCULATION
ENM CALC MODULE

FILENAMES
 C:\ENM\SOURCES\2118506A\506A-3
 2118506A.GEN
 C:\ENM\MAPS\2118506A\506A

 OUT1 file and RNK1 file

TEMP (deg C)	HUMIDITY (%)
25.0	50.0

WIND SPEED (m/sec)	WIND DIR (deg)
.0	.0

TEMP GRAD (deg C/100m)
 .0

X= 2719.000 Y= 3953.000 Z= 22.200

SOURCE : 13
CFS - processing (external) - backhoe

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.1	.5	1.8	4.8	9.3	15.9	31.6	83.6	277.8
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.7	-3.5	5.5	15.0	15.0	14.8	9.4	3.2	-2.2	-5.5
TOTAL AWT 4.8	25.9	23.6	14.3	3.5	.5	-3.7	-5.1	-14.5	-61.1	-100.0

SOURCE : 14
CFS - processing (external) - FEL

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	94.0	100.0	100.0	106.0	98.0	101.0	98.0	92.0	86.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.1	.5	1.8	4.8	9.3	16.0	31.7	83.9	278.7
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.7	-3.5	5.5	15.0	15.0	14.8	9.6	3.3	-2.2	-5.5
TOTAL AWT 10.5	24.9	28.6	19.3	14.5	3.5	2.2	-2.3	-17.7	-70.5	-100.0

SOURCE : 15
CFS - curing (intenral) - FEL

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	90.0	90.0	96.0	88.0	91.0	88.0	82.0	76.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0	75.0
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.1	.5	1.8	4.9	9.6	16.4	32.5	86.3	286.8
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.7	-3.4	5.7	15.0	15.0	14.9	9.9	3.7	-1.9	-5.4
TOTAL AWT .1	14.6	18.3	8.8	4.2	-6.9	-8.4	-13.3	-29.1	-83.4	-100.0

SOURCE : 16
CFS - curing (intenral) - conveyor belt / motor 1

	FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.1	.6	1.9	5.0	9.7	16.7	32.9	87.5	290.8
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.7	-3.4	5.8	15.0	15.0	14.9	10.0	3.8	-1.8	-5.4
TOTAL AWT -4.7	7.5	21.1	-1.4	-18.0	-23.1	-31.7	-36.8	-49.8	-100.0	-100.0

SOURCE : 17
CFS - curing (intenral) - conveyor belt / motor 2

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.1	.6	1.9	5.1	9.8	16.9	33.3	88.6	294.2
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.7	-3.4	5.9	15.0	15.0	15.0	10.3	4.0	-1.6	-5.3
TOTAL AWT -4.9	7.4	21.0	-1.7	-18.1	-23.3	-32.0	-37.4	-50.6	-100.0	-100.0

SOURCE : 18
CFS - curing (intenral) - conveyor belt / motor 3

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3
BARRIER	12.5	14.9	17.9	20.9	23.9	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.1	.6	1.9	5.1	9.9	17.0	33.6	89.5	296.5
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.5	-.2	8.9	.5	-4.5	-.3	-3.4	-2.0	-3.1	-2.0
TOTAL AWT -22.1	-6.5	2.8	-22.7	-24.7	-27.8	-41.9	-49.0	-69.9	-100.0	-100.0

SOURCE : 19
CFS - curing (intenral) - conveyor belt / motor 4

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3	75.3
BARRIER	12.8	15.7	18.7	21.7	24.7	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.1	.6	1.9	5.1	9.9	17.0	33.6	89.5	296.6
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.5	-.4	8.9	.9	-4.5	-.5	-3.3	-2.4	-2.4	-4.3
TOTAL AWT -22.8	-6.7	2.2	-23.5	-25.8	-28.7	-41.8	-49.1	-69.6	-100.0	-100.0

SOURCE : 20
CFS - curing (intenral) - conveyor belt / motor 5

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2	75.2
BARRIER	9.2	11.5	13.0	16.0	19.1	22.1	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.1	.6	1.9	5.0	9.7	16.7	33.1	87.9	292.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.3	.0	6.9	-1.7	-3.6	-2.1	-2.3	-2.0	-3.1	-4.1
TOTAL AWT -18.1	-3.1	6.2	-15.6	-17.4	-23.6	-36.8	-49.6	-69.2	-100.0	-100.0

SOURCE : 21
CFS - curing (intenral) - conveyor belt / motor 6

FREQUENCY Hz

	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0

DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9
BARRIER	8.8	11.0	12.7	15.4	18.5	21.5	24.5	25.0	25.0	25.0
AIR ABSORPTION	.0	.1	.5	1.8	4.9	9.5	16.3	32.3	85.8	285.3
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.2	.2	6.4	-2.1	-3.0	-2.1	-2.5	-2.7	-2.9	-3.6
TOTAL AWT -17.4	-2.5	6.7	-14.6	-16.1	-23.3	-35.8	-48.3	-67.6	-100.0	-100.0

SOURCE : 22
CFS - processing (external) - RTT manv

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	111.0	114.0	103.0	104.0	103.0	100.0	98.0	94.0	88.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9	74.9
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.1	.5	1.8	4.9	9.5	16.3	32.2	85.5	284.2
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.7	-3.4	5.6	15.0	15.0	14.8	9.7	3.4	-2.1	-5.5
TOTAL AWT 17.4	41.7	42.4	21.9	12.3	8.2	.8	-2.8	-16.6	-70.4	-100.0

SOURCE : 23
CFS - processing (external) - RTT reversing

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	57.0	75.0	75.0	79.0	89.0	93.0	91.0	87.0	77.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.1	.5	1.8	4.8	9.2	15.9	31.5	83.4	277.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.7	-3.5	5.4	15.0	15.0	14.8	9.4	3.2	-2.2	-5.5
TOTAL AWT -2.2	-12.0	3.7	-5.6	-12.5	-5.4	-5.7	-9.0	-22.4	-78.8	-100.0

SOURCE : 24
CFS - processing (external) - dust collector / fan

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	100.0	102.0	106.0	109.0	108.0	101.0	94.0	89.0	83.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.1	.5	1.8	4.8	9.3	16.0	31.6	83.9	278.6
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.7	-3.5	5.5	15.0	15.0	14.8	9.6	3.3	-2.2	-5.5
TOTAL AWT 15.0	30.9	30.6	25.3	17.5	13.5	2.2	-6.2	-20.7	-73.5	-100.0

SOURCE : 25
CFS - processing (external) - forklift

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	101.0	100.0	99.0	97.0	93.0	93.0	91.0	88.0	83.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8	74.8
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.1	.5	1.8	4.8	9.4	16.1	31.9	84.6	281.2
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.7	-3.4	5.5	15.0	15.0	14.9	9.8	3.6	-2.0	-5.5
TOTAL AWT 6.7	31.8	28.5	18.1	5.4	-1.6	-6.1	-9.7	-22.3	-74.5	-100.0

SOURCE : 26
CFS - processing (external) - aggregate unload

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	110.0	111.0	102.0	100.0	101.0	104.0	101.0	97.0	105.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7

BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.1	.5	1.8	4.8	9.2	15.9	31.4	83.3	276.6
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.7	-3.5	5.4	15.0	15.0	14.8	9.4	3.2	-2.2	-5.5
TOTAL AWT 15.5	41.0	39.7	21.4	8.6	6.6	5.3	1.1	-12.3	-50.7	-100.0

SOURCE : 27
CFS - processing (external) - silo vent 1

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	82.0	86.0	89.0	88.0	81.0	74.0	69.0	63.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.1	.5	1.8	4.8	9.2	15.9	31.5	83.5	277.3
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.9	-1.7	7.6	10.5	1.8	-3.9	-3.9	-2.7	-2.6	-2.4
TOTAL AWT 5.9	14.2	8.9	3.2	2.1	6.7	1.0	-12.6	-34.5	-92.6	-100.0

SOURCE : 28
CFS - processing (external) - silo vent 2

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	82.0	86.0	89.0	88.0	81.0	74.0	69.0	63.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7	74.7
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.1	.5	1.8	4.8	9.2	15.9	31.5	83.4	277.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.9	-1.7	7.6	10.4	1.8	-4.0	-3.9	-2.7	-2.6	-2.4
TOTAL AWT 5.9	14.2	8.9	3.2	2.1	6.7	1.1	-12.6	-34.5	-92.5	-100.0

TOTAL AWT 21.8	44.9	44.7	29.1	20.8	16.8	10.6	5.2	-8.1	-50.2	-88.0

SINGLE POINT CALCULATION
ENM CALC MODULE

FILENAMES
C:\ENM\SOURCES\2118506A\506A-3
2118506A.GEN
C:\ENM\MAPS\2118506A\506A

OUT1 file and RNK1 file

TEMP (deg C)	HUMIDITY (%)
25.0	50.0

WIND SPEED (m/sec)	WIND DIR (deg)
.0	.0

TEMP GRAD (deg C/100m)
.0

X= 2366.000 Y= 4471.000 Z= 22.200

SOURCE : 13
CFS - processing (external) - backhoe

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.1	11.8	20.2	39.4	106.0	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.7	-3.3	6.6	15.0	15.0	15.0	15.0	11.7	5.6	.0
TOTAL AWT .9	23.8	21.3	10.9	.9	-3.0	-8.7	-17.0	-33.0	-93.5	-100.0

SOURCE : 14
CFS - processing (external) - FEL

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k

POWER LEVEL	94.0	100.0	100.0	106.0	98.0	101.0	98.0	92.0	86.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.1	11.8	20.2	39.5	106.2	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.7	-3.3	6.6	15.0	15.0	15.0	15.0	11.4	5.3	-.3
TOTAL AWT 7.1	22.8	26.2	15.8	11.8	.0	-2.7	-14.1	-35.8	-100.0	-100.0

SOURCE : 15
CFS - curing (intenral) - FEL

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	90.0	90.0	96.0	88.0	91.0	88.0	82.0	76.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1	77.1
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.1	20.7	40.4	108.7	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.7	-3.3	6.8	15.0	15.0	15.0	15.0	12.0	6.0	.2
TOTAL AWT -3.2	12.6	16.0	5.4	1.6	-10.3	-13.2	-24.8	-47.5	-100.0	-100.0

SOURCE : 16
CFS - curing (intenral) - conveyor belt / motor 1

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.4	6.3	12.3	20.9	40.8	109.9	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.7	-3.2	6.9	15.0	15.0	15.0	15.0	12.0	6.0	.2
TOTAL AWT -7.1	5.5	18.8	-4.8	-20.6	-26.5	-36.4	-48.1	-68.0	-100.0	-100.0

SOURCE : 17
CFS - curing (intenral) - conveyor belt / motor 2

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
BARRIER	6.9	8.4	10.5	12.5	14.8	17.8	20.8	23.8	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.4	6.4	12.4	21.1	41.2	111.1	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.3	.3	9.1	.2	-4.6	-.3	-3.4	-2.1	-3.3	-1.9
TOTAL AWT -17.6	-2.9	6.8	-17.6	-18.4	-21.8	-39.2	-50.8	-78.3	-100.0	-100.0

SOURCE : 18
CFS - curing (intenral) - conveyor belt / motor 3

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4	77.4
BARRIER	12.6	15.0	18.0	21.0	24.0	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.4	6.4	12.5	21.3	41.5	111.8	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.5	.0	10.9	2.8	-3.7	-3.7	-2.6	-2.6	-2.7	-2.1
TOTAL AWT -24.9	-8.5	.5	-26.9	-29.6	-32.1	-43.2	-56.0	-79.2	-100.0	-100.0

SOURCE : 19
CFS - curing (intenral) - conveyor belt / motor 4

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

DISTANCE	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
BARRIER	12.8	15.8	18.8	21.8	24.8	25.0	25.0	25.0	25.0	25.0
AIR ABSORPTION	.0	.2	.7	2.4	6.4	12.5	21.2	41.4	111.7	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.5	-.1	11.4	3.7	-3.1	-4.5	-2.3	-2.1	-3.1	-3.2
TOTAL AWT -25.7	-8.7	-.2	-28.2	-31.2	-33.4	-42.3	-56.3	-79.7	-100.0	-100.0

SOURCE : 20
CFS - curing (intenral) - conveyor belt / motor 5

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2	77.2
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.4	6.3	12.3	20.9	40.8	110.0	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.7	-3.2	6.9	15.0	15.0	15.0	15.0	11.7	5.6	-.1
TOTAL AWT -7.1	5.5	18.8	-4.8	-20.6	-26.5	-36.5	-48.1	-67.8	-100.0	-100.0

SOURCE : 21
CFS - curing (intenral) - conveyor belt / motor 6

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	77.0	93.0	80.0	74.0	72.0	68.0	65.0	62.0	58.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.2	12.0	20.5	40.1	107.9	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.7	-3.3	6.7	15.0	15.0	15.0	15.0	11.7	5.6	-.1
TOTAL AWT -6.9	5.6	19.1	-4.4	-20.3	-26.2	-36.0	-47.5	-66.9	-100.0	-100.0

SOURCE : 22
CFS - processing (external) - RTT manv

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	111.0	114.0	103.0	104.0	103.0	100.0	98.0	94.0	88.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.1	11.8	20.1	39.3	105.7	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.7	-3.3	6.5	15.0	15.0	15.0	15.0	11.1	5.1	-.6
TOTAL AWT 15.1	39.8	40.3	18.9	9.9	5.1	-3.6	-13.9	-33.3	-99.6	-100.0

SOURCE : 23
CFS - processing (external) - RTT reversing

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	57.0	75.0	75.0	79.0	89.0	93.0	91.0	87.0	77.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.1	11.8	20.2	39.4	106.0	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.7	-3.3	6.6	15.0	15.0	15.0	15.0	11.4	5.3	-.3
TOTAL AWT -7.8	-14.2	1.3	-9.1	-15.1	-9.0	-10.7	-21.0	-40.7	-100.0	-100.0

SOURCE : 24
CFS - processing (external) - dust collector / fan

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	100.0	102.0	106.0	109.0	108.0	101.0	94.0	89.0	83.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9	76.9
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.1	11.8	20.2	39.4	105.9	300.0

TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.7	-3.3	6.6	15.0	15.0	15.0	15.0	11.7	5.6	.0
TOTAL AWT 11.8	28.8	28.3	21.9	14.9	10.1	-2.7	-18.0	-39.0	-100.0	-100.0

SOURCE : 25
CFS - processing (external) - forklift

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	101.0	100.0	99.0	97.0	93.0	93.0	91.0	88.0	83.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.2	11.9	20.4	39.8	107.1	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.7	-3.3	6.6	15.0	15.0	15.0	15.0	11.4	5.3	-.3
TOTAL AWT 3.7	29.7	26.2	14.7	2.7	-5.1	-10.9	-21.3	-40.2	-100.0	-100.0

SOURCE : 26
CFS - processing (external) - aggregate unload

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	110.0	111.0	102.0	100.0	101.0	104.0	101.0	97.0	105.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.1	11.8	20.1	39.3	105.5	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-5.7	-3.3	6.5	15.0	15.0	15.0	15.0	11.4	5.3	-.3
TOTAL AWT 12.6	38.8	37.3	18.0	5.9	3.1	.4	-10.9	-30.5	-82.7	-100.0

SOURCE : 27
CFS - processing (external) - silo vent 1

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	82.0	86.0	89.0	88.0	81.0	74.0	69.0	63.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.1	11.8	20.1	39.3	105.6	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.9	-1.2	10.0	13.0	4.5	-2.0	-5.4	-.6	-3.7	-2.3
TOTAL AWT -.3	12.0	6.2	-1.5	-3.1	.6	-5.6	-17.6	-46.5	-100.0	-100.0

SOURCE : 28
CFS - processing (external) - silo vent 2

	FREQUENCY Hz									
	31.5	63	125	250	500	1k	2k	4k	8k	16k
POWER LEVEL	84.0	82.0	86.0	89.0	88.0	81.0	74.0	69.0	63.0	.0
DIRECTIVITY	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
DISTANCE	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8	76.8
BARRIER	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
AIR ABSORPTION	.0	.2	.7	2.3	6.1	11.8	20.1	39.3	105.5	300.0
TEMP & WIND	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
GROUND	-4.9	-1.2	10.0	13.0	4.5	-2.0	-5.4	-.6	-3.7	-2.3
TOTAL AWT -.2	12.0	6.2	-1.5	-3.1	.6	-5.6	-17.6	-46.5	-100.0	-100.0

TOTAL AWT 18.9	42.9	42.6	25.8	18.1	13.0	5.5	-6.0	-26.1	-81.4	-88.0

Appendix D

Sample ENM ranking file

OUTPUT FOR (.rnk) Rutherford Waste Revocey - Scn A-3 (CFS) neutral

PROGRAM ENM SOURCE RANKING
SINGLE POINT CALCULATION

X= 647.0 Y= 3483.0 Z= 46.2

SOURCE TITLE	dB(A)
24 CFS - processing (external) - dust collector / fan	23.9
26 CFS - processing (external) - aggregate unload	22.6
22 CFS - processing (external) - RTT manv	22.4
23 CFS - processing (external) - RTT reversing	11.0
27 CFS - processing (external) - silo vent 1	7.9
28 CFS - processing (external) - silo vent 2	7.9
14 CFS - processing (external) - FEL	1.1
25 CFS - processing (external) - forklift	-3.6
13 CFS - processing (external) - backhoe	-7.1
15 CFS - curing (intenral) - FEL	-8.5
19 CFS - curing (intenral) - conveyor belt / motor 4	-20.9
21 CFS - curing (intenral) - conveyor belt / motor 6	-21.9
18 CFS - curing (intenral) - conveyor belt / motor 3	-22.1
20 CFS - curing (intenral) - conveyor belt / motor 5	-22.6
17 CFS - curing (intenral) - conveyor belt / motor 2	-24.4
16 CFS - curing (intenral) - conveyor belt / motor 1	-24.6
TOTAL	28.0

PROGRAM ENM SOURCE RANKING
SINGLE POINT CALCULATION

X= 510.0 Y= 3539.0 Z= 53.2

SOURCE TITLE	dB(A)
24 CFS - processing (external) - dust collector / fan	23.9
22 CFS - processing (external) - RTT manv	20.2
26 CFS - processing (external) - aggregate unload	18.5
23 CFS - processing (external) - RTT reversing	6.4
27 CFS - processing (external) - silo vent 1	3.7
28 CFS - processing (external) - silo vent 2	3.7
14 CFS - processing (external) - FEL	.3
25 CFS - processing (external) - forklift	-4.3
13 CFS - processing (external) - backhoe	-8.1
15 CFS - curing (intenral) - FEL	-9.3
19 CFS - curing (intenral) - conveyor belt / motor 4	-21.7
21 CFS - curing (intenral) - conveyor belt / motor 6	-22.8
18 CFS - curing (intenral) - conveyor belt / motor 3	-22.9
20 CFS - curing (intenral) - conveyor belt / motor 5	-23.4
17 CFS - curing (intenral) - conveyor belt / motor 2	-25.3
16 CFS - curing (intenral) - conveyor belt / motor 1	-25.5
TOTAL	26.3

PROGRAM ENM SOURCE RANKING
SINGLE POINT CALCULATION

X= 827.0 Y= 3006.0 Z= 22.2

SOURCE TITLE	dB(A)
22 CFS - processing (external) - RTT manv	19.7
26 CFS - processing (external) - aggregate unload	16.2
24 CFS - processing (external) - dust collector / fan	11.3
27 CFS - processing (external) - silo vent 1	6.5
28 CFS - processing (external) - silo vent 2	6.5
14 CFS - processing (external) - FEL	.7
25 CFS - processing (external) - forklift	-.6
23 CFS - processing (external) - RTT reversing	-2.7
13 CFS - processing (external) - backhoe	-4.8
15 CFS - curing (intenral) - FEL	-8.9
18 CFS - curing (intenral) - conveyor belt / motor 3	-16.7
19 CFS - curing (intenral) - conveyor belt / motor 4	-18.0
21 CFS - curing (intenral) - conveyor belt / motor 6	-18.8
20 CFS - curing (intenral) - conveyor belt / motor 5	-19.4
17 CFS - curing (intenral) - conveyor belt / motor 2	-21.2
16 CFS - curing (intenral) - conveyor belt / motor 1	-21.4
TOTAL	22.1

PROGRAM ENM SOURCE RANKING
SINGLE POINT CALCULATION

X= 661.0 Y= 2957.0 Z= 22.2

SOURCE TITLE	dB(A)
22 CFS - processing (external) - RTT manv	18.6
26 CFS - processing (external) - aggregate unload	15.1
24 CFS - processing (external) - dust collector / fan	10.1
27 CFS - processing (external) - silo vent 1	4.5
28 CFS - processing (external) - silo vent 2	4.5
14 CFS - processing (external) - FEL	-.6
25 CFS - processing (external) - forklift	-.9
13 CFS - processing (external) - backhoe	-6.2
23 CFS - processing (external) - RTT reversing	-8.2
15 CFS - curing (intenral) - FEL	-10.3
18 CFS - curing (intenral) - conveyor belt / motor 3	-17.7
19 CFS - curing (intenral) - conveyor belt / motor 4	-19.0
21 CFS - curing (intenral) - conveyor belt / motor 6	-19.9
20 CFS - curing (intenral) - conveyor belt / motor 5	-20.6
17 CFS - curing (intenral) - conveyor belt / motor 2	-22.3
16 CFS - curing (intenral) - conveyor belt / motor 1	-22.5
TOTAL	20.9

PROGRAM ENM SOURCE RANKING
SINGLE POINT CALCULATION

X= 2568.0 Y= 556.0 Z= 61.2

SOURCE TITLE	dB(A)
22 CFS - processing (external) - RTT manv	18.3
14 CFS - processing (external) - FEL	18.1
13 CFS - processing (external) - backhoe	10.8
25 CFS - processing (external) - forklift	10.3
15 CFS - curing (intenral) - FEL	8.8
24 CFS - processing (external) - dust collector / fan	7.0
23 CFS - processing (external) - RTT reversing	3.9
27 CFS - processing (external) - silo vent 1	.9
28 CFS - processing (external) - silo vent 2	.8
26 CFS - processing (external) - aggregate unload	-2.3
19 CFS - curing (intenral) - conveyor belt / motor 4	-10.1
18 CFS - curing (intenral) - conveyor belt / motor 3	-10.1
17 CFS - curing (intenral) - conveyor belt / motor 2	-10.2
16 CFS - curing (intenral) - conveyor belt / motor 1	-10.3
21 CFS - curing (intenral) - conveyor belt / motor 6	-22.5
20 CFS - curing (intenral) - conveyor belt / motor 5	-22.8
TOTAL	22.4

PROGRAM ENM SOURCE RANKING
SINGLE POINT CALCULATION

X= 2964.0 Y= 577.0 Z= 51.2

SOURCE TITLE	dB(A)
14 CFS - processing (external) - FEL	17.5
25 CFS - processing (external) - forklift	9.5
22 CFS - processing (external) - RTT manv	9.1
13 CFS - processing (external) - backhoe	9.1
15 CFS - curing (intenral) - FEL	7.8
24 CFS - processing (external) - dust collector / fan	5.3
23 CFS - processing (external) - RTT reversing	2.9
27 CFS - processing (external) - silo vent 1	1.2
28 CFS - processing (external) - silo vent 2	1.1
26 CFS - processing (external) - aggregate unload	-2.5
18 CFS - curing (intenral) - conveyor belt / motor 3	-10.6
19 CFS - curing (intenral) - conveyor belt / motor 4	-10.7
17 CFS - curing (intenral) - conveyor belt / motor 2	-10.7
16 CFS - curing (intenral) - conveyor belt / motor 1	-10.8
21 CFS - curing (intenral) - conveyor belt / motor 6	-24.4
20 CFS - curing (intenral) - conveyor belt / motor 5	-24.7
TOTAL	19.9

PROGRAM ENM SOURCE RANKING

SINGLE POINT CALCULATION

X= 3712.0 Y= 1349.0 Z= 22.2

SOURCE TITLE	dB(A)
26 CFS - processing (external) - aggregate unload	12.5
22 CFS - processing (external) - RTT manv	8.9
14 CFS - processing (external) - FEL	7.4
25 CFS - processing (external) - forklift	5.3
24 CFS - processing (external) - dust collector / fan	4.0
28 CFS - processing (external) - silo vent 2	2.9
27 CFS - processing (external) - silo vent 1	2.7
15 CFS - curing (intenral) - FEL	2.6
13 CFS - processing (external) - backhoe	1.2
18 CFS - curing (intenral) - conveyor belt / motor 3	-6.5
19 CFS - curing (intenral) - conveyor belt / motor 4	-6.5
23 CFS - processing (external) - RTT reversing	-6.6
17 CFS - curing (intenral) - conveyor belt / motor 2	-11.9
16 CFS - curing (intenral) - conveyor belt / motor 1	-12.0
21 CFS - curing (intenral) - conveyor belt / motor 6	-24.1
20 CFS - curing (intenral) - conveyor belt / motor 5	-24.3
TOTAL	16.5

PROGRAM ENM SOURCE RANKING
SINGLE POINT CALCULATION

X= 3827.0 Y= 1335.0 Z= 31.2

SOURCE TITLE	dB(A)
26 CFS - processing (external) - aggregate unload	21.6
14 CFS - processing (external) - FEL	19.2
13 CFS - processing (external) - backhoe	13.9
23 CFS - processing (external) - RTT reversing	10.4
25 CFS - processing (external) - forklift	8.5
22 CFS - processing (external) - RTT manv	8.4
15 CFS - curing (intenral) - FEL	5.5
24 CFS - processing (external) - dust collector / fan	4.5
27 CFS - processing (external) - silo vent 1	1.7
28 CFS - processing (external) - silo vent 2	1.7
18 CFS - curing (intenral) - conveyor belt / motor 3	-7.9
19 CFS - curing (intenral) - conveyor belt / motor 4	-8.0
17 CFS - curing (intenral) - conveyor belt / motor 2	-11.2
16 CFS - curing (intenral) - conveyor belt / motor 1	-11.3
21 CFS - curing (intenral) - conveyor belt / motor 6	-25.1
20 CFS - curing (intenral) - conveyor belt / motor 5	-25.3
TOTAL	24.6

PROGRAM ENM SOURCE RANKING
SINGLE POINT CALCULATION

X= 4143.0   Y= 1967.0   Z=   31.2

SOURCE TITLE	dB(A)
26 CFS - processing (external) - aggregate unload	17.0
14 CFS - processing (external) - FEL	13.8
22 CFS - processing (external) - RTT manv	9.8
13 CFS - processing (external) - backhoe	8.7
25 CFS - processing (external) - forklift	7.2
23 CFS - processing (external) - RTT reversing	5.5
15 CFS - curing (intenral) - FEL	4.9
28 CFS - processing (external) - silo vent 2	4.4
24 CFS - processing (external) - dust collector / fan	4.2
27 CFS - processing (external) - silo vent 1	1.6
17 CFS - curing (intenral) - conveyor belt / motor 2	-8.3
18 CFS - curing (intenral) - conveyor belt / motor 3	-11.8
16 CFS - curing (intenral) - conveyor belt / motor 1	-11.8
19 CFS - curing (intenral) - conveyor belt / motor 4	-11.9
21 CFS - curing (intenral) - conveyor belt / motor 6	-25.4
20 CFS - curing (intenral) - conveyor belt / motor 5	-25.6
TOTAL	20.4

PROGRAM ENM SOURCE RANKING
SINGLE POINT CALCULATION

X= 3948.0   Y= 2044.0   Z=   22.2

SOURCE TITLE	dB(A)
26 CFS - processing (external) - aggregate unload	13.2
22 CFS - processing (external) - RTT manv	10.7
14 CFS - processing (external) - FEL	8.1
25 CFS - processing (external) - forklift	4.6
24 CFS - processing (external) - dust collector / fan	4.4
27 CFS - processing (external) - silo vent 1	3.5
15 CFS - curing (intenral) - FEL	3.4
28 CFS - processing (external) - silo vent 2	2.1
13 CFS - processing (external) - backhoe	2.0
23 CFS - processing (external) - RTT reversing	-5.6
19 CFS - curing (intenral) - conveyor belt / motor 4	-11.5
16 CFS - curing (intenral) - conveyor belt / motor 1	-11.5
17 CFS - curing (intenral) - conveyor belt / motor 2	-11.5
18 CFS - curing (intenral) - conveyor belt / motor 3	-11.5
21 CFS - curing (intenral) - conveyor belt / motor 6	-23.8
20 CFS - curing (intenral) - conveyor belt / motor 5	-24.1
TOTAL	17.3

PROGRAM ENM SOURCE RANKING
SINGLE POINT CALCULATION

X= 3985.0   Y= 2886.0   Z=   22.2

SOURCE TITLE	dB(A)
22 CFS - processing (external) - RTT manv	14.6
26 CFS - processing (external) - aggregate unload	13.1
14 CFS - processing (external) - FEL	8.0
24 CFS - processing (external) - dust collector / fan	4.5
25 CFS - processing (external) - forklift	4.4
15 CFS - curing (intenral) - FEL	3.1
28 CFS - processing (external) - silo vent 2	2.2
27 CFS - processing (external) - silo vent 1	2.1
13 CFS - processing (external) - backhoe	1.9
23 CFS - processing (external) - RTT reversing	-5.5
17 CFS - curing (intenral) - conveyor belt / motor 2	-11.9
16 CFS - curing (intenral) - conveyor belt / motor 1	-11.9
18 CFS - curing (intenral) - conveyor belt / motor 3	-12.0
19 CFS - curing (intenral) - conveyor belt / motor 4	-21.8
21 CFS - curing (intenral) - conveyor belt / motor 6	-23.9
20 CFS - curing (intenral) - conveyor belt / motor 5	-24.2
TOTAL	18.4

PROGRAM ENM SOURCE RANKING
SINGLE POINT CALCULATION

X= 3971.0   Y= 3280.0   Z=   22.2

SOURCE TITLE	dB(A)
22 CFS - processing (external) - RTT manv	14.1
26 CFS - processing (external) - aggregate unload	12.4
14 CFS - processing (external) - FEL	7.2
24 CFS - processing (external) - dust collector / fan	3.9
25 CFS - processing (external) - forklift	3.6
15 CFS - curing (intenral) - FEL	1.7
13 CFS - processing (external) - backhoe	1.0
27 CFS - processing (external) - silo vent 1	1.0
28 CFS - processing (external) - silo vent 2	1.0
23 CFS - processing (external) - RTT reversing	-6.7
16 CFS - curing (intenral) - conveyor belt / motor 1	-12.7
18 CFS - curing (intenral) - conveyor belt / motor 3	-12.8
17 CFS - curing (intenral) - conveyor belt / motor 2	-12.8
19 CFS - curing (intenral) - conveyor belt / motor 4	-23.8
21 CFS - curing (intenral) - conveyor belt / motor 6	-24.3
20 CFS - curing (intenral) - conveyor belt / motor 5	-24.7
TOTAL	17.7

PROGRAM ENM SOURCE RANKING
SINGLE POINT CALCULATION

X= 4129.0   Y= 3329.0   Z=   31.2

SOURCE TITLE	dB(A)
26 CFS - processing (external) - aggregate unload	17.5
22 CFS - processing (external) - RTT manv	15.3
14 CFS - processing (external) - FEL	14.4
13 CFS - processing (external) - backhoe	9.2
25 CFS - processing (external) - forklift	7.5
23 CFS - processing (external) - RTT reversing	6.0
15 CFS - curing (intenral) - FEL	4.3
27 CFS - processing (external) - silo vent 1	4.2
28 CFS - processing (external) - silo vent 2	4.2
24 CFS - processing (external) - dust collector / fan	4.1
16 CFS - curing (intenral) - conveyor belt / motor 1	-12.5
18 CFS - curing (intenral) - conveyor belt / motor 3	-12.6
17 CFS - curing (intenral) - conveyor belt / motor 2	-12.6
19 CFS - curing (intenral) - conveyor belt / motor 4	-25.0
21 CFS - curing (intenral) - conveyor belt / motor 6	-25.6
20 CFS - curing (intenral) - conveyor belt / motor 5	-26.0
TOTAL	21.6

PROGRAM ENM SOURCE RANKING
SINGLE POINT CALCULATION

X= 3079.0 Y= 3574.0 Z= 22.2

SOURCE TITLE	dB(A)
22 CFS - processing (external) - RTT manv	18.1
26 CFS - processing (external) - aggregate unload	17.0
24 CFS - processing (external) - dust collector / fan	16.3
14 CFS - processing (external) - FEL	12.2
25 CFS - processing (external) - forklift	8.2
27 CFS - processing (external) - silo vent 1	8.1
28 CFS - processing (external) - silo vent 2	8.1
13 CFS - processing (external) - backhoe	6.7
15 CFS - curing (intenral) - FEL	1.7
23 CFS - processing (external) - RTT reversing	.5
16 CFS - curing (intenral) - conveyor belt / motor 1	-3.6
17 CFS - curing (intenral) - conveyor belt / motor 2	-8.5
21 CFS - curing (intenral) - conveyor belt / motor 6	-19.0
20 CFS - curing (intenral) - conveyor belt / motor 5	-19.5
18 CFS - curing (intenral) - conveyor belt / motor 3	-20.4
19 CFS - curing (intenral) - conveyor belt / motor 4	-21.4
TOTAL	23.0

PROGRAM ENM SOURCE RANKING
SINGLE POINT CALCULATION

X= 2719.0 Y= 3953.0 Z= 22.2

SOURCE TITLE	dB(A)
22 CFS - processing (external) - RTT manv	17.4
26 CFS - processing (external) - aggregate unload	15.5
24 CFS - processing (external) - dust collector / fan	15.0
14 CFS - processing (external) - FEL	10.5
25 CFS - processing (external) - forklift	6.7
27 CFS - processing (external) - silo vent 1	5.9
28 CFS - processing (external) - silo vent 2	5.9
13 CFS - processing (external) - backhoe	4.8
15 CFS - curing (intenral) - FEL	.1
23 CFS - processing (external) - RTT reversing	-2.2
16 CFS - curing (intenral) - conveyor belt / motor 1	-4.7
17 CFS - curing (intenral) - conveyor belt / motor 2	-4.9
21 CFS - curing (intenral) - conveyor belt / motor 6	-17.4
20 CFS - curing (intenral) - conveyor belt / motor 5	-18.1
18 CFS - curing (intenral) - conveyor belt / motor 3	-22.1
19 CFS - curing (intenral) - conveyor belt / motor 4	-22.8
TOTAL	21.8

PROGRAM ENM SOURCE RANKING
SINGLE POINT CALCULATION

X= 2366.0 Y= 4471.0 Z= 22.2

SOURCE TITLE	dB(A)
22 CFS - processing (external) - RTT manv	15.1
26 CFS - processing (external) - aggregate unload	12.6
24 CFS - processing (external) - dust collector / fan	11.8
14 CFS - processing (external) - FEL	7.1
25 CFS - processing (external) - forklift	3.7
13 CFS - processing (external) - backhoe	.9
28 CFS - processing (external) - silo vent 2	-.2
27 CFS - processing (external) - silo vent 1	-.3
15 CFS - curing (intenral) - FEL	-3.2
21 CFS - curing (intenral) - conveyor belt / motor 6	-6.9
20 CFS - curing (intenral) - conveyor belt / motor 5	-7.1
16 CFS - curing (intenral) - conveyor belt / motor 1	-7.1
23 CFS - processing (external) - RTT reversing	-7.8
17 CFS - curing (intenral) - conveyor belt / motor 2	-17.6
18 CFS - curing (intenral) - conveyor belt / motor 3	-24.9
19 CFS - curing (intenral) - conveyor belt / motor 4	-25.7
TOTAL	18.9