



DOCUMENT OF NOISE RISK ASSESSMENT

Prepared in accordance with the Legal Notice 158 of 2006

Headquarters:

Hal Far Industrial Estate

HF 51 – Birzebuggia

Malta

Rev. and Date:

rev. 00 del 11/07/2014



1. PURPOSE OF THE DOCUMENT

The aims of the document, which meets the requirements according with art. 4 of Legal Notice 158 of 2006 “*Work Place (minimum health and safety requirements for the protection of workers from risks resulting from exposure to noise) Regulations*” are intended to highlight the risks present on site and/or at work deriving from noise, explain the preventive measures taken in relation to the identified risks, plan to reduce the residual risks and encourage interaction between those in charge of prevention, monitoring and improvement of safety.

Birzebuggia, 31/07/2013

Employer – Mr Simone Ferlin

2. MEASUREMENTS PERFORMED

The risk assessment takes into account the measurements made on 24.06.2014, at the offices of Sterling Chemical Malta LTD., Technician Dr. Robert Cortis the results of which are shown in the report issued on 07.07.2014 attached to this assessment.

Below are the results of measurements in terms of either Exposure Level and Peak Sound Pressure.

Sample	Location	Lex	Ppeak
1	Laboratory – Fume Cupboard ON, Sonicator ON	73.7	101.1
2	Laboratory – Fume Cupboard ON, Sonicator ON	61.0	92.1
3	Pilot Production – ground floor	70.6	104.0
4	Pilot Production – first floor	73.4	96.2
5	Sampling Room	77.7	95.9
6	Outside – opposite Sampling Room	72.5	103.6
7	Outside – opposite Boiler Room	72.6	94.9
8	Fire Pump Room – Electric Motor	104.0	119.2
9	Fire Pump Room – Diesel Motor	108.9	120.3
10	Boiler Room	76.2	89.2
11	Utility Plant Area	86.8	110.0
12	R&D Laboratory	61.5	111.0

Measures were not carried out in the Offices Areas as it is not considered to be in any occasion exceeded the Lower Exposure Limit.

3. RISK ASSESSMENT

From the measurements made, in the Utility Area the Upper Exposure Action Values is exceeded, while in the Fire Pump Room the Exposure Limit Values are exceeded. In no case is instead exceeded the Peak Sound Pressure.

Both areas in which they are detected above the limits, there are not places where operators regularly perform their work: in the Utility Area, checks or maintenance operations are carried out, while in the Fire Pump Room the entry is done once a week for the operation controls.

In order to calculate the workers level of exposure different tasks have been identified as described in the General Risk Assessment Document , calculating for each of these the noise exposure levels.

H.E.G.s	HOMOGENEOUS ACTIVITY AREA	WORK PHASES
Office employee	Office	Preparation and revision of documents, purchase and sale of material.

Technical employee	Offices and supervision of all areas	Main activity in office and, occasionally, control activities in all departments.
Technical-production employee	Offices and supervision of all areas	Main activity in office and, occasionally, control activities in all departments.
Production supervisor	Production, warehouse and laboratory	Management of plant equipment, management of production staff, compilation of production documentation, monitoring and control of the production plant.
Production operator	Production and warehouse	Direct use of the equipment in accordance with the plant operating instructions and operating procedure.
Warehouse operator	Production and warehouse	Warehouse management, sampling of intermediate products, finished products, raw materials and packaging materials.
Maintenance operator	All the areas	Assigned to various maintenance operations within the plant, small electrical work, control, operation tests and replacement of plant components.
Laboratory technician	Laboratory	Qualitative and quantitative analysis of pharmacologically active substances, analysis and approval of inbound, outbound, intermediate products and external samples, documentation laboratory management.

In the calculation of exposure levels it has been used the Daily Noise Exposure Level Lex, 8h for some tasks, while for others it has been preferred the Weekly Noise Exposure Level Lex, according to the distribution of assets with exposure to noise during shift work or the working week. It is shown below for each task the choice made.

H.E.G.s	Lex,8h / Lex,w	Note
Office employee	No measurements	Lex < 80 dB(A)
Technical employee	Lex,w	Occasional supervision in all departments
Technical-production employee	Lex,w	Occasional supervision in all departments
Production supervisor	Lex,8h	
Production operator	Lex,8h	
Warehouse operator	Lex,8h	
Maintenance operator	Lex,w	Weekly Fire Pump Room Control
Laboratory technician	Lex, 8h	

Technical Employee/Technical-Production Employee		L	T/d	day/week	T tot
1	Laboratory - Fume Cupboard ON, Sonicator ON	73.7	10	1	10
2	Laboratory - Fume Cupboard ON, Sonicator ON	61	20	3	60
3	Pilot Production – Ground Floor	70.6	30	4	120
4	Pilot Production – First Floor	73.4	15	4	60
5	Sampling Room	77.7	10	2	20
6	Outside – opposite Sampling Room	72.5	10	2	20
7	Outside – opposite Boiler Room	72.6	10	2	20
8	Fire Pump Room – Electric Motor	104	0	1	0

9	Fire Pump Room – Diesel Motor	108.9	0	1	0
10	Boiler Room	76.2	10	2	20
11	Utility Plant Area	86.8	30	4	120
Lex,w = 74.2 dB(A)					

Maintenance operator		L	T/d	day/week	T tot
1	Laboratory - Fume Cupboard ON, Sonicator ON	73.7	10	1	10
2	Laboratory - Fume Cupboard ON, Sonicator ON	61	30	4	120
3	Pilot Production – Ground Floor	70.6	60	5	300
4	Pilot Production – First Floor	73.4	30	5	150
5	Sampling Room	77.7	20	3	60
6	Outside – opposite Sampling Room	72.5	10	3	30
7	Outside – opposite Boiler Room	72.6	10	4	40
8	Fire Pump Room – Electric Motor	104	10	1	10
9	Fire Pump Room – Diesel Motor	108.9	10	1	10
10	Boiler Room	76.2	30	4	120
11	Utility Plant Area	86.8	30	5	150
Lex < 86.6 dB(A)					

Production Supervisor / Production Operator		L	T/d
1	Laboratory - Fume Cupboard ON, Sonicator ON	73.7	30
3	Pilot Production – Ground Floor	70.6	165
4	Pilot Production – First Floor	73.4	165
6	Outside – opposite Sampling Room	72.5	30
7	Outside – opposite Boiler Room	72.6	30
10	Boiler Room	76.2	30
11	Utility Plant Area	86.8	30
Lex < 76.8 dB(A)			

Laboratory technician		L	T/d
1	Laboratory - Fume Cupboard ON, Sonicator ON	73.7	90
2	Laboratory - Fume Cupboard ON, Sonicator ON	61	360
Lex,8h = 67.3 dB(A)			

Warehouse operator		L	T/d
3	Pilot Production – Ground Floor	70.6	60

4	Pilot Production – First Floor	73.4	30
5	Sampling Room	77.7	60
6	Outside – opposite Sampling Room	72.5	240
7	Outside – opposite Boiler Room	72.6	30
11	Utility Plant Area	86.8	30
Lex,8h = 77 dB(A)			

The definition of the level of risk has been carried out considering the limitations imposed by LN 15/2006 and by classifying them as follows.

	Acceptable risk	Risk to be reduced	Risk to be reduced	Not Acceptable risk
Category of Risk	Low	Medium	High	Very High
Noise	Lex, 8h less than 80 dBA	Lex, 8h between 80 and 85 dBA	Lex, 8h between 85 and 87 dBA	Lex, 8h higher than 87 dBA

Following the results obtained, the situation of exposure to noise is the following.

H.E.G.s	RISK
MAINTENANCE OPERATOR	HIGH
Office employee	LOW
Technical employee	LOW
Technical-production employee	LOW
Production supervisor	LOW
Production operator	LOW
Warehouse operator	LOW
Laboratory technician	LOW

4. PREVENTIVE MEASURES

The only task for which there is an exposure above the Upper Exposure Action Value is the Operator's Maintenance while for all the other tasks the exposure remains below the Lower Exposure Action Value, for which is not present any risk.

The workers who perform the job at risk will be subject to health surveillance in accordance with art. 10 of LN 158/2006.

All the operators entering the areas with exposure levels above the Upper Exposure Limit will be provided with appropriate PPE and these areas will be identified through signage.

The appropriate PPE are identified by the method SNR (Simplified Noise Reduction) by identifying a value of SNR that remain in acceptable accordance with the UNI EN 458 and below.

Actual level with PPE	Estimation of protection
LA eq > 85 dB(A)	INSUFFICIENT
80 < LA eq < 85 dB(A)	ACCEPTABLE
75 < LA eq < 80 dB(A)	GOOD
70 < LA eq < 75 dB(A)	ACCEPTABLE
LA eq > 70 dB(A)	OVERPROTECTION

Through this process, the values needed for each area have been identified.

	L	SNR	LA eq	Estimation of protection
Utility Plant Area	86.8	14	75.8	Acceptable
Fire Pump Room – Electric Motor	104	28	76	Acceptable
Fire Pump Room – Diesel Motor	108.9	28	20.9	Good

5. MEASURES FOR IMPROVEMENT

The following are the improvement measures to be implemented within the planned dates.

Activity	Timing	Supervisor
Audiometric visit for all the exposed	At the first periodic visit scheduled for each operator	Competent Physician
Reporting risk areas	August 2014	ASPP
DPI Distribution and training on the proper use	August 2014	ASPP