LEV INDUSTRY FORUM - COMPETENCY WORKING GROUP

Matrix of LEV knowledge guidance for key roles:

Last modified 21-5-2018

Topic	Knowledge Requirements:	Roles: Employer-related personnel: The Employer (System Owner)	Employer's plant supervisor	Process operators	Employer-appointed LEV responsible Person	LEV Specialist and contractor personnel: LEV Organisation Technical Engineering Manager	LEV Project Manager (person responsible for delivery of the project)	LEV Designer / Technical Sales	Supplier(s) and Manufacturer(s) of LEV Components	LEV Installation team leader	End User Trainer	LEV Commissioning Engineer	LEV Maintenance Engineer	LEV Test Engineer
	ESSENTIAL LEARNING	C, P	C, F, G	F	B, C, F, G	M, N	B, G, I	D, G, M		G	F, L	N	F	G, L
	DESIRABLE LEARNING	H, G, Q	B, J	Q, R	J, N	O	M, O	H, I, L, N	A, G	B	N	M	A, E, J	J, M
Preparation of LEV specification & quotation	Properties of airborne contaminants: principles		1		2	3	2	3	3	1		3	2	3
	Recognition of hazards from process materials	1	2	1	2	3	2	3	3	1		3	2	3
	Recognition of hazardous substances generated by the process		2	1	2	3	2	3	3	1		3	2	3
	Understanding of the nature of sources of airborne contaminants in the process		2	1	2	3	2	3	3			3	1	3
	Understanding of process requirements		2	1	3	3	2	3	3	1		3	2	3
	Understanding of statutory requirements for control	1	2	1	2	3	2	3	3			3	2	3
Design of LEV system	Selection of a control benchmark		1		1	3	1	3	2			3	1	3
	Selection of a control requirement		1		1	3	1	3	2			3	1	3
	Components of LEV systems		2		2	3	3	3	3	2		3	3	3
	Characteristics of different hood types		2		2	3	1	3	3	1		3	1	3
	Principles of LEV hood design		2		2	3	1	3	3	1		3	1	3
	Selection of appropriate hoods for the application		1		1	3	1	3	3	1		3	1	3
	Principles of good ductwork design		1		1	3	1	3	3	1		3	1	3
	Need for system monitors & alarms		1		2	3	1	3	3	1		3	2	3
	Characteristics of fans/air movers		1		1	3	1	3	3	1		3	2	3
	Characteristics of air cleaners/filters		1		1	3	1	3	3	1		3	1	3
	Air discharge and filtrate removal arrangements		1		1	3	1	3	3	1		3	1	3
	DSEAR/ATEX Requirement inc explosion relief	1	2		2	3	1	3	3	1		3	1	3
	Recirculation of filtered air		2		2	3	1	3	3	1		3	1	3
	Provision of makeup air/ impact on general workroom ventilation		1		1	3	1	3	1	1		3	1	3
	Impact on workroom and external environment		1		1	3	1	3	1	1		3	1	3
	Ergonomic and safety considerations		1		2	3	1	3	3	1		3	1	3
	Arrangements for maintenance, cleaning, inspection and test		1		2	3	1	3	3	1		3	3	3
Installation & commissioning of LEV system	Installation of hardware: mechanical		1		1	3	2	3		3		2	1	2
	Installation of hardware: electrical		1		1	3	2	3		3		2	1	2
	Balancing of system		1		1	3	1	3		2		3	1	2
	Technical performance testing		1		1	3	1	2		2		3	2	2
	Qualitative assessment of control effectiveness		1		1	3	1	2				3	1	2
	Quantitative assessment of control effectiveness		1		1	3	1	2				3	1	2
	Commissioning report		1	1	1	3	1	2				3	1	2
	Provision of System manual		1	1	1	3	3	3	1			3	1	1
	Provision of System logbook		1	1	1	3	3	3	1			2	1	1
	End User Training		1	1	2	3		2			3	3	1	
Thorough examination & test of LEV system	Pre-work risk assessment		1		2	3		1					3	3
	Visual examination of system		1		2	3		2					2	3
	Technical performance measurement		1		1	3		2					1	3
	Assessment of control effectiveness		1		2	3		2					1	3
	Thorough examination and test report	1	1		1	3		1				2	2	3
Maintenance	Completion of Logbook		1	1	2	2							3	3
	Routine inspections		1	1	2	2							1	2
	Routine maintenance		1		2	2							3	
	Repairs and remedial works		1		1	2							3	
Changes & modifications	Modifications & changes		1		2	3		2			2	3	2	3
	Re-commissioning				2	3		2			2	3	1	1
	User training			1	2	3		2			3	3	2	2
LEV Professional	Guide to typical relevent experience (in years) to include: • Portfolio • Interview • References	-	-	-	-	5+	2	3+	1	3	3	3	2	2

Knowledge Sources

Topic	Knowledge Requirements:	Awareness Course: LEV Awareness	LEV Practical Management of Control	Guidance information: HSE INDG 136 Working with substances hazardous to health: a brief guide to COSHH	ACGIH Industrial Ventilation Manual	ACGIH Maintenance Manual	Manufacturers O&M Manual	HSG258:Controlling airborne contaminants at work	INDG408: Clearing the air - a simple guide to buying and using LEV	BESA TR40: Guide to Good Practice: LEV	SAFeD LEV C03	BOHS Qualifications (or equivalent): P600: Methods for testing the performance of LEV systems	P601 : Thorough examination and testing of LEV systems inc. report submission.	P602: Basic design principles of LEV systems inc. report submission	P604: Performance evaluation and management of LEV systems inc. report submision	Certificate of Competence Control	INDG370	OCM2 Local Exhaust Ventilation Control Approach 4	INDG409
		A	B	C	D	E	F	G	H	I	J	K	L	M	N*	O	P	Q	R
Preparation of LEV specification & quotation	Properties of airborne contaminants: principles				✓			✓					*	*	**	✓			
	Recognition of hazards from process materials	✓	✓	✓	✓			✓					*	*	**	✓			
	Recognition of hazardous substances generated by the process	✓	✓	✓	✓			✓		✓				*	**	✓			
	Understanding of the nature of sources of airborne contaminants in the process			✓	✓			✓		✓				*	**	✓			
	Understanding of process requirements				✓				✓	✓	✓					✓			
	Understanding of statutory requirements for control	✓	✓	✓				✓		✓			*	*	*	✓		✓	✓
Design of LEV system	Selection of a control benchmark				✓			✓						**		✓			
	Selection of a control requirement				✓			✓						**		✓			
	Components of LEV systems	✓			✓		✓	✓	✓		✓	*	*	**	*	✓			
	Characteristics of different hood types	✓			✓			✓	✓		✓	*	*	**	*	✓			
	Principles of LEV hood design		✓		✓			✓			✓	*	*	**	*	✓			
	Selection of appropriate hoods for the application		✓		✓			✓						**		✓			
	Principles of good ductwork design				✓			✓			✓	*	*	**	*	✓			
	Need for system monitors & alarms							✓						**	*	✓			
	Characteristics of fans/air movers				✓		✓	✓			✓	*	*	**	*	✓			
	Characteristics of air cleaners/filters				✓		✓	✓			✓	*	*	**	*	✓			
	Air discharge and filtrate removal arrangements							✓					*	**	*	✓			
	DSEAR/ATEX Requirement inc explosion relief						✓			✓	✓		*	**	**	✓	✓		
	Recirculation of filtered air						✓	✓		✓			*	**	*	✓			
	Provision of makeup air/ impact on general workroom ventilation							✓		✓			*	**	*	✓			
	Impact on workroom and external environment							✓					*	**	*	✓			
	Ergonomic and safety considerations							✓			✓		*		*	✓			
	Arrangements for maintenance, cleaning, inspection and test						✓	✓		✓	✓		*		*	✓			
Installation & commissioning of LEV system	Installation of hardware: mechanical						✓			✓									
	Installation of hardware: electrical						✓			✓									
	Balancing of system				✓			✓					*	*	**	✓			
	Technical performance testing				✓		✓	✓					*	*	**	✓			
	Qualitative assessment of control effectiveness							✓				*	*	*	**	✓			
	Quantitative assessment of control effectiveness							✓				*	*	*	**	✓			
	Commissioning report		✓					✓	✓	✓	✓				**	✓		✓	✓
	Provision of System manual		✓	✓				✓	✓	✓	✓				**	✓		✓	✓
	Provision of System logbook		✓	✓				✓	✓	✓	✓				**	✓		✓	✓
	End User Training		✓	✓			✓	✓	✓	✓	✓				**	✓		✓	✓
Thorough examination & test of LEV system	Pre-work risk assessment							✓					**		**	✓			
	Visual examination of system							✓	✓		✓		**		**	✓			
	Technical performance measurement							✓			✓	*	**		**	✓			
	Assessment of control effectiveness							✓			✓	*	**		**	✓			
	Thorough examination and test report		✓	✓				✓	✓	✓	✓		**		**	✓		✓	✓
Maintenance	Completion of Logbook		✓					✓	✓	✓	✓				**	✓		✓	
	Routine inspections						✓	✓					*		**	✓		✓	✓
	Routine maintenance						✓	✓					*		**	✓		✓	✓
	Repairs and remedial works						✓	✓							**				
Changes & modifications	Modifications & changes							✓							**	✓			
	Re-commissioning							✓							**	✓			
	User training							✓	✓		✓				**	✓		✓	

Notes:
1. Evidence of other experience e.g. UKAS, ILEVE, BOHS etc.
2. * From January 2018, BOHS P601 is a pre-requisite to P604.

Key:
1: Basic knowledge
2: Good knowledge of topic
3: Detailed knowledge of topic

BOHS Qualifications Key:
* Basic information on topic
** Detailed information on topic