



EXPLANATORY NOTE AND ANALYSIS

Draft

**2021 Code of Practice for the
Chemical Agents and Carcinogens Regulations**

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Foreword

The Health and Safety Authority has prepared this Explanatory Note & analysis document to support the proposed draft 2021 Code of Practice for the Chemical Agent & Carcinogens Regulations.

The 'Chemical Agent Regulations' means the Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001 (S.I. No. 619 of 2001), as amended by S.I. No. 623/2015 - Safety, Health and Welfare at Work (Chemical Agents) (Amendment) Regulations 2015 and the Safety, Health and Welfare at Work (Chemical Agents) (Amendment) Regulations 2021 (S.I. No. X of 2021).

The "Carcinogens Regulations" means the Safety, Health and Welfare at Work (Carcinogens) Regulations, 2001 (S.I. No. 78 of 2001), as amended by S.I. No. 622/2015- Safety, Health and Welfare at Work (Carcinogens) (Amendment) Regulations, 2015 and by S.I. No. 592/2019 Safety, Health and Welfare at Work (Carcinogens) (Amendment) Regulations, 2019.

This Explanatory Note and analysis outlines the options, cost, benefits, impacts and the consultation requirements and the arrangements in publishing this updated Code of Practice.

1.0 Background and Context

Occupational exposure limit values (OELVs) provide a basis for ensuring that exposure to airborne contaminants in the workplace are controlled in such a way as to prevent adverse health effects.

The purpose of the 2021 Code of Practice is to provide practical guidance as to the observance of the requirements of the Chemical Agent and Carcinogen Regulations (as amended), in relation to occupational exposure limit values (OELVs) for a number of chemical agents listed in Schedule 1 and Schedule 2 to the Code.

The 2021 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) & (Carcinogens) Regulations 2001;

- updates and replaces the "2020 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations (2001-2015) and the Safety, Health and Welfare at Work (Carcinogens) Regulations (2001-2019)", based on the latest available relevant scientific information, and
- fulfils the commitment as stated in the foreword of the 2020 Code of Practice to update the Code of Practice periodically, where appropriate.

The draft 2021 Code of Practice includes the following updates /amendments:

- **Schedule 1** has been updated to include ten new Indicative OELVs included in EU Directive 2019/1831
- **Schedule 3** has been updated to include future possible changes to current OELV values and new entrants in the next iteration of the Code of Practice. It provides a list of any OELVs under review by the Health & Safety Authority; including limits proposed under the fourth Amendment to the Carcinogens and Mutagens Directive along with other EU Commission proposals.

With the exception of the 5th List of indicative values, proposals to change OELVs in **Schedule 3** of the 2020 Code of Practice are being maintained until the next iteration of the Code of Practice. This is to allow for an appropriate period of advanced notice and lead-in for implementation.

However, a submission has been received by the Authority on one of these limit values listed in Schedule 3 of the 2020 Code of Practice. The proposal for *Resin acids, as total resin acids (Colophony)* is being withdrawn from Schedule 3 of the Draft 2021 Code of Practice due to potential difficulties with the detection limit of the analytical procedure. The current limit value of 0.05mg/m³ with a STEL 0.15mg/m³ will still be maintained in Schedule 2 of the 2021 Code of Practice.

- **Schedule 4** – contains the Chemical Abstracts Service (CAS) Numbers Index.
- **Errata** from the 2020 Code of Practice have been addressed (see Appendix 1, Table 2)

2.0 Objectives of the Code of Practice

Overall objective:

To publish an up-dated Code of Practice to provide a comprehensive schedule of OELVs based on current scientific knowledge for employers to ensure that necessary protective measures are in place to secure the safety, health and welfare of employees.

Immediate objectives:

- ❖ To update the 2020 Code of Practice based on the latest available relevant scientific information,
- ❖ To fulfil the commitment as stated in the foreword of the 2020 Code of Practice to update the document.
- ❖ To transpose EU Directive 2019/1831.

3.0 Options

Option 1

Do Nothing: By not updating the Code of Practice, the 2020 Code of Practice will contain out of date OELVs for some chemical agents and our transposition requirements for the IOELV lists will not be met.

Option 2

Publish the Code of Practice:

By publishing an updated Code of Practice the 2021 Code of Practice will contain the most up to date OELVs for chemical agents, based on the latest available relevant scientific information and comply with transposition requirements for Member States.

4.0 Costs, Benefits and Impacts

4.1 General Costs

The Code of Practice will be published on the Health and Safety Authority's website. Combined publication costs to the Authority are estimated not to exceed €2,000. A minimum number of copies will be printed, as most customers consult the document on the Authority's website.

Extra enforcement costs are not anticipated. No additional staffing or capital investment is envisaged as a result of the operation of the new Code of Practice.

4.2 Direct Compliance Costs

Industries using chemical agents listed in bold in Schedules 1 & 2 (changed occupational exposure limit values) may possibly, in some cases, be obliged to enhance control measures to comply with the advice given in the Code of Practice. Improvement in containment, engineering controls or personal protective equipment (PPE) costs may be necessary for some industries to satisfy some requirements of the Code.

4.3 Benefits of Each Option

Option 1: Do Nothing:-This option would be regarded as having no benefit to any of the parties involved as it implies continuing to use the now outdated occupational exposure limits (OELVs) and will not fully support the need to protect the health of employees.

Option 2: Publish the Code of Practice: By updating the Code of Practice, the 2021 Code of Practice will contain the most up to date OELVs for chemical agents.

4.4 Other Impacts

(a) Impacts on National Competitiveness

The updated elements of the code of practice are based on international and European standards and are not expected to have a significant adverse effect on national stakeholders.

(b) Impacts on Socially Excluded or Vulnerable Groups

No adverse impact.

(c) Human Health and Environmental Issues

No adverse human health or environmental issues.

(d) Impacts upon Consumers and Competition

No impacts on consumers and competition.

(e) Impacts on the Rights of Citizens

No impact on the rights of citizens.

(f) Compliance Burdens

Compliance costs, in terms of improvement of containment, additional engineering controls or personal protective equipment (PPE), should not be significant from the point of view of their proportionality and distribution. There should be no increased compliance costs for the Authority.

4.5 Preferred Option

Option 2 – To publish an updated replacement Code of Practice – will produce a cohesive update of all national occupational exposure limit values, readily accessible in one document and without excessive cost.

5.0 Consultation

Public consultation in the form of publication of a draft Code of Practice on the Authority's website, seeking submissions, as well as direct contact with key stakeholders will be undertaken in line with the Authority's standard practice for public consultation, in accordance with Section 60(2) of the Safety, Health and Welfare at Work Act 2005.

6.0 Enforcement and Compliance

The Health and Safety Authority will continue to enforce the Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001 (S.I. No. 619 of 2001), and the Safety, Health and Welfare at Work (Carcinogens) Regulations 2001 (S.I. No 78 of 2001) as amended, **along with the Safety, Health and Welfare at Work (Chemical Agents) (Amendment) Regulations 2021 (S.I. No. X of 2021)** on which the draft Code of Practice gives practical guidance and observance. The use of the Code of Practice may be assessed during inspections of workplaces where chemical agents mentioned in the Code of Practice are used.

7.0 Review

It is the Authority's intention that the proposed Code of Practice will continue to be reviewed and updated periodically to reflect current knowledge concerning the health hazards of chemical agents.

APPENDIX 1: 5th IOELV list and 2020 COP errata.

Table 1: 5 th IOELV list (to be included in Schedule 1 of the 2021 Code of Practice)													
EC No	CAS No	Name of chemical agent	5 th list Limit values				Notation	Current limit values-CoP 2020				Notation	% Change
			8 hour		Short-term			8 hour		Short-term			
			mg/m ³	ppm	mg/m ³	ppm		mg/m ³	ppm	mg/m ³	ppm		
200-539-3	62-53-3	Aniline	7.74	2	19.35	5	skin	3.8	1	-	-	Sk, Sens	50% increase in OELV, new STEL
200-817-4	74-87-3	Chloromethane	42	20	-	-	-	105	50	210	100	-	60% decrease in OELV, remove STEL
200-875-0	75-50-3	Trimethylamine	4.9	2	12.5	5	-	-	5	-	-	-	60% decrease in OELV, new STEL
202-704-5	98-82-8	2-Phenylpropane (Cumene)	50	10	250	50	skin	100	20	250	50	Sk, IOELV	50% decrease in OELV, STEL remaining same
203-300-1	105-46-4	sec-Butyl acetate	241	50	723	150	-	-	200	-	-	-	75% decrease in OELV, new STEL
203-403-1	106-49-0	4-aminotoluene	4.46	1	8.92	2	skin	0.9	0.2	-	-	Sk	80% increase in OELV, new STEL
203-745-1	110-19-0	Isobutyl acetate	241	50	723	150	-	700	150	-	-	-	67% decrease in OELV, new STEL
204-633-5	123-51-3	Isoamyl alcohol	18	5	37	10	-	360	100	450	125	-	95% decrease in OELV, 92% decrease in STEL
204-658-1	123-86-4	n-Butyl acetate	241	50	723	150	-	710	150	950	200	-	67% decrease in OELV, 25% decrease in STEL
233-046-7	10025-87-3	Phosphoryl trichloride	0.064	0.01	0.13	0.02	-	-	0.1	-	-	-	90% decrease in OELV, new STEL

Table 2: Errata from the 2020 Code of Practice		
No.	Error highlighted	Comments
1	Page 16-Should the highlighted value 25 be the value in brackets? Should the footnote for the highlighted entry be 22 instead of 23?	Typographical errors amended
2	Ethane-1,2-diol" and "ε-Caprolactam" descriptions as "dust and vapour" or "particulate and vapour" but in the main name these descriptions are not present.	The main entry for "ε-Caprolactam" should include " (dust and vapour)". This is a typographical error and will be amended. In relation to the limit for "Ethylene Glycol, particulate and vapour, see Ethane-1,2-diol", the limit value applies to all forms and the reference to "particulate and vapour" will be removed.
3	Glycerol mist CAS 56-81-5 is listed in Schedule 5	Glycerol mist will be removed from Schedule 5 of the 2021 Chemical Agents Code of Practice, as this is a legacy issue.
4	15 minute OEL listing for ethane-1,2-diol in the Chemical Agents Code of Practice 2020.	Typographical error amended.