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IIR REFRIGERATION SAFETY – EVENT REPORTER

Please record only public, non-confidential information. The survey includes 20 questions organised in 7 sections. Submit one form per event.

***** required question***

Type of the event

1. What type of event was reported? (select multiple if applicable) *

Tick all that apply.

☐ Refrigerant release

☐ Pressure burst

☐ Explosion (ignition of flammable gas)

☐ Fire

☐ Freeze-burn

☐ Toxic reaction

☐ Asphyxiation

☐ Electrocution

☐ Fall from height

Other:

2. What were the consequences of the event reported? (select multiple if applicable)*

Tick all that apply.

☐Death

☐ Major injury

☐ Minor injury, inconvenience

☐ Damage to property

☐ Damage to the environment

Other:

3. Please quantify the consequences reported above, if applicable.

Location and date of the event

4. Country*

5. City

6. Date of event *

E.g. 7 January 2019

Application and life cycle

7. What kind of application was involved? (Select one)

Mark only one oval.

☐ Household refrigeration

☐ Household air conditioning

☐ Household heating

☐ Commercial air conditioning and heating

☐ Data center cooling

☐ Hospitality refrigeration

☐ Retail refrigeration

☐ Food processing

☐ Cold storage

☐ Transport refrigeration

☐ Transport air conditioning

☐ Car air conditioning

☐ Leisure facility

☐ Miscellaneous industrial process

Other:

8. What type of equipment was involved? (Select multiple if applicable)

Tick all that apply.

☐ Domestic fridge/freezer

☐ Room air conditioner (split, window, portable)

☐ Heat pump

☐ Chiller

☐ Monoblock refrigeration

☐ Distributed evaporator

☐ Remote condensing unit

☐ Remote compressor pack

☐ Stand-alone cabinet

☐ Blast freezer/icemaker

9. In which stage of the life cycle did the event occur? (Select one)

Mark only one oval.

☐ Production

☐ Transport

☐ Installation and commissioning

☐ Intended use (normal operation)

☐ Maintenance

☐ Service (repairing)

☐ Dismantling and decommissioning

☐ Working on the system (other than servicing or maintenance, e.g. retrofitting)

☐ Not known

Other:

Suspected nature and cause of failure

10. What is the suspected nature of failure? (Select multiple if applicable)

Tick all that apply.

☐ Technical – A physical component of the system failed.

☐ Organizational – Procedure, role, and responsibilities did not exist or were faulty.

☐ Human – Existing and valid procedure was not duly followed (voluntary or not).

Other:

11. What is the suspected root cause? (Select multiple if applicable)

Tick all that apply.

☐ Wrong or bad design – The design was not according to function, constraint, environment expected.

☐ Intrinsic material defect – A component, deemed to be in good condition, set in the system, was initially defective.

☐ Bad use – The system was used in violation of existing and valid rules.

☐ Out of scope use – The system was operated outside the constraints and limit provided by design (e.g. retrofitting).

☐ No scheduled maintenance – Nothing was planned as preventive maintenance.

☐ Bad maintenance – The scheduled maintenance operation was performed incorrectly or not carried out at all (e.g. due to lack of qualification).

☐ Wear - the component had followed a natural wear curve.

☐ External event – The cause of the failure originated outside (fire due to another system, natural event, people outside of the staff, forklift shock, etc.).

Other:

Refrigeration system if details are known

12. Which refrigerant was used in the system? (Enter R-number or trade name)

13. Which part of the refrigeration system was most closely related to the event? (Select multiple if applicable)

Tick all that apply.

☐ Compressor

☐ Heat exchanger

☐ Expansion device

☐ Pressure relief valve

☐ Piping or pressure vessel

☐ Access port

☐ Ancillary (cylinder, recovery machine, hoses, manifold set)

☐ Electrical component

☐ Electrical wiring

☐ Controls

Other:

Additional information

14. Please can you briefly describe the context of the event and any information missing above?

15. Is your entry a follow-up of an event that you have reported earlier?

☐ Yes - In this form, I provide additional information for an event reported earlier.

☐ No - It is a first record, as far as I know.

16. What could be done better next time to avoid the event?

Reference and contact details

17. Please provide the link(s) to at least one publicly available source so that we may find more information and verify your report. You can also send a document to refrigerationsafety@gmail.com. *

19. Would you like to provide personal contact details to provide further information?

20. Please enter your email address so that we may contact you for additional questions if necessary. Your address details will remain confidential and will never be published.