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Fluor Federal Services, Inc. Paducah Deactivation Project

CP4-ES-0043 **Rev. 0**	**TITLE:** Temperature Control for Sample Storage	Page 1 of 7

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1.0 PURPOSE AND SCOPE

1.1 Purpose

To provide a system for the documentation and maintenance of controlled temperatures for storage areas holding samples requiring ≤6 °C preservation by 40 Code of Federal Regulations (CFR) 136.3 or other regulatory guidelines.

1.2 Scope

This procedure applies to any person performing environmental sampling activities for Fluor Federal Services, Inc. Paducah Deactivation Project and its subcontractors at the Paducah Gaseous Diffusion Plant. The requirements in this procedure apply to temperature controlled storage areas in C-730 and C-612.

2.0 REFERENCES

2.1 Use References

CP3-RD-0010, Records Management Process.

2.2 Source References

- Federal Register, 40 Code of Federal Regulations Part 136.3.
- SW-846, 3rd Edition, Test Methods of Evaluating Solid Waste.

3.0 COMMITMENTS

None

4.0 PRECAUTIONS AND LIMITATIONS

None

5.0 PREREQUISITES

5.1 The following are needed to complete CP4-ES-0043, *Temperature Control for Sample Storage.*

- Thermometer calibration must be traceable to National Institute of Standards and Technology (NIST) or equivalent
- Glycerin or water
- Recording disc
- CP4-ES-0043-F01, *Weekly Fridge Chart Change Out Form*

5.2 Refrigeration areas shall be inspected on normal working days to assure temperature requirements are met.

5.3 Compliance will be assumed for nonworking days if the days immediately preceding and following the nonworking days are in compliance.

5.4 Automated disk recorders shall be used to verify compliance with storage temperature requirements during normal working days and during off-normal hours. The automated disk recorder will be inspected the next working day following off-normal hours to identify any temperature variances that may have occurred during off-normal hours.

6.0 Instructions

6.1 Temperature Control Check

Sampler

Note:
Position the thermometer in an area representative of the overall temperature of the refrigerator.

6.1.1 Place the NIST traceable thermometer in water or glycerin **and** place in the refrigerator when the refrigerator is installed for sample storage.

NOTE:
Recorder disc should be replaced weekly. The date, time and initials should be recorded on the recorder disk at insertion and removal from recorder.

6.1.2 Record date, time, and initials on recording disk **and** insert disk into recorder according to manufacturer's instructions when the refrigerator is installed for sample storage.

6.1.3 Compare reading on NIST thermometer with removed recorder disk.

6.1.4 Log date and time of inspection on Weekly Fridge Chart Change Out Form.

6.1.5 **If** reading on disc does **NOT** reflect reading on thermometer $\leq 6°C$, **then** adjust temperature on disc recorder.

6.1.6 **If** thermometer reading is **NOT** within acceptance limits, **then** recheck the thermometer in approximately one hour.

6.1.7 **If** adjustment does **NOT** bring temperature into acceptable limits, **then** remove samples and place in an alternate refrigerator until temperature requirements are met.

6.1.8 Document any out of range temperature conditions and corrective actions on form CP4-ES-0043-F01, *Weekly Fridge Chart Change Out Form.*

7.0 ACCEPTANCE CRITERIA

None

8.0 POST PERFORMANCE WORK ACTIVITIES

File the recording disc in accordance with CP3-RD-0010, *Records Management Process.*

9.0 RECORDS

9.1 Records Generated

The following records may be generated by this procedure:

- Recording disc
- CP4-ES-0043-F01, *Weekly Fridge Chart Change Out Form*

Records Disposition

The records are to be maintained in accordance with CP3-RD-0010, *Records Management Process*.

Appendix A – Acronyms/Definitions

ACRONYMS

CFR –Code of Federal Regulations

NIST –National Institute of Standards and Technology

DEFINITIONS

None

Appendix B – Weekly Fridge Chart Change Out Form

Weekly Fridge Chart Change Out Form

	Week 1	Week 2	Week 3	Week 4	Week 5	Comments
Fridge #1						
Fridge #2						
Fridge #3						
Fridge #4						

Comments:

	Week 1	Week 2	Week 3	Week 4	Week 5	Comments
Fridge #1						
Fridge #2						
Fridge #3						
Fridge #4						

Comments:

	Week 1	Week 2	Week 3	Week 4	Week 5	Comments
Fridge #1						
Fridge #2						
Fridge #3						
Fridge #4						

Comments:

EXAMPLE