Review Title Edit 52826 — Triennial assessment of Fermilab Radiation Protection Program

Led By —

Performed On FERMILAB — Fermi National Accelerator Laboratory

Review Category Division/Section/Project Self-Assessment

**Review Sub-category** Assessments

**Start Date** 03/10/2020 **End Date** 05/15/2020

Review Description Partial internal triennial assessment of Fermilab compliance to 10 CFR 835 (Code of

Federal Regulations, Title 10, Chapter III, Part 835), Occupational Radiation

Protection, Subparts E, I, J, and N.

Participants AD Compton, Joe

ES Schmitt, Wayne LBNFDUNE/LBNF Newhart, Duane

PPD Hahn, Dee

# Details For Item #103916 — Investigate methods for obtaining bioassay services from commercial entity

Review 52826 — Triennial assessment of Fermilab Radiation Protection Program

**Item Type** Recommendation

**Item Category** ESH

Management System Environment Safety and Health

**Status** CLOSED 11/16/2020

Item Description As a fall-back position, investigate alternative methods for obtaining bioassay services

commercially to address §835.402(c).

**Date Found** 05/15/2020

**Due Date** 11/15/2020

Found In ES — Environment, Safety and Health Section

Risk Code 3 — Moderate

**Hazard Severity** 4 — Low

**Human** Injuries or temporary, reversible illnesses not resulting in

hospitalization with lost time

**Environmental** Isolated and minor, but measurable, impact(s) on some component(s)

of a public resource

Compliance Programmatic noncompliance with the Lab's Work Smart set

**Property** Minor property damage or critical program component; (\$50,000 -

\$1,000,000 total cost)

Mishap Probability C — Occurring not more than once in ten years

## **Responsible Parties**

1 - Michael Vincent (ES) CLOSED: 11/16/2020

1 - Wayne Schmitt (ES) CLOSED: 11/09/2020

### **Action Plans / Responses**

Action Plan / Response Title Investigate availability of commercial bioassay services

**Scheduled Date** 11/15/2020 **Close Date** 11/16/2020

Action Plan Description Briefly investigated option of using GEL Labs for bioassay.

Response / Action Plan Decided to continue using Argonne for bioassay/internal dosimetry services.

Resolution

AP/R Owner Michael Vincent

Action Plan / Response Title Renew bioassay dosimetry contract with ANL

**Scheduled Date** 11/14/2020 **Close Date** 11/09/2020

Response / Action Plan Evaluation of dosimetry bioassay services from outside vendors has been

Resolution conducted by the Dosimetry Program Manager. The Fermilab Senior Radiation

Safety Officer has instructed the Dosimetry Program Manager to proceed with renewing the previous agreement with Argonne National Laboratory for these

services.

AP/R Owner Wayne Schmitt

# Details For Item #103917 — Add an item to Radiological Worker (FN000470/CR/01) training to describe escort responsibilities

Review 52826 — Triennial assessment of Fermilab Radiation Protection Program

Item Type Recommendation

Item Category ESH

Management System Environment Safety and Health

Status CLOSED 07/20/2020

Item Description Add an item to Radiological Worker (FN000470/CR/01) training that clearly states

expectations of trained workers when escorting an untrained individual(s) within a

radiological area to address §835.901(d)(2).

**Date Found** 05/15/2020 **Due Date** 11/15/2020

Found In ES — Environment, Safety and Health Section

Risk Code 0 — Uncategorized

**Hazard Severity** 4 — Low

Human Injuries or temporary, reversible illnesses not resulting in

hospitalization with lost time

**Environmental** Isolated and minor, but measurable, impact(s) on some component(s)

of a public resource

**Compliance** Programmatic noncompliance with the Lab's Work Smart set

**Property** Minor property damage or critical program component; (\$50,000 -

\$1,000,000 total cost)

**Mishap Probability** 0 — Does Not Apply

## **Responsible Parties**

- 1 Wayne Schmitt (ES) CLOSED: 07/20/2020
- 1 Kathy Graden (ES) CLOSED: 07/20/2020

### **Action Plans / Responses**

Action Plan / Response Title Add items to Radiological Worker training to better describe escort

responsibilities

Scheduled Date 11/15/2020

**Close Date** 07/20/2020

Action Plan Description Revise Radiological Worker training classroom (virtual) to

include responsibilities of rad workers who escort untrained individuals.

Response / Action Plan Radiological Worker training (FN000470) classroom (virtual) was revised

Resolution to include responsibilities of rad workers who escort untrained individuals.

AP/R Owner Kathy Graden

Action Plan / Response Title Approve Kathy Graden action

**Scheduled Date** 11/15/2020 **Close Date** 07/20/2020

Response / Action Plan Item has been added to Radiological Worker training to describe escort

**Resolution** responsibilities. **AP/R Owner** Wayne Schmitt

## Details For Item #103918 — Add an item to FRCM Article 922 concerning Fermi Site Office (FSO) notification

Review <u>52826</u> — Triennial assessment of Fermilab Radiation Protection Program

**Item Type** Recommendation

**Item Category ESH** 

Management System Environment Safety and Health

**Status** CLOSED 11/09/2020

Item Description Add an item to FRCM Article 922 concerning Fermi Site Office (FSO) notification to

address §835.1301(c).

**Date Found** 05/15/2020

**Due Date** 11/15/2020

Found In ES — Environment, Safety and Health Section

Risk Code 3 — Moderate

Hazard Severity 4 — Low

**Human** Injuries or temporary, reversible illnesses not resulting in

hospitalization with lost time

**Environmental** Isolated and minor, but measurable, impact(s) on some component(s)

of a public resource

Compliance Programmatic noncompliance with the Lab's Work Smart set

Property Minor property damage or critical program component; (\$50,000 -

\$1,000,000 total cost)

**Mishap Probability** C — Occurring not more than once in ten years

### **Responsible Parties**

1 - Wayne Schmitt (ES) CLOSED: 11/09/2020

### **Action Plans / Responses**

Action Plan / Response Title Add items to FRCM Article 922 for required FSO notifications

**Scheduled Date** 11/15/2020 **Close Date** 11/09/2020

Response / Action Plan FRCM Chapter 9 revision has been drafted for FSO notification after operations

**Resolution** have been suspended after an Emergency Exposure.

AP/R Owner Wayne Schmitt

Action Plan / Response Title Draft FRCM Chapter 9 revision for FSO notifications

**Scheduled Date** 11/14/2020 **Close Date** 11/09/2020

Response / Action Plan FRCM Chapter 9 changes have been drafted to include FSO notification before

**Resolution** resuming operations after Emergency Exposure.

AP/R Owner Wayne Schmitt

### Details For Item #103919 — Add an item to FRCM Article 922 concerning DOE approval

Review 52826 — Triennial assessment of Fermilab Radiation Protection Program

Item Type Recommendation

**Item Category** ESH

Management System Environment Safety and Health

**Status** CLOSED 11/09/2020

**Item Description** Add an item to FRCM Article 922 concerning DOE approval to address §835.1301(d).

**Date Found** 05/15/2020 **Due Date** 11/15/2020

Found In ES — Environment, Safety and Health Section

Risk Code 3 — Moderate

**Hazard Severity** 4 — Low

Human Injuries or temporary, reversible illnesses not resulting in

hospitalization with lost time

**Environmental** Isolated and minor, but measurable, impact(s) on some component(s)

of a public resource

**Compliance** Programmatic noncompliance with the Lab's Work Smart set

**Property** Minor property damage or critical program component; (\$50,000 -

\$1,000,000 total cost)

**Mishap Probability** C — Occurring not more than once in ten years

## **Responsible Parties**

1 - Wayne Schmitt (ES) CLOSED: 11/09/2020

### **Action Plans / Responses**

Action Plan / Response Title Add items to FRCM Article 922 for required FSO approvals

**Scheduled Date** 11/15/2020 **Close Date** 11/09/2020

Response / Action Plan FRCM Chapter 9 revisions have been drafted for FSO approval before resuming

**Resolution** operations after an Emergency Exposure.

AP/R Owner Wayne Schmitt

Action Plan / Response Title Draft FRCM Chapter 9 revision for FSO approvals

**Scheduled Date** 11/14/2020 **Close Date** 11/09/2020

Response / Action Plan FRCM Chapter 9 revisions have been drafted for FSO approval before resuming

**Resolution** operations after an Emergency Exposure.

AP/R Owner Wayne Schmitt