Fermilab

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April 19, 2011

Mr. Michael J. Weis
Fermi Site Office
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Subject: Contractor Assurance System Description

Dear Mr. Weis:

Enclosed you will find the Contractor Assurance System Description for your approval. An electronic copy of the document will follow via email to Mary Ann Burt. Should you have questions, please feel free to contact me.

Sincerely,

J. R. Grant

John R. Grant
Head, Office of Quality & Best Practices

Enclosures:
As Stated

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Fermilab

Contractor Assurance System Description

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Contractor Assurance System Description

1.0 Introduction

Fermi National Accelerator Laboratory (Fermilab) is managed and operated by Fermi Research Alliance (FRA), LLC, under Contract DE-AC02-07CH11359 (prime contract) with the U.S. Department of Energy's (DOE's) Office of Science (SC). The prime contract Clause H.13-*Contractor Assurance System* requires FRA to develop a Contractor Assurance System (CAS) that is executed by the contractor's Board of Directors (or equivalent corporate oversight entity) and implemented throughout the contractor's organization. This system provides reasonable assurance that the objectives of the contractor management systems are being accomplished. The Contractor Assurance System, at a minimum, shall include the following key attributes:

> **CLAUSE H.13 – CONTRACTOR ASSURANCE SYSTEM**
> (a) The Contractor shall develop a contractor assurance system that is executed by the Contractor's Board of Directors (or equivalent corporate oversight entity) and implemented throughout the Contractor's organization. This system provides reasonable assurance that the objectives of the contractor management systems are being accomplished and that the systems and controls will be effective and efficient. The contractor assurance system, at a minimum, shall include the following key attributes:
> (1) A comprehensive description of the assurance system with processes, key activities, and accountabilities clearly identified.
> (2) A method for verifying/ensuring effective assurance system processes. Third party audits, peer reviews, independent assessments, and external certification (such as VPP and ISO 9001 or ISO 14001) may be used.

1. A comprehensive description of the assurance system with processes, key activities, and accountabilities clearly defined.
2. A method for verifying/ensuring effective assurance system processes. Third party audits, peer reviews, independent assessments, and external certification (such as VPP and ISO9001 or ISO 14001) may be used.
3. Timely notification of the DOE-Fermi Site Office (FSO) Contracting Officer of significant assurance system changes prior to changes.
4. Rigorous, risk-based, credible self-assessments, and feedback and improvement reviews to assess and improve Fermilab's work process and to carry out independent risk and vulnerability studies.
5. Independent verification and correction of negative performance/compliance trends before they become significant issues.
6. Integration of assurance system with other management systems including Integrated safety Management (ISM).
7. Metrics and targets to assess performance, including benchmarking of key functional areas with other DOE contractors, industry and research institutions. Assure development of metrics and targets that result in efficient and cost effective performance.
8. Continuous feedback and performance improvement.
9. An implementation plan (if needed) that considers and mitigates risks.
10. Timely and appropriate communication to the FSO Contracting Officer, including electronic access, of assurance related information.

1.1 Purpose

The purpose of this document is to describe how the FRA and Fermilab's management programs, processes, and procedures work in concert to form a comprehensive CAS that complies with the requirements of the prime contract.

1.2 Scope

CAS processes encompass all aspects the management systems (Figure 1) and operations essential to mission success (i.e., mission support operations) and applies to all work activities and personnel performing work at Fermilab including subcontractors and guests.

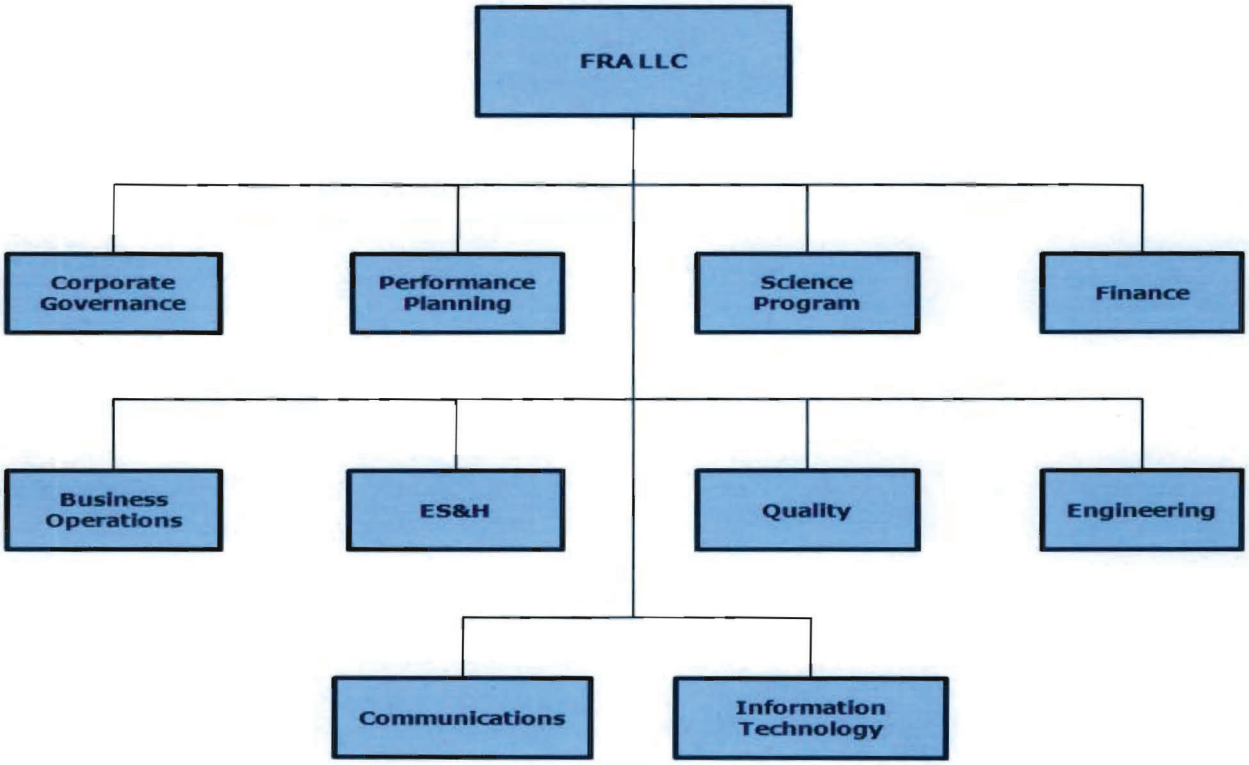

Figure 1: FRA/Fermilab Management Systems

2.0 Assurance Process

FRA and Fermilab view contractor assurance as a facility-wide initiative and the primary tool for demonstrating operations are complaint with legal and contract requirements. Contract Assurance is integrated across all contract activities.

2.1 Roles

Each level of management has a different role and focus:

The **FRA Board of Directors** (BoD) has the responsibility for governing Fermilab operations in accordance with the letter and intent of the contract between FRA and DOE. In performing their role, their actions are designed to achieve the following:

- Provide continuity for the organization by setting up a corporation or legal existence

- Select, appoint, and support a chief executive to whom responsibility for the administration of the organization is delegated.
- Review and evaluate the chief executive's performance regularly on the basis of a specific job description.
- Govern the organization by broad policies and objectives, formulated by the chief executive.
- Acquire and manage sufficient resources for the organization's operations and ensure that the activities are properly financed.
- Account to the stakeholders and public for the management and work activities of the organization and expenditures of its funds.

The **Fermilab Director and Deputy Director are** the bridge between the Laboratory and the Board of Directors. Their primary responsibility is to carry out the strategic plans and policies as approved by the Board of Directors and by DOE.

The **Director and Deputy Director** are accountable to the board for:

- Contributing to the development of annual goals and objectives;
- Ensuring that procedures and overall management are designed in accordance with established board policy;
- Informing the Board of existing or impending policy issues; and
- Issuing an assurance declaration to the DOE that describes the compliance status of requirements found in the directives associated with Fermilab's management systems.

The **Fermilab Associate Directors** are responsible for the day-to-day management of different mission-aligned parts or common programs. Their primary focus is ensuring the major processes and policies match the strategic direction specific to each program.

The **Fermilab Division, Section and/or Center (D/S/C) Managers** have day-to-day management responsibilities that include managing and coordinating specific projects or tasks.

The **Fermilab Department Managers and Supervisors** have day-to-day management responsibilities of executing specific projects or tasks at the detailed activity level.

Councils and Committees:

The **FRA CAS Committee** advises the FRA BoD of a program's long-term needs, progress, and strategies.

The **Laboratory Assurance Council (AC)** ensures the Fermilab Integrated Contractor Assurance Program provides sufficient internal control and that oversight systems are in place and operating properly.

2.2 Corporate Governance

In response to a competitive solicitation for the management and operation of the Fermi National Accelerator Laboratory (the Laboratory) for the U.S. Department of Energy (DOE), the University of Chicago (UChicago) and Universities Research Association, Inc. (URA) joined together to create Fermi Research Alliance, LLC (FRA). FRA, a limited liability company (LLC), was established for the sole purpose of managing and operating the Laboratory in accordance with the prime contract with the DOE. The DOE awarded to FRA the management and operating contract for the Laboratory, effective January 1, 2007.

2.2.1 Board of Directors

The FRA Board of Directors (BoD) is appointed by FRA to assist in the oversight of the management and operations of the Laboratory. The FRA Board Chairman provides the DOE with single-point Laboratory Director and his management team, and ensures that the Laboratory has the resources necessary for its scientific mission. The BoD consists of the Chairman of the Board, who is also the President of UChicago; a Vice-Chair, who is the President of URA; and twenty two additional members drawn from industry, government, academia, research and other leadership positions. The Director of the Laboratory is appointed by the BoD with the approval of the DOE. The Laboratory Director reports to the FRA BoD Chairman and the Board of Directors. The Laboratory Director is responsible for the direction, performance and supervision of the work of the Laboratory in accordance with the prime contract with the DOE and the policies and procedures of the Board of Directors.

The duties, powers, and governance of the BoD consist of three primary functional oversight areas:

- Stewardship: By ensuring that effective senior leadership is in place and adequately supported; ensuring that the Laboratory carries out its DOE mission in accordance with the terms of the prime contract and the policies and procedures of FRA; In addition, when appropriate, UChicago and URA provide "corporate reach back" either to deal with specific, urgent issues or issues where the Laboratory can benefit from the unique resources of one or both corporate parents.
- Guidance and Advice: By assisting the Director in formulating a strategy that is embraced by DOE and provides an intellectual environment conducive to the stimulation of world-class research and development; and providing expert advice from industry, government, and academia to assist the Director and his leadership team in ensuring infrastructure, staffing and budget are appropriately established and maintained.
- Advocacy and Outreach: By acting as advocates and ambassadors on behalf of the Laboratory to help ensure adequate support is available for execution of the Laboratory mission.

2.2.2 BOD Committees

FRA executes its stewardship function through the full BoD and (a) BoD Committees whose charter, membership and scope are defined by the BoD and which meet at regular meetings of the BoD; and (b) Standing Review Committees which meet according to their individual timetables to assess the operations and scientific programs of the Laboratory and provide assurance to the BoD. Additionally, the BoD or a Standing Review Committee periodically creates Ad Hoc Review Committees to conduct specialized reviews as needs arise.

There are at present seven BoD Committees (four of which have direct oversight of Laboratory functions):

- Executive – provides executive leadership for the BoD and acts as a proxy for the full Board;
- Administrative & Finance – oversees the management of fiscal and operational systems, and manages Laboratory-wide risk issues;
- Audit – oversees the internal and external audit function;
- Compensation – oversees human resource systems as well as compensation and succession planning for key personnel;
- Environment, Safety & Health – oversees Laboratory policies, programs, and practices relevant to employee, customer and public safety, security and health;
- Physics - oversees the present and short-term scientific functions of the Laboratory including all scientific activities and management of research facilities; and
- Science Planning - provides advice and support to Laboratory management for issues surrounding new and proposed, long-term major science initiatives, directions and collaborations (international & domestic)

The full BoD and the BoD Committees generally meet every four months (February, June, and October). At each full board meeting, strategic topics are presented to the BoD, as they are responsible for periodic review of the strategic plan. Performance data, DOE requirements, the findings and the Laboratory's response to specific programmatic (i.e., science and technology) and operational reviews are disseminated in full board meetings. Staff members from Laboratory management and FRA support each BoD committee by documenting, monitoring, and facilitating the execution of action items from each meeting.

There are presently two Standing Review Committees of the BoD, one of which assesses the scientific mission of the Laboratory (Visiting Committee for Scientific Programs) and one which is responsible for Contractor Assurance (CAS Review Committee) – See Figure 2.

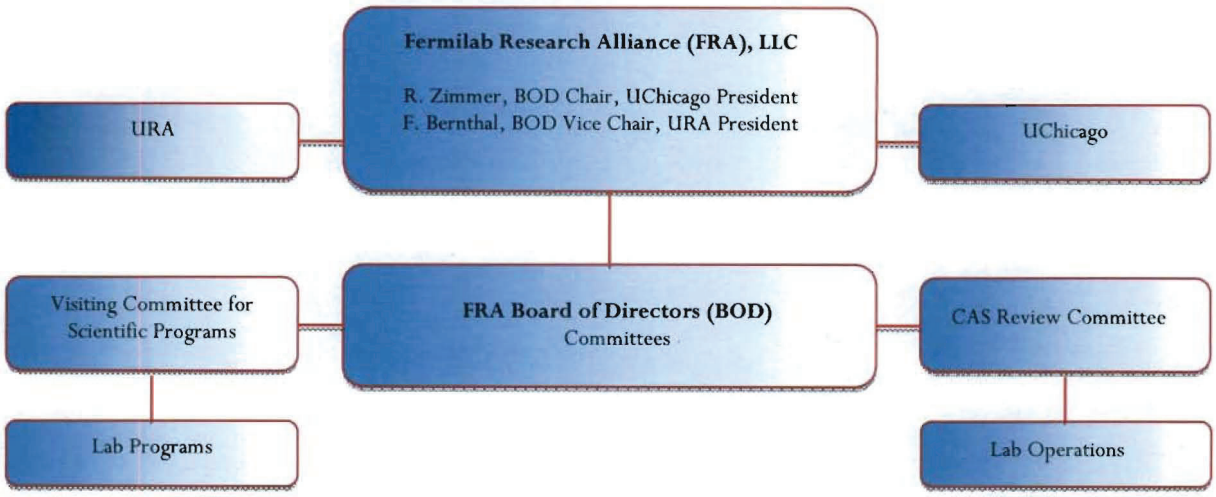

Figure 2: Corporate Governance Organization Chart

Each Standing Review Committee has two members of the BoD and a sufficient number of subject matter experts to assess the relevant area(s) adequately. Review Committee members have staggered terms to ensure an appropriate balance of continuity and turnover. In collaboration with FRA and the Laboratory Director, the charge and scope of each review are determined by the Standing Review Committee Chair; and Review Committee meetings and assessments are conducted at least once annually. After a Review Committee assesses performance, findings and recommendations are reported first to Laboratory management. Reports are shared and discussed with the full BoD at a subsequent Board meeting. FRA staff coordinates the reviews and are responsible for capturing action items and tracking and reporting resolution of action items and final outcomes. The FRA Review Committee process is illustrated in Figure 3.

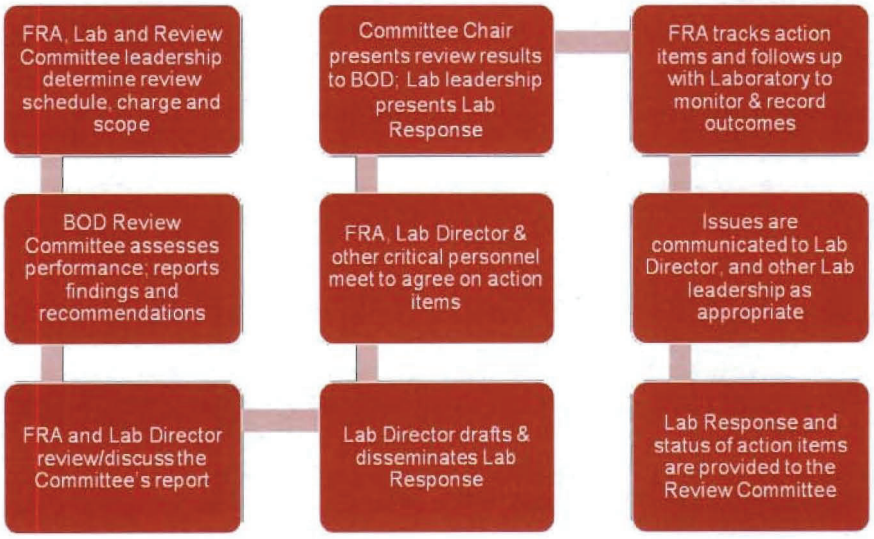

Figure 3: BoD Review Committee Assessment Process

2.3 Execution of Contractor Assurance

The BoD CAS Review Committee is comprised of two BoD members and three to four additional subject matter experts (SMEs) with staggered terms to ensure an appropriate balance of continuity and turnover. The initial BoD members include the Chair and a member of the Administrative and Finance Committee, both of whom closely coordinate with the other committees, including the Environment, Safety and Health Committee.

The CAS Review Committee functions as an extension of the FRA BoD and provides: 1) expert assurance to the Board that the Laboratory has a robust and effective CAS in place; and 2) advice and assistance to the Laboratory in identifying and managing issues related to its CAS and helping the Laboratory prepare for periodic external CAS peer reviews. Contractor assurance activities and performance data help to inform and prioritize the Review Committee's assessment schedule. The CAS Review Committee meets as often as necessary to insure adequate performance of its primary function.

The Chair of the CAS Review Committee is required to present results of the CAS review(s) once annually to the full BoD. BoD members who serve on the CAS Committee are available to answer additional questions and provide Board perspectives. The staggered terms for BoD members help ensure that, over time, a larger number of Board members will have developed expertise in CAS, thereby enhancing oversight and a more complete connection between CAS and the BoD.

Because CAS is meant to subsume all Laboratory operations, the CAS Committee and its review process replaces all former operations reviews conducted in an ad hoc manner by the BoD (including the prior Standing Review Committee related to Administration & Operations). Focused operational reviews may still occur, but they are conducted within the framework of CAS (e.g., targeting a specific operational issue, management system(s) or chronic challenge area as identified by the CAS review process).

2.4 Partnering

The Fermi Site Office and The Director of the laboratory have signed a Partnership Agreement to formally declare their commitment to work in full partnership to achieve the mission of the laboratory and fulfill their responsibilities to the public, our employees, the scientific community, and the American people. A key element of the implementation of this agreement is clear and concise communication.

2.4.1 Timely and Appropriate Communication

In order to facilitate timely and appropriate communication to the DOE site Manager, Contracting Officer and other appropriate DOE staff, FRA and the Laboratory have developed an internet-based repository of CAS-related information. The repository includes detailed information utilized by the CAS Committee in conducting its assessments, and reports generated by the Committee and reported to the BoD. In addition, senior leadership provides routine verbal CAS updates to DOE leadership throughout the year. FRA routinely provides access to and shares management information with the DOE through a combination of informal and formal mechanisms.

Senior leadership of FRA conducts standing and impromptu meetings throughout the year with the DOE Fermilab Site Office (FSO) to provide information, obtain input, feedback and address issues as they arise. UChicago and URA also meet by phone and in person as necessary with appropriate DOE officials at Office of Science headquarters for the same purposes.

2.5 Laboratory Management of Contractor Assurance

Fermilab's management is comprised of two main elements: line management and process management. Line management determines what Fermilab will do. The process management system, tells employees how to accomplish activities needed to get work done. The combined effort is focused on achieving Fermilab's science mission in an efficient and effective manner.

2.5.1 Contractor Assurance and Management System Integration.

Uniformity may be imposed where implementation by one organization may have a negative impact on another or there is a gain in efficiency and/or effectiveness. There are distinct variations in implementation at the D/S/C level or activity level only when there is a need because of the nature of the operations.

Vertical integration is facilitated by the downward flow of information regarding expectations for management system and program implementation. Vertical integration begins with management and continues down through the organization lines to the individual worker.

Horizontal integration provides parity and compatibility to avoid conflicting requirements among organizations and technical disciplines.

Assurance systems are either part of management system or stand-alone programs and comply with the Fermilab Director's Policy Manual, policy number 39, Assurance Program.

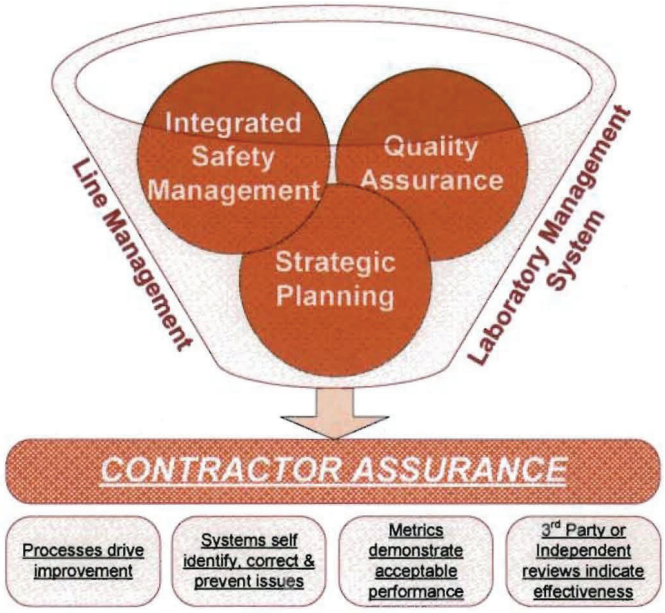

Figure 4: Integration of Management Systems

2.5.2 Fermilab Organizational Management Structure

Fermilab operates under a line management structure, a hierarchical chain of command from the Laboratory Director down to front-line employees. The Laboratory Director is responsible for establishing a clear vision of Fermilab's future, setting highest level goals and targets, and providing employees with the required resources, training, and authority to perform work in a safe manner. Fermilab's line management structure provides clear roles, responsibilities, authorities, and accountabilities (R2A2's) for our workforce so that work at the Laboratory can be directed and conducted in an efficient manner.

The Directorate organizational chart is shown in Figure 5:

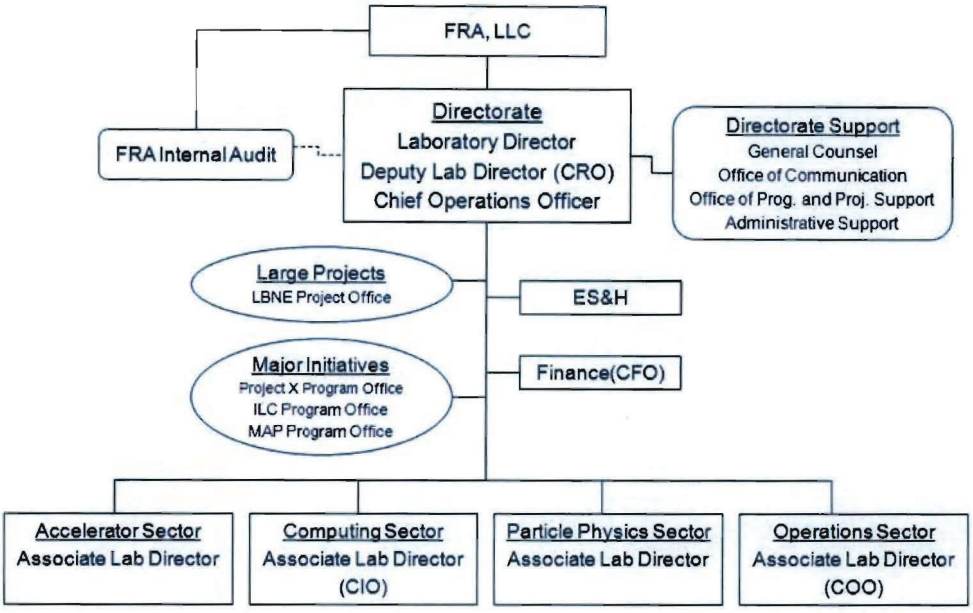

Figure 5: Fermilab Organization

2.5.3 Organizational Management Structure Vs Contractor Assurance

The director is responsible for all programs and delegates to the OQBP the day-to-day management of the Contractor Assurance Program and the oversight of all management systems.

Operation of the Contractor Assurance Program consists of several major components with clear, documented description of activities. Managers understand the description of their responsibilities, and a clear plan of key activities has been developed. OQBP coordinates site-wide assessment activities for the Contractor Assurance Program and validates each functional manager's annual assessment plan to assure the highest risk processes are included. Functional organizations provide assurance information in the form of assessment reports and metrics. Assessment completion is compared to established plans to ensure accountability. Assessment reports are reviewed for breadth, depth and consistency, and feedback is provided to the functional organizations.

2.5.4 Contractor Assurance Oversight within the Laboratory

The management review is the line manager's tool for reviewing inputs generated from within the lab and from suppliers, customers, and others outside of the organization. Management reviews are primarily comprised of regularly scheduled area surveys, walk-throughs, and meetings to review documents, data, and activities conducted within the organization. All levels of the organization participate by providing input to line management and looking for opportunities to improve productivity, security, quality, and safety during daily activities.

2.6 Requirements Management

Requirements of the prime contract govern the work performed at Fermilab. The review of contract requirements and any changes is accomplished through the Contract Review and Change Management Process. This process ensures that requirements are appropriately assigned to process owners and establishes both responsibilities for managing new and existing prime contract requirements to ensure that policies and/or procedures are in place to implement the requirements. .

3.0 Risk Management

The Laboratory has established an Enterprise Risk Management program using a graded approach to provide assurance regarding the achievement of Laboratory objectives.

The process requires identification and communication of potential events that may significantly impact the Laboratory negatively and then managing these identified risk events to an acceptable level. It emphasizes managing risk across the enterprise using common methods and advocates integrating risk management functions to improve performance. The scope covers the management systems,and work processes for work done at Fermilab or that may affect FRA.

4.0 Performance Management

Performance management includes the planning, assessments, performance measurement, issues and corrective action management, and feedback and improvement programs.

4.1 Planning

Strategic and tactical planning for Fermilab is conducted by the Director, with advice from off-site advisors including the Director's Physics Advisory Committee and internal bodies, such as the Fermilab Assurance Council, Directorate, and OPPS. The goal is to position Fermilab on the forefront of scientific discovery and to maximize the effectiveness of its physical and intellectual assets.

4.2 Assessments

Fermilab uses a combination of Management Assessments, Independent Assessments and Surveillances to ensure the external and internal requirements and controls applicable to the specific management systems listed above are satisfied:

- **Management Assessments:** Management Assessments at Fermilab are self assessments conducted by, or under the direction of, Fermilab managers at all levels, to identify and correct problems that hinder their organizations from achieving their objectives or to identify opportunities for improvement. These include assessments sponsored by Fermilab management such as third party certification assessments.

- **Independent Assessments:** Independent Assessments at Fermilab are audits, surveillances, verification and validation reviews, or inspections sponsored by the Office of Quality & Best Practices and led by OQBP staff. Independent assessment teams may include others who are independent are independent from the work or process being evaluated.

- **Surveillances:** Surveillances are a subset of Independent Assessments that include more routine and more frequent assessments that do not warrant the same level of rigor and formality as an audit. Typically they are led by OQBP staff, but may be led by others as directed by Fermilab management.

4.2.1 Corporate Assessments

Corporate oversight is accomplished by FRA principally through its Board of Directors and its BoD Committees as described in Sections 2.3. An additional level of corporate level assessment is executed by the Laboratory Internal Audit department. The Internal Auditor manages a comprehensive program of financial reviews designed to ensure adequate, cost-effective financial and operating controls. The FRA CFO functions as the liaison to the BoD Audit Committee, and in conjunction with the Laboratory Internal Audit department, routinely reports the results of audits and other issues to that BoD Committee.

4.2.2 External Assessments

External certification audits to the OHSAS-18001 and ISO14001 standards are completed by an International Organization for Standardization (ISO) registrar. The registrar conducts external audits of the Laboratory Management System twice a year and recertification audits every three years. Other assessments are performed by organizations such as the IG, GOA, and KPMG.

4.3 Performance Measurement

Performance measures are used to demonstrate sustained and improved performance relative to defined outcome measures and targets. Leading indicators are used, where possible, to monitor performance. Performance measures are aligned with strategic goals, via the DOE Performance Evaluation and Measurement Plan (PEMP). Periodic reporting of status against metrics is provided to FSO and assurance program data is also available outside of formal reporting making the process transparent to key stakeholders. The elements of Performance Measurement are outlined in Figure 6.

Steps	Elements
Establish Objectives and Measures	• Strategic Plan • Performance Evaluation and Measurement Plan • Management System objectives and measures • Project deliverables per Critical Decision step • EVMS thresholds • Line management goals / employee performance appraisals
Collect Data	• Assessments • Incident Investigations

	• Worker feedback • Lessons learned from others • Benchmarking / Peer Reviews
Track Performance	• Issues tracking system • Financial management systems • Human resources / performance appraisal process • Lessons Learned database
Report Results	• Periodic Lab Agenda and PEMP performance reporting • Management Reviews • Committee reports • ORPS reporting system • NTS reporting system • Employee performance appraisals • Lessons Learned bulletins

Figure 6: Elements of Performance Measurement

The use of metrics aids in monitoring performance and supports alignment of resources with work activities that warrant attention. Performance metrics support effective communication of operational performance to management, helping management understand performance conditions

4.4 Issues and Corrective Actions Management

Issues management is utilized to ensure that significant items requiring the Directorate's involvement and/or commitment on resources, problems, trends, and issues are identified, documented, analyzed, and prioritized to promote effective resolution in a timely manner.

Issues management applies to issues identified through contractual obligations, corrective actions, assessments, lessons learned, and worker feedback, as well as injury, incident, and event (mishap) reporting which tend to be of major consequence, need lab-wide attention, and/or need senior management involvement. Fermilab's Issues Management System (IMS) utilizes a centralized database to track, manage, and report the status of identified issues

4.5 Feedback and Improvement

Feedback and improvement systems are used to drive continuous improvement across the operation. Trends in performance are analyzed to identify opportunities for improvement in both performance and risk reduction. Periodic reporting of status against metrics is provided to FSO and assurance program data is also available outside of formal reporting making the process transparent to all stakeholders.

4.5.1 Worker Feedback

Fermilab promptly addresses employee concerns about environment, safety, health, security, fraud, waste, abuse, or mismanagement of DOE and Fermilab managed activities. Resolution of employee concerns/complaints about environment, safety and health issues is expected to occur at the lowest management level possible. However, if the issue cannot be resolved at this level, the employee may proceed within his/her management chain or report the problem using alternative resolution processes described in this chapter.

Any situation that presents an imminent danger to the safety of an employee, visiting scientist, member of the public, or the environment must be halted immediately. Once the imminent danger has been mitigated, the concern must be reported.

4.5.2 Event or Incident Reporting

Fermilab policy requires that laboratory management and the DOE are notified of all events which may:

1) affect the safety and health of the public or workers;
2) seriously impact the intended purpose of the laboratory;
3) have an adverse effect on the environment; or
4) create publicity detrimental to the mission of the laboratory.

The procedures for reporting appropriate events are contained within the bounds of each management system or program. As an example, the FESHM outlines the internal roles and responsibilities for notification and categorization of events, and investigation of occurrence, generating and submitting reports.

4.6 Lessons Learned

The Fermilab lessons learned program is described in Lessons Learned Program (LLP), which establishes the processes that do the following:

- Ensure identification, documentation, validation, and dissemination of a lesson learned.
- Ensure utilization and incorporation process that includes identification of applicable lessons learned, identification of actions that will be taken as a result of the lesson learned, and follow-up to ensure that the identified actions were taken.
- Ensure measurement of operational performance improvement and program effectiveness.

The OQBP serves as the Fermilab LL Coordinator and has the responsibility for the program. The program coordinator performs an initial review and, if the lesson has the potential for use at Fermilab, contacts the appropriate review. The MSLLC interfaces with D/S/C Point of Contacts (POCs) or Assurance Representatives (ARs) and Subject Matter Experts (SMEs) to coordinate the screening, development, and distribution of lessons learned reports.

4.7 Performance Reporting

Management assesses performance via indicator data routinely and uses the outputs of the Management Review as a basis for process improvement. The performance indicator data is considered in allocating resources, establishing goals, identifying performance trends, identifying potential problems, and applying lessons learned and good practices. Problems with performance are identified and corrected at the earliest possible stage. Areas where performance excels are examined for potential application elsewhere.

4.7.1 Benchmarking

Fermilab will perform benchmarking where requested by reviewers or line management to assess best practices and gain insights into practice by others. Fermilab performance

data is used during the benchmarking process and it is compared against other sites within the DOE complex or commercial practices as deemed appropriate.

5.0 Operational Interfaces

Operational interfaces are designed to assure customer transparency, a key element of the Contractor Assurance System. Transparency is defined as timely, broad, and appropriate communication between Fermilab, FRA and the FSO to establish credibility in the Contractor Assurance (CA) processes. Transparency means unfettered access, within established protocols, to Fermilab's facilities and information about Laboratory operations in the areas of assessments, performance measurements and analysis, issues identification, and corrective action plans.

5.1 CA Program Approval and Change Control

The minimum review cycle for this FRACAP is annually and whenever new contractual requirements affect the assurance programs. This plan is also modified if lessons learned throughout the laboratory indicate a need for revision.

The Office of Quality and Best Practices (OQBP) and the AC review all revisions other than minor editorial changes. If a review results in revisions, the OQBP will resubmit the revised FICAP to the DOE for review and approval. Any changes will be identified and explained, and the OQBP will provide the basis for concluding that the revised FRACAP continues to satisfy requirements. If no revisions are made, the DOE will be notified that the review was conducted and that no revisions were necessary.

6.0 References

Fermi National Laboratory Prime Contract, Contract No. DE-AC02-07CH11359, Clause H.13 - *Contractor Assurance System*

DEAR Clause 970.5204-2, *DOE Management and Operations Contracts*, "Laws, Regulations, and DOE Directives"

DOE G 414.1-1B, *Management Assessment and Independent Assessment Guide*

DOE M 450.4-1, *Integrated Safety Management System Manual*

DOE O 231.1A, *Environment, Safety and Health Reporting*

DOE O 414.1C, *Quality Assurance*

Title 10 CFR Part 830, Subpart A, *Quality Assurance Requirements*

Title 10 CFR Part 851, *Worker Safety and Health Program*

DOE P 450.4, *Safety Management System Policy*

DOE P 450.5, *Line ES&H Oversight Policy*

DOE G 414.1-2A, *Quality Assurance Management System Guide for Use with 10 CFR 830 Subpart A*

DOE Order 151.1C, *Comprehensive Emergency Management System*

DOE Order 205.1A, *Department of Energy Cyber Security Management Program*

DOE Order 231.1A *Environmental, Safety and Health Reporting;*

DOE O 470.2B, *Independent Oversight and Performance Assurance Program, Attachment 2*

Fermilab Integrated Quality Assurance Program

Fermilab Director's Policy Manual, policy number 39, Assurance Program