



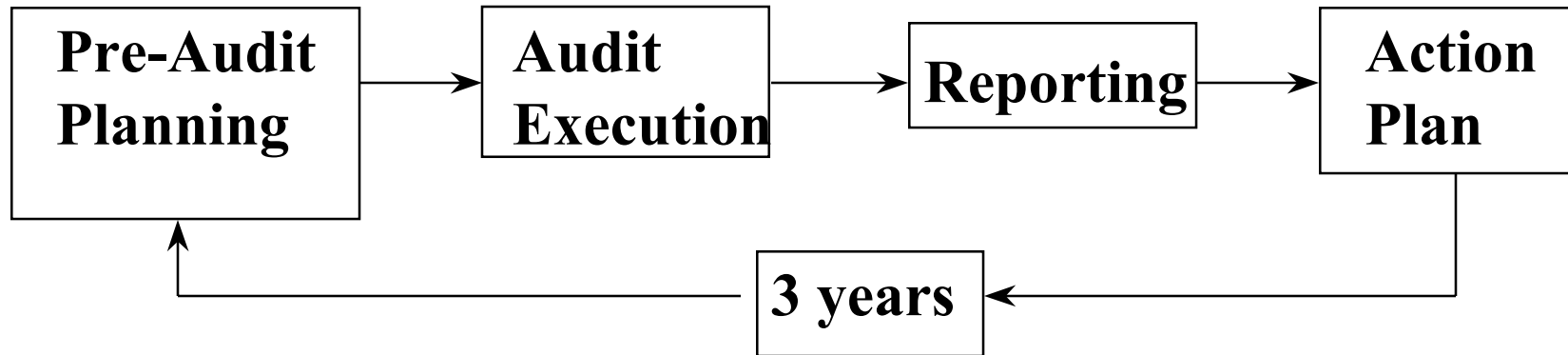
A REVISED EHS ASSURANCE PROCESS

**2002 CEAA Technical Conference &
Annual General Meeting
Thursday, September 26th to Saturday,
September 28th, 2002**

OUTLINE

- Noranda EHS Audit Program
- Noranda - Falconbridge EHS Integration
- EHS Assurance
- Audit Scope
- Reporting

NORANDA AUDIT PROGRAM: Pre-1998



- All corporate audits
- Many findings
- Unclear action plan objectives and priorities
- Voluntary follow-up on action plans
- No assessment of continual improvement

MANAGEMENT EXPECTATIONS 1998

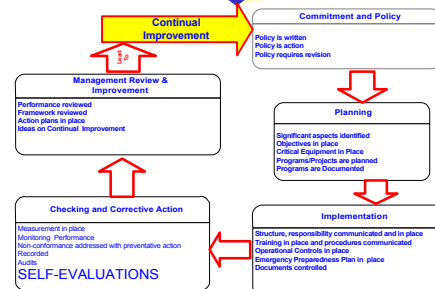
- ✓ **EHS audits are needed; how they are done must change;**
- ✓ **Strong support for a dual approach:**
 - ◆ **Self- evaluations**
 - ◆ **Corporate audits**
- ✓ **Develop synergies with quality management;**
- ✓ **Corporate audits should:**
 - ◆ **focus on the system**
 - ◆ **require appropriate corrective action plans**
 - ◆ **ensure continuous improvement**
 - ◆ **help increase EHS awareness and competencies at all levels of the organization**

INTEGRATED EHS MANAGEMENT SYSTEM

- Start in 1999 - one system for all of EHS
- Tiered implementation; baseline audits:
- Continuous improvement objectives:
 - **Implementation window = 3 years**
 - **Yearly improvement objective = 50% per year**
 - **Implementation level >90% after 3 years**
 - **Shift emphasis to performance after Y-3**
- As interim step, conducted systematic reviews of previous audits and compliance audits as needed or requested
- Provided the necessary tools, guidance, training and resources to help operations with implementation. (Bilingual)

CONTEXT

SPRING 2002



BACKGROUND

	NORANDA	FALCONBRIDGE
SALES \$MILLIONS (2001)	6,152	2,138
ASSETS \$MILLIONS	12,032	5,069
EMPLOYEES	16,000	6,400
ACTIVITIES	Cu, Zn, Mg, Al, Pb, Au, H ₂ SO ₄ , Recycling	Ni, Cu, Zn, Co, Pd, Pt, Ag
ISO 14001 REGISTERED SITES	NO	YES

SPRING 2002

- **Integration of Noranda and Falconbridge EHS Management Systems**
- **Strong and autonomous Business Units**
- **New function: Business Unit EHS Champion**
- **Key EHS Assurance players:**
 - Senior Management
 - Business Unit EHS Champions
 - Site EHS personnel
 - Corporate EHS team
 - Employees

BUSINESS UNITS



**Noranda
Board**

D. Pannell
President & CEO
Noranda

B. Brooks
President
Aluminum

F. Porcile
President
**Copper
Chile**

B. Sippel
President
Magnesium

G. Jones
President
Zinc

**Falconbridge
Board**

A. Regent
President & CEO
Falconbridge

B. Chertow
President
**Can. Copper &
Recycling**

J. Laezza
President
Nickel



EHS RESPONSIBILITIES

- EHS Committee of the Board of Directors oversees EHS governance matters
- CEO's, Presidents provide leadership and the EHS Vision
- VP EHS and Corporate EHS Team support management's duties through the implementation of policies, systems, programs, procedures and the **EHS Assurance process**
- Site and Project Managers integrate EHS management systems into their management processes
- Employees and Contractors adhere to the EHS standards and take personal action to achieve EHS objectives

CORPORATE EHS TEAM

- **Mandate:**
 - maintains a direct link with Noranda and Falconbridge executive and senior management on EHS affairs
 - ensures leadership for EHS issues remains a line responsibility
- **Interface with Business Units:**
 - provides support to BU and EHS Champions in meeting objectives
 - manages corporate EHS Assurance programs including regular audits and ECAP-SHL visits.
- **Performance metrics:**
 - updates EHS performance metrics when needed
 - ensures good mix of trailing and leading indicators
 - works with the Boards and executive management on setting company-wide EHS objectives

LINK TO BUSINESS UNITS

- **Business units are responsible for continuous improvement in EHS**
- **Each is responsible for:**
 - **identifying significant aspects**
 - **establishing challenging objectives and targets**
 - **ensuring a disciplined tracking system**
 - **reporting ESH performance and management data**
- **Corporate EHS team will support these efforts and provide assistance in selecting ESH tools to meet site-specific needs**
- **Corporate EHS staff can assist BU Presidents and HR with the selection of Business Unit EHS Champions and other EHS professionals**

EHS CHAMPIONS

- **Mandate:**
 - Supported by senior management, play a strategic role in developing and meeting the EHS commitments of the corporation;
 - Maintain communications with corporate EHS Services and EHS Champions in other Business Units
 - Oversee elements of EHS management such as:
 - EHS Policy development and reviews
 - roles and responsibilities of site EHS resources
 - internal audits and self-evaluations
 - EHS performance reporting
 - Serve as a technical resource within the Noranda Falconbridge Crisis Management Plan.
 - Carry out other duties as required by their present function within the business unit.

EHS AND THE BUSINESS UNITS

**Given that the Business Units are responsible
for continuous improvement in EHS
performance:**

- **EHS Champions exercise a leadership role within their Business Unit towards meeting company EHS objectives.**
- **EHS Champions work directly with site EHS managers and cooperate with the Corporate EHS Team in ensuring a consistent approach throughout the company.**

EHS OBJECTIVES

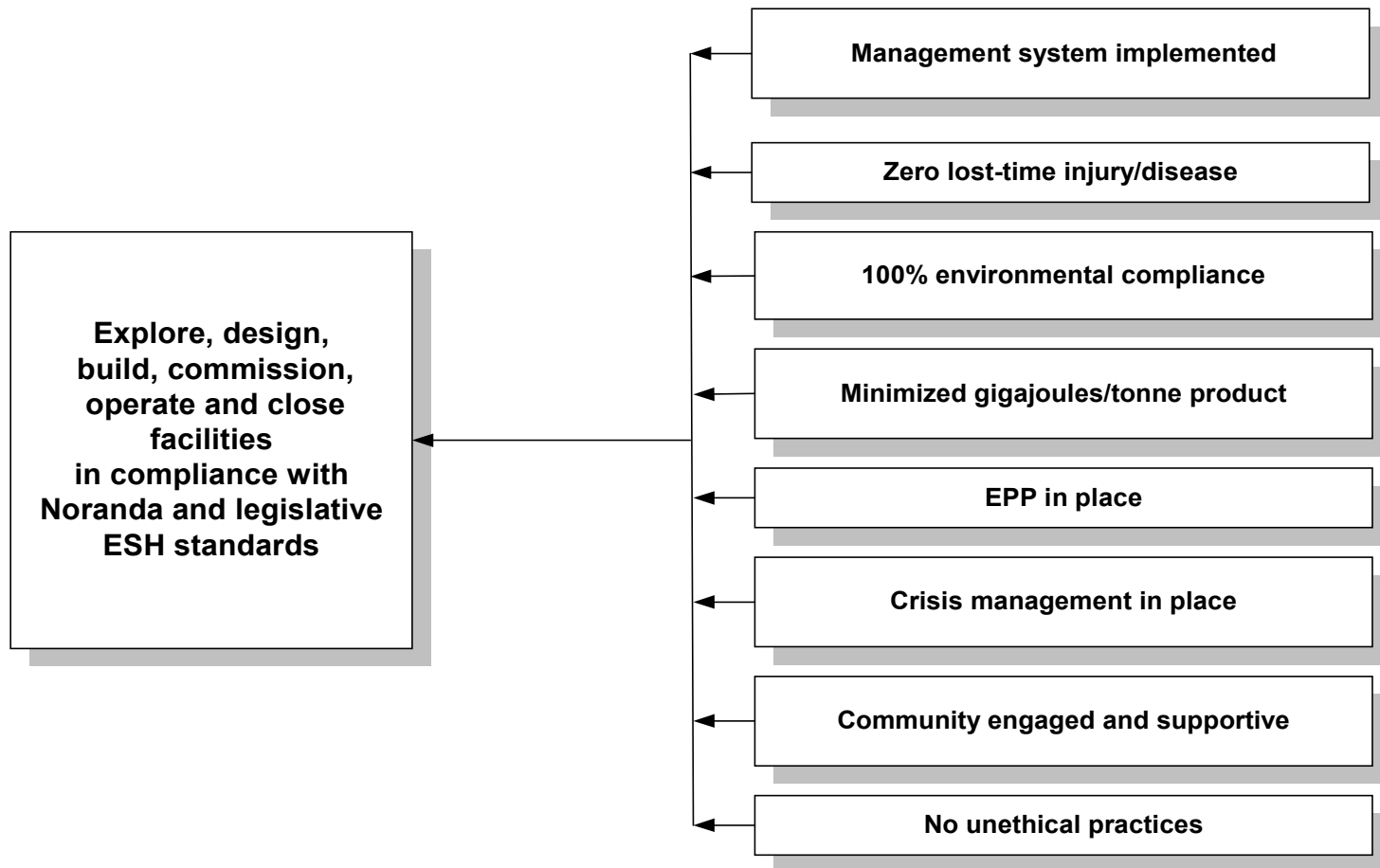
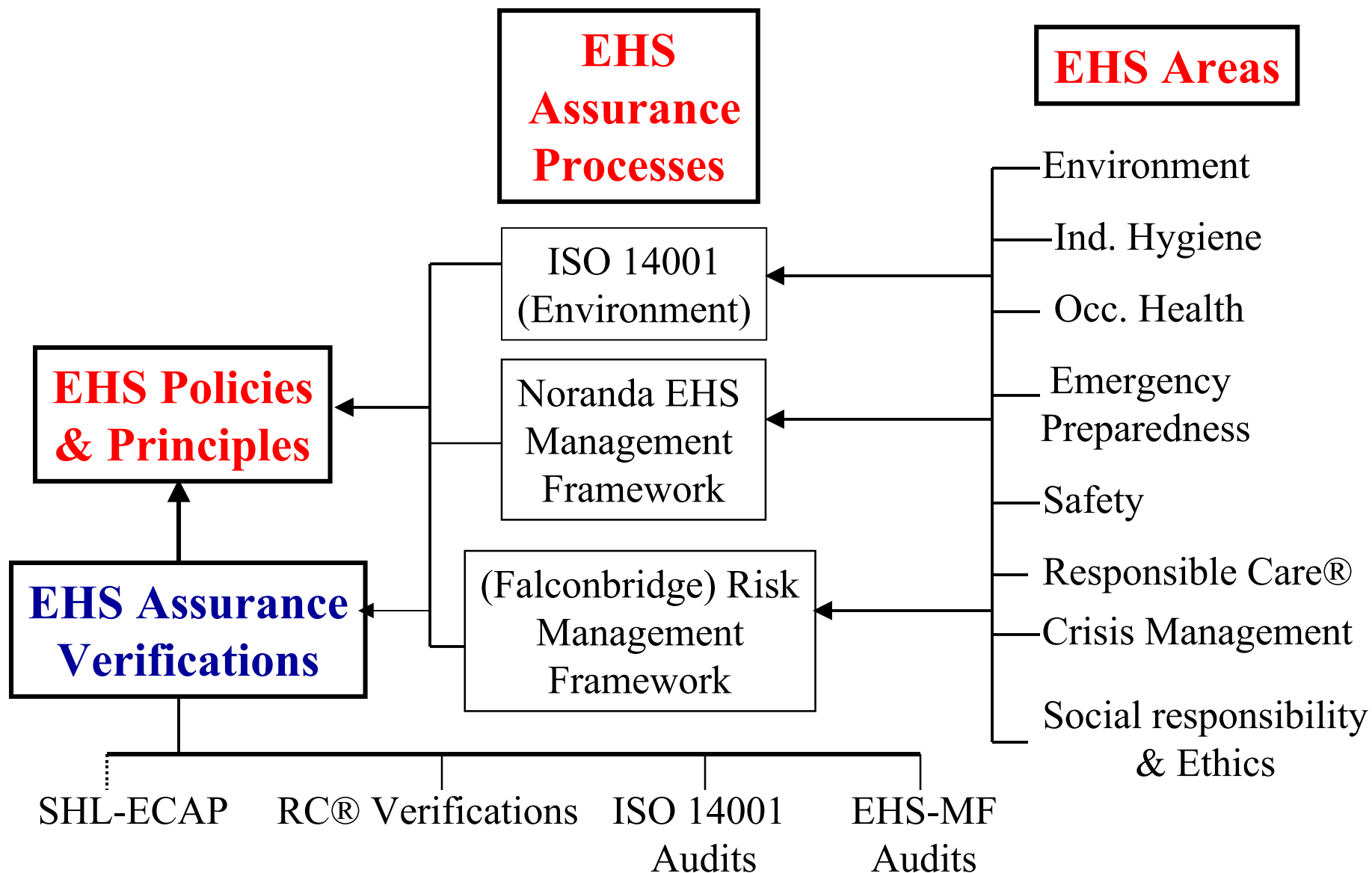
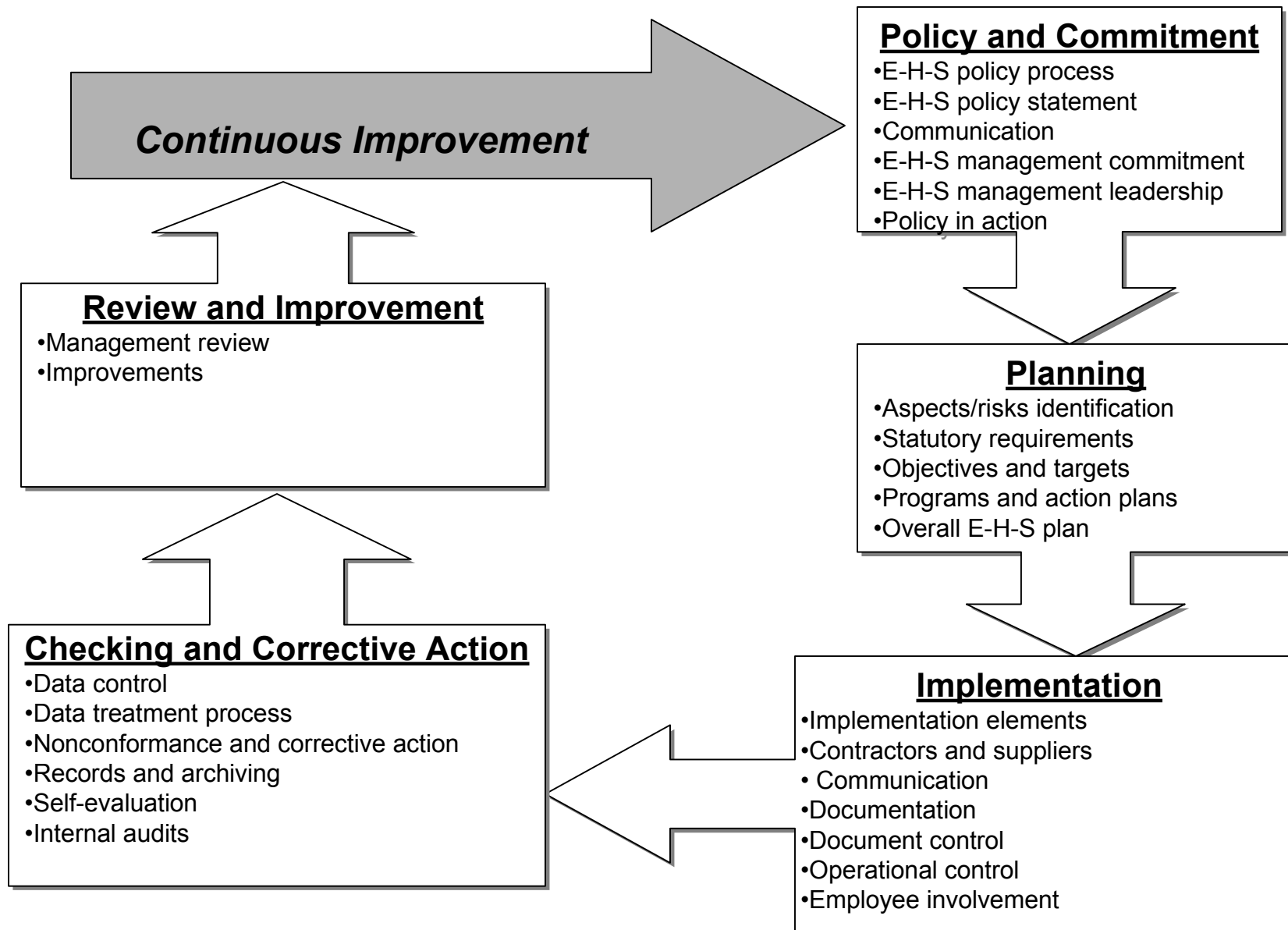


Figure 1: Noranda's ESH Performance Objectives

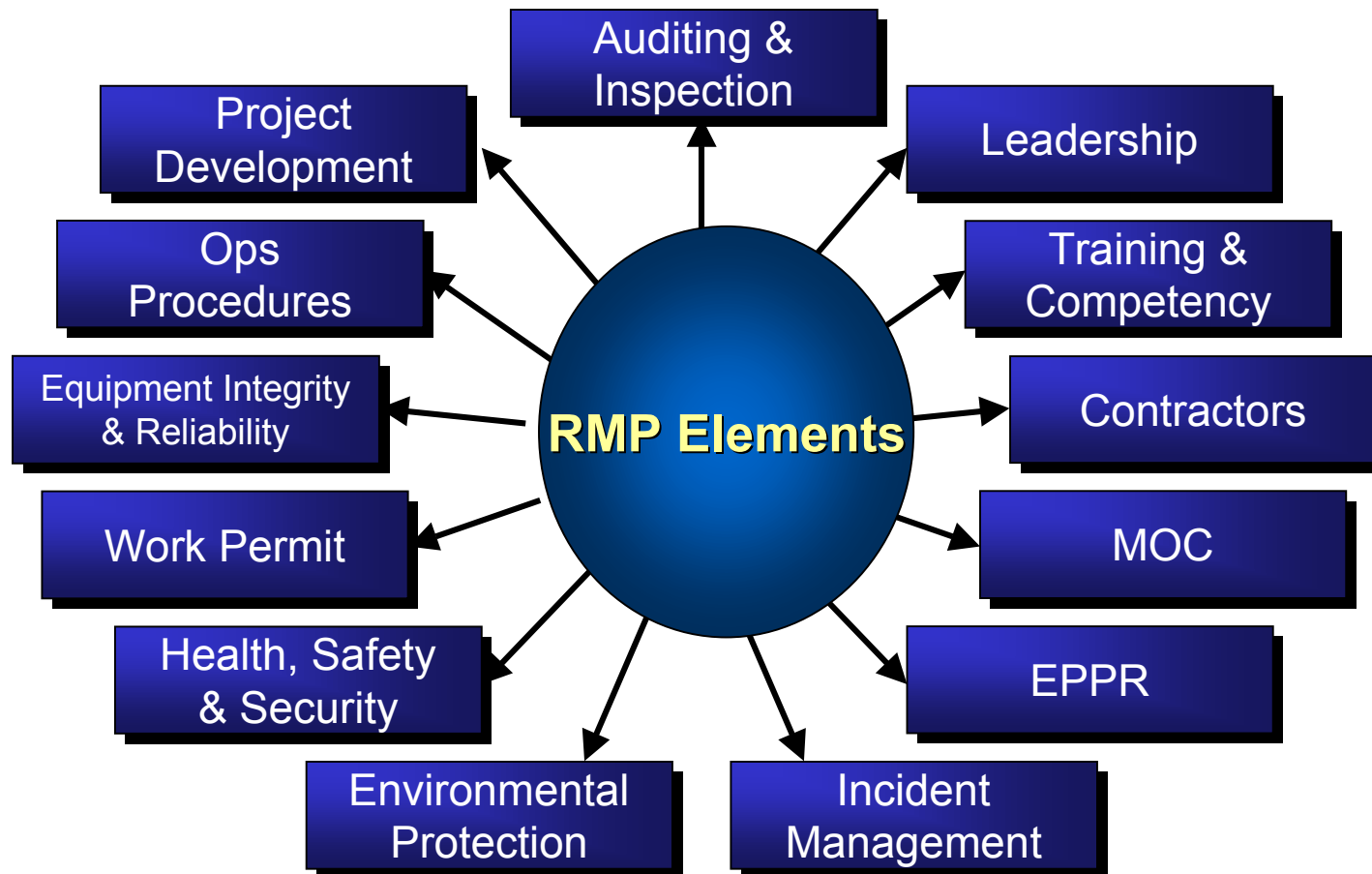
EHS ASSURANCE



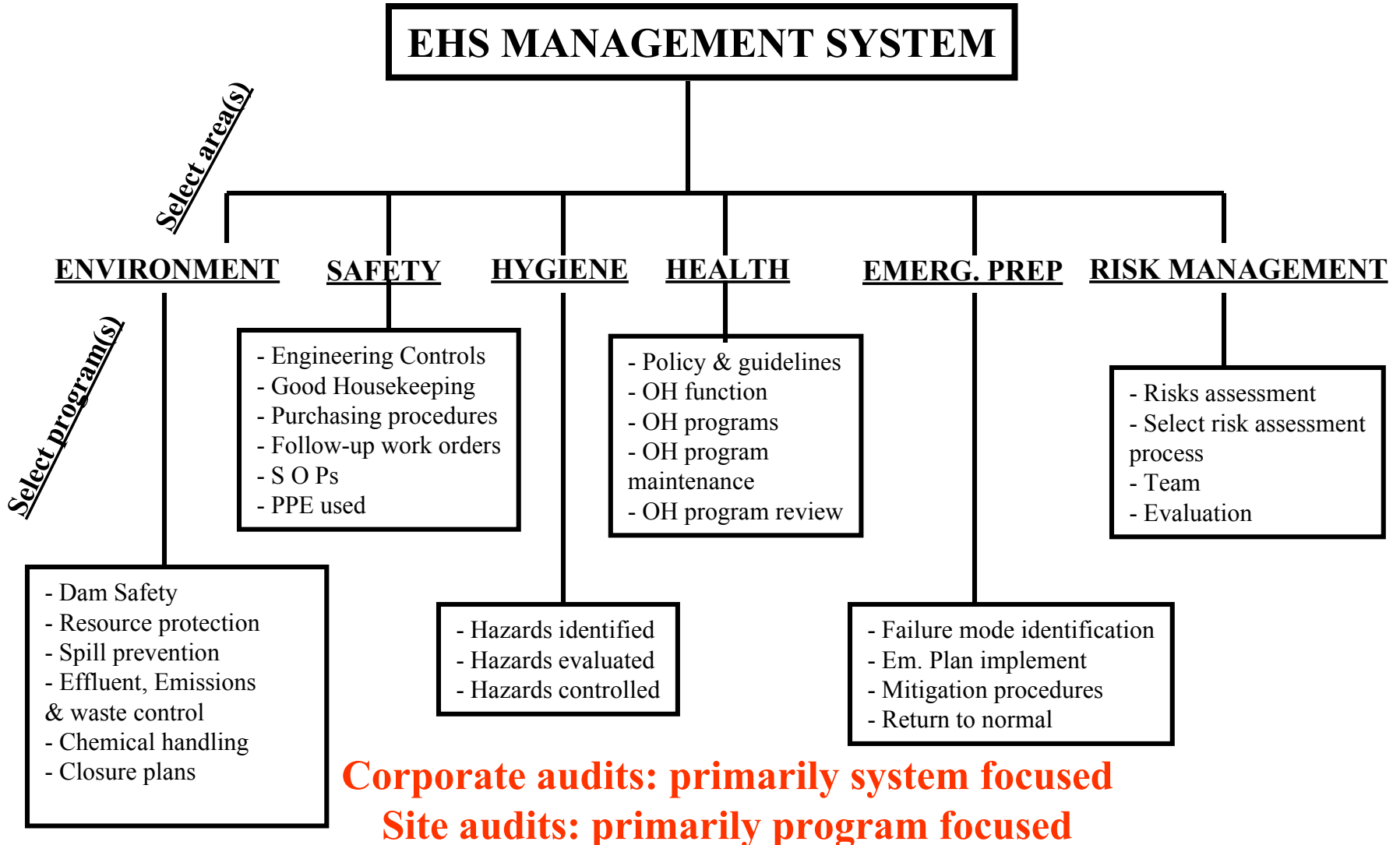
EHS MANAGEMENT SYSTEM



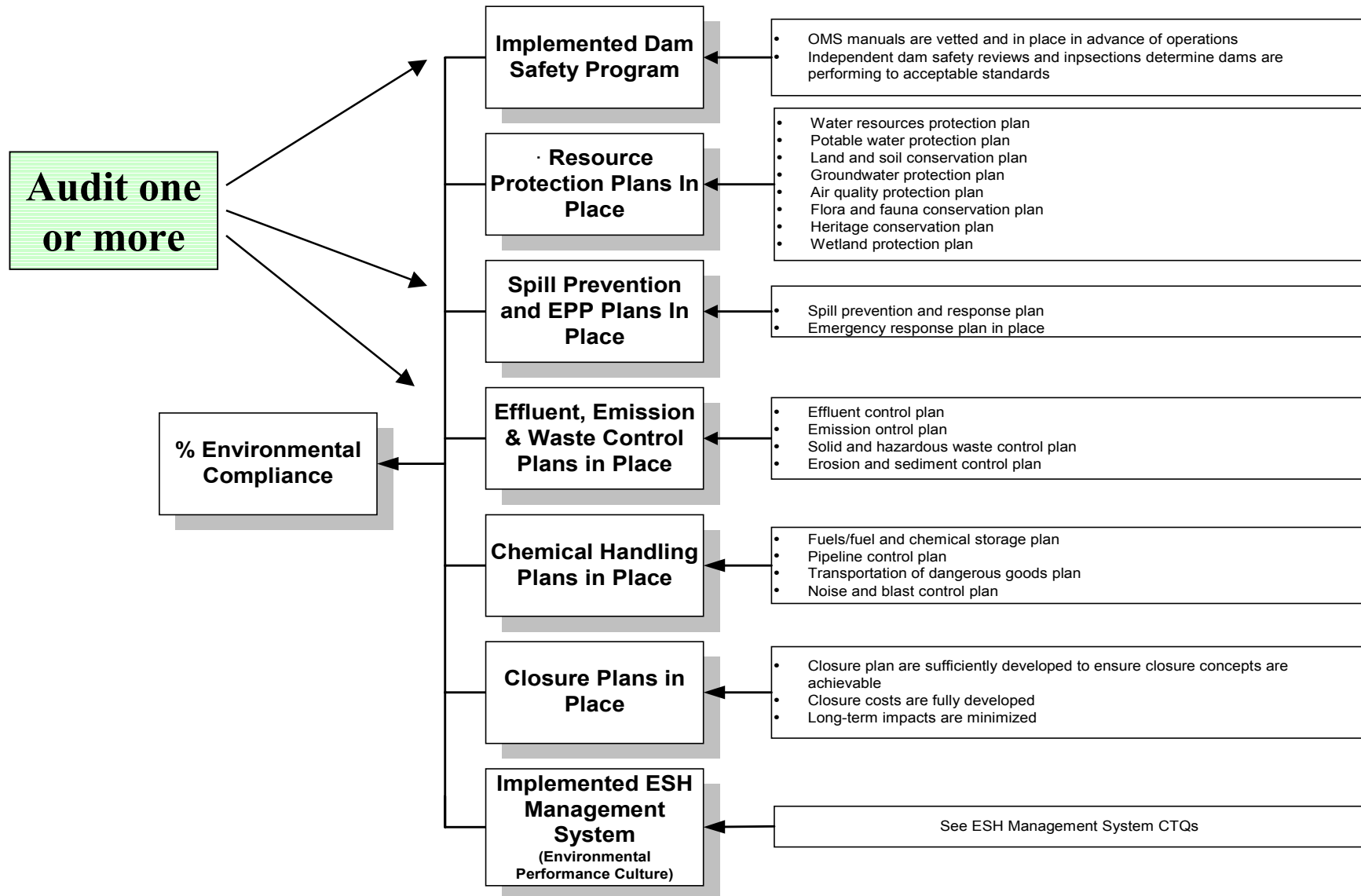
RISK MANAGEMENT FRAMEWORK



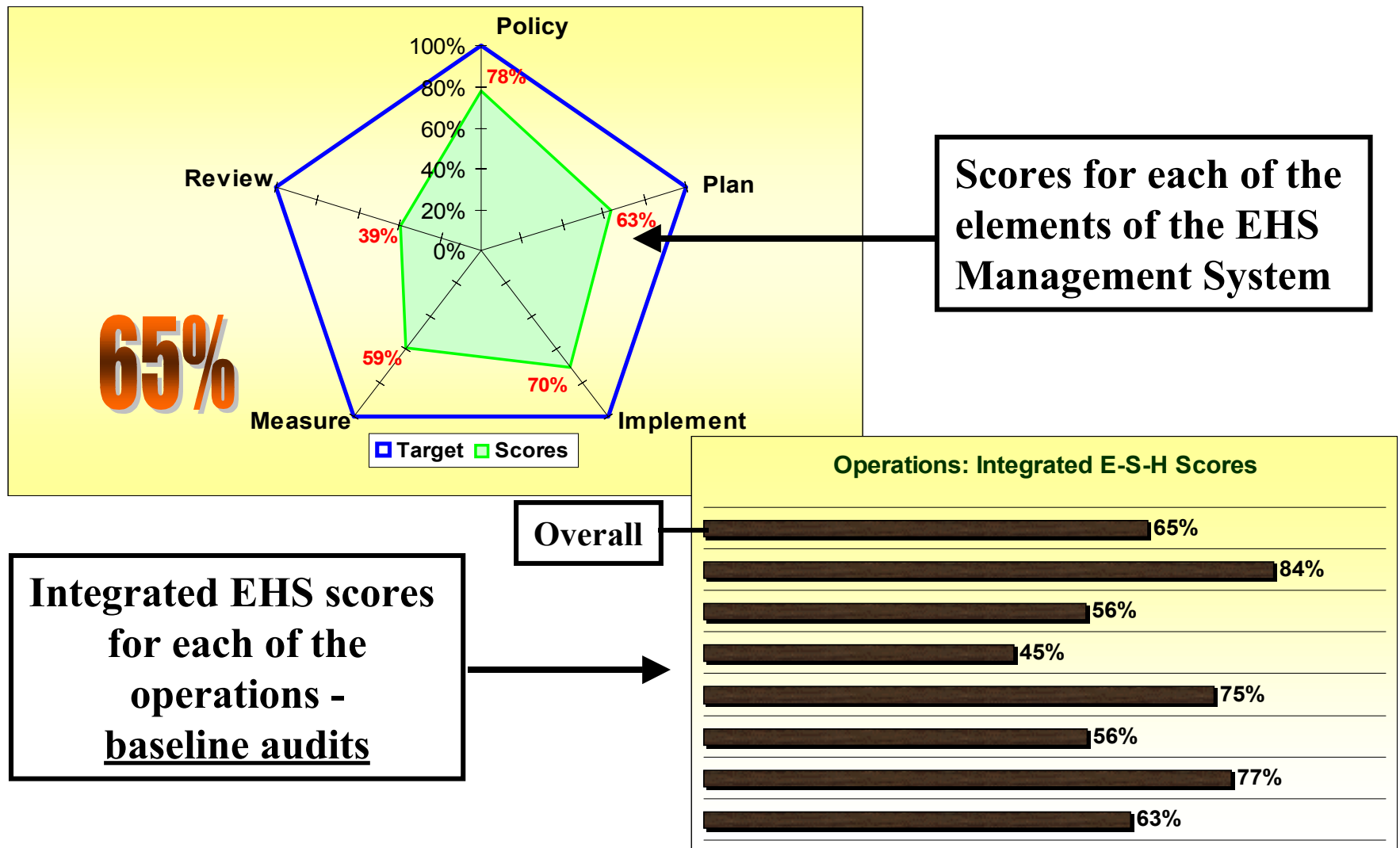
AUDIT SCOPE



SITE ENVIRONMENTAL PROGRAMS



CORPORATE SYSTEM AUDIT RESULTS



E-H-S ASSURANCE REPORTING

