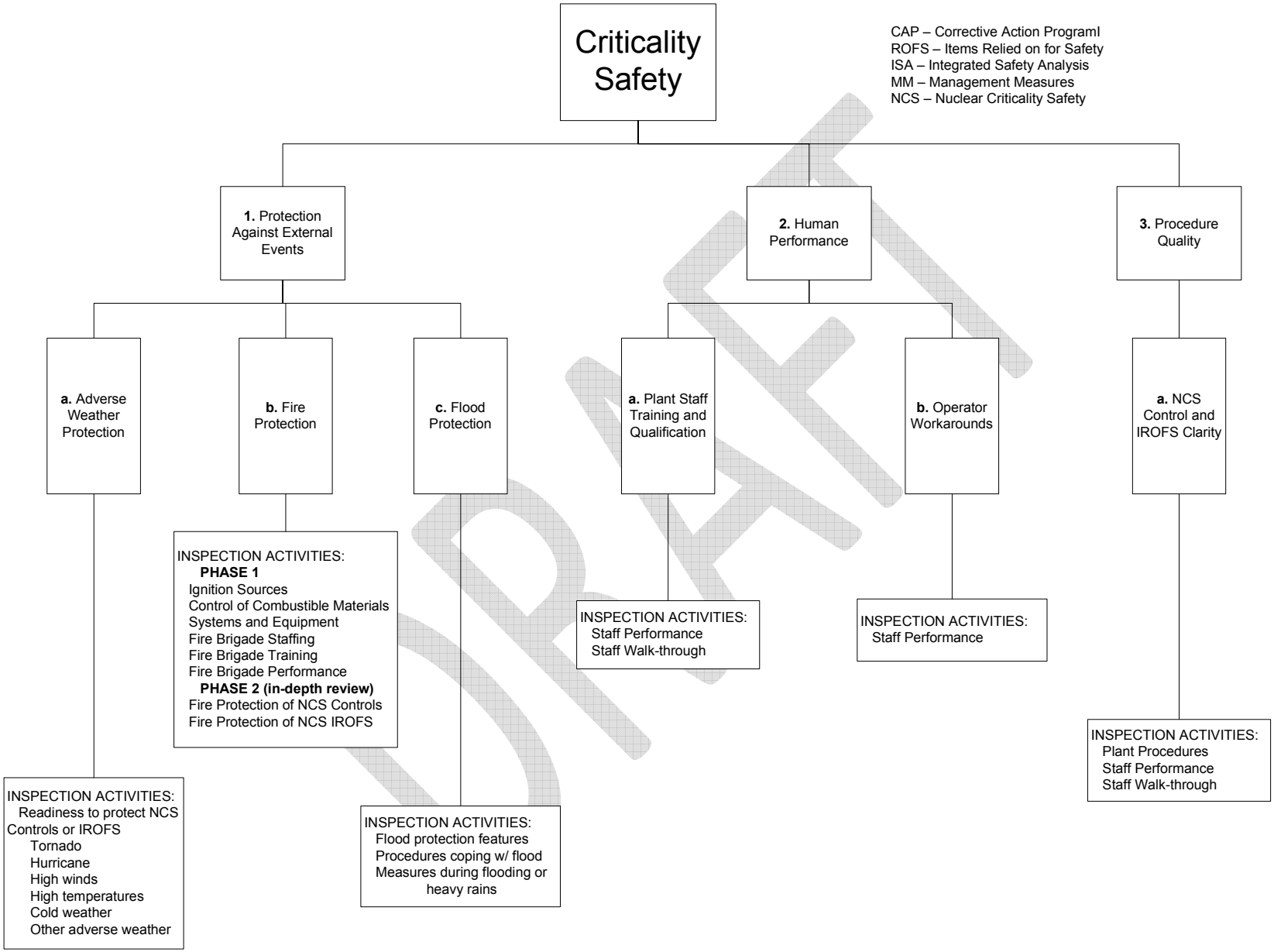

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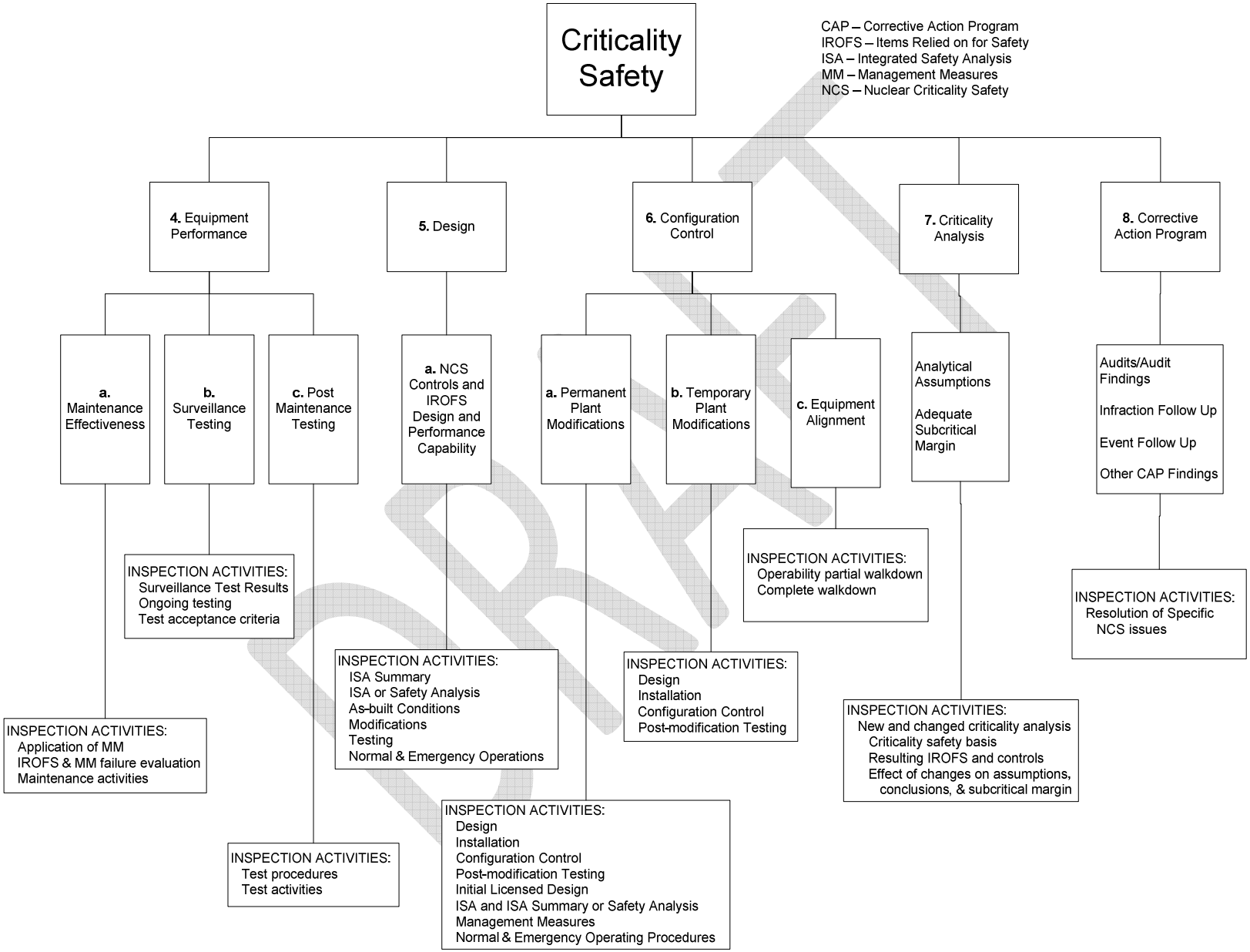
Enclosure 5


Criticality Safety
CAP – Corrective Action Program
IROFS – Items Relied on for Safety
ISA – Integrated Safety Analysis
MM – Management Measures
NCS – Nuclear Criticality Safety
4. Equipment Performance
5. Design
6. Configuration Control
7. Criticality Analysis
8. Corrective Action Program
a. Maintenance Effectiveness
b. Surveillance Testing
c. Post Maintenance Testing
a. NCS Controls and IROFS Design and Performance Capability
a. Permanent Plant Modifications
b. Temporary Plant Modifications
c. Equipment Alignment
Analytical Assumptions
Adequate Subcritical Margin
Audits/Audit Findings
Infraction Follow Up
Event Follow Up
Other CAP Findings
INSPECTION ACTIVITIES:
Surveillance Test Results
Ongoing testing
Test acceptance criteria
INSPECTION ACTIVITIES:
Operability partial walkdown
Complete walkdown
INSPECTION ACTIVITIES:
Resolution of Specific NCS issues
INSPECTION ACTIVITIES:
ISA Summary
ISA or Safety Analysis
As-built Conditions
Modifications
Testing
Normal & Emergency Operations
INSPECTION ACTIVITIES:
Design
Installation
Configuration Control
Post-modification Testing
INSPECTION ACTIVITIES:
New and changed criticality analysis
Criticality safety basis
Resulting IROFS and controls
Effect of changes on assumptions, conclusions, & subcritical margin
INSPECTION ACTIVITIES:
Application of MM
IROFS & MM failure evaluation
Maintenance activities
INSPECTION ACTIVITIES:
Test procedures
Test activities
INSPECTION ACTIVITIES:
Design
Installation
Configuration Control
Post-modification Testing
Initial Licensed Design
ISA and ISA Summary or Safety Analysis
Management Measures
Normal & Emergency Operating Procedures

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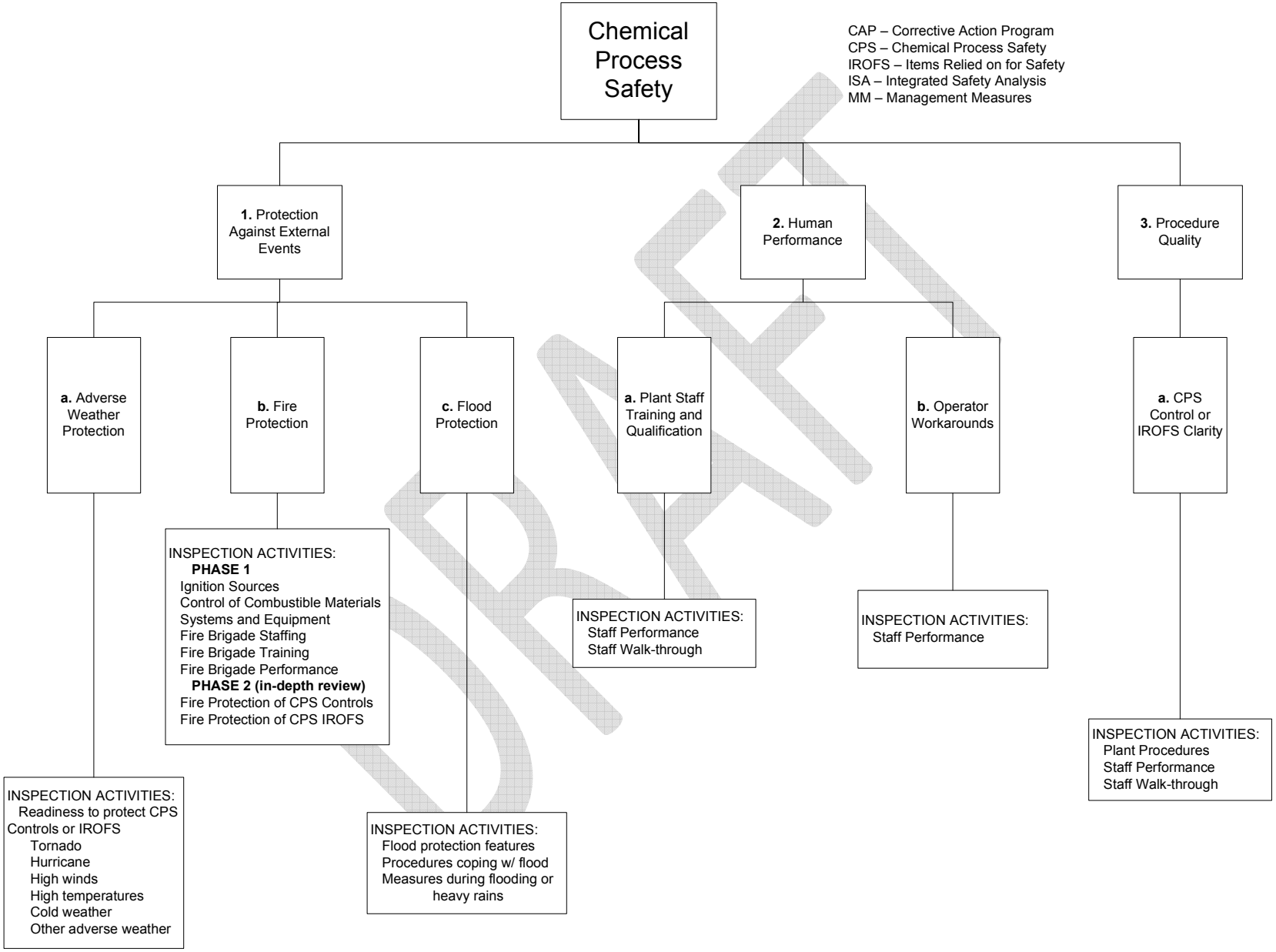
Chemical Process Safety
CAP – Corrective Action Program
CPS – Chemical Process Safety
IROFS – Items Relied on for Safety
ISA – Integrated Safety Analysis
MM – Management Measures
1. Protection Against External Events
2. Human Performance
3. Procedure Quality
a. Adverse Weather Protection
b. Fire Protection
c. Flood Protection
a. Plant Staff Training and Qualification
b. Operator Workarounds
a. CPS Control or IROFS Clarity
INSPECTION ACTIVITIES:
PHASE 1
Ignition Sources
Control of Combustible Materials
Systems and Equipment
Fire Brigade Staffing
Fire Brigade Training
Fire Brigade Performance
PHASE 2 (in-depth review)
Fire Protection of CPS Controls
Fire Protection of CPS IROFS
INSPECTION ACTIVITIES:
Staff Performance
Staff Walk-through
INSPECTION ACTIVITIES:
Staff Performance
INSPECTION ACTIVITIES:
Plant Procedures
Staff Performance
Staff Walk-through
INSPECTION ACTIVITIES:
Readiness to protect CPS Controls or IROFS
Tornado
Hurricane
High winds
High temperatures
Cold weather
Other adverse weather
INSPECTION ACTIVITIES:
Flood protection features
Procedures coping w/ flood
Measures during flooding or heavy rains

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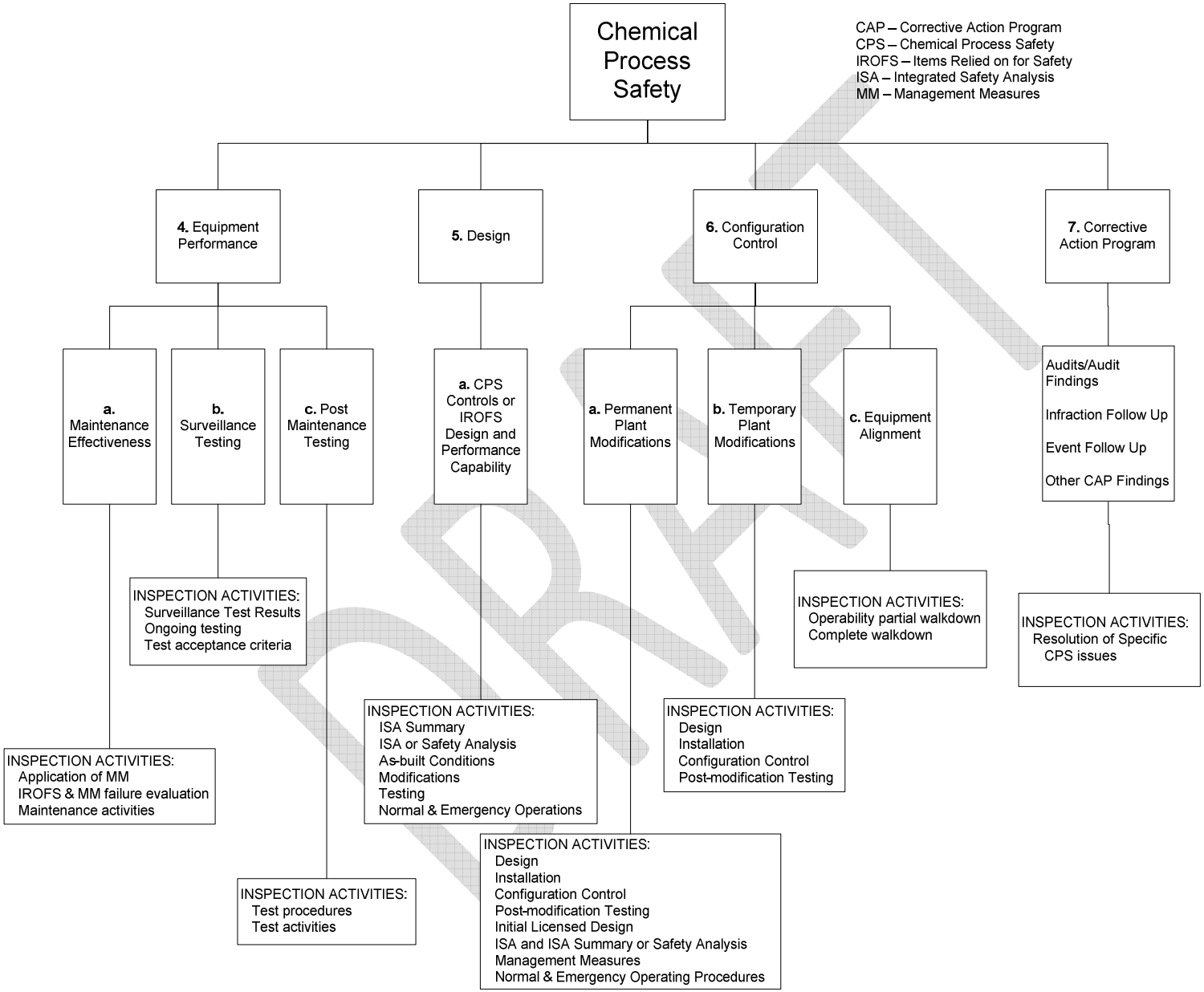
Chemical Process Safety
CAP – Corrective Action Program
CPS – Chemical Process Safety
IROFS – Items Relied on for Safety
ISA – Integrated Safety Analysis
MM – Management Measures
4. Equipment Performance
5. Design
6. Configuration Control
7. Corrective Action Program
a. Maintenance Effectiveness
b. Surveillance Testing
c. Post Maintenance Testing
a. CPS Controls or IROFS Design and Performance Capability
a. Permanent Plant Modifications
b. Temporary Plant Modifications
c. Equipment Alignment
Audits/Audit Findings
Infraction Follow Up
Event Follow Up
Other CAP Findings
INSPECTION ACTIVITIES:
Surveillance Test Results
Ongoing testing
Test acceptance criteria
INSPECTION ACTIVITIES:
Operability partial walkdown
Complete walkdown
INSPECTION ACTIVITIES:
Resolution of Specific CPS issues
INSPECTION ACTIVITIES:
ISA Summary
ISA or Safety Analysis
As-built Conditions
Modifications
Testing
Normal & Emergency Operations
INSPECTION ACTIVITIES:
Design
Installation
Configuration Control
Post-modification Testing
INSPECTION ACTIVITIES:
Application of MM
IROFS & MM failure evaluation
Maintenance activities
INSPECTION ACTIVITIES:
Test procedures
Test activities
INSPECTION ACTIVITIES:
Design
Installation
Configuration Control
Post-modification Testing
Initial Licensed Design
ISA and ISA Summary or Safety Analysis
Management Measures
Normal & Emergency Operating Procedures

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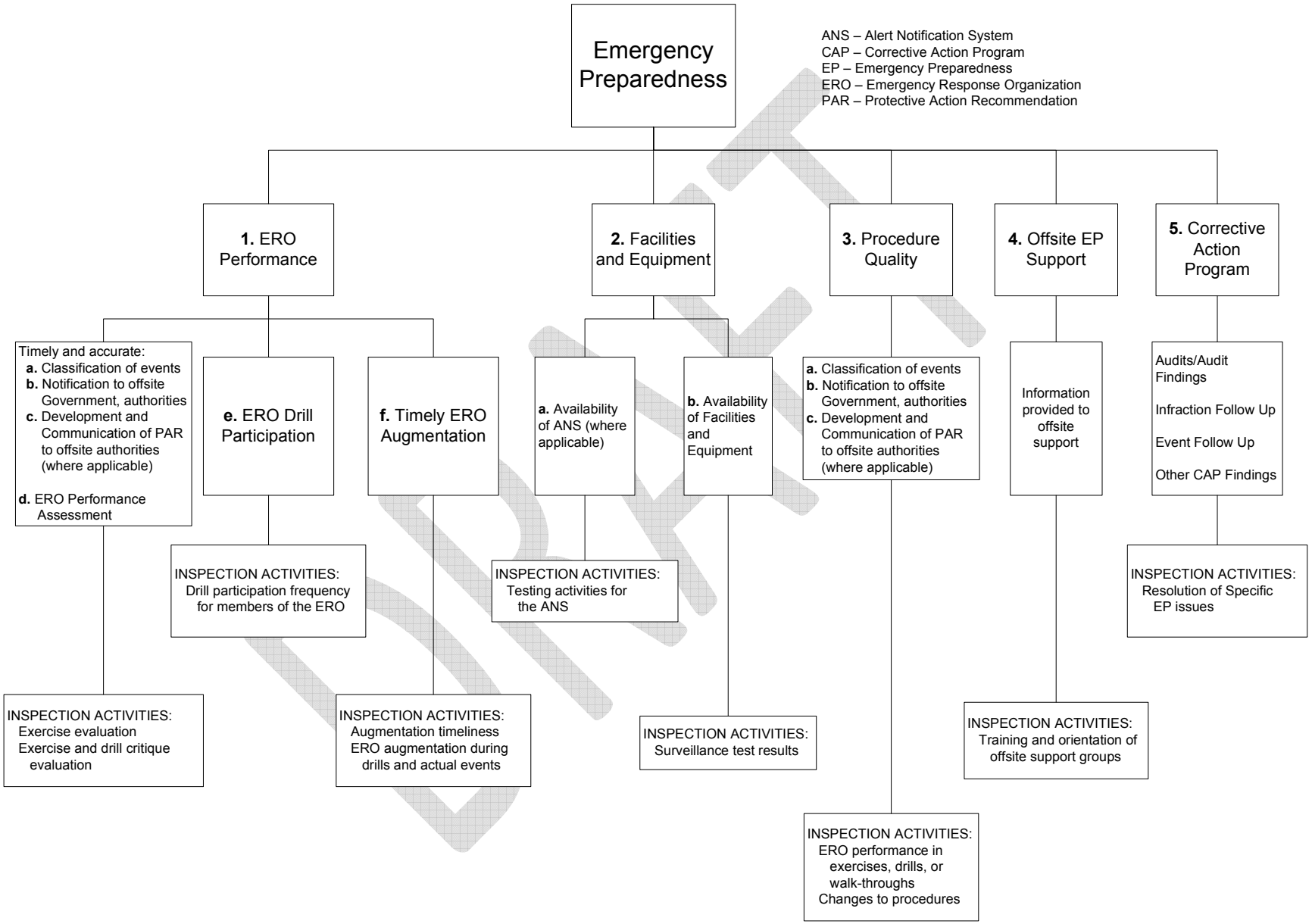
Emergency Preparedness
ANS – Alert Notification System
CAP – Corrective Action Program
EP – Emergency Preparedness
ERO – Emergency Response Organization
PAR – Protective Action Recommendation
1. ERO Performance
2. Facilities and Equipment
3. Procedure Quality
4. Offsite EP Support
5. Corrective Action Program
Timely and accurate:
a. Classification of events
b. Notification to offsite Government, authorities
c. Development and Communication of PAR to offsite authorities (where applicable)
d. ERO Performance Assessment
e. ERO Drill Participation
f. Timely ERO Augmentation
a. Availability of ANS (where applicable)
b. Availability of Facilities and Equipment
a. Classification of events
b. Notification to offsite Government, authorities
c. Development and Communication of PAR to offsite authorities (where applicable)
Information provided to offsite support
Audits/Audit Findings
Infraction Follow Up
Event Follow Up
Other CAP Findings
INSPECTION ACTIVITIES: Drill participation frequency for members of the ERO
INSPECTION ACTIVITIES: Testing activities for the ANS
INSPECTION ACTIVITIES: Resolution of Specific EP issues
INSPECTION ACTIVITIES: Exercise evaluation Exercise and drill critique evaluation
INSPECTION ACTIVITIES: Augmentation timeliness ERO augmentation during drills and actual events
INSPECTION ACTIVITIES: Surveillance test results
INSPECTION ACTIVITIES: Training and orientation of offsite support groups
INSPECTION ACTIVITIES: ERO performance in exercises, drills, or walk-throughs Changes to procedures

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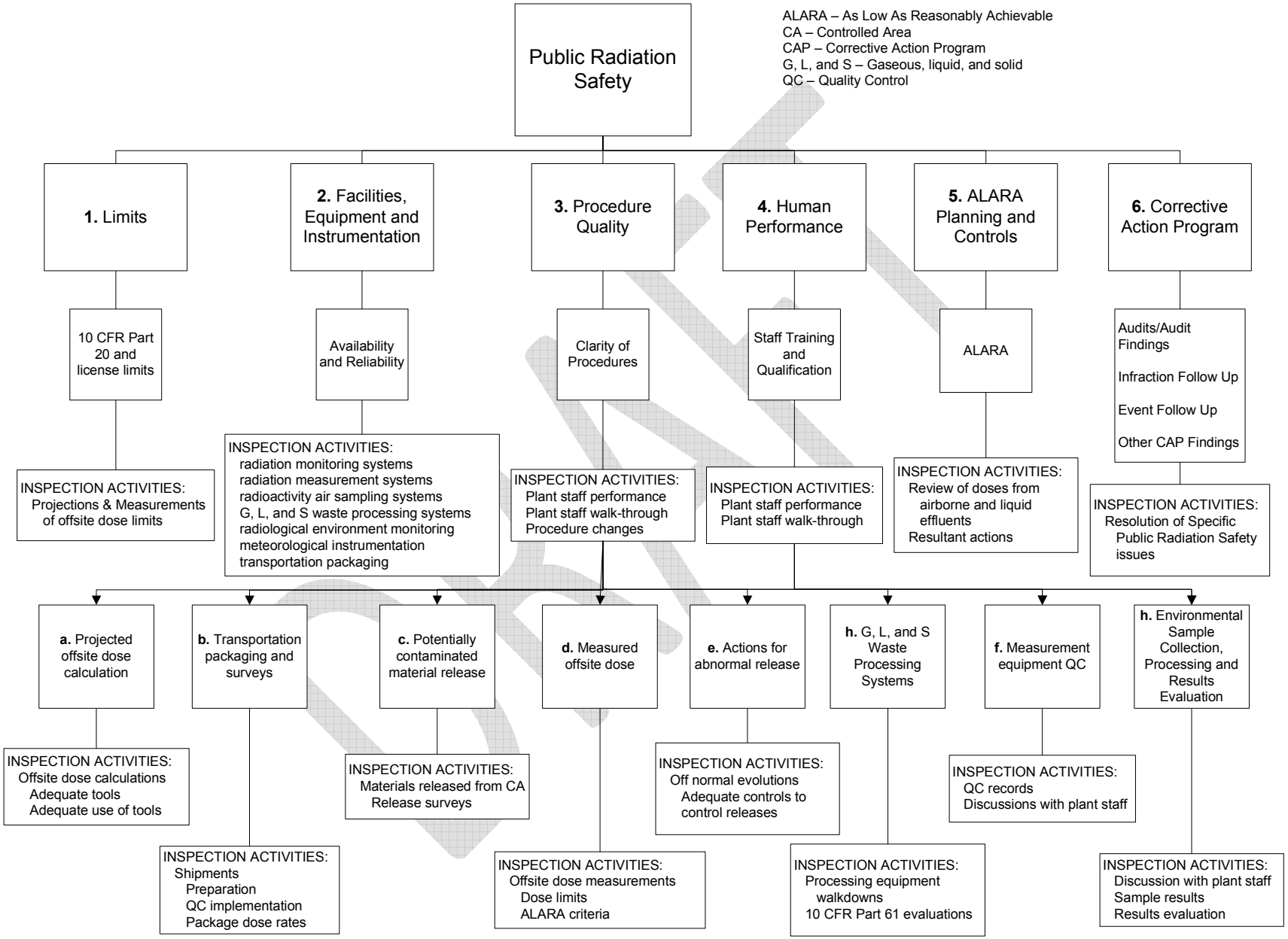
Public Radiation Safety
ALARA – As Low As Reasonably Achievable
CA – Controlled Area
CAP – Corrective Action Program
G, L, and S – Gaseous, liquid, and solid
QC – Quality Control
1. Limits
2. Facilities, Equipment and Instrumentation
3. Procedure Quality
4. Human Performance
5. ALARA Planning and Controls
6. Corrective Action Program
10 CFR Part 20 and license limits
Availability and Reliability
Clarity of Procedures
Staff Training and Qualification
ALARA
Audits/Audit Findings
Infraction Follow Up
Event Follow Up
Other CAP Findings
INSPECTION ACTIVITIES: Projections & Measurements of offsite dose limits
INSPECTION ACTIVITIES: radiation monitoring systems radiation measurement systems radioactivity air sampling systems G, L, and S waste processing systems radiological environment monitoring meteorological instrumentation transportation packaging
INSPECTION ACTIVITIES: Plant staff performance Plant staff walk-through Procedure changes
INSPECTION ACTIVITIES: Plant staff performance Plant staff walk-through
INSPECTION ACTIVITIES: Review of doses from airborne and liquid effluents Resultant actions
INSPECTION ACTIVITIES: Resolution of Specific Public Radiation Safety issues
a. Projected offsite dose calculation
b. Transportation packaging and surveys
c. Potentially contaminated material release
d. Measured offsite dose
e. Actions for abnormal release
h. G, L, and S Waste Processing Systems
f. Measurement equipment QC
h. Environmental Sample Collection, Processing and Results Evaluation
INSPECTION ACTIVITIES: Offsite dose calculations Adequate tools Adequate use of tools
INSPECTION ACTIVITIES: Shipments Preparation QC implementation Package dose rates
INSPECTION ACTIVITIES: Materials released from CA Release surveys
INSPECTION ACTIVITIES: Offsite dose measurements Dose limits ALARA criteria
INSPECTION ACTIVITIES: Off normal evolutions Adequate controls to control releases
INSPECTION ACTIVITIES: Processing equipment walkdowns 10 CFR Part 61 evaluations
INSPECTION ACTIVITIES: QC records Discussions with plant staff
INSPECTION ACTIVITIES: Discussion with plant staff Sample results Results evaluation

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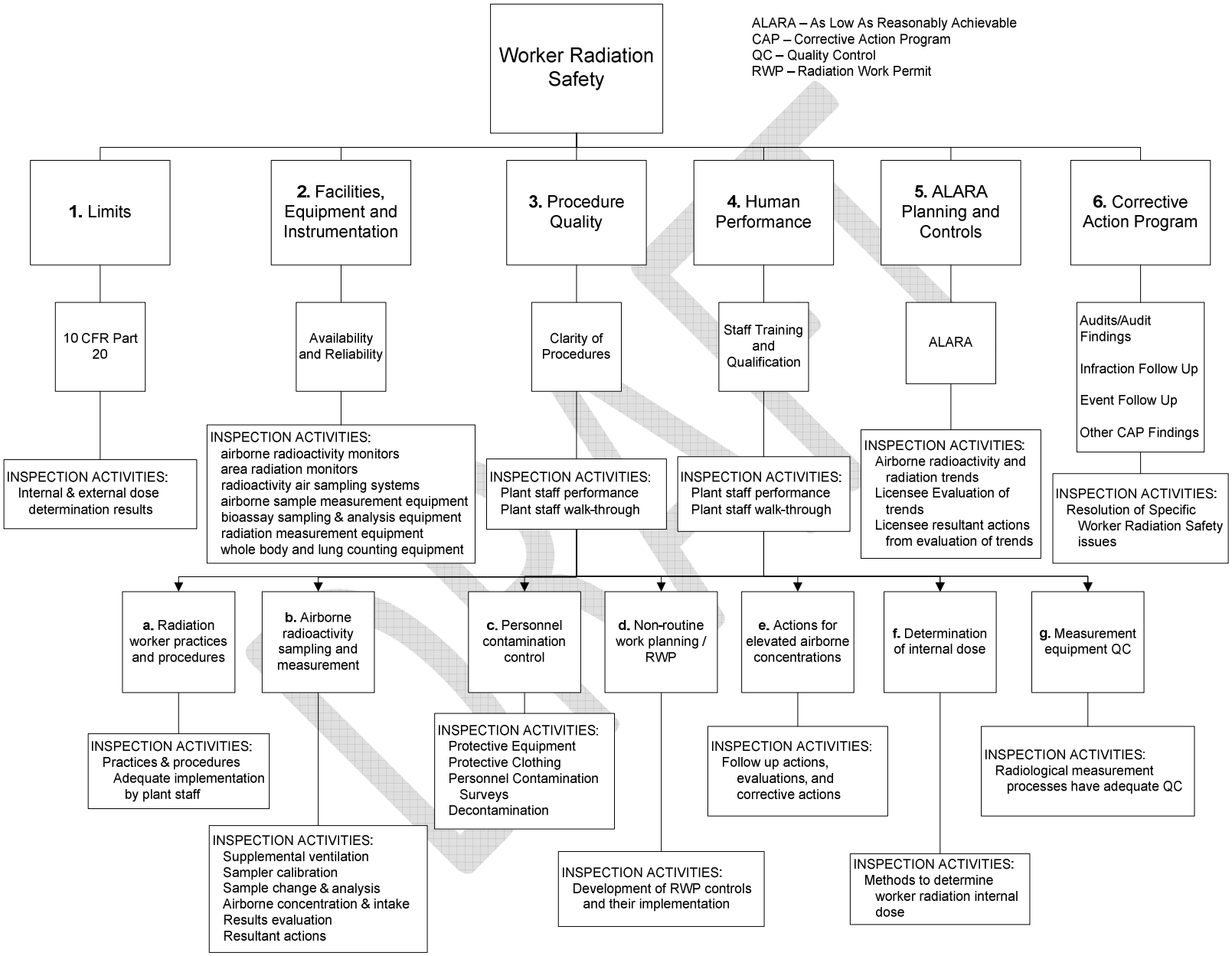
Worker Radiation Safety
ALARA – As Low As Reasonably Achievable
CAP – Corrective Action Program
QC – Quality Control
RWP – Radiation Work Permit
1. Limits
2. Facilities, Equipment and Instrumentation
3. Procedure Quality
4. Human Performance
5. ALARA Planning and Controls
6. Corrective Action Program
10 CFR Part 20
Availability and Reliability
Clarity of Procedures
Staff Training and Qualification
ALARA
Audits/Audit Findings
Infraction Follow Up
Event Follow Up
Other CAP Findings
INSPECTION ACTIVITIES: Internal & external dose determination results
INSPECTION ACTIVITIES: airborne radioactivity monitors area radiation monitors radioactivity air sampling systems airborne sample measurement equipment bioassay sampling & analysis equipment radiation measurement equipment whole body and lung counting equipment
INSPECTION ACTIVITIES: Plant staff performance Plant staff walk-through
INSPECTION ACTIVITIES: Plant staff performance Plant staff walk-through
INSPECTION ACTIVITIES: Airborne radioactivity and radiation trends Licensee Evaluation of trends Licensee resultant actions from evaluation of trends
INSPECTION ACTIVITIES: Resolution of Specific Worker Radiation Safety issues
a. Radiation worker practices and procedures
b. Airborne radioactivity sampling and measurement
c. Personnel contamination control
d. Non-routine work planning / RWP
e. Actions for elevated airborne concentrations
f. Determination of internal dose
g. Measurement equipment QC
INSPECTION ACTIVITIES: Practices & procedures Adequate implementation by plant staff
INSPECTION ACTIVITIES: Supplemental ventilation Sampler calibration Sample change & analysis Airborne concentration & intake Results evaluation Resultant actions
INSPECTION ACTIVITIES: Protective Equipment Protective Clothing Personnel Contamination Surveys Decontamination
INSPECTION ACTIVITIES: Development of RWP controls and their implementation
INSPECTION ACTIVITIES: Follow up actions, evaluations, and corrective actions
INSPECTION ACTIVITIES: Methods to determine worker radiation internal dose
INSPECTION ACTIVITIES: Radiological measurement processes have adequate QC