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NAVPGSCHOL INSTRUCTION 5100.2F

From: Superintendent, Naval Postgraduate School
To: Distribution

Subj: NAVAL POSTGRADUATE SCHOOL OCCUPATIONAL SAFETY AND HEALTH PROGRAM MANUAL

Ref: (a) Navy Occupational Safety and Health (NAVOSH) Program Manual, OPNAVINST 5100.23E
(b) OSHA Regulations for General Industry, 29 CFR 1910
(c) OSHA Regulations for Construction, 29 CFR 1926

Encl: (1) NAVOSH Program Processes
(2) OSH Regulatory Summary
(3) OSH Forms, Charts, Tables
(4) Glossary of OSH Terminology
(5) OSH Responsibilities

1. Purpose. To promulgate policy, responsibility, and procedures for the implementation, management, and control of the Occupational Safety and Health Program at Naval Postgraduate School (NPS). This instruction implements reference (a).

2. Cancellation. NAVPGSCOLINST 5100.2E/NAVSUPPACT MB INSTRUCTION 5100.2.

3. Policy. The OSH policy of the NPS is to provide an environment free of hazards to employees, students, and visitors. NPS recognizes the value of all employees. Therefore, creating a safe and healthful workplace is paramount to accomplishing the mission of NPS and maintaining operational readiness. The Superintendent is fully committed to preventing and/or minimizing personal injuries/illness and damage to Navy facilities. A safe and healthy work environment is achieved through the management of a comprehensive NAVOSH program identified in OPNAVINST 5100.23E. The program primarily features annual workplace inspections, compliance with applicable standards, prompt abatement of indentified hazards, OSH Training, hazard reporting procedures, mishap investigations, industrial hygiene programs, medical surveillance programs, facility construction and design plan review, and personal accountability for

safety and health through documented performance standards. Occuptaional Safety and Health is a fundamental responsibility of all
NPS management and supervision. The NPS OSH office, Code 223, administers the NAVOSH program and provides direct consultation to all echelon of personnel and serves as the focal point on all OSH related matters. The Superintendent's OSH Policy Statement shall be issued within three months after assumption of command, disseminated to all personnel and posted on all official bulletin boards.

4. Discussion. Enclosure (1) is a series of flowcharts that defines our NAVOSH Programs as processes. The processes identify the sequence of events that are necessary to provide a safe and healthy work environment and maintain regulatory compliance. The flowcharts are intended to provide NPS with a customer oriented, technically excellent and cost effective OSH Program dedicated to protecting people. Enclosure (2) offers an overview of various Federal OSHA regulations including a summary of the more commonly found workplace hazards. Enclosure (3) provides a series of forms, charts, and tables utilized by supervisors and employees for a variety of purposes; they are provided for your use, so feel free to make copies as you deem necessary. Enclosure (4) is a glossary of commonly used OSH terminology that may assist you in understanding OSHA regulations as well our NAVOSH Program Processes. Enclosure (5) defines specific responsibilities for NPS management, supervision, and employees.

5. Action. All personnel shall abide by and actively support the NPS Occupational Safety and Health Program.

ROBERT C. CHAPLIN
Rear Admiral, U.S. Navy

Distribution:
(All Departments)

NPS NAVOSH PROGRAM PROCESSES

Occupational Safety & Health Administrative

Chapter 1 Program Processes

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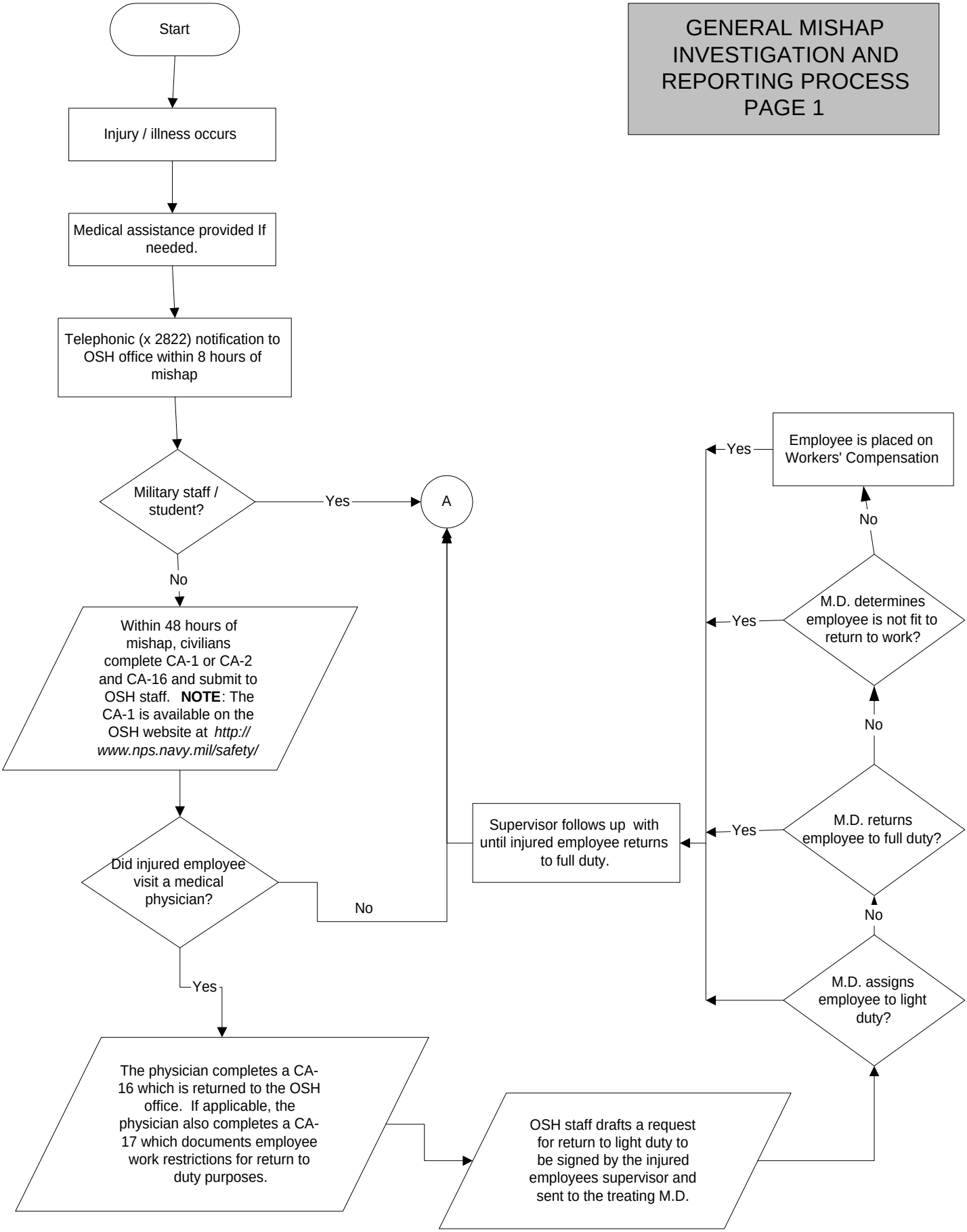
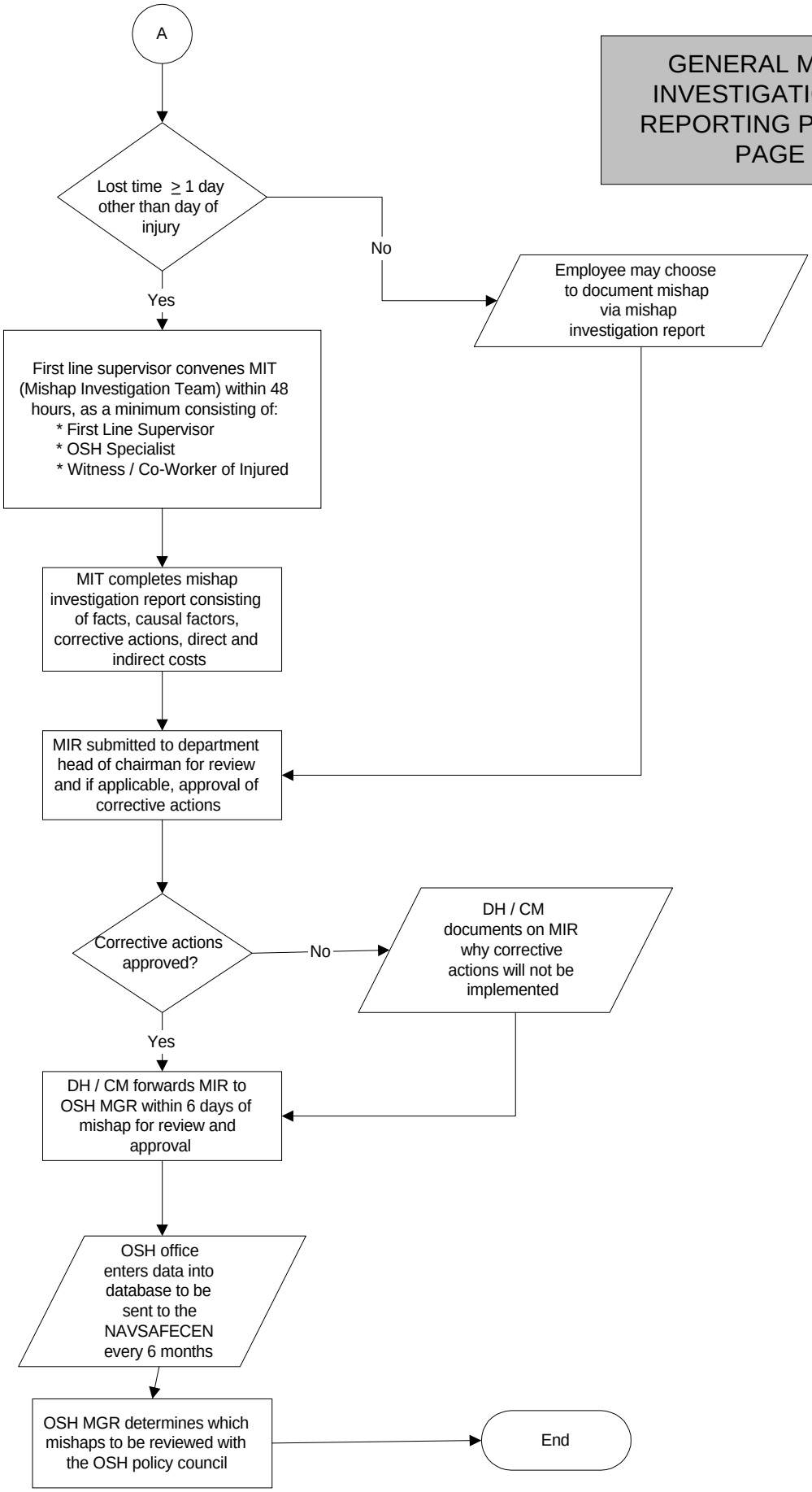
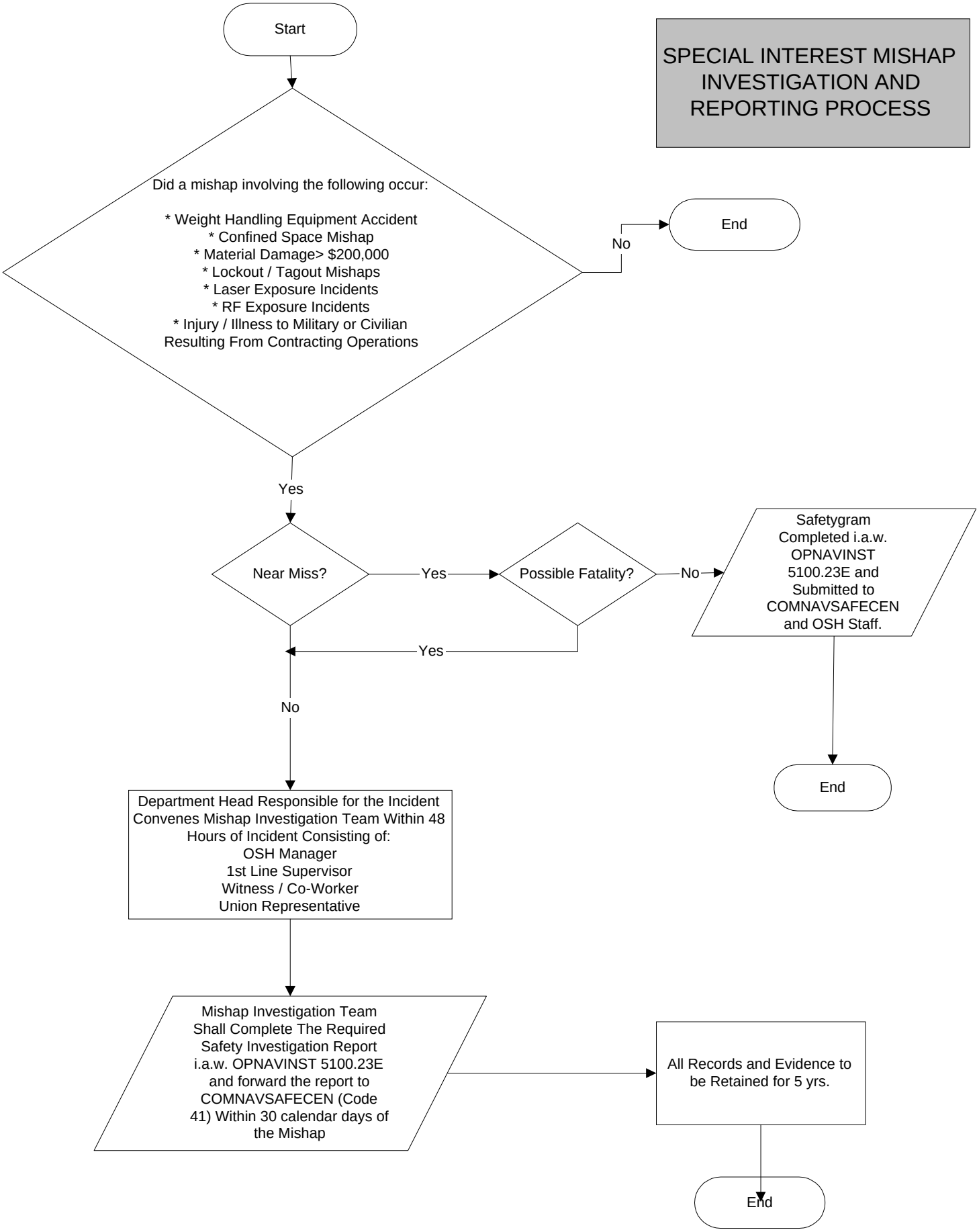
GENERAL MISHAP INVESTIGATION AND REPORTING PROCESS PAGE 1

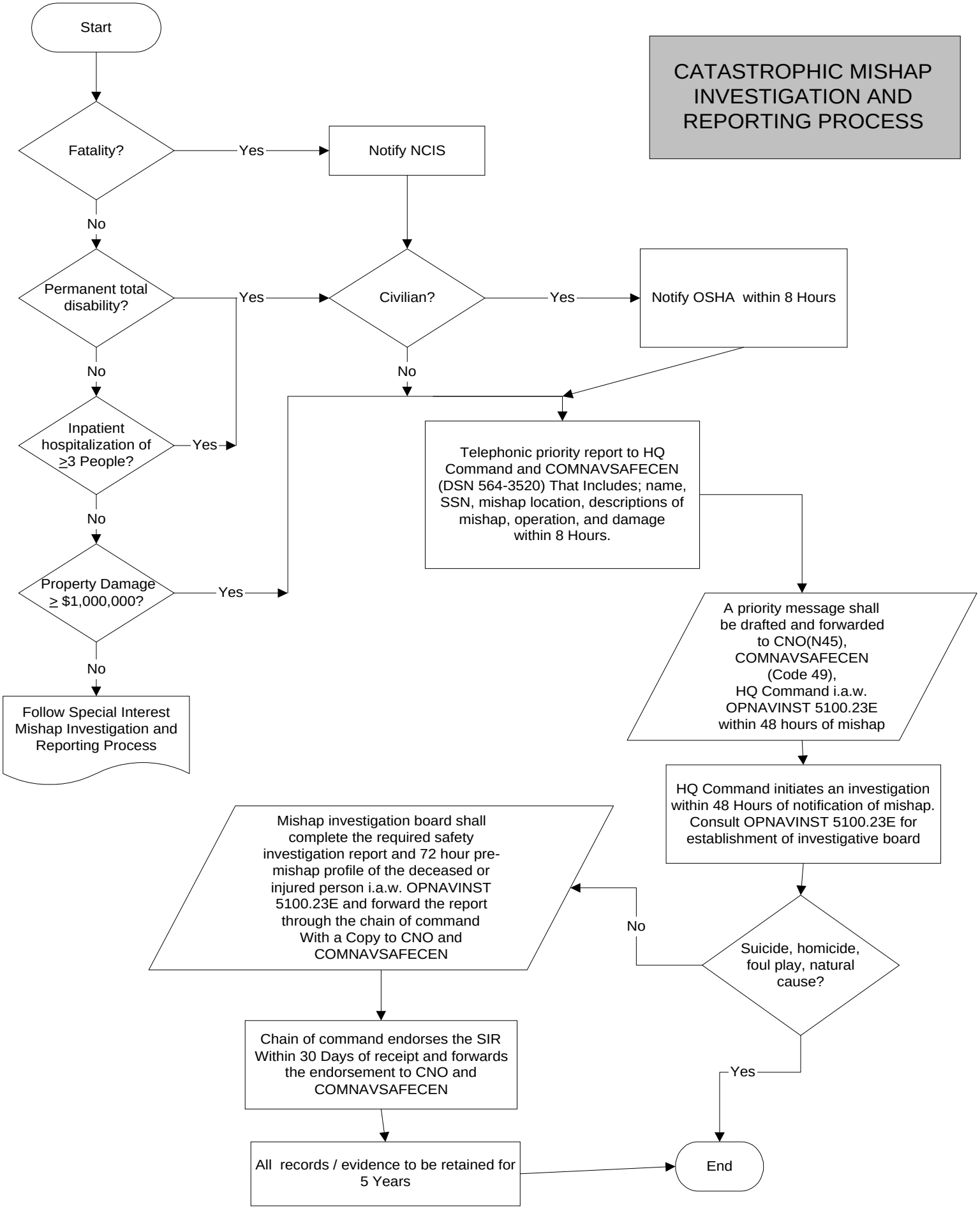


GENERAL MISHAP INVESTIGATION AND REPORTING PROCESS PAGE 2

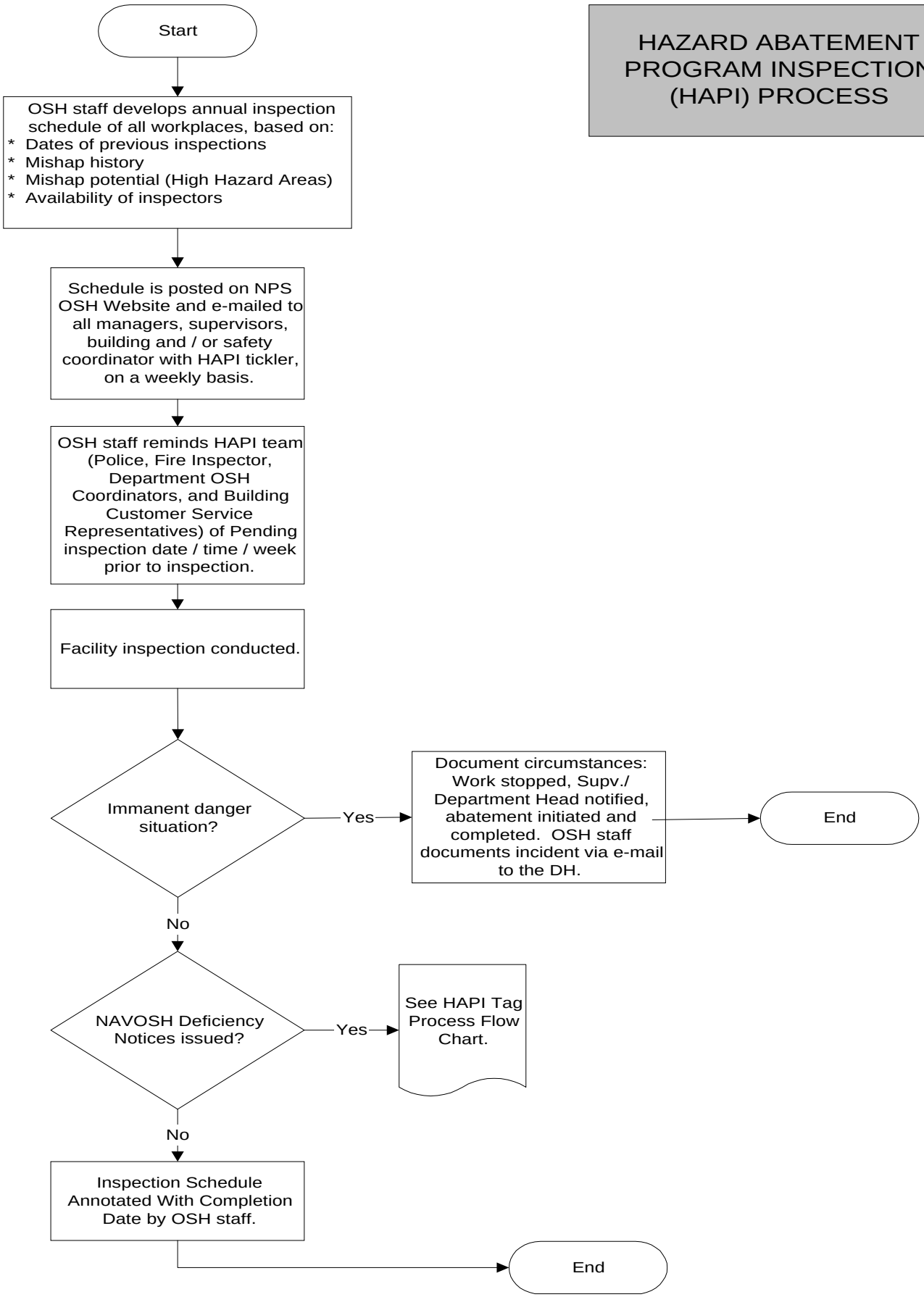


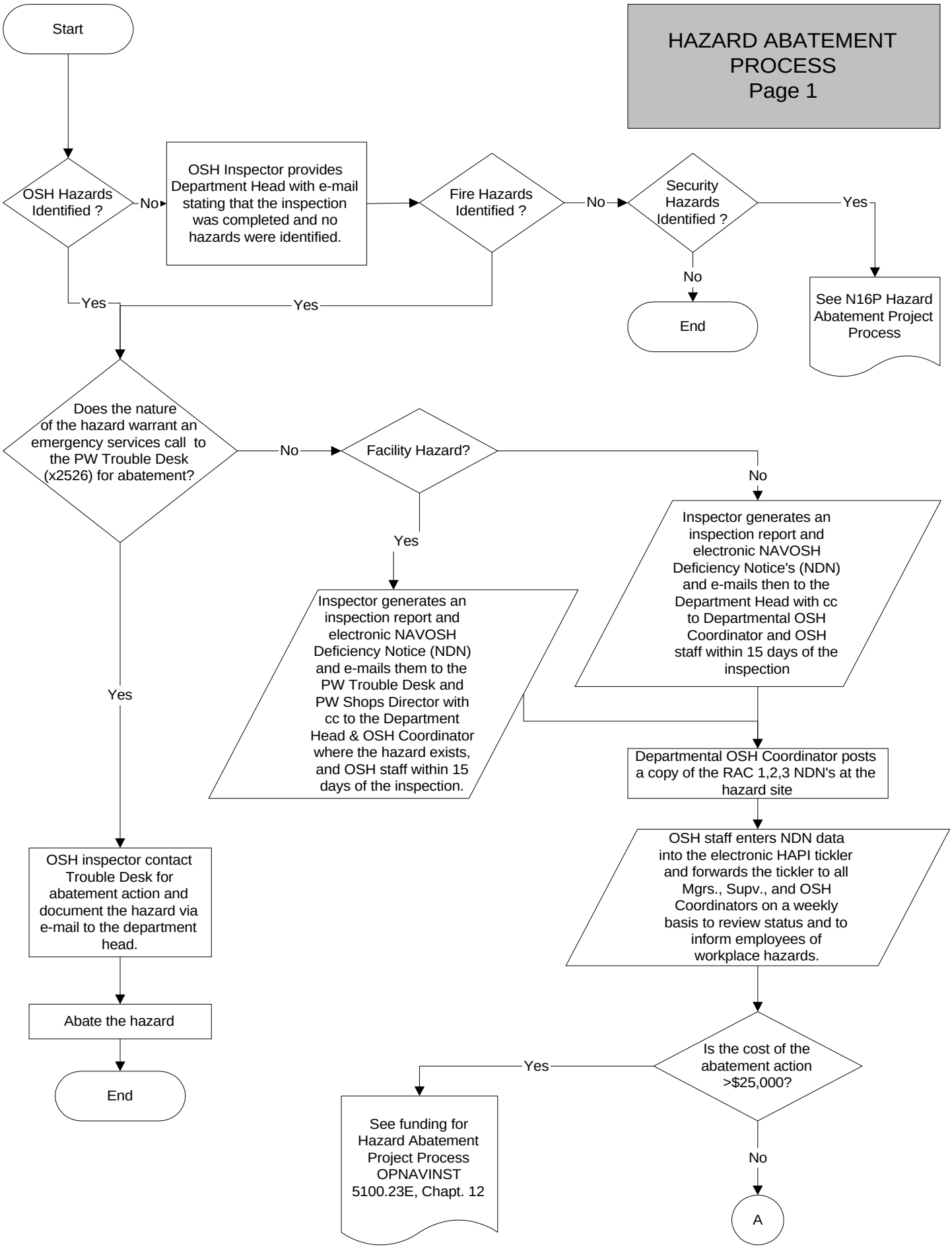
SPECIAL INTEREST MISHAP INVESTIGATION AND REPORTING PROCESS



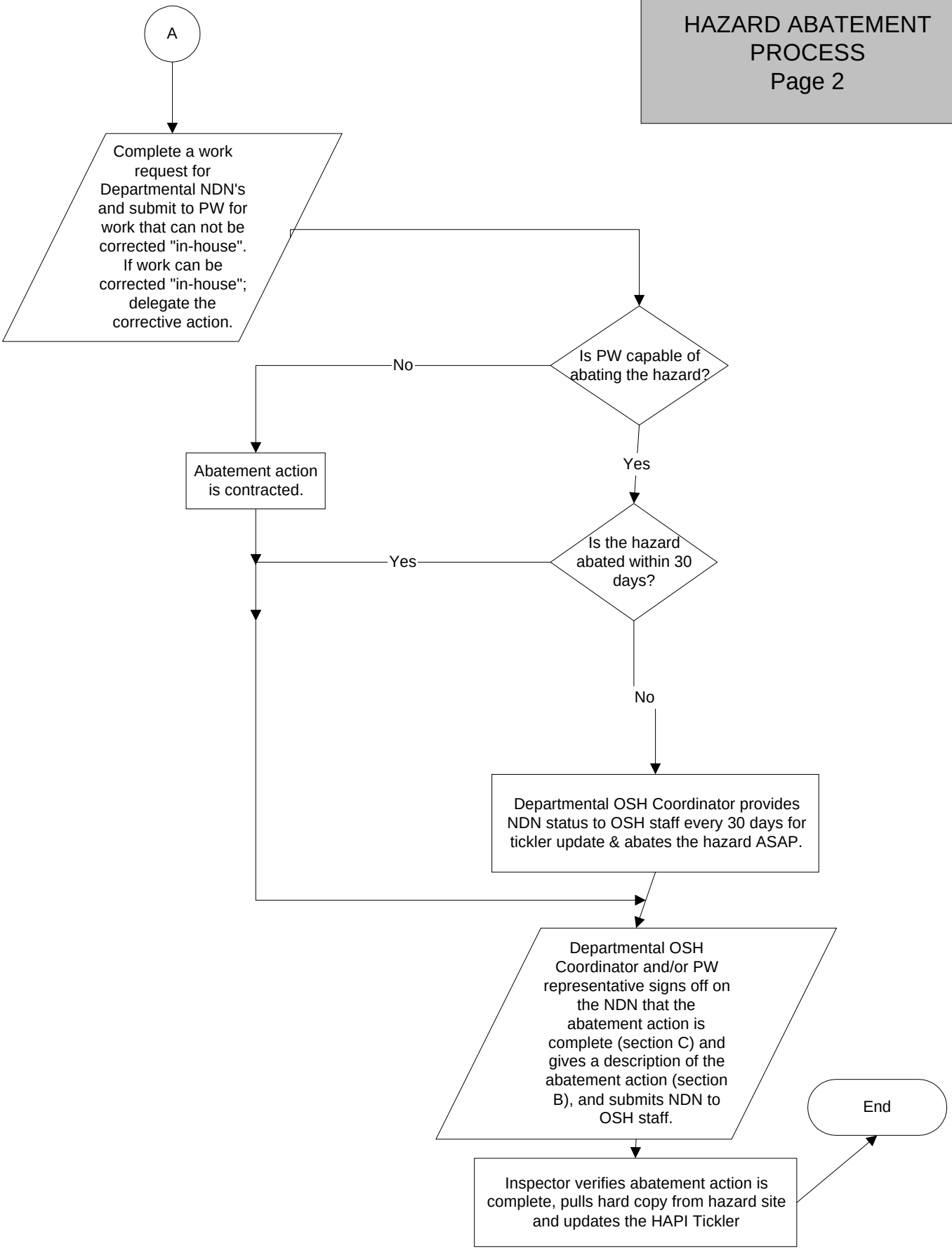

CATASTROPHIC MISHAP INVESTIGATION AND REPORTING PROCESS
Start
Fatality?
Yes
Notify NCIS
No
Permanent total disability?
Yes
Civilian?
Yes
Notify OSHA within 8 Hours
No
No
Inpatient hospitalization of ≥3 People?
Yes
No
Property Damage ≥ $1,000,000?
Yes
No
Follow Special Interest Mishap Investigation and Reporting Process
Telephonic priority report to HQ Command and COMNAVSAFECEN (DSN 564-3520) That Includes; name, SSN, mishap location, descriptions of mishap, operation, and damage within 8 Hours.
A priority message shall be drafted and forwarded to CNO(N45), COMNAVSAFECEN (Code 49), HQ Command i.a.w. OPNAVINST 5100.23E within 48 hours of mishap
HQ Command initiates an investigation within 48 Hours of notification of mishap. Consult OPNAVINST 5100.23E for establishment of investigative board
Suicide, homicide, foul play, natural cause?
No
Mishap investigation board shall complete the required safety investigation report and 72 hour pre-mishap profile of the deceased or injured person i.a.w. OPNAVINST 5100.23E and forward the report through the chain of command With a Copy to CNO and COMNAVSAFECEN
Yes
Chain of command endorses the SIR Within 30 Days of receipt and forwards the endorsement to CNO and COMNAVSAFECEN
All records / evidence to be retained for 5 Years
End

HAZARD ABATEMENT PROGRAM INSPECTION (HAPI) PROCESS

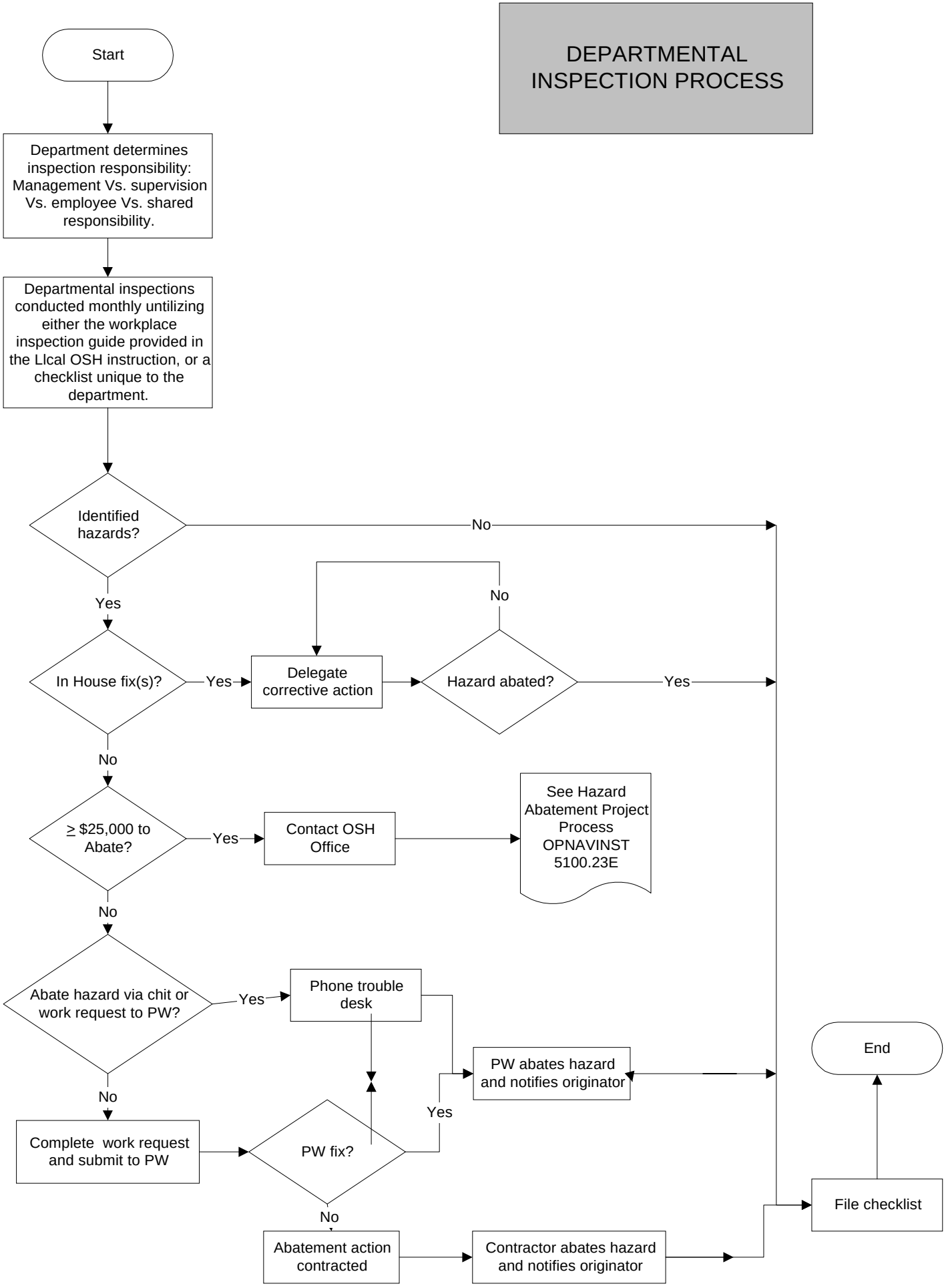



HAZARD ABATEMENT PROCESS
Page 1
Start
OSH Hazards Identified ?
No
OSH Inspector provides Department Head with e-mail stating that the inspection was completed and no hazards were identified.
Fire Hazards Identified ?
No
Security Hazards Identified ?
Yes
See N16P Hazard Abatement Project Process
No
End
Yes
Yes
Does the nature of the hazard warrant an emergency services call to the PW Trouble Desk (x2526) for abatement?
No
Facility Hazard?
No
Inspector generates an inspection report and electronic NAVOSH Deficiency Notice's (NDN) and e-mails then to the Department Head with cc to Departmental OSH Coordinator and OSH staff within 15 days of the inspection
Yes
Inspector generates an inspection report and electronic NAVOSH Deficiency Notice (NDN) and e-mails them to the PW Trouble Desk and PW Shops Director with cc to the Department Head & OSH Coordinator where the hazard exists, and OSH staff within 15 days of the inspection.
Yes
Departmental OSH Coordinator posts a copy of the RAC 1,2,3 NDN's at the hazard site
OSH staff enters NDN data into the electronic HAPI tickler and forwards the tickler to all Mgrs., Supv., and OSH Coordinators on a weekly basis to review status and to inform employees of workplace hazards.
OSH inspector contact Trouble Desk for abatement action and document the hazard via e-mail to the department head.
Abate the hazard
End
Is the cost of the abatement action >$25,000?
Yes
See funding for Hazard Abatement Project Process OPNAVINST 5100.23E, Chapt. 12
No
A

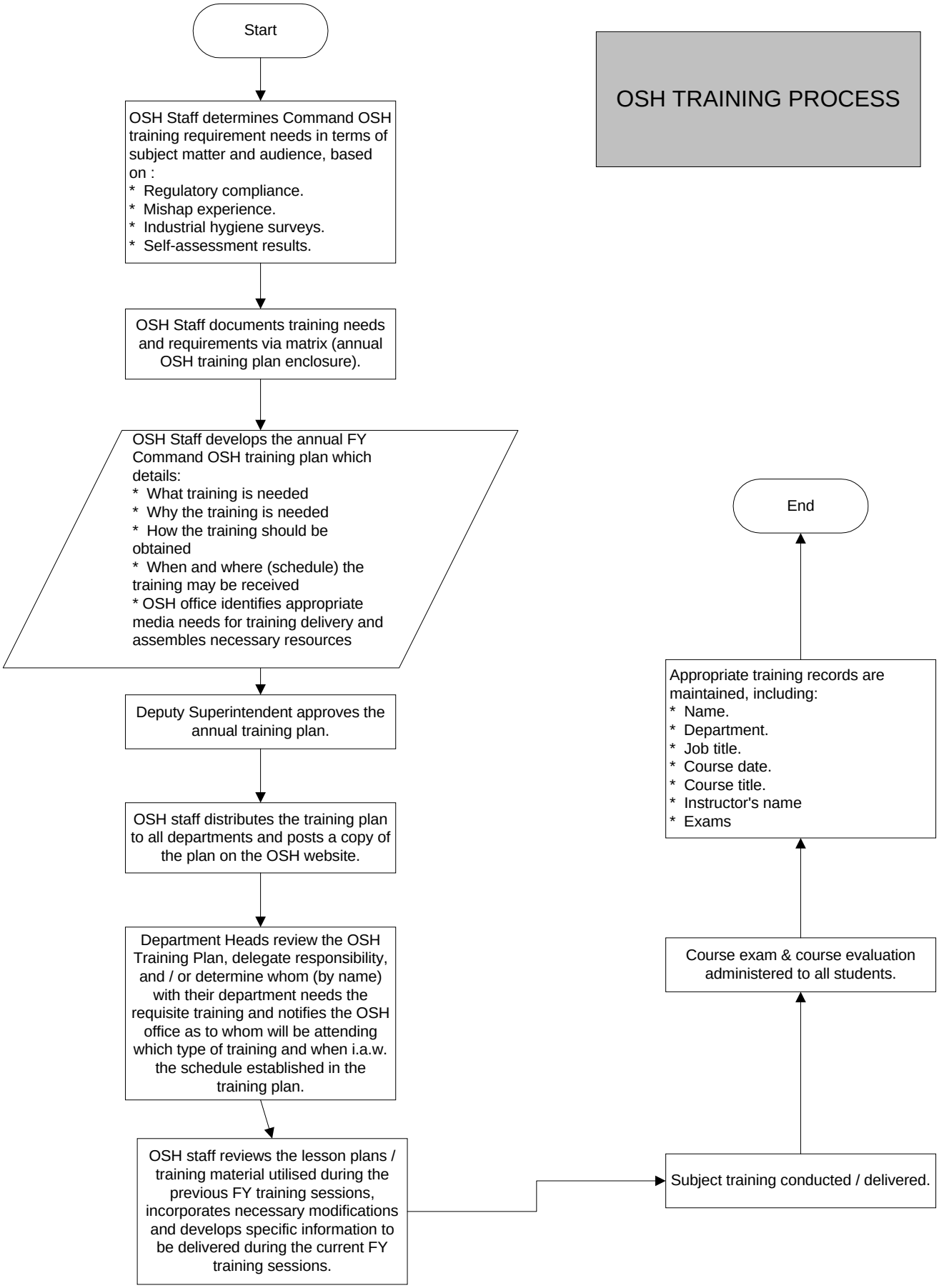
HAZARD ABATEMENT PROCESS Page 2

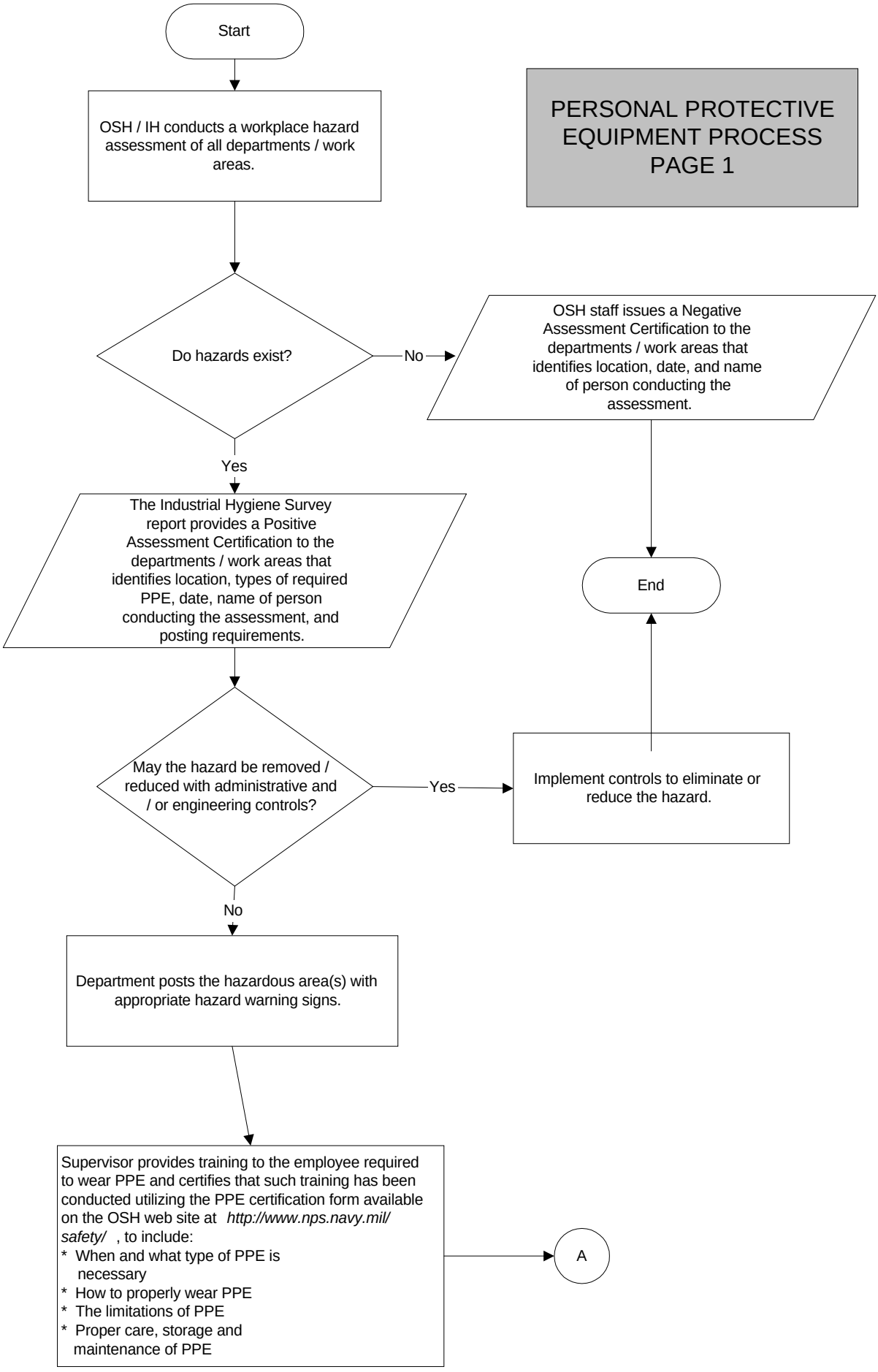


DEPARTMENTAL INSPECTION PROCESS

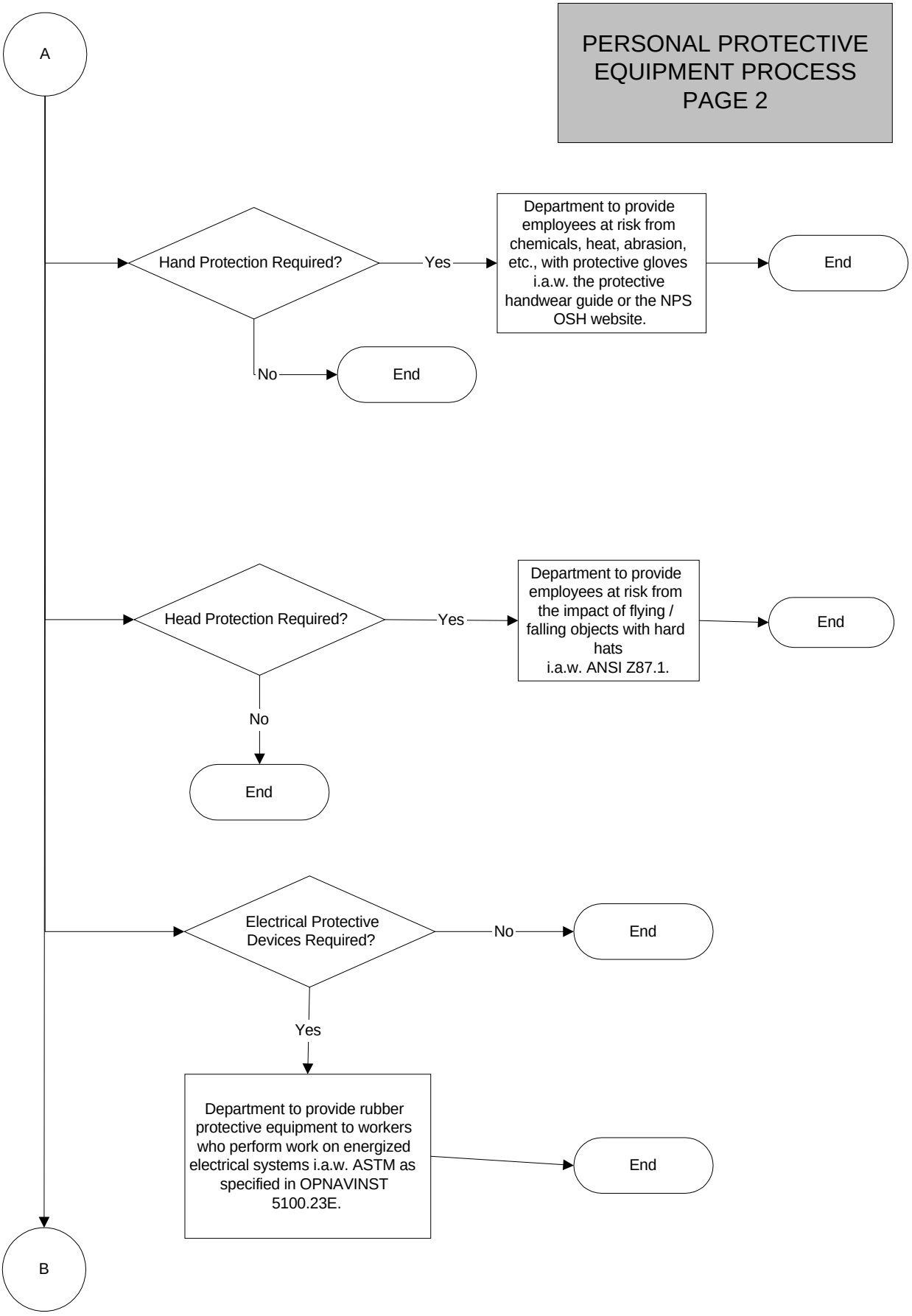


OSH TRAINING PROCESS

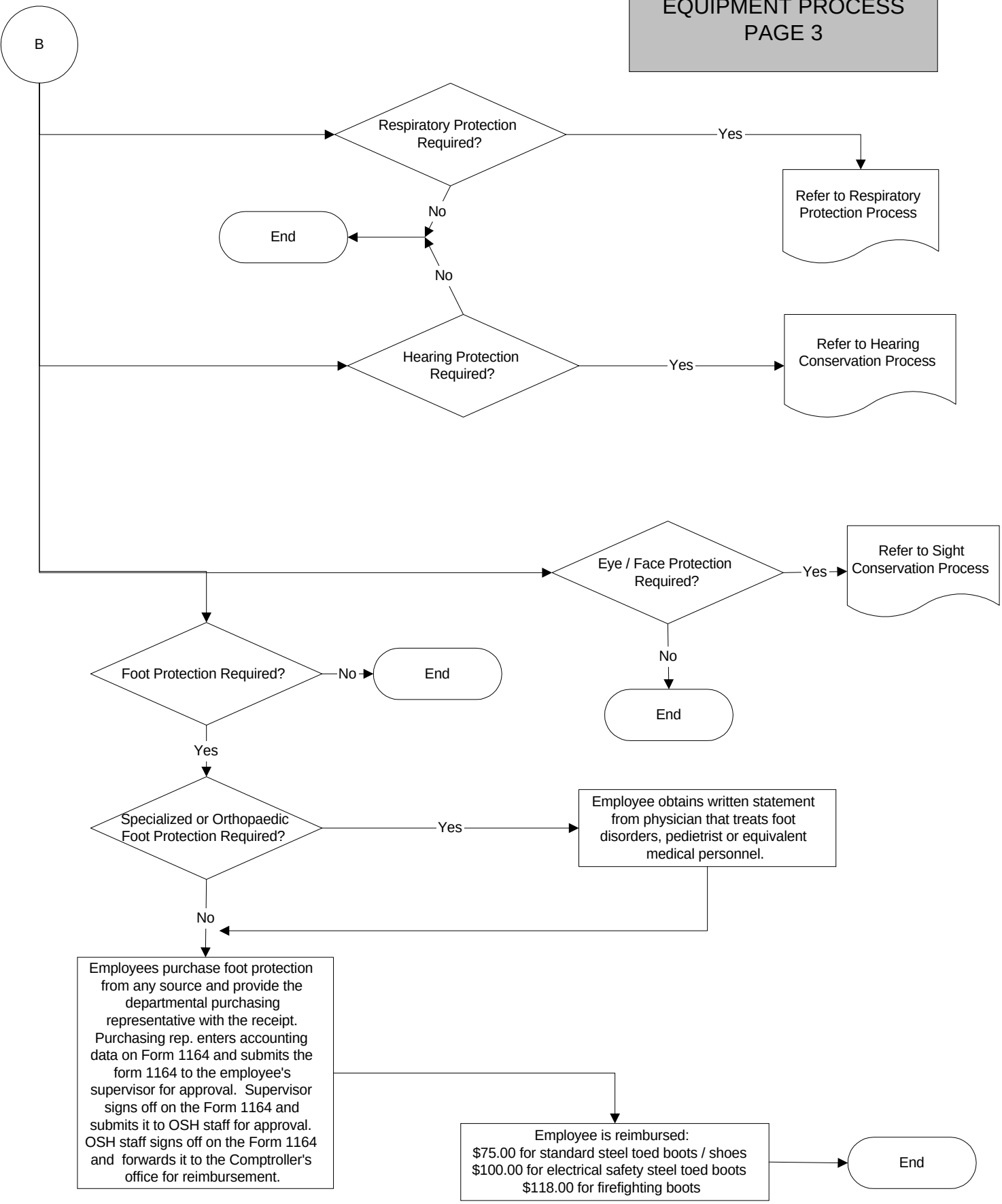



Start
OSH / IH conducts a workplace hazard assessment of all departments / work areas.
PERSONAL PROTECTIVE EQUIPMENT PROCESS PAGE 1
Do hazards exist?
No
OSH staff issues a Negative Assessment Certification to the departments / work areas that identifies location, date, and name of person conducting the assessment.
Yes
The Industrial Hygiene Survey report provides a Positive Assessment Certification to the departments / work areas that identifies location, types of required PPE, date, name of person conducting the assessment, and posting requirements.
End
May the hazard be removed / reduced with administrative and / or engineering controls?
Yes
Implement controls to eliminate or reduce the hazard.
No
Department posts the hazardous area(s) with appropriate hazard warning signs.
Supervisor provides training to the employee required to wear PPE and certifies that such training has been conducted utilizing the PPE certification form available on the OSH web site at http://www.nps.navy.mil/safety/ , to include:
* When and what type of PPE is necessary
* How to properly wear PPE
* The limitations of PPE
* Proper care, storage and maintenance of PPE
A

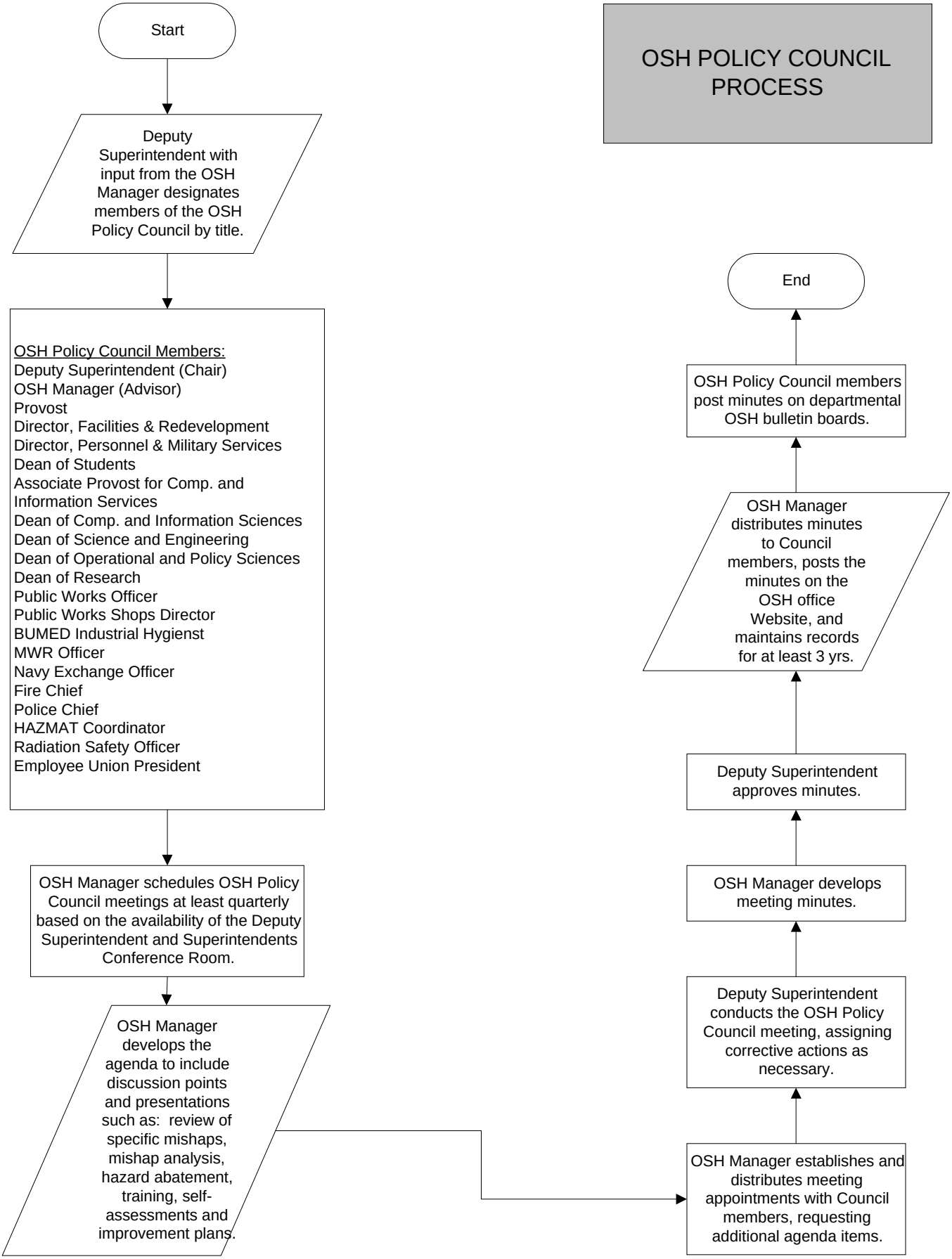
PERSONAL PROTECTIVE EQUIPMENT PROCESS PAGE 2



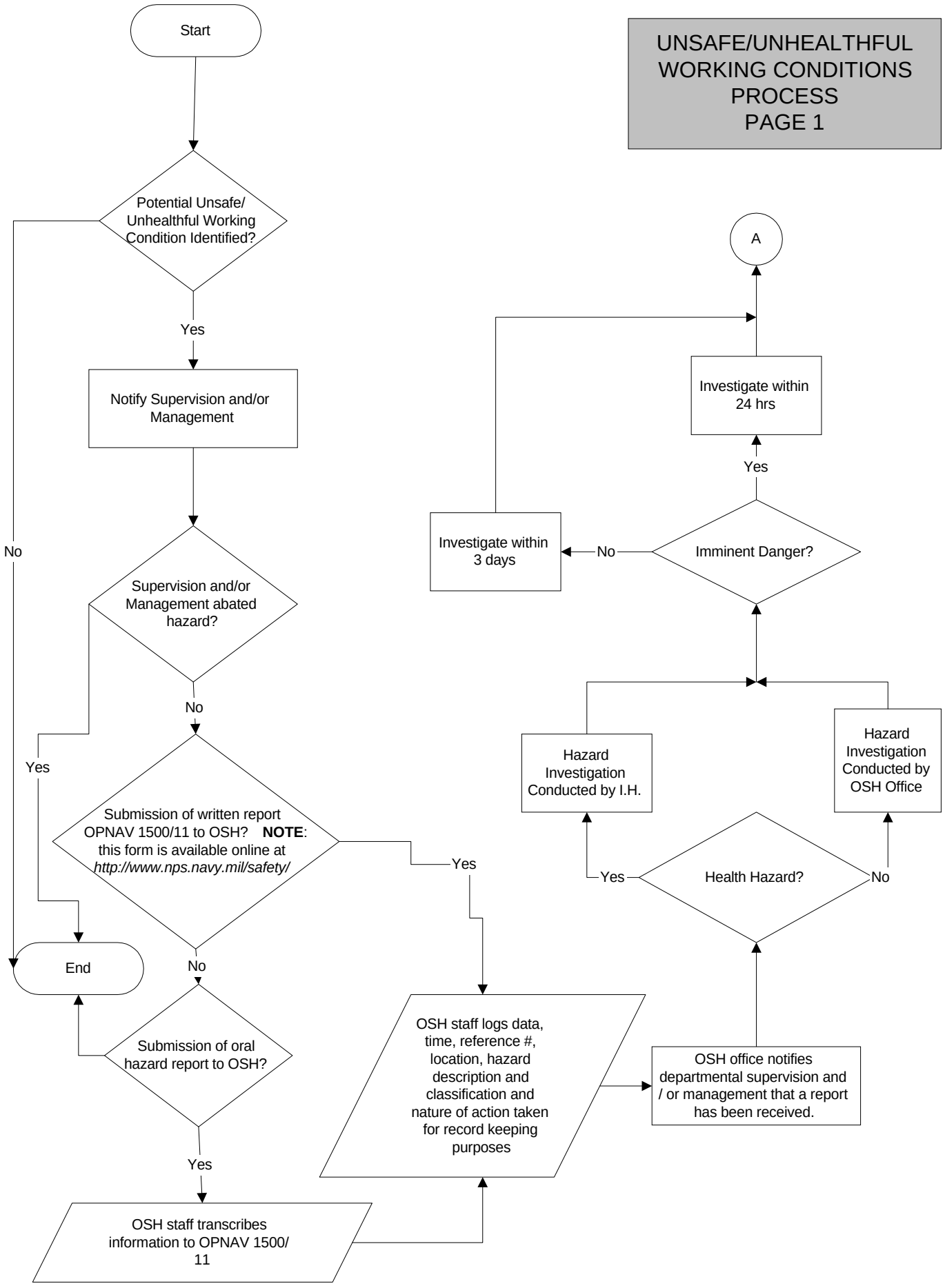
PERSONAL PROTECTIVE EQUIPMENT PROCESS PAGE 3



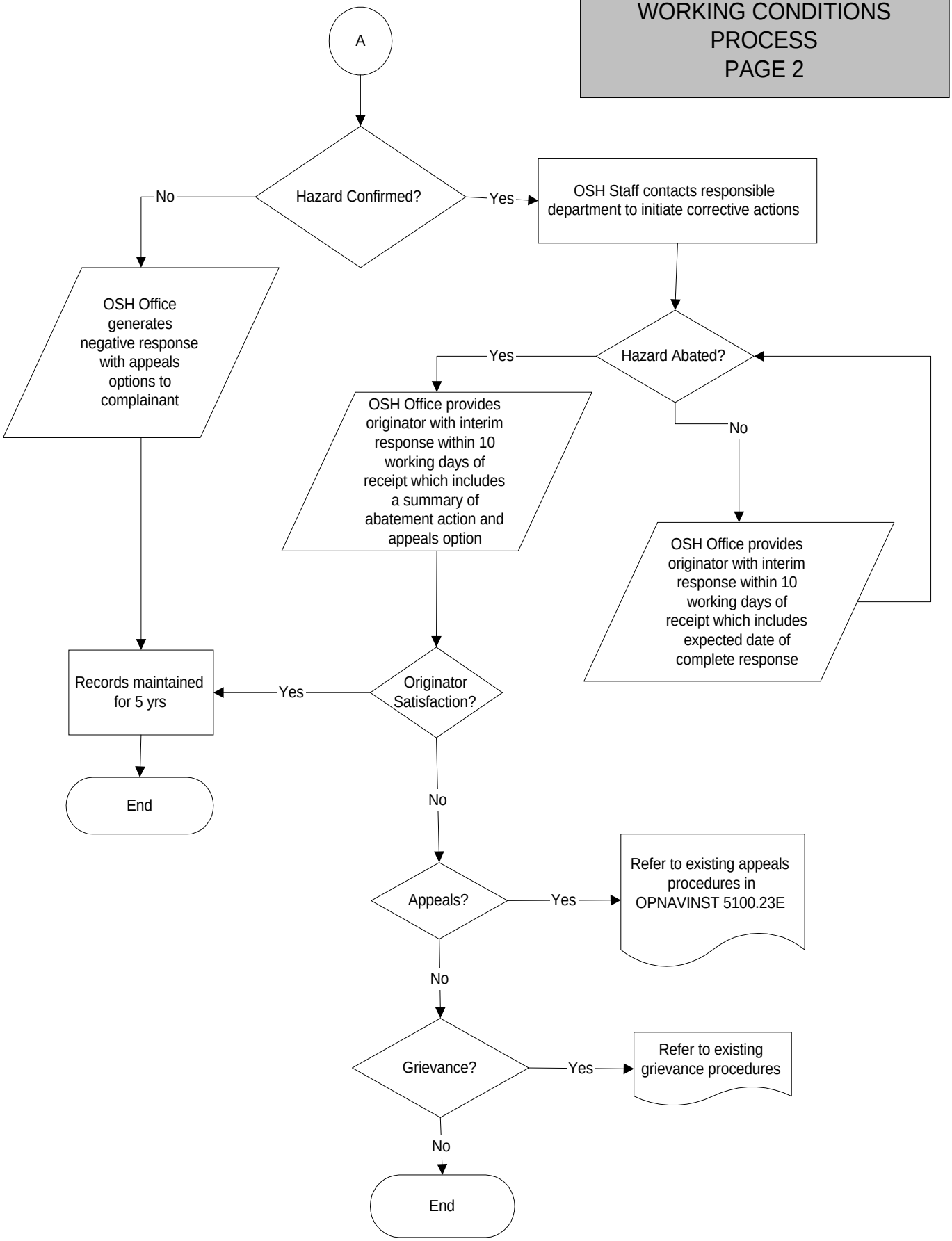
OSH POLICY COUNCIL PROCESS

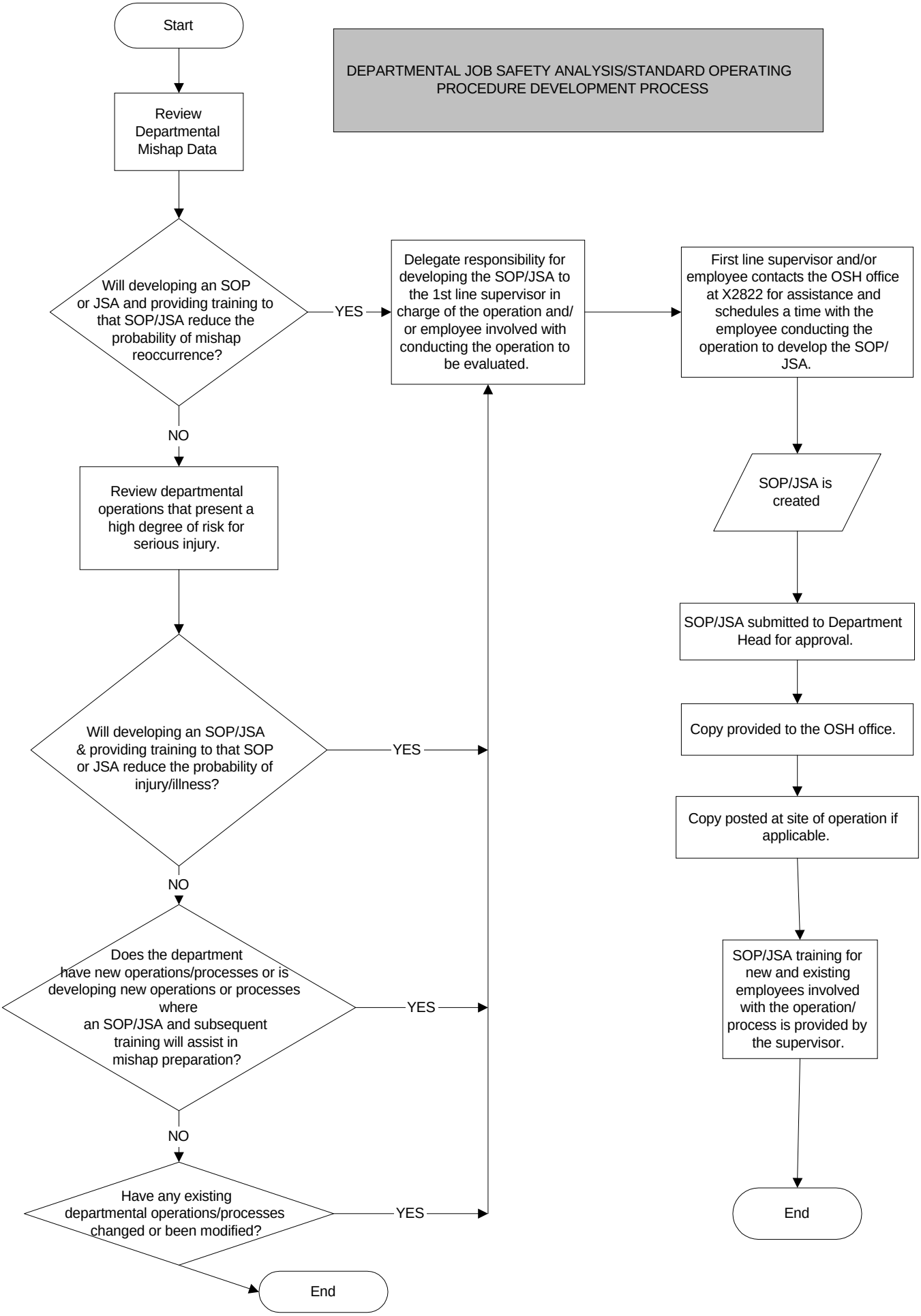


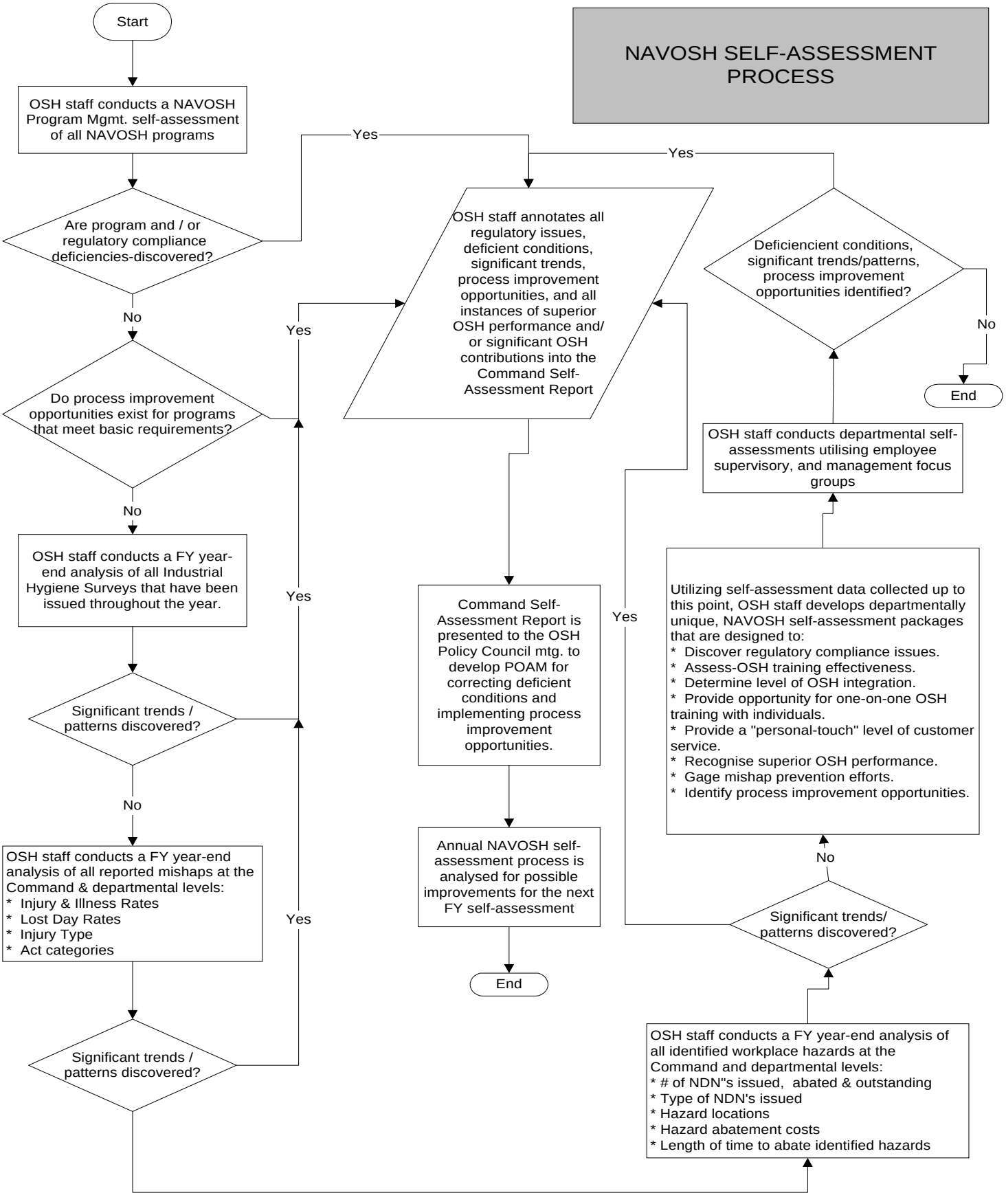
UNSAFE/UNHEALTHFUL WORKING CONDITIONS PROCESS PAGE 1



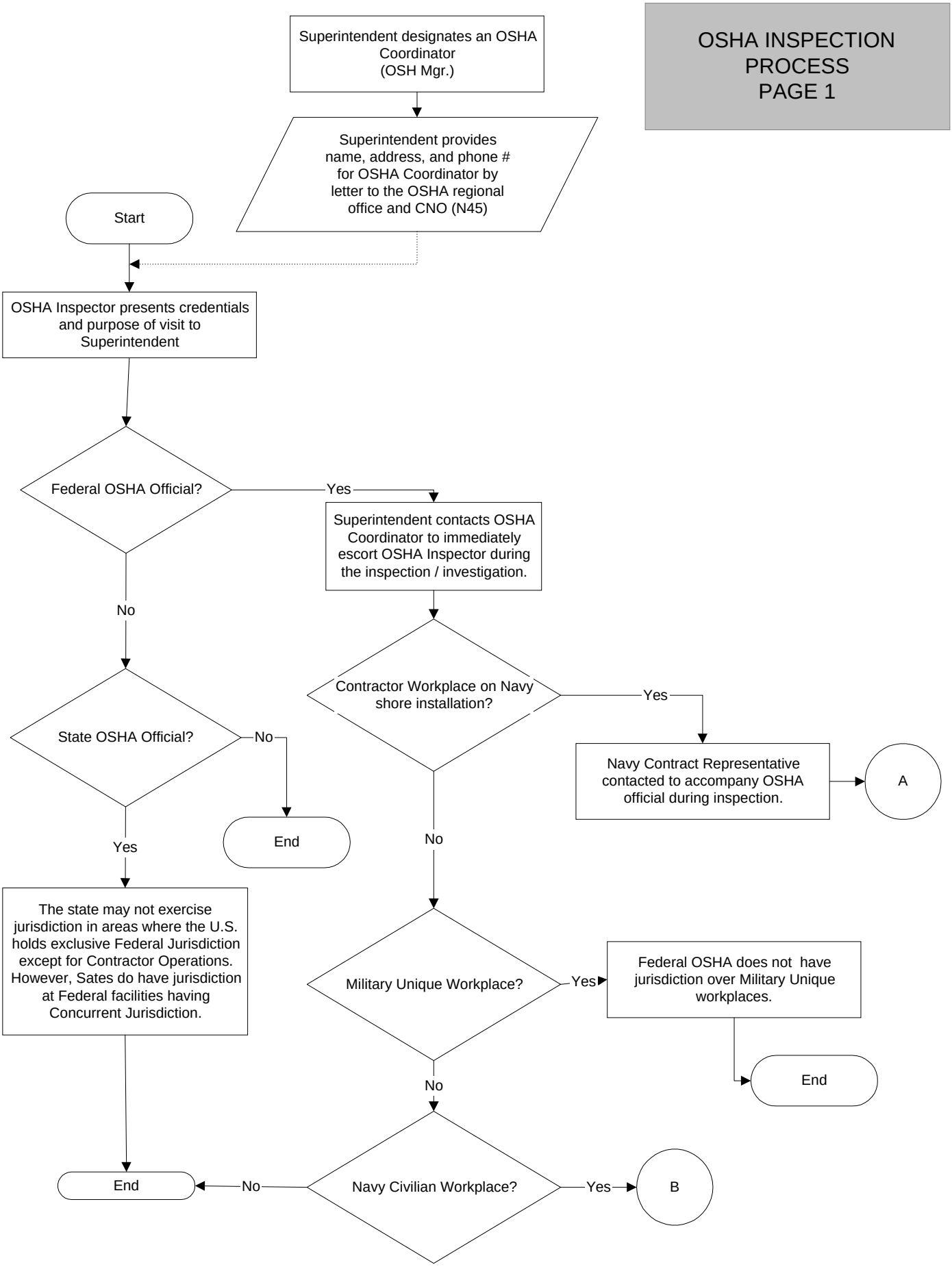
UNSAFE/UNHEALTHFUL WORKING CONDITIONS PROCESS PAGE 2

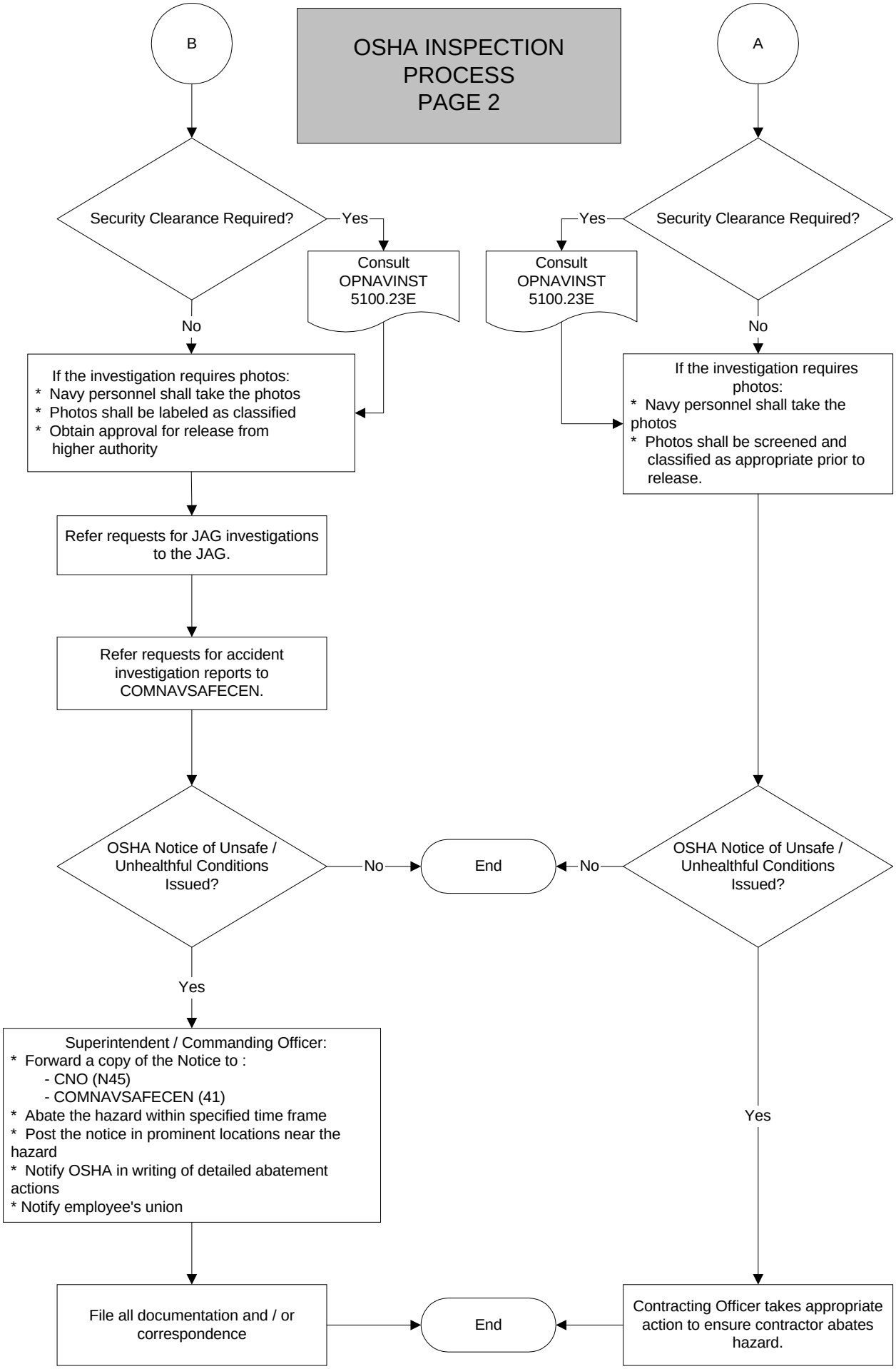



Start
DEPARTMENTAL JOB SAFETY ANALYSIS/STANDARD OPERATING PROCEDURE DEVELOPMENT PROCESS
Review Departmental Mishap Data
Will developing an SOP or JSA and providing training to that SOP/JSA reduce the probability of mishap reoccurrence?
YES
Delegate responsibility for developing the SOP/JSA to the 1st line supervisor in charge of the operation and/ or employee involved with conducting the operation to be evaluated.
First line supervisor and/or employee contacts the OSH office at X2822 for assistance and schedules a time with the employee conducting the operation to develop the SOP/ JSA.
NO
Review departmental operations that present a high degree of risk for serious injury.
SOP/JSA is created
SOP/JSA submitted to Department Head for approval.
Will developing an SOP/JSA & providing training to that SOP or JSA reduce the probability of injury/illness?
YES
Copy provided to the OSH office.
Copy posted at site of operation if applicable.
NO
Does the department have new operations/processes or is developing new operations or processes where an SOP/JSA and subsequent training will assist in mishap preparation?
YES
SOP/JSA training for new and existing employees involved with the operation/ process is provided by the supervisor.
NO
Have any existing departmental operations/processes changed or been modified?
YES
End
End


NAVOSH SELF-ASSESSMENT PROCESS
Start
OSH staff conducts a NAVOSH Program Mgmt. self-assessment of all NAVOSH programs
Are program and / or regulatory compliance deficiencies-discovered?
Yes
No
Do process improvement opportunities exist for programs that meet basic requirements?
Yes
No
OSH staff conducts a FY year-end analysis of all Industrial Hygiene Surveys that have been issued throughout the year.
Significant trends / patterns discovered?
Yes
No
OSH staff conducts a FY year-end analysis of all reported mishaps at the Command & departmental levels:
* Injury & Illness Rates
* Lost Day Rates
* Injury Type
* Act categories
Significant trends / patterns discovered?
Yes
OSH staff annotates all regulatory issues, deficient conditions, significant trends, process improvement opportunities, and all instances of superior OSH performance and/ or significant OSH contributions into the Command Self-Assessment Report
Command Self-Assessment Report is presented to the OSH Policy Council mtg. to develop POAM for correcting deficient conditions and implementing process improvement opportunities.
Annual NAVOSH self-assessment process is analysed for possible improvements for the next FY self-assessment
End
Deficiencient conditions, significant trends/patterns, process improvement opportunities identified?
Yes
No
End
OSH staff conducts departmental self-assessments utilising employee supervisory, and management focus groups
Utilizing self-assessment data collected up to this point, OSH staff develops departmentally unique, NAVOSH self-assessment packages that are designed to:
* Discover regulatory compliance issues.
* Assess-OSH training effectiveness.
* Determine level of OSH integration.
* Provide opportunity for one-on-one OSH training with individuals.
* Provide a "personal-touch" level of customer service.
* Recognise superior OSH performance.
* Gage mishap prevention efforts.
* Identify process improvement opportunities.
Significant trends/ patterns discovered?
Yes
No
OSH staff conducts a FY year-end analysis of all identified workplace hazards at the Command and departmental levels:
* # of NDN"s issued, abated & outstanding
* Type of NDN's issued
* Hazard locations
* Hazard abatement costs
* Length of time to abate identified hazards

OSHA INSPECTION PROCESS PAGE 1

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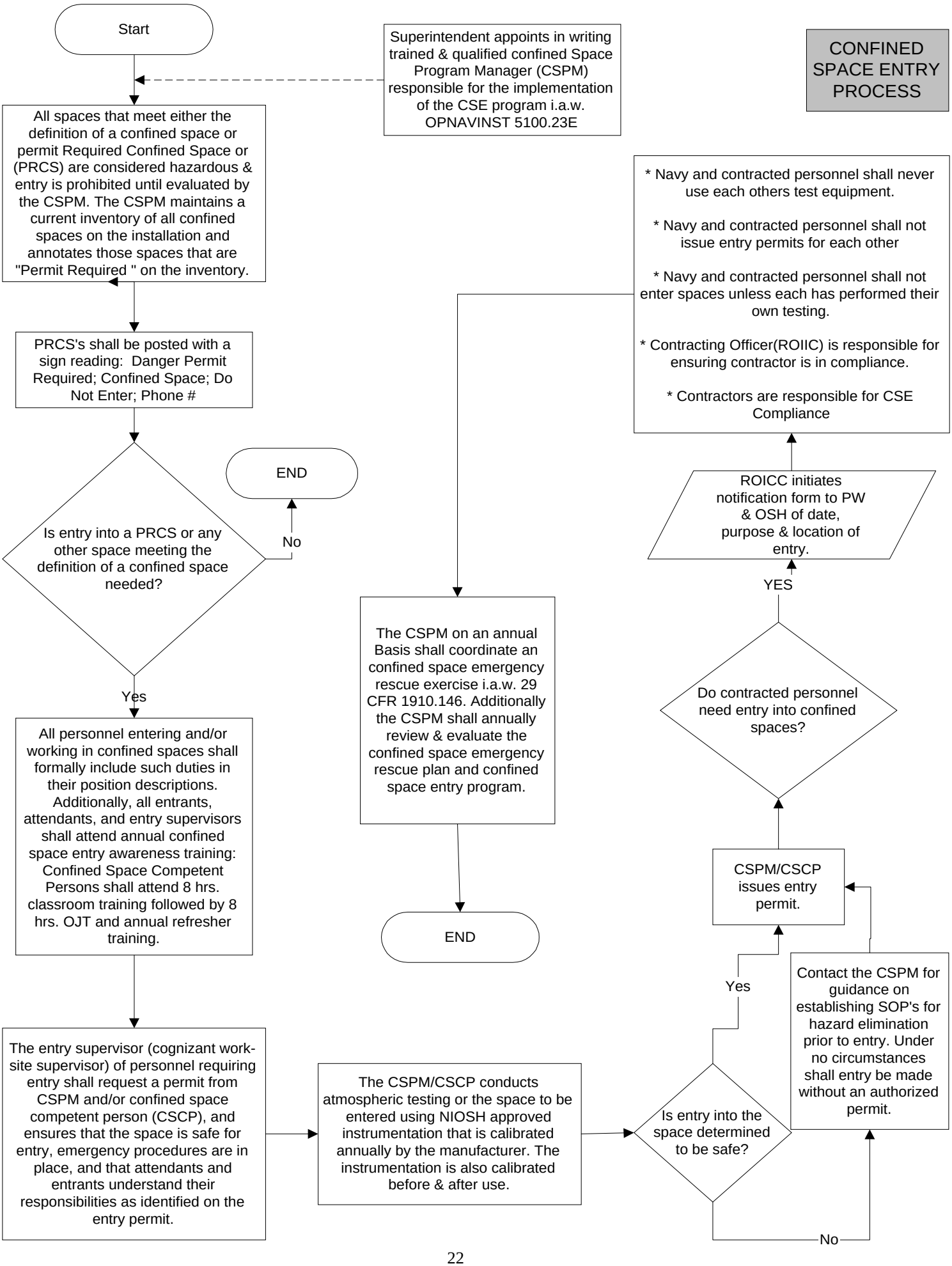
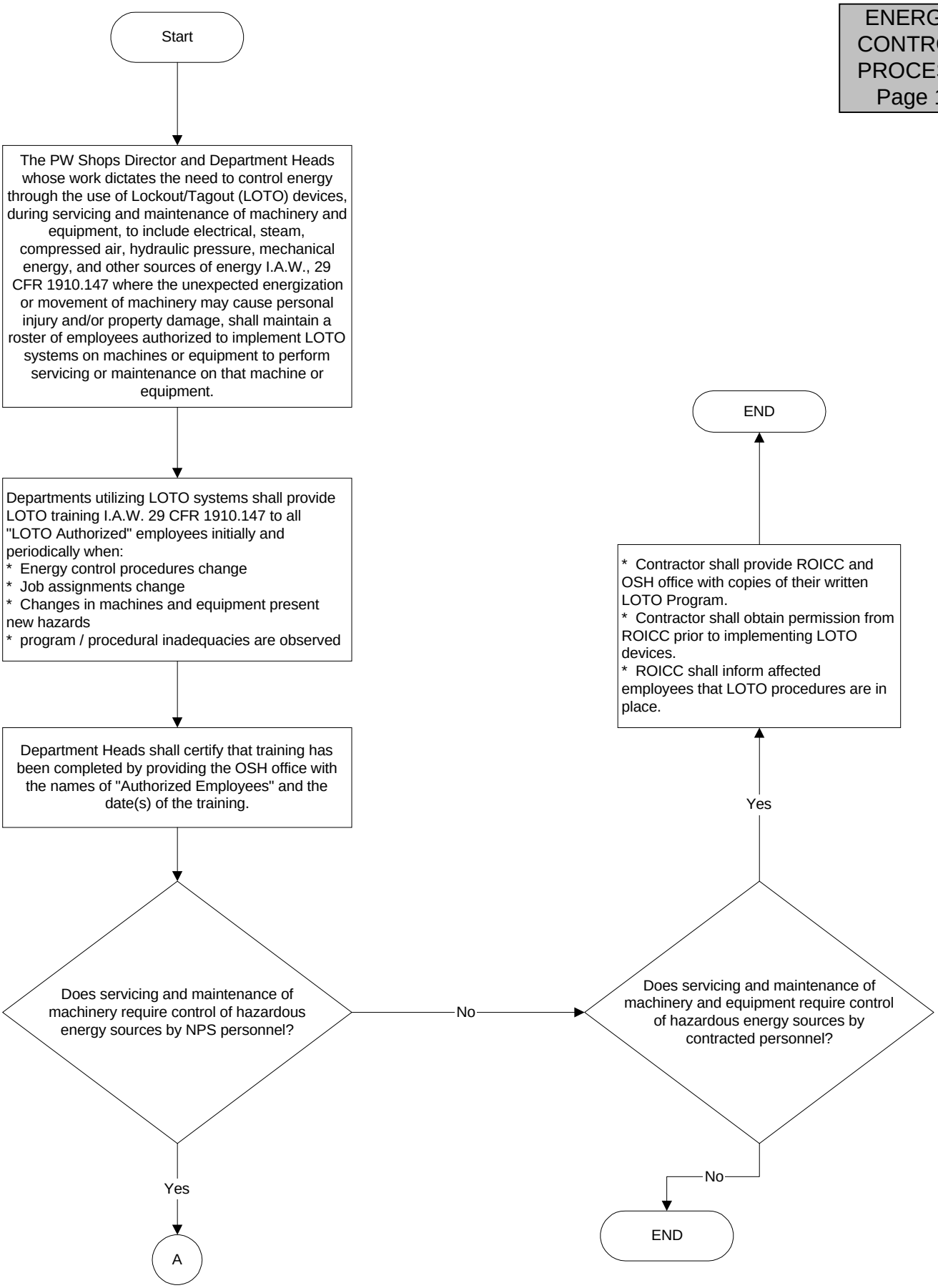
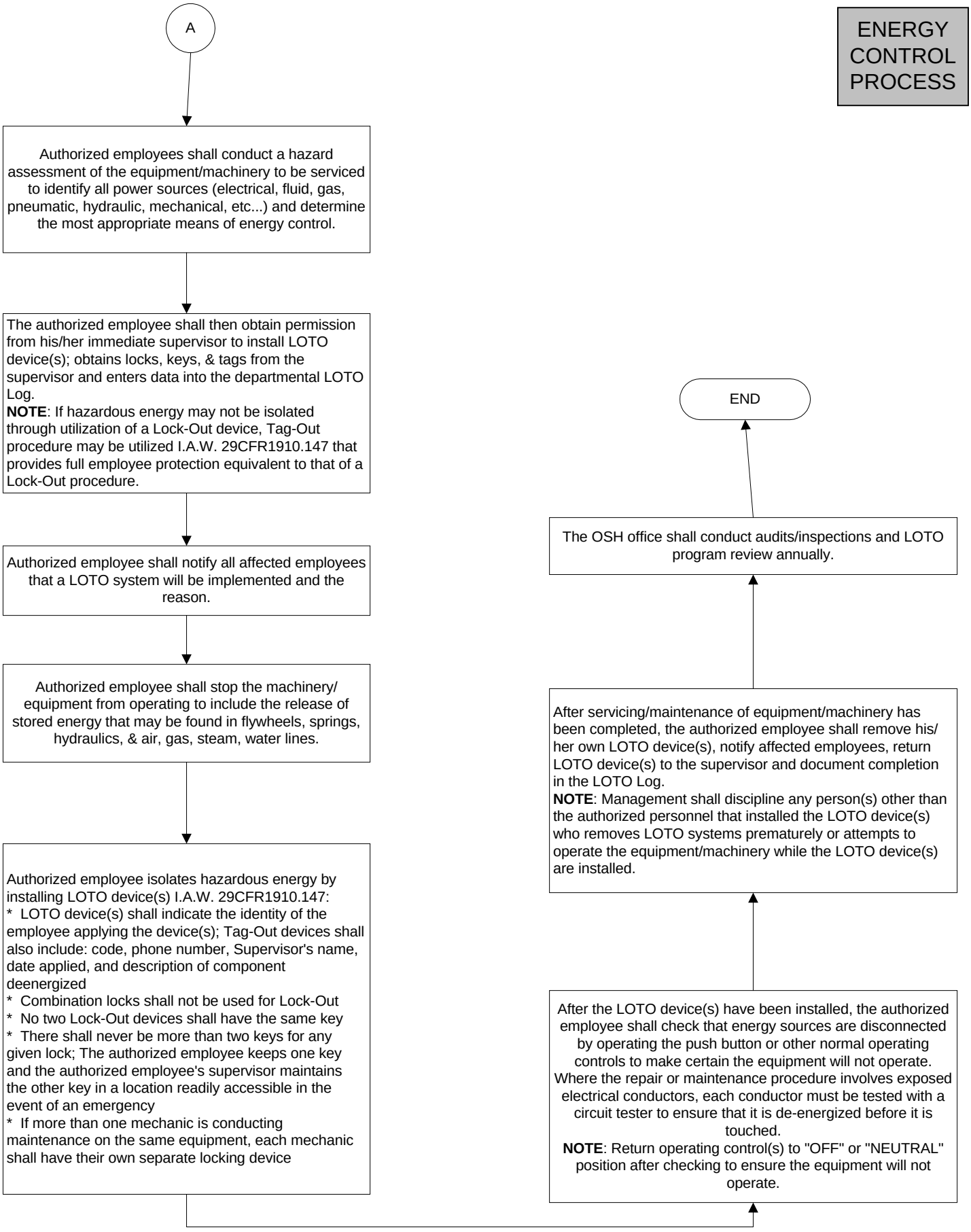
OSHA INSPECTION PROCESS PAGE 2
A
Security Clearance Required?
Yes
Consult OPNAVINST 5100.23E
No
If the investigation requires photos:
* Navy personnel shall take the photos
* Photos shall be labeled as classified
* Obtain approval for release from higher authority
Refer requests for JAG investigations to the JAG.
Refer requests for accident investigation reports to COMNAVSAFECEN.
OSHA Notice of Unsafe / Unhealthful Conditions Issued?
No
End
Yes
Superintendent / Commanding Officer:
* Forward a copy of the Notice to :
- CNO (N45)
- COMNAVSAFECEN (41)
* Abate the hazard within specified time frame
* Post the notice in prominent locations near the hazard
* Notify OSHA in writing of detailed abatement actions
* Notify employee's union
File all documentation and / or correspondence
Security Clearance Required?
Yes
Consult OPNAVINST 5100.23E
No
If the investigation requires photos:
* Navy personnel shall take the photos
* Photos shall be screened and classified as appropriate prior to release.
OSHA Notice of Unsafe / Unhealthful Conditions Issued?
No
End
Yes
Contracting Officer takes appropriate action to ensure contractor abates hazard.

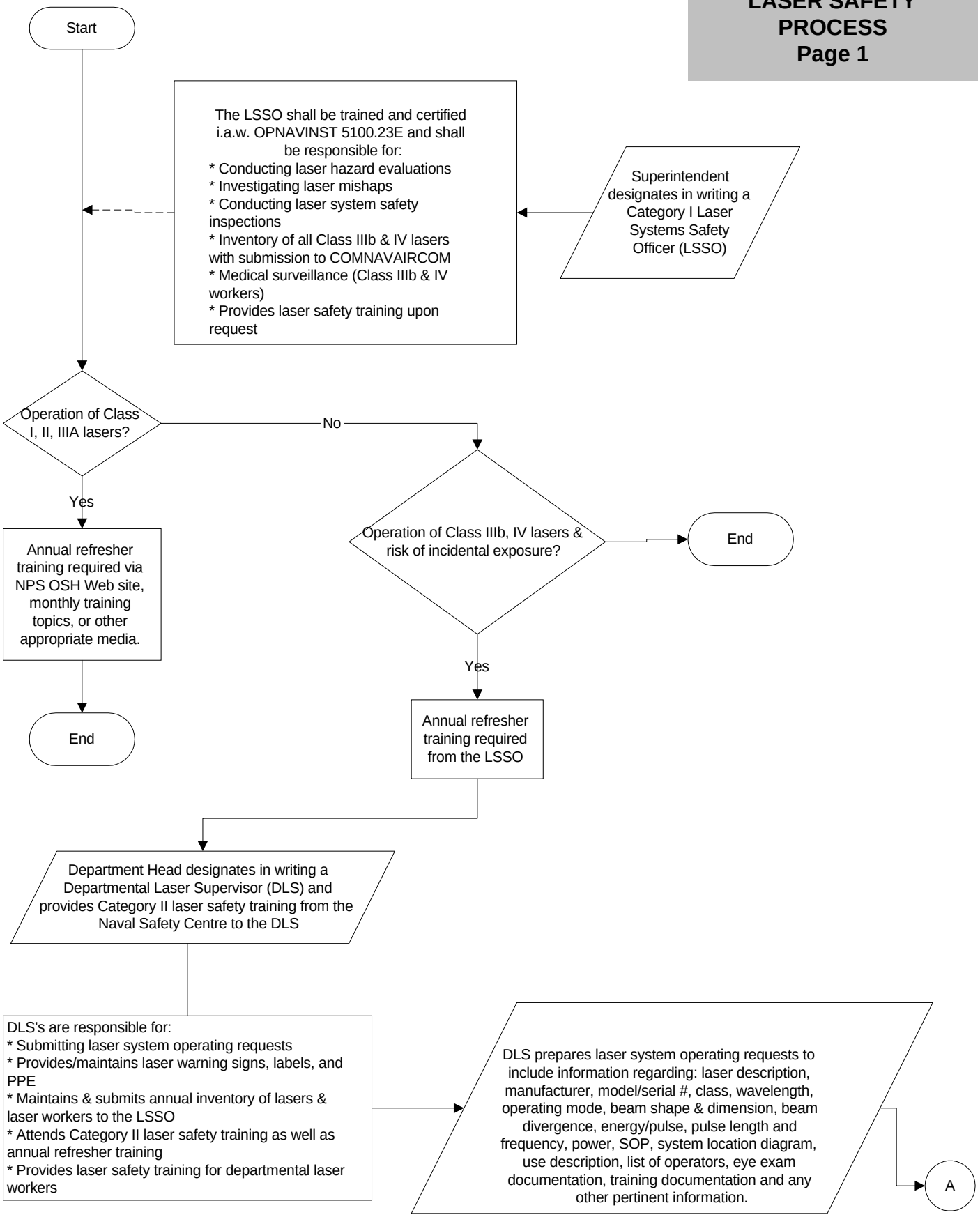

CONFINED SPACE ENTRY PROCESS
Start
Superintendent appoints in writing trained & qualified confined Space Program Manager (CSPM) responsible for the implementation of the CSE program i.a.w. OPNAVINST 5100.23E
All spaces that meet either the definition of a confined space or permit Required Confined Space or (PRCS) are considered hazardous & entry is prohibited until evaluated by the CSPM. The CSPM maintains a current inventory of all confined spaces on the installation and annotates those spaces that are "Permit Required " on the inventory.
PRCS's shall be posted with a sign reading: Danger Permit Required; Confined Space; Do Not Enter; Phone #
Is entry into a PRCS or any other space meeting the definition of a confined space needed?
No
END
Yes
All personnel entering and/or working in confined spaces shall formally include such duties in their position descriptions. Additionally, all entrants, attendants, and entry supervisors shall attend annual confined space entry awareness training: Confined Space Competent Persons shall attend 8 hrs. classroom training followed by 8 hrs. OJT and annual refresher training.
The entry supervisor (cognizant work-site supervisor) of personnel requiring entry shall request a permit from CSPM and/or confined space competent person (CSCP), and ensures that the space is safe for entry, emergency procedures are in place, and that attendants and entrants understand their responsibilities as identified on the entry permit.
The CSPM/CSCP conducts atmospheric testing or the space to be entered using NIOSH approved instrumentation that is calibrated annually by the manufacturer. The instrumentation is also calibrated before & after use.
Is entry into the space determined to be safe?
Yes
No
Contact the CSPM for guidance on establishing SOP's for hazard elimination prior to entry. Under no circumstances shall entry be made without an authorized permit.
CSPM/CSCP issues entry permit.
Do contracted personnel need entry into confined spaces?
YES
ROICC initiates notification form to PW & OSH of date, purpose & location of entry.
* Navy and contracted personnel shall never use each others test equipment.
* Navy and contracted personnel shall not issue entry permits for each other
* Navy and contracted personnel shall not enter spaces unless each has performed their own testing.
* Contracting Officer(ROIIC) is responsible for ensuring contractor is in compliance.
* Contractors are responsible for CSE Compliance
The CSPM on an annual Basis shall coordinate an confined space emergency rescue exercise i.a.w. 29 CFR 1910.146. Additionally the CSPM shall annually review & evaluate the confined space emergency rescue plan and confined space entry program.
END

ENERGY CONTROL PROCESS Page 1

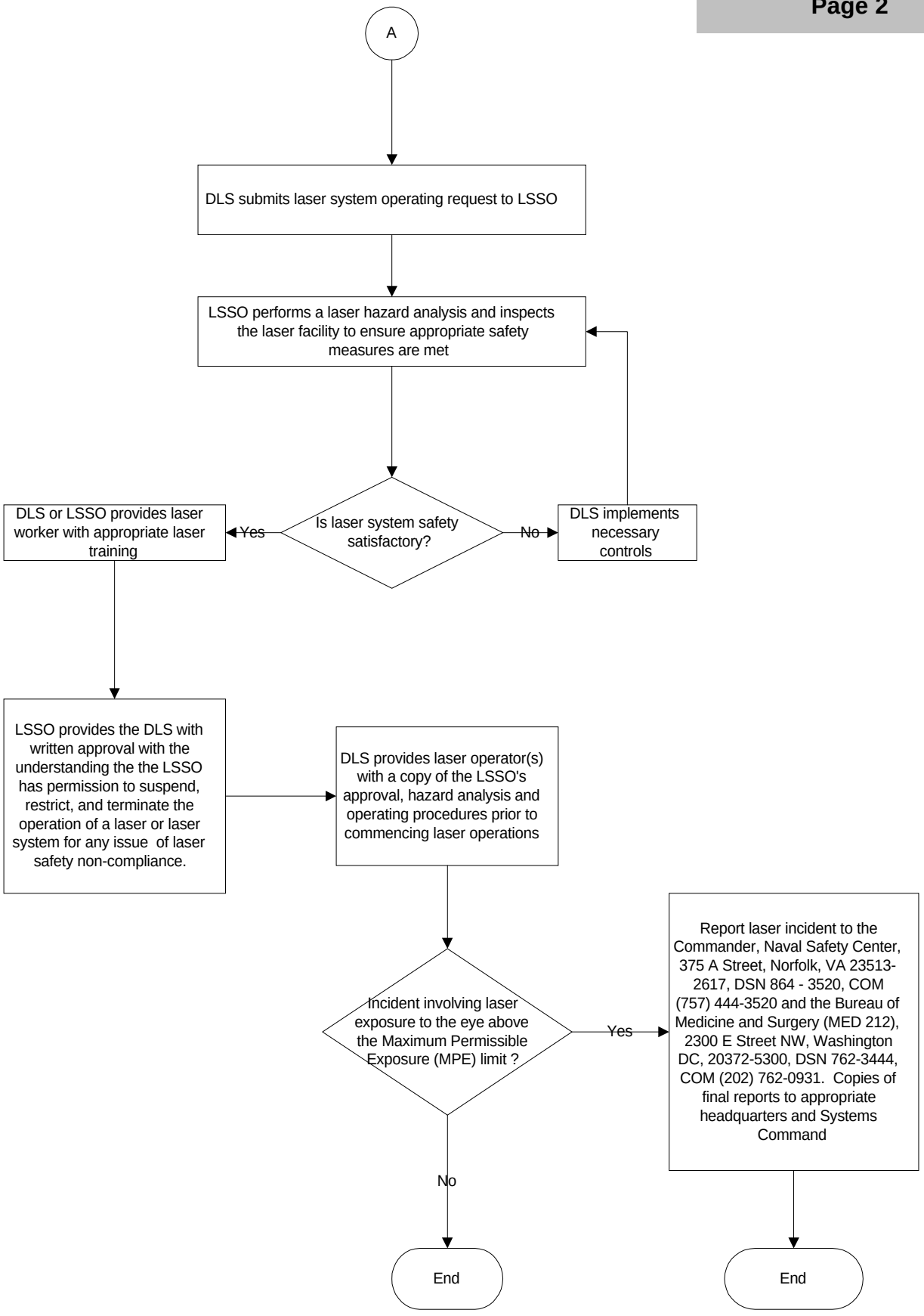



ENERGY CONTROL PROCESS
A
Authorized employees shall conduct a hazard assessment of the equipment/machinery to be serviced to identify all power sources (electrical, fluid, gas, pneumatic, hydraulic, mechanical, etc...) and determine the most appropriate means of energy control.
The authorized employee shall then obtain permission from his/her immediate supervisor to install LOTO device(s); obtains locks, keys, & tags from the supervisor and enters data into the departmental LOTO Log.
NOTE: If hazardous energy may not be isolated through utilization of a Lock-Out device, Tag-Out procedure may be utilized I.A.W. 29CFR1910.147 that provides full employee protection equivalent to that of a Lock-Out procedure.
Authorized employee shall notify all affected employees that a LOTO system will be implemented and the reason.
Authorized employee shall stop the machinery/ equipment from operating to include the release of stored energy that may be found in flywheels, springs, hydraulics, & air, gas, steam, water lines.
Authorized employee isolates hazardous energy by installing LOTO device(s) I.A.W. 29CFR1910.147:
* LOTO device(s) shall indicate the identity of the employee applying the device(s); Tag-Out devices shall also include: code, phone number, Supervisor's name, date applied, and description of component deenergized
* Combination locks shall not be used for Lock-Out
* No two Lock-Out devices shall have the same key
* There shall never be more than two keys for any given lock; The authorized employee keeps one key and the authorized employee's supervisor maintains the other key in a location readily accessible in the event of an emergency
* If more than one mechanic is conducting maintenance on the same equipment, each mechanic shall have their own separate locking device
After the LOTO device(s) have been installed, the authorized employee shall check that energy sources are disconnected by operating the push button or other normal operating controls to make certain the equipment will not operate. Where the repair or maintenance procedure involves exposed electrical conductors, each conductor must be tested with a circuit tester to ensure that it is de-energized before it is touched.
NOTE: Return operating control(s) to "OFF" or "NEUTRAL" position after checking to ensure the equipment will not operate.
After servicing/maintenance of equipment/machinery has been completed, the authorized employee shall remove his/ her own LOTO device(s), notify affected employees, return LOTO device(s) to the supervisor and document completion in the LOTO Log.
NOTE: Management shall discipline any person(s) other than the authorized personnel that installed the LOTO device(s) who removes LOTO systems prematurely or attempts to operate the equipment/machinery while the LOTO device(s) are installed.
The OSH office shall conduct audits/inspections and LOTO program review annually.
END

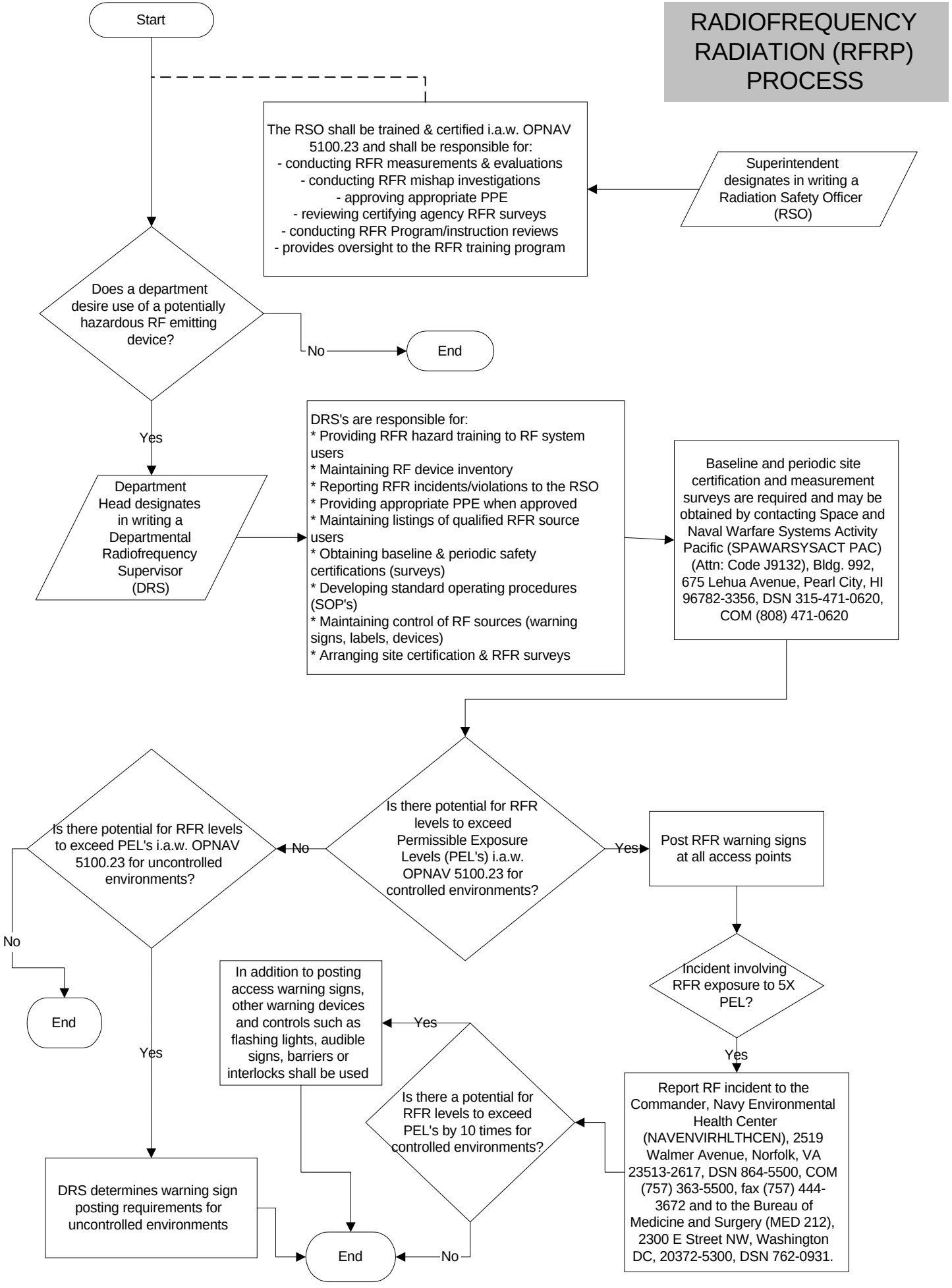
LASER SAFETY PROCESS Page 1

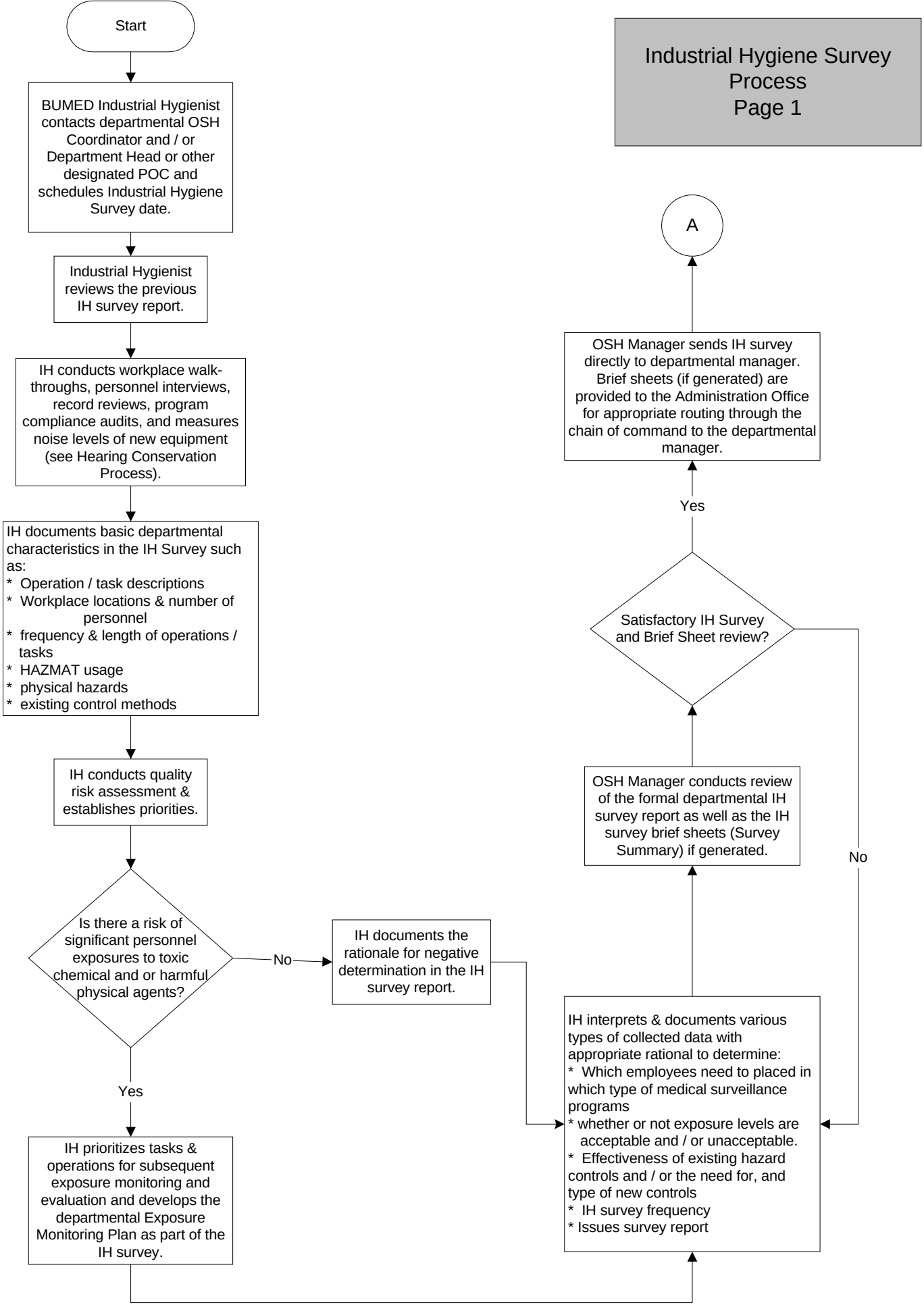


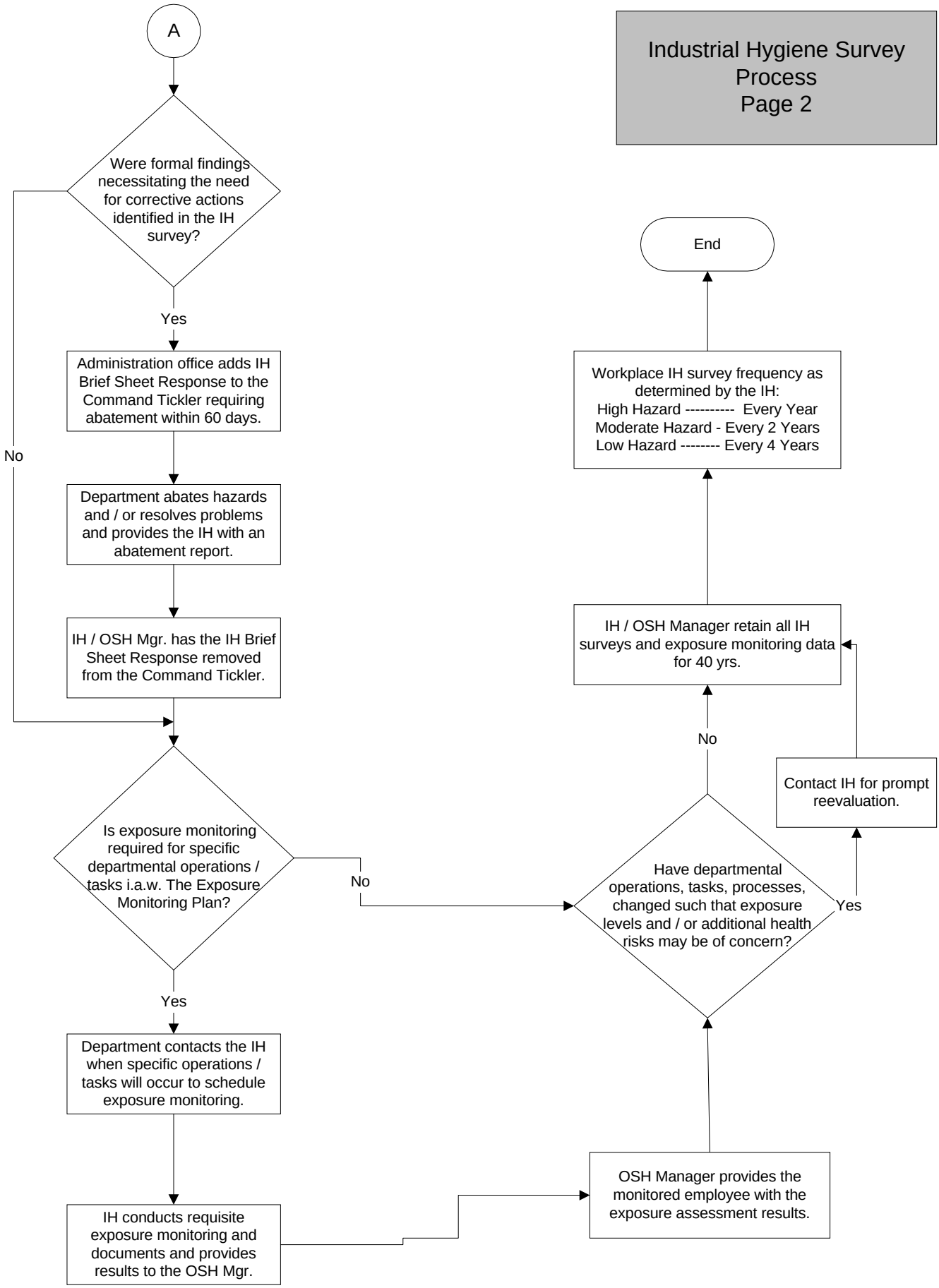
LASER SAFETY PROCESS
Page 2



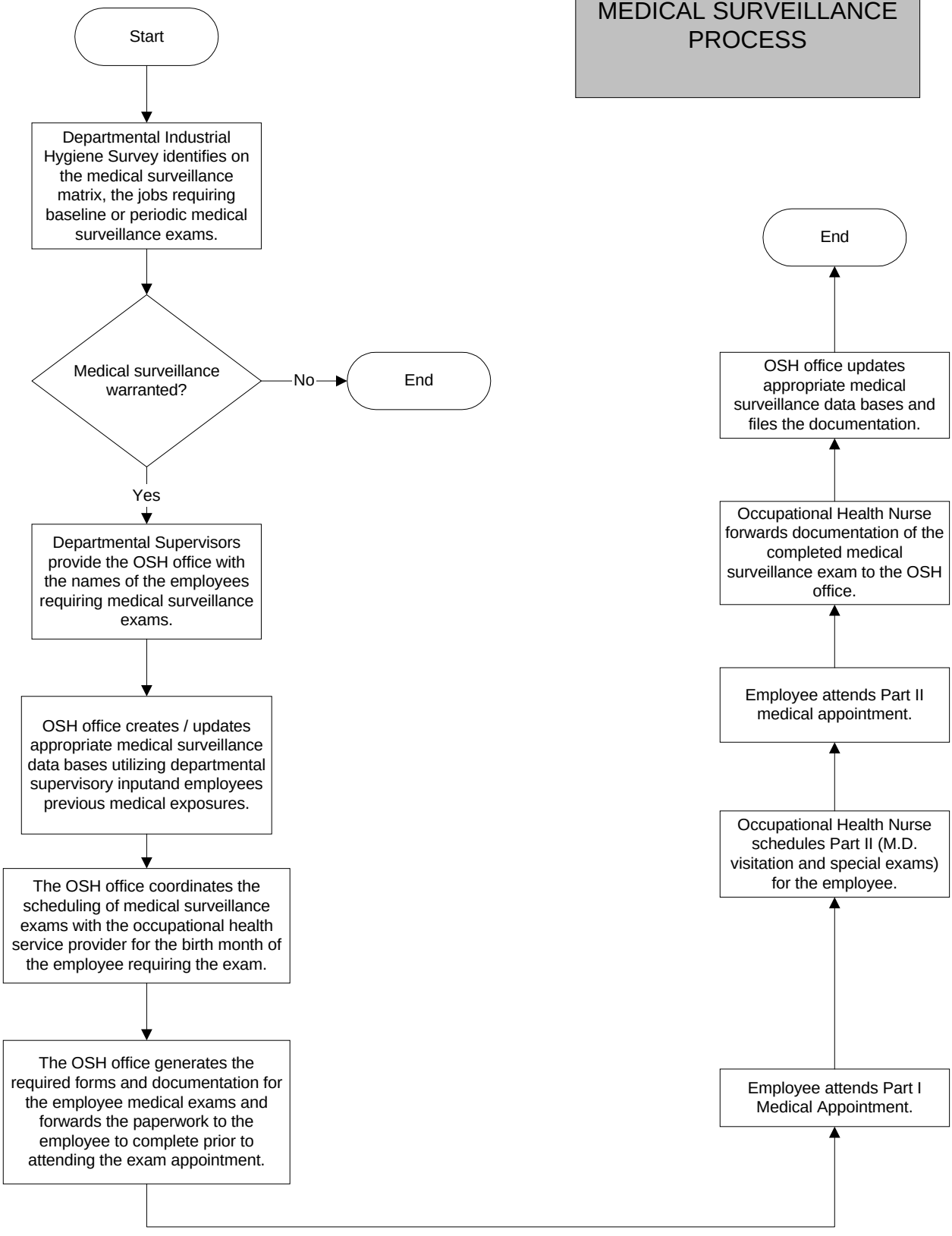
RADIOFREQUENCY RADIATION (RFRP) PROCESS



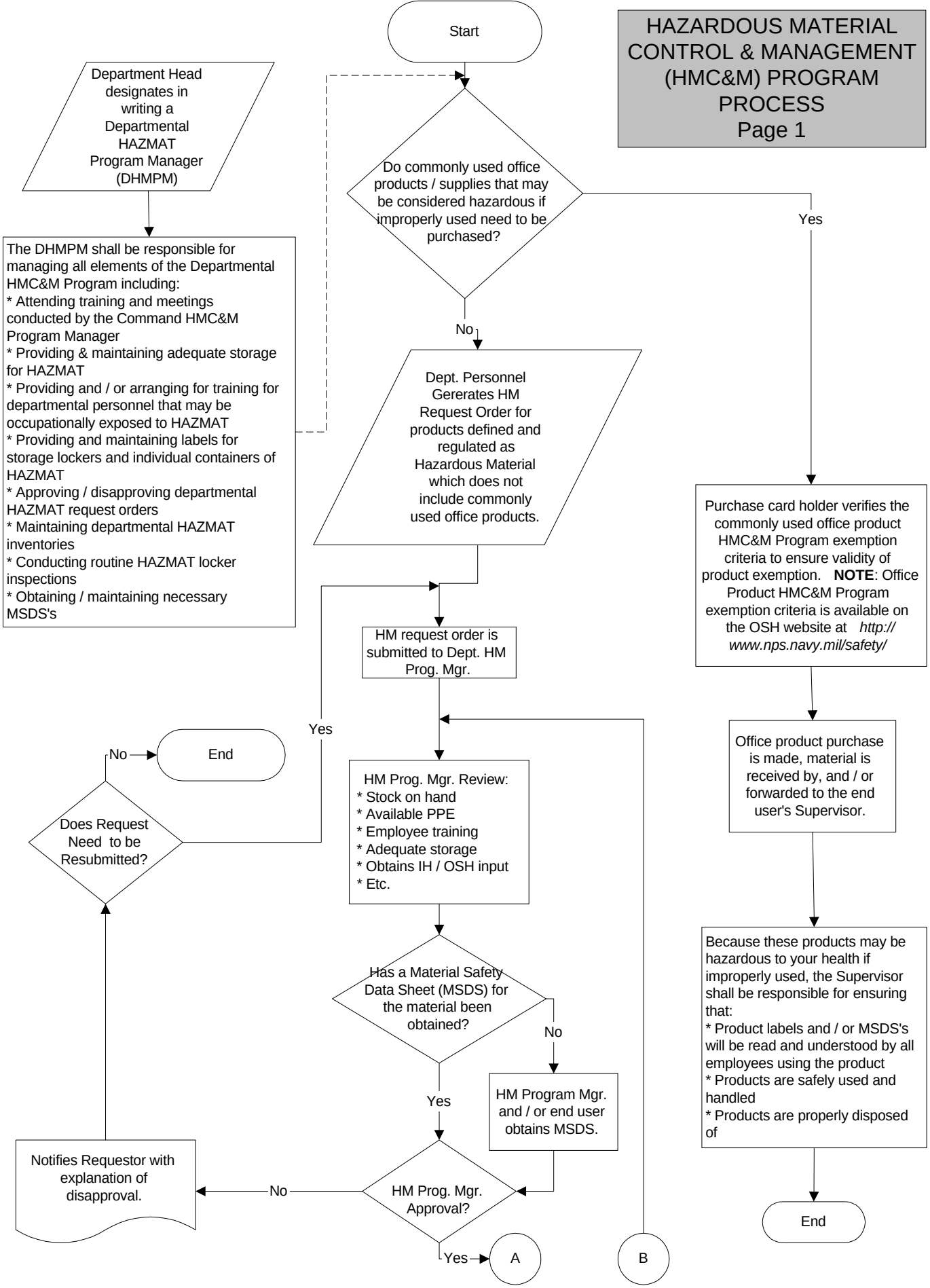

Industrial Hygiene Survey Process
Page 1
Start
BUMED Industrial Hygienist contacts departmental OSH Coordinator and / or Department Head or other designated POC and schedules Industrial Hygiene Survey date.
Industrial Hygienist reviews the previous IH survey report.
IH conducts workplace walk-throughs, personnel interviews, record reviews, program compliance audits, and measures noise levels of new equipment (see Hearing Conservation Process).
IH documents basic departmental characteristics in the IH Survey such as:
* Operation / task descriptions
* Workplace locations & number of personnel
* frequency & length of operations / tasks
* HAZMAT usage
* physical hazards
* existing control methods
IH conducts quality risk assessment & establishes priorities.
Is there a risk of significant personnel exposures to toxic chemical and or harmful physical agents?
No
IH documents the rationale for negative determination in the IH survey report.
Yes
IH prioritizes tasks & operations for subsequent exposure monitoring and evaluation and develops the departmental Exposure Monitoring Plan as part of the IH survey.
IH interprets & documents various types of collected data with appropriate rational to determine:
* Which employees need to placed in which type of medical surveillance programs
* whether or not exposure levels are acceptable and / or unacceptable.
* Effectiveness of existing hazard controls and / or the need for, and type of new controls
* IH survey frequency
* Issues survey report
OSH Manager conducts review of the formal departmental IH survey report as well as the IH survey brief sheets (Survey Summary) if generated.
Satisfactory IH Survey and Brief Sheet review?
No
Yes
OSH Manager sends IH survey directly to departmental manager. Brief sheets (if generated) are provided to the Administration Office for appropriate routing through the chain of command to the departmental manager.
A


Industrial Hygiene Survey Process
Page 2
A
Were formal findings necessitating the need for corrective actions identified in the IH survey?
Yes
No
Administration office adds IH Brief Sheet Response to the Command Tickler requiring abatement within 60 days.
Department abates hazards and / or resolves problems and provides the IH with an abatement report.
IH / OSH Mgr. has the IH Brief Sheet Response removed from the Command Tickler.
Is exposure monitoring required for specific departmental operations / tasks i.a.w. The Exposure Monitoring Plan?
Yes
No
Department contacts the IH when specific operations / tasks will occur to schedule exposure monitoring.
IH conducts requisite exposure monitoring and documents and provides results to the OSH Mgr.
OSH Manager provides the monitored employee with the exposure assessment results.
Have departmental operations, tasks, processes, changed such that exposure levels and / or additional health risks may be of concern?
Yes
No
Contact IH for prompt reevaluation.
IH / OSH Manager retain all IH surveys and exposure monitoring data for 40 yrs.
Workplace IH survey frequency as determined by the IH:
High Hazard ---------- Every Year
Moderate Hazard - Every 2 Years
Low Hazard -------- Every 4 Years
End

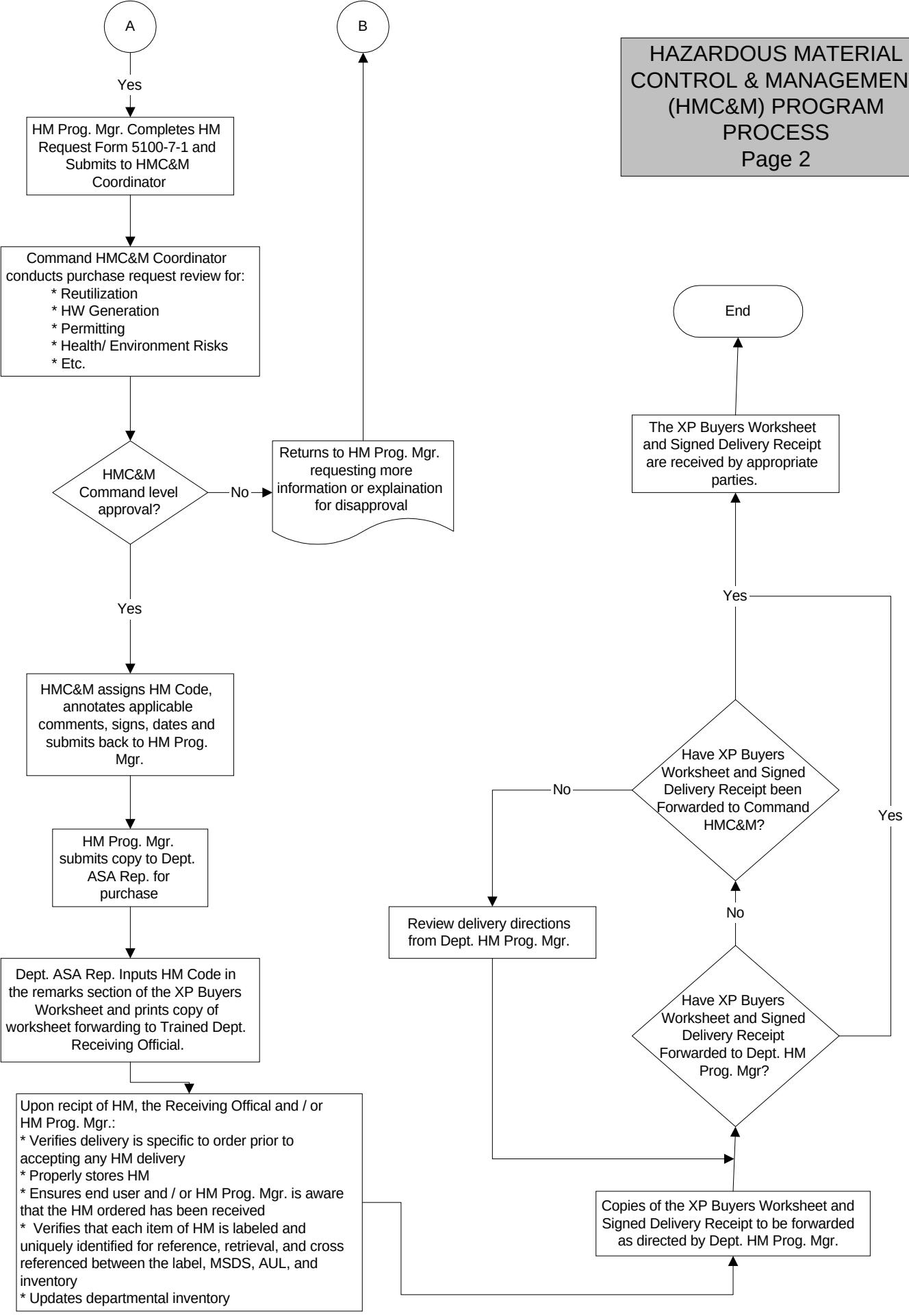
MEDICAL SURVEILLANCE PROCESS



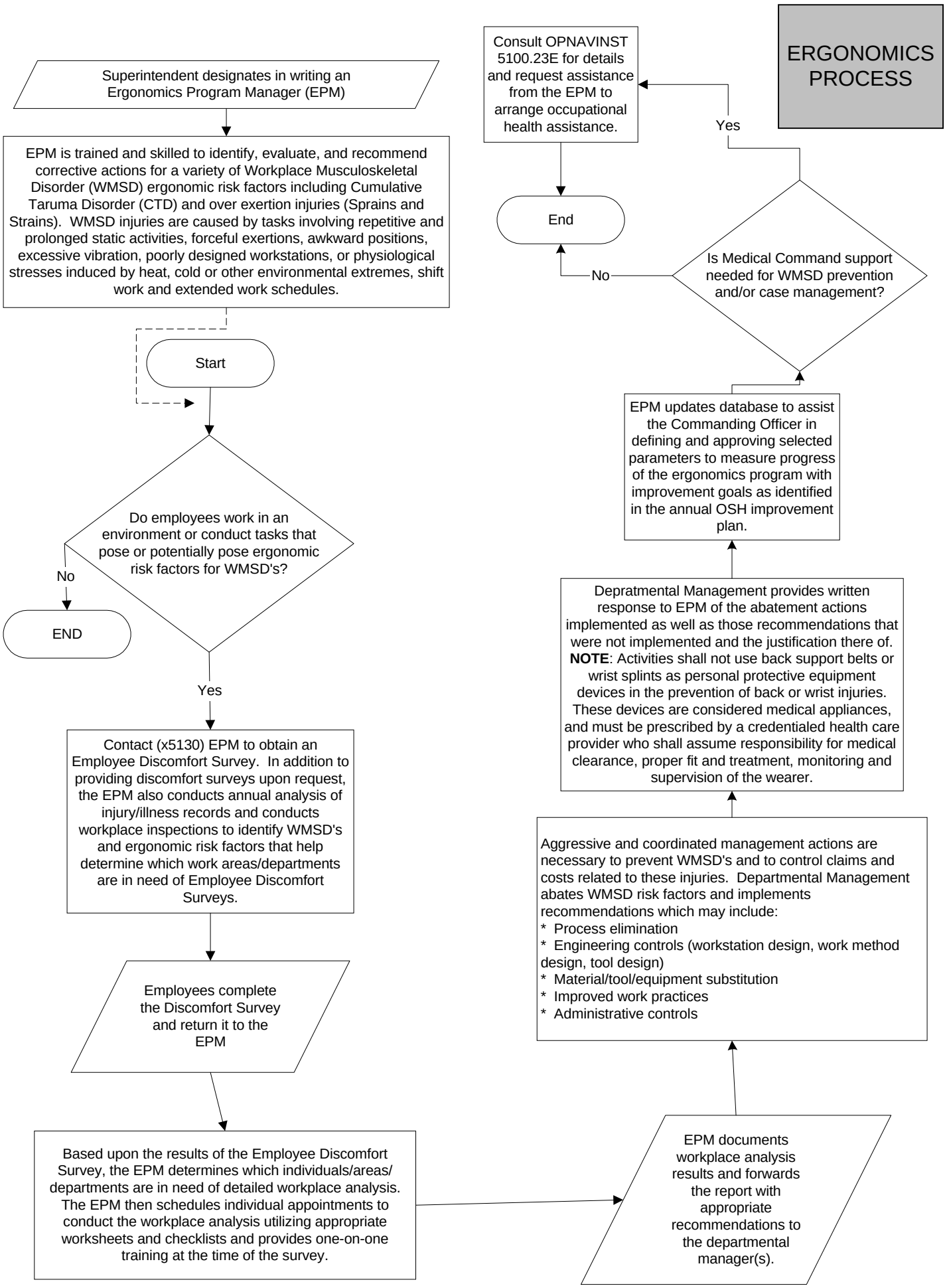
HAZARDOUS MATERIAL CONTROL & MANAGEMENT (HMC&M) PROGRAM PROCESS
Page 1

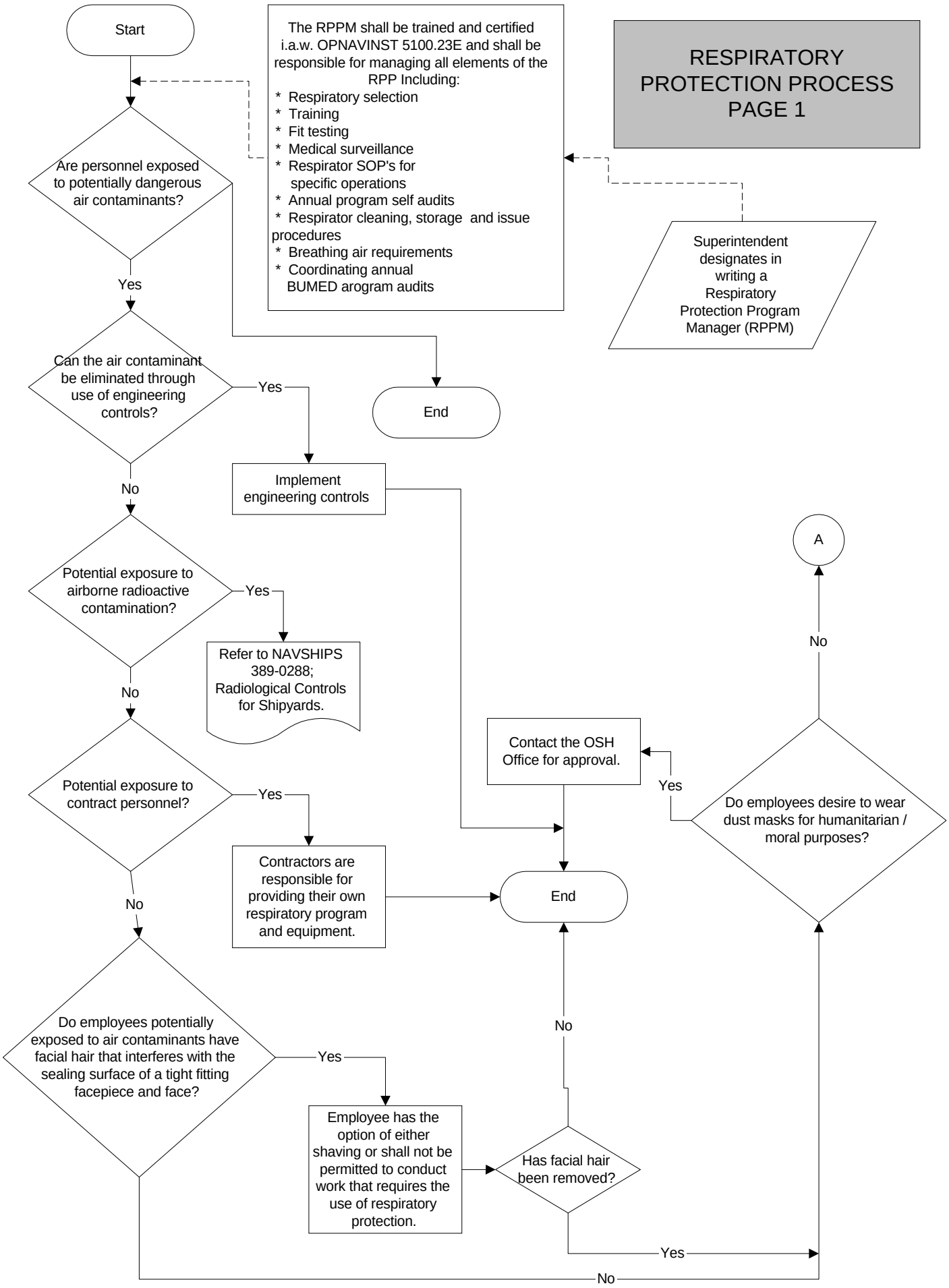


HAZARDOUS MATERIAL CONTROL & MANAGEMENT (HMC&M) PROGRAM PROCESS
Page 2

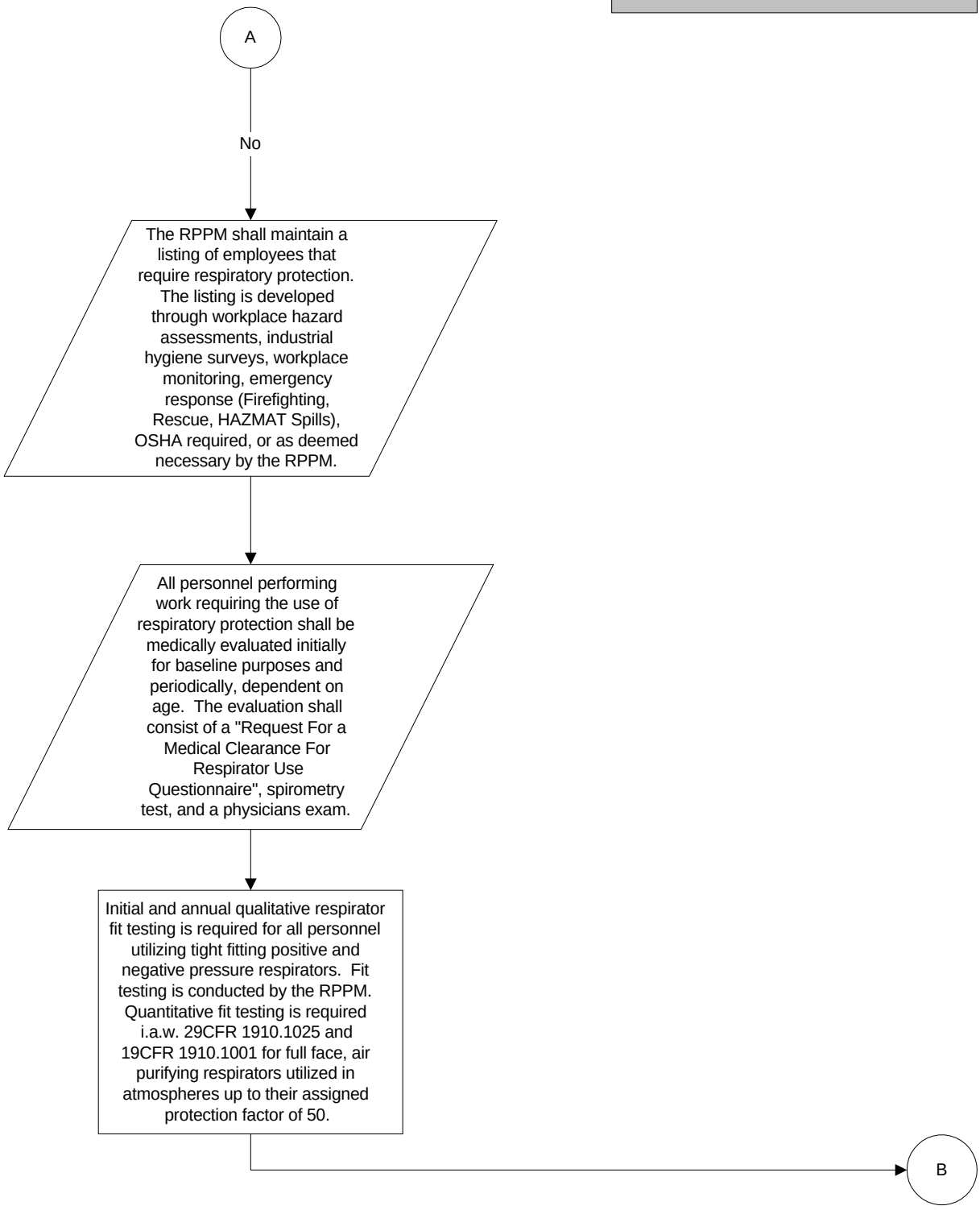


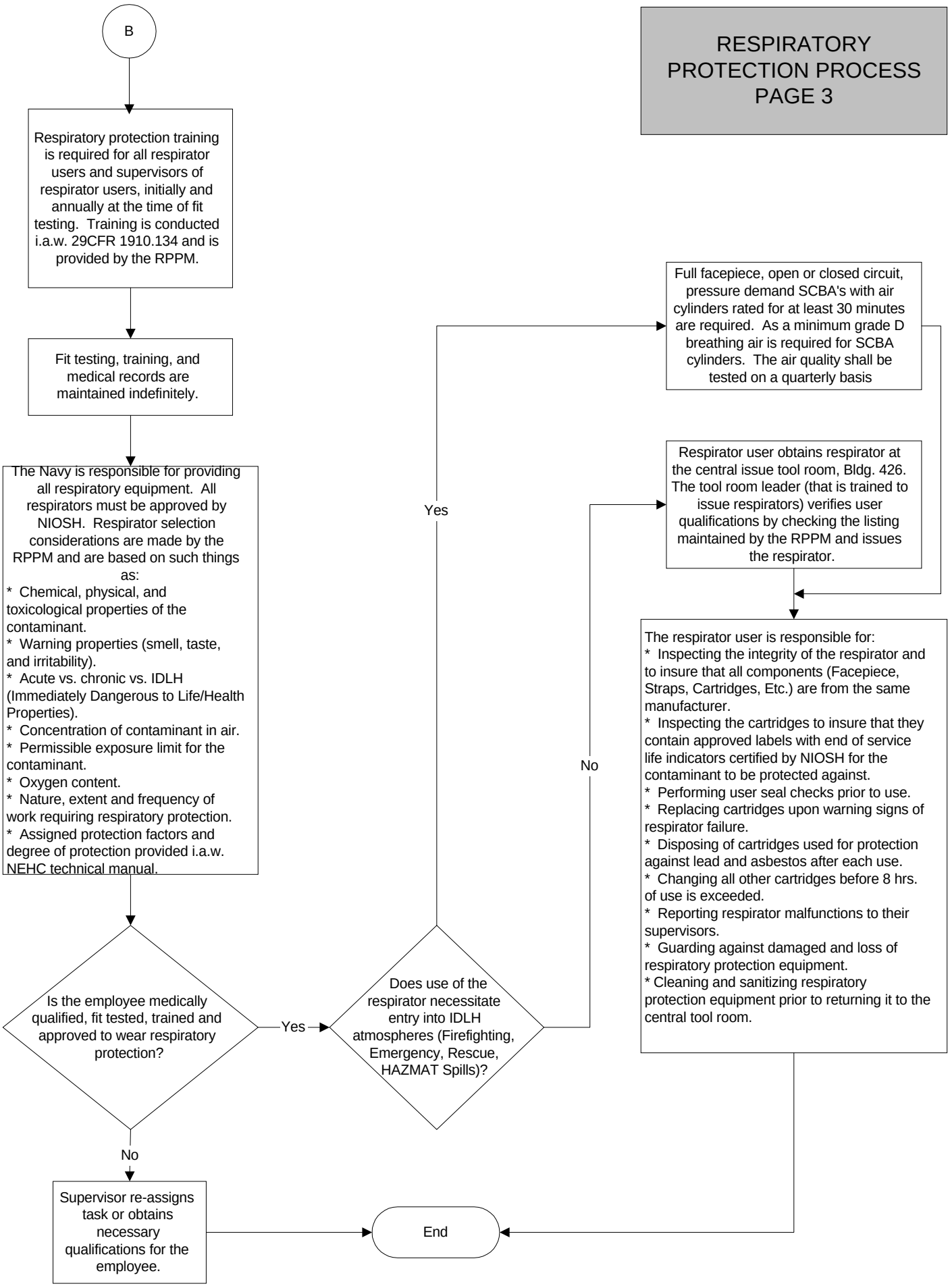
ERGONOMICS PROCESS

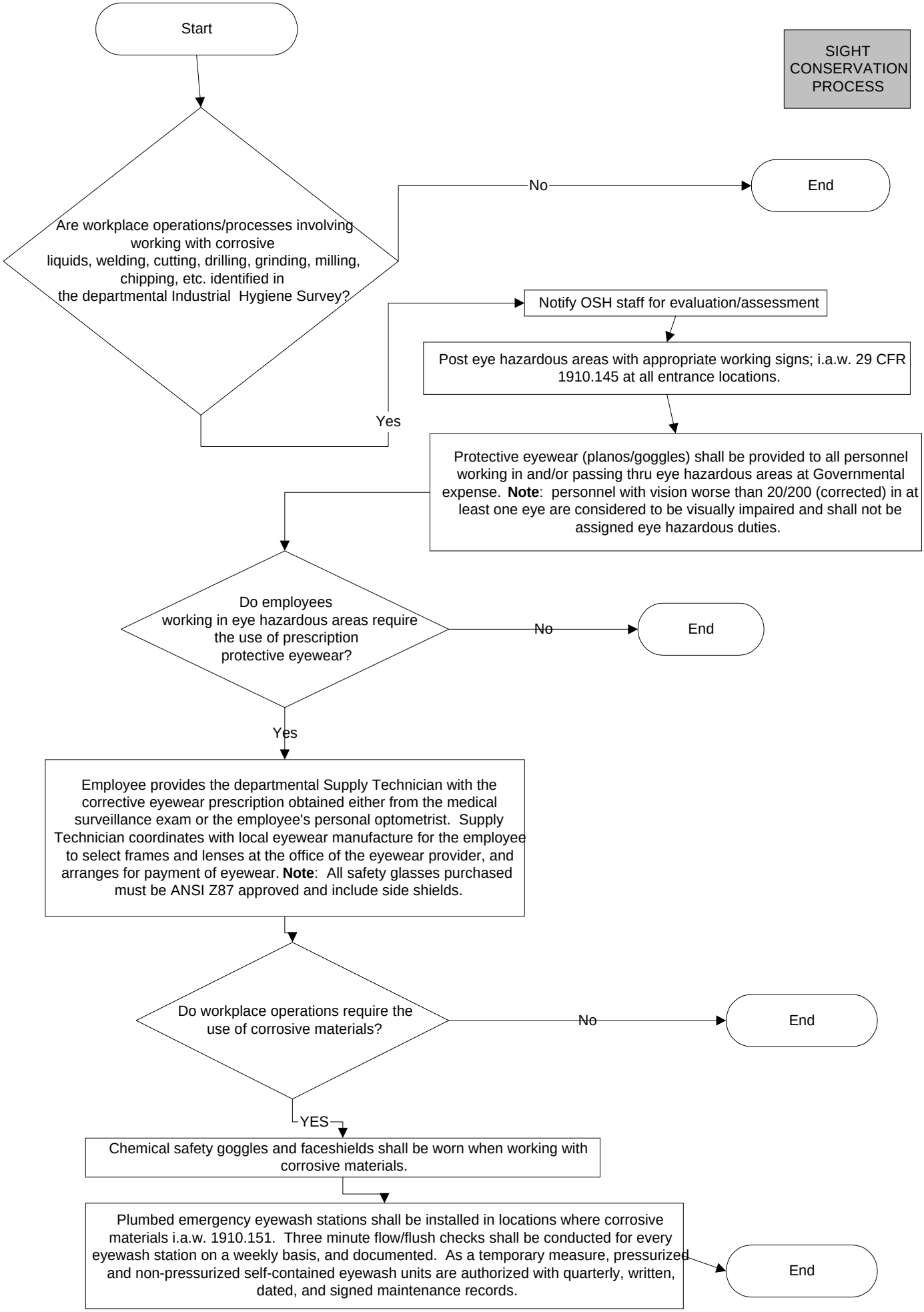


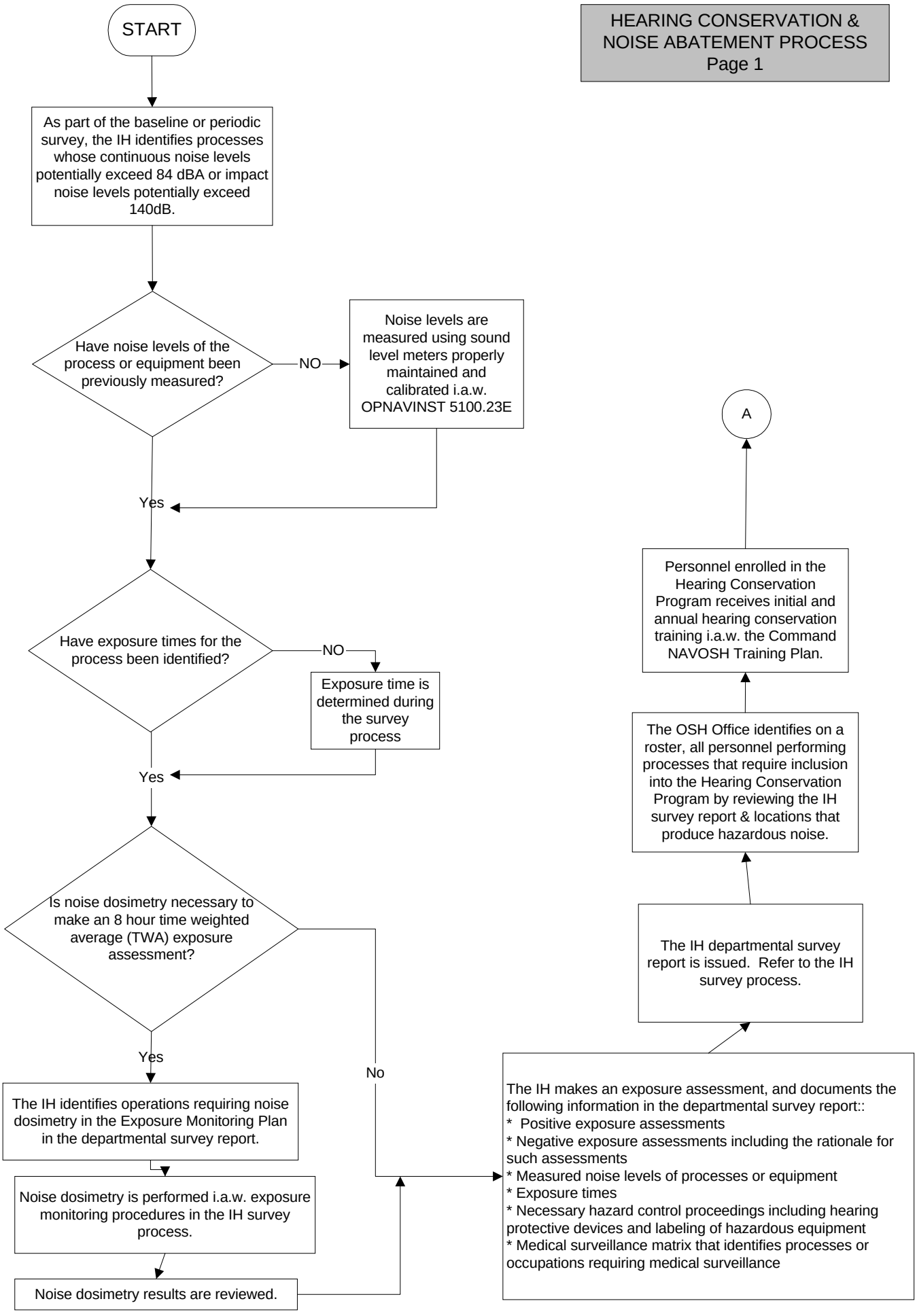

RESPIRATORY PROTECTION PROCESS PAGE 1
Start
The RPPM shall be trained and certified i.a.w. OPNAVINST 5100.23E and shall be responsible for managing all elements of the RPP Including:
* Respiratory selection
* Training
* Fit testing
* Medical surveillance
* Respirator SOP's for specific operations
* Annual program self audits
* Respirator cleaning, storage and issue procedures
* Breathing air requirements
* Coordinating annual BUMED arogram audits
Superintendent designates in writing a Respiratory Protection Program Manager (RPPM)
Are personnel exposed to potentially dangerous air contaminants?
Yes
Can the air contaminant be eliminated through use of engineering controls?
Yes
End
Implement engineering controls
No
Potential exposure to airborne radioactive contamination?
Yes
Refer to NAVSHIPS 389-0288; Radiological Controls for Shipyards.
No
Potential exposure to contract personnel?
Yes
Contractors are responsible for providing their own respiratory program and equipment.
End
No
Do employees potentially exposed to air contaminants have facial hair that interferes with the sealing surface of a tight fitting facepiece and face?
Yes
Employee has the option of either shaving or shall not be permitted to conduct work that requires the use of respiratory protection.
Has facial hair been removed?
No
Yes
No
Contact the OSH Office for approval.
Yes
Do employees desire to wear dust masks for humanitarian / moral purposes?
No
A

RESPIRATORY PROTECTION PROCESS PAGE 2

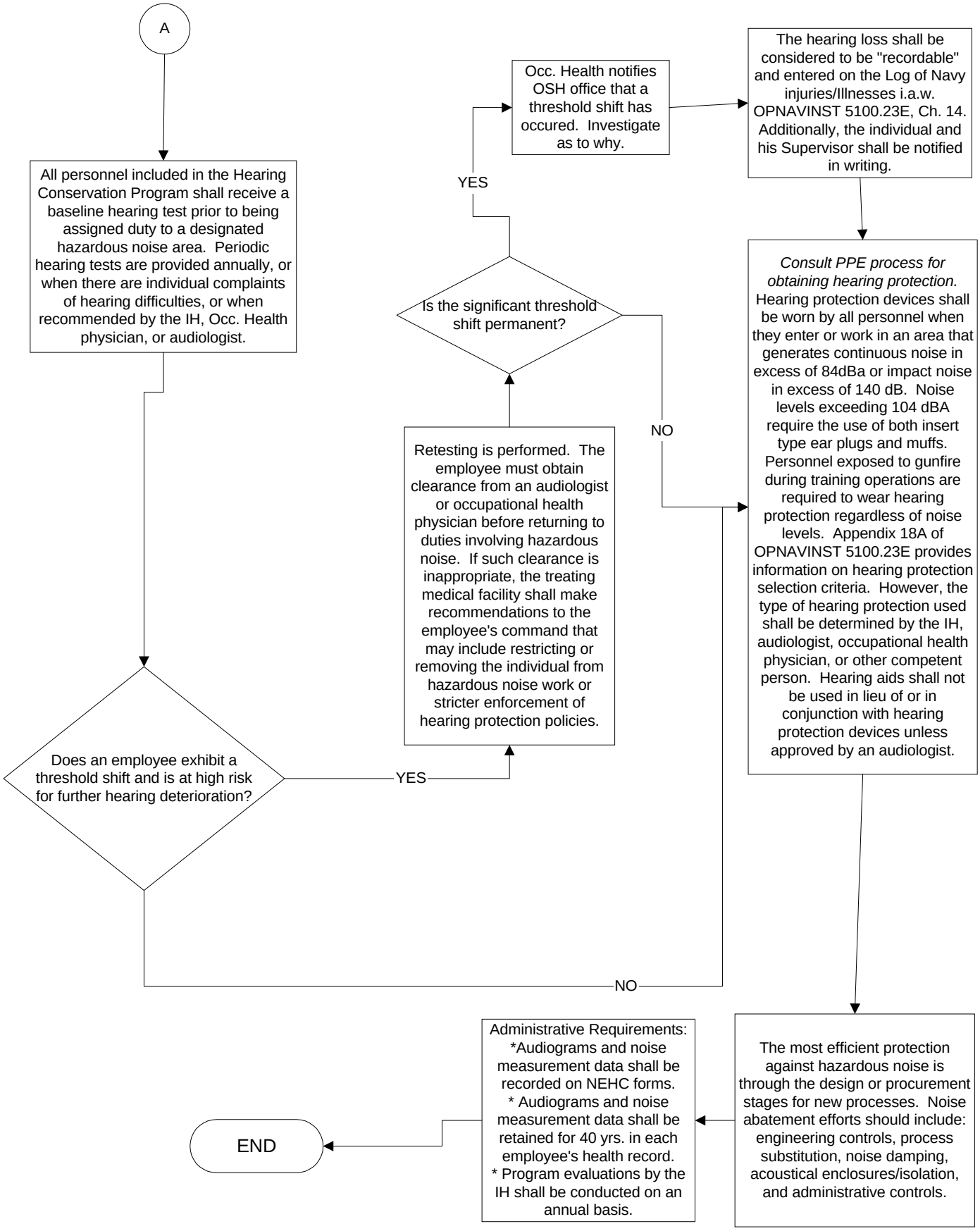



B
RESPIRATORY PROTECTION PROCESS PAGE 3
Respiratory protection training is required for all respirator users and supervisors of respirator users, initially and annually at the time of fit testing. Training is conducted i.a.w. 29CFR 1910.134 and is provided by the RPPM.
Fit testing, training, and medical records are maintained indefinitely.
The Navy is responsible for providing all respiratory equipment. All respirators must be approved by NIOSH. Respirator selection considerations are made by the RPPM and are based on such things as:
* Chemical, physical, and toxicological properties of the contaminant.
* Warning properties (smell, taste, and irritability).
* Acute vs. chronic vs. IDLH (Immediately Dangerous to Life/Health Properties).
* Concentration of contaminant in air.
* Permissible exposure limit for the contaminant.
* Oxygen content.
* Nature, extent and frequency of work requiring respiratory protection.
* Assigned protection factors and degree of protection provided i.a.w. NEHC technical manual.
Is the employee medically qualified, fit tested, trained and approved to wear respiratory protection?
Yes
No
Does use of the respirator necessitate entry into IDLH atmospheres (Firefighting, Emergency, Rescue, HAZMAT Spills)?
Yes
No
Full facepiece, open or closed circuit, pressure demand SCBA's with air cylinders rated for at least 30 minutes are required. As a minimum grade D breathing air is required for SCBA cylinders. The air quality shall be tested on a quarterly basis
Respirator user obtains respirator at the central issue tool room, Bldg. 426. The tool room leader (that is trained to issue respirators) verifies user qualifications by checking the listing maintained by the RPPM and issues the respirator.
The respirator user is responsible for:
* Inspecting the integrity of the respirator and to insure that all components (Facepiece, Straps, Cartridges, Etc.) are from the same manufacturer.
* Inspecting the cartridges to insure that they contain approved labels with end of service life indicators certified by NIOSH for the contaminant to be protected against.
* Performing user seal checks prior to use.
* Replacing cartridges upon warning signs of respirator failure.
* Disposing of cartridges used for protection against lead and asbestos after each use.
* Changing all other cartridges before 8 hrs. of use is exceeded.
* Reporting respirator malfunctions to their supervisors.
* Guarding against damaged and loss of respiratory protection equipment.
* Cleaning and sanitizing respiratory protection equipment prior to returning it to the central tool room.
Supervisor re-assigns task or obtains necessary qualifications for the employee.
End

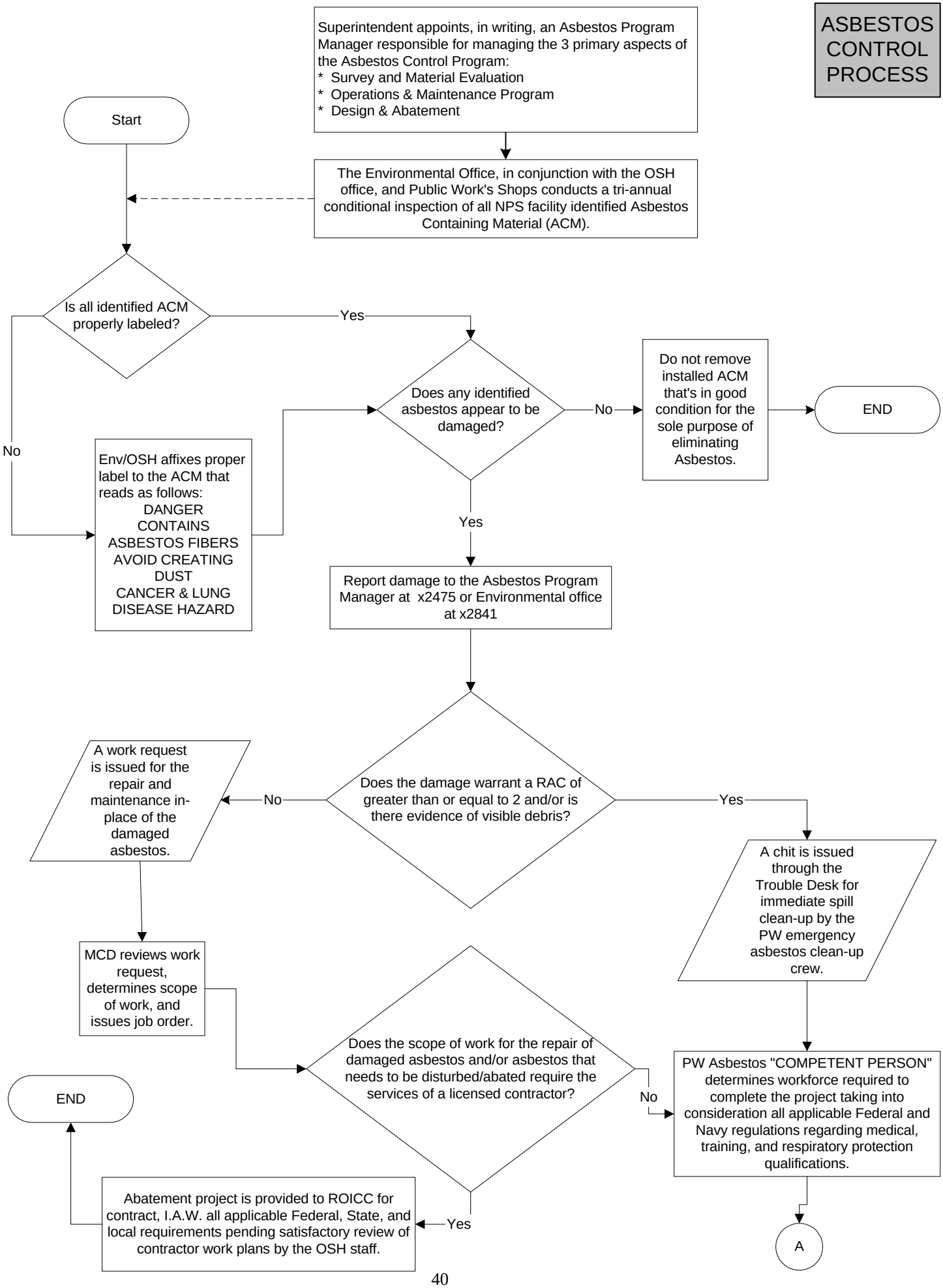

Start
SIGHT CONSERVATION PROCESS
Are workplace operations/processes involving working with corrosive liquids, welding, cutting, drilling, grinding, milling, chipping, etc. identified in the departmental Industrial Hygiene Survey?
No
End
Yes
Notify OSH staff for evaluation/assessment
Post eye hazardous areas with appropriate working signs; i.a.w. 29 CFR 1910.145 at all entrance locations.
Protective eyewear (planos/goggles) shall be provided to all personnel working in and/or passing thru eye hazardous areas at Governmental expense. **Note**: personnel with vision worse than 20/200 (corrected) in at least one eye are considered to be visually impaired and shall not be assigned eye hazardous duties.
Do employees working in eye hazardous areas require the use of prescription protective eyewear?
No
End
Yes
Employee provides the departmental Supply Technician with the corrective eyewear prescription obtained either from the medical surveillance exam or the employee's personal optometrist. Supply Technician coordinates with local eyewear manufacture for the employee to select frames and lenses at the office of the eyewear provider, and arranges for payment of eyewear. **Note**: All safety glasses purchased must be ANSI Z87 approved and include side shields.
Do workplace operations require the use of corrosive materials?
No
End
YES
Chemical safety goggles and faceshields shall be worn when working with corrosive materials.
Plumbed emergency eyewash stations shall be installed in locations where corrosive materials i.a.w. 1910.151. Three minute flow/flush checks shall be conducted for every eyewash station on a weekly basis, and documented. As a temporary measure, pressurized and non-pressurized self-contained eyewash units are authorized with quarterly, written, dated, and signed maintenance records.
End

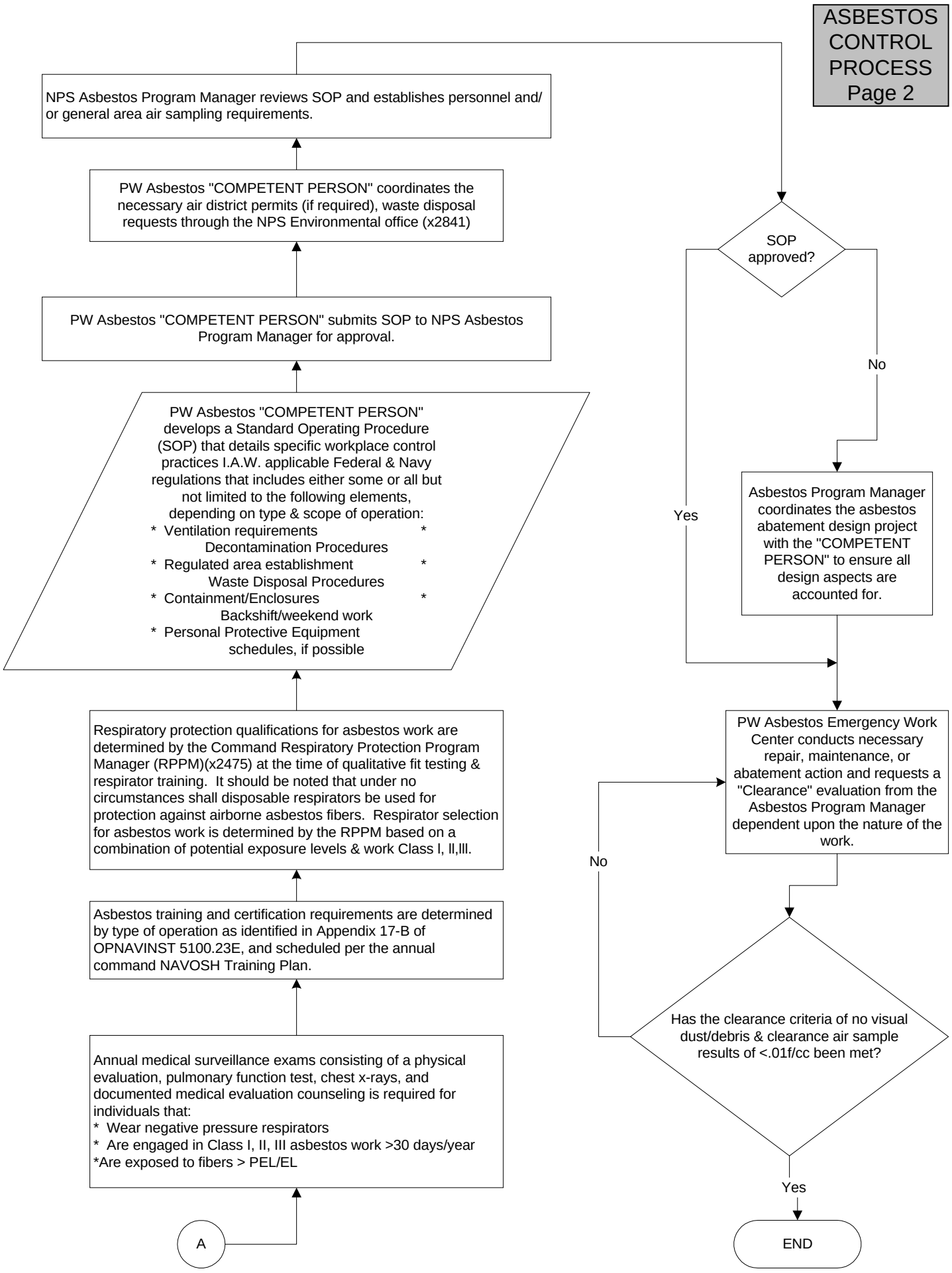

HEARING CONSERVATION & NOISE ABATEMENT PROCESS Page 1
START
As part of the baseline or periodic survey, the IH identifies processes whose continuous noise levels potentially exceed 84 dBA or impact noise levels potentially exceed 140dB.
Have noise levels of the process or equipment been previously measured?
NO
Noise levels are measured using sound level meters properly maintained and calibrated i.a.w. OPNAVINST 5100.23E
Yes
Have exposure times for the process been identified?
NO
Exposure time is determined during the survey process
Yes
Is noise dosimetry necessary to make an 8 hour time weighted average (TWA) exposure assessment?
Yes
No
The IH identifies operations requiring noise dosimetry in the Exposure Monitoring Plan in the departmental survey report.
Noise dosimetry is performed i.a.w. exposure monitoring procedures in the IH survey process.
Noise dosimetry results are reviewed.
The IH makes an exposure assessment, and documents the following information in the departmental survey report::
* Positive exposure assessments
* Negative exposure assessments including the rationale for such assessments
* Measured noise levels of processes or equipment
* Exposure times
* Necessary hazard control proceedings including hearing protective devices and labeling of hazardous equipment
* Medical surveillance matrix that identifies processes or occupations requiring medical surveillance
The IH departmental survey report is issued. Refer to the IH survey process.
The OSH Office identifies on a roster, all personnel performing processes that require inclusion into the Hearing Conservation Program by reviewing the IH survey report & locations that produce hazardous noise.
Personnel enrolled in the Hearing Conservation Program receives initial and annual hearing conservation training i.a.w. the Command NAVOSH Training Plan.
A

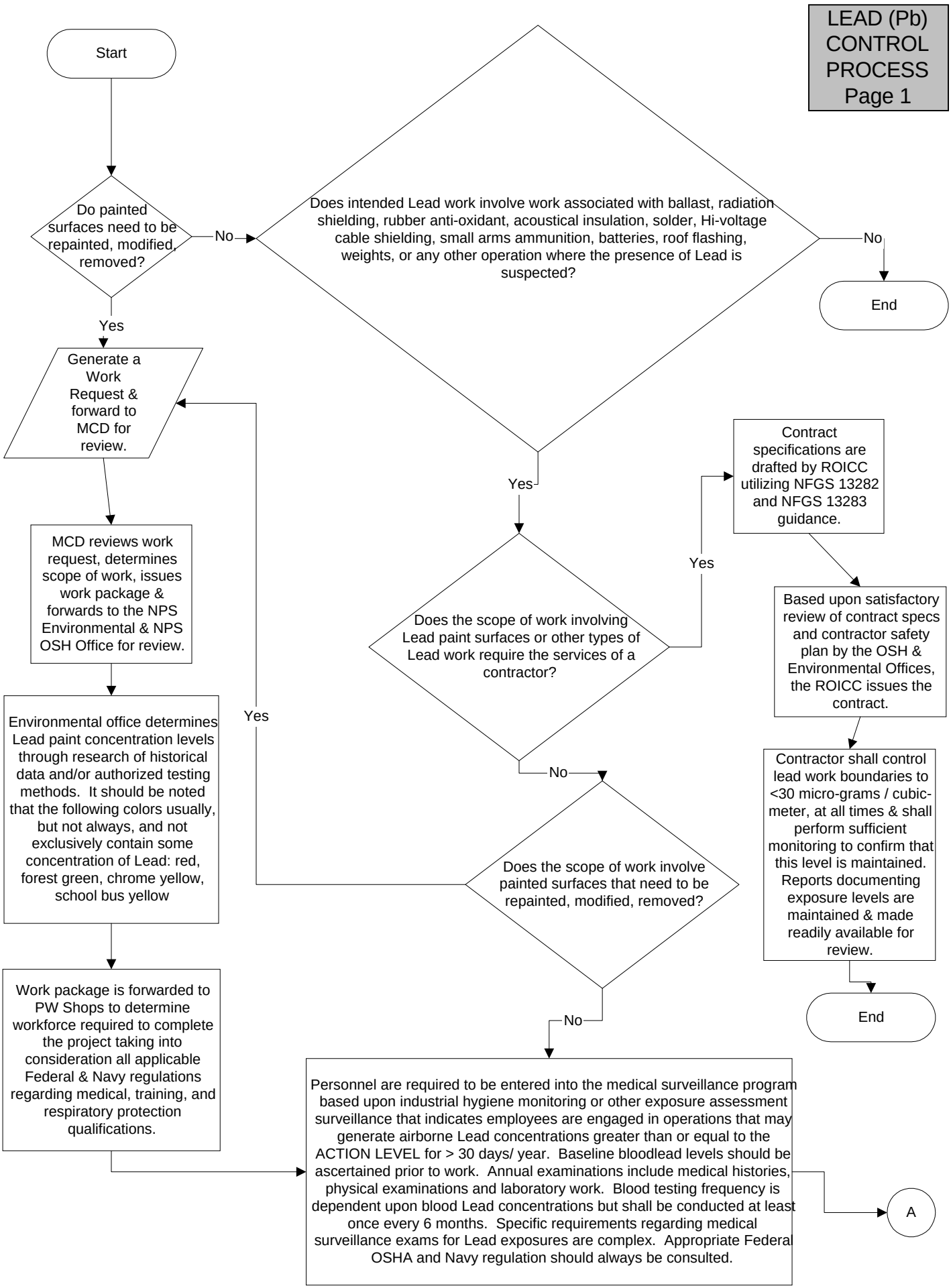
HEARING CONSERVATION & NOISE ABATEMENT PROCESS
Page 2

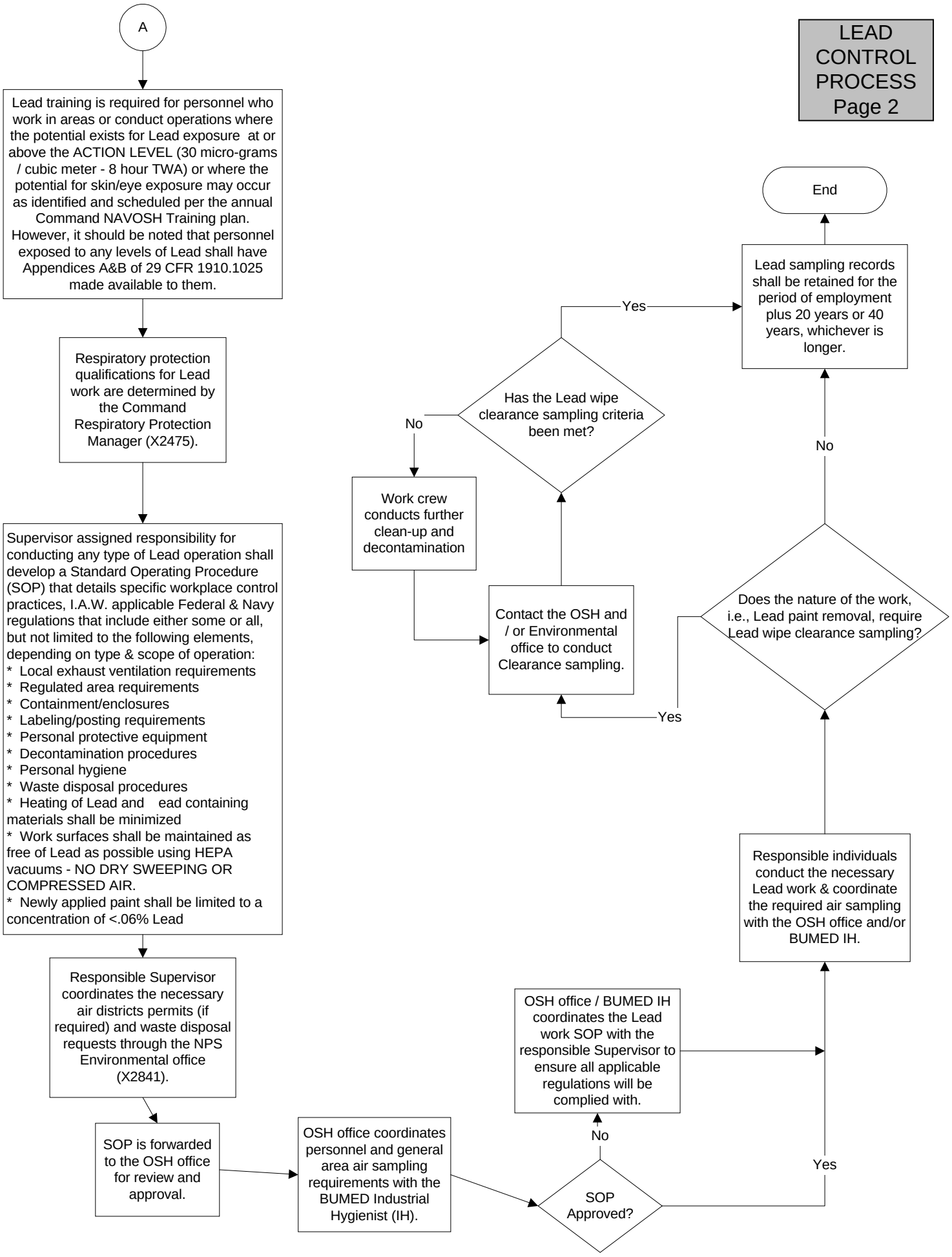


ASBESTOS CONTROL PROCESS




ASBESTOS CONTROL PROCESS Page 2
NPS Asbestos Program Manager reviews SOP and establishes personnel and/ or general area air sampling requirements.
PW Asbestos "COMPETENT PERSON" coordinates the necessary air district permits (if required), waste disposal requests through the NPS Environmental office (x2841)
PW Asbestos "COMPETENT PERSON" submits SOP to NPS Asbestos Program Manager for approval.
PW Asbestos "COMPETENT PERSON" develops a Standard Operating Procedure (SOP) that details specific workplace control practices I.A.W. applicable Federal & Navy regulations that includes either some or all but not limited to the following elements, depending on type & scope of operation:
* Ventilation requirements *
Decontamination Procedures
* Regulated area establishment *
Waste Disposal Procedures
* Containment/Enclosures *
Backshift/weekend work
* Personal Protective Equipment
schedules, if possible
Respiratory protection qualifications for asbestos work are determined by the Command Respiratory Protection Program Manager (RPPM)(x2475) at the time of qualitative fit testing & respirator training. It should be noted that under no circumstances shall disposable respirators be used for protection against airborne asbestos fibers. Respirator selection for asbestos work is determined by the RPPM based on a combination of potential exposure levels & work Class I, II,III.
Asbestos training and certification requirements are determined by type of operation as identified in Appendix 17-B of OPNAVINST 5100.23E, and scheduled per the annual command NAVOSH Training Plan.
Annual medical surveillance exams consisting of a physical evaluation, pulmonary function test, chest x-rays, and documented medical evaluation counseling is required for individuals that:
* Wear negative pressure respirators
* Are engaged in Class I, II, III asbestos work >30 days/year
*Are exposed to fibers > PEL/EL
A
SOP approved?
No
Yes
Asbestos Program Manager coordinates the asbestos abatement design project with the "COMPETENT PERSON" to ensure all design aspects are accounted for.
PW Asbestos Emergency Work Center conducts necessary repair, maintenance, or abatement action and requests a "Clearance" evaluation from the Asbestos Program Manager dependent upon the nature of the work.
Has the clearance criteria of no visual dust/debris & clearance air sample results of <.01f/cc been met?
No
Yes
END


LEAD (Pb) CONTROL PROCESS Page 1
Start
Do painted surfaces need to be repainted, modified, removed?
No
Does intended Lead work involve work associated with ballast, radiation shielding, rubber anti-oxidant, acoustical insulation, solder, Hi-voltage cable shielding, small arms ammunition, batteries, roof flashing, weights, or any other operation where the presence of Lead is suspected?
No
End
Yes
Generate a Work Request & forward to MCD for review.
MCD reviews work request, determines scope of work, issues work package & forwards to the NPS Environmental & NPS OSH Office for review.
Environmental office determines Lead paint concentration levels through research of historical data and/or authorized testing methods. It should be noted that the following colors usually, but not always, and not exclusively contain some concentration of Lead: red, forest green, chrome yellow, school bus yellow
Work package is forwarded to PW Shops to determine workforce required to complete the project taking into consideration all applicable Federal & Navy regulations regarding medical, training, and respiratory protection qualifications.
Yes
Yes
Does the scope of work involving Lead paint surfaces or other types of Lead work require the services of a contractor?
Yes
Contract specifications are drafted by ROICC utilizing NFGS 13282 and NFGS 13283 guidance.
Based upon satisfactory review of contract specs and contractor safety plan by the OSH & Environmental Offices, the ROICC issues the contract.
Contractor shall control lead work boundaries to <30 micro-grams / cubic-meter, at all times & shall perform sufficient monitoring to confirm that this level is maintained. Reports documenting exposure levels are maintained & made readily available for review.
End
No
Does the scope of work involve painted surfaces that need to be repainted, modified, removed?
No
Personnel are required to be entered into the medical surveillance program based upon industrial hygiene monitoring or other exposure assessment surveillance that indicates employees are engaged in operations that may generate airborne Lead concentrations greater than or equal to the ACTION LEVEL for > 30 days/ year. Baseline bloodlead levels should be ascertained prior to work. Annual examinations include medical histories, physical examinations and laboratory work. Blood testing frequency is dependent upon blood Lead concentrations but shall be conducted at least once every 6 months. Specific requirements regarding medical surveillance exams for Lead exposures are complex. Appropriate Federal OSHA and Navy regulation should always be consulted.
A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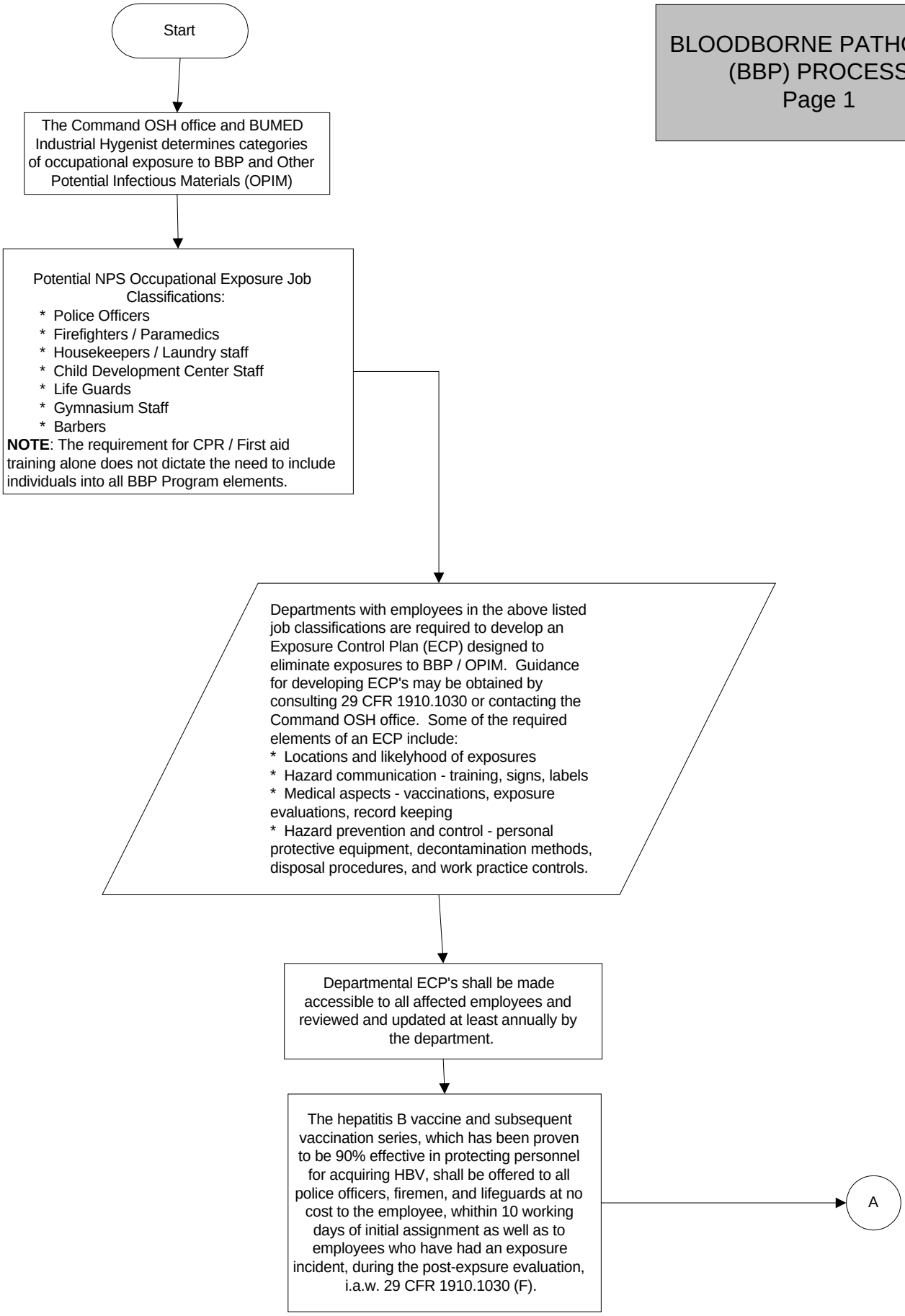
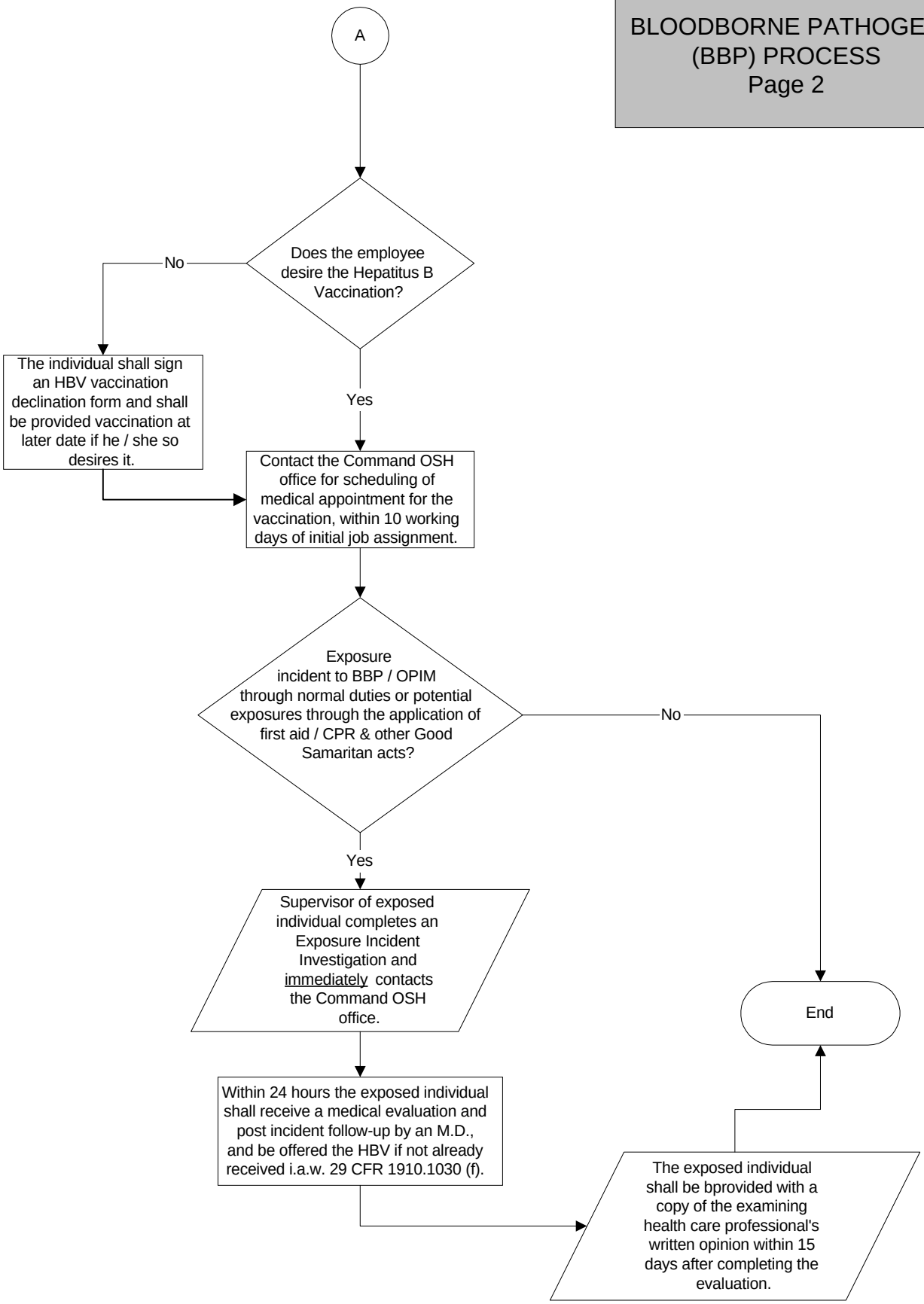
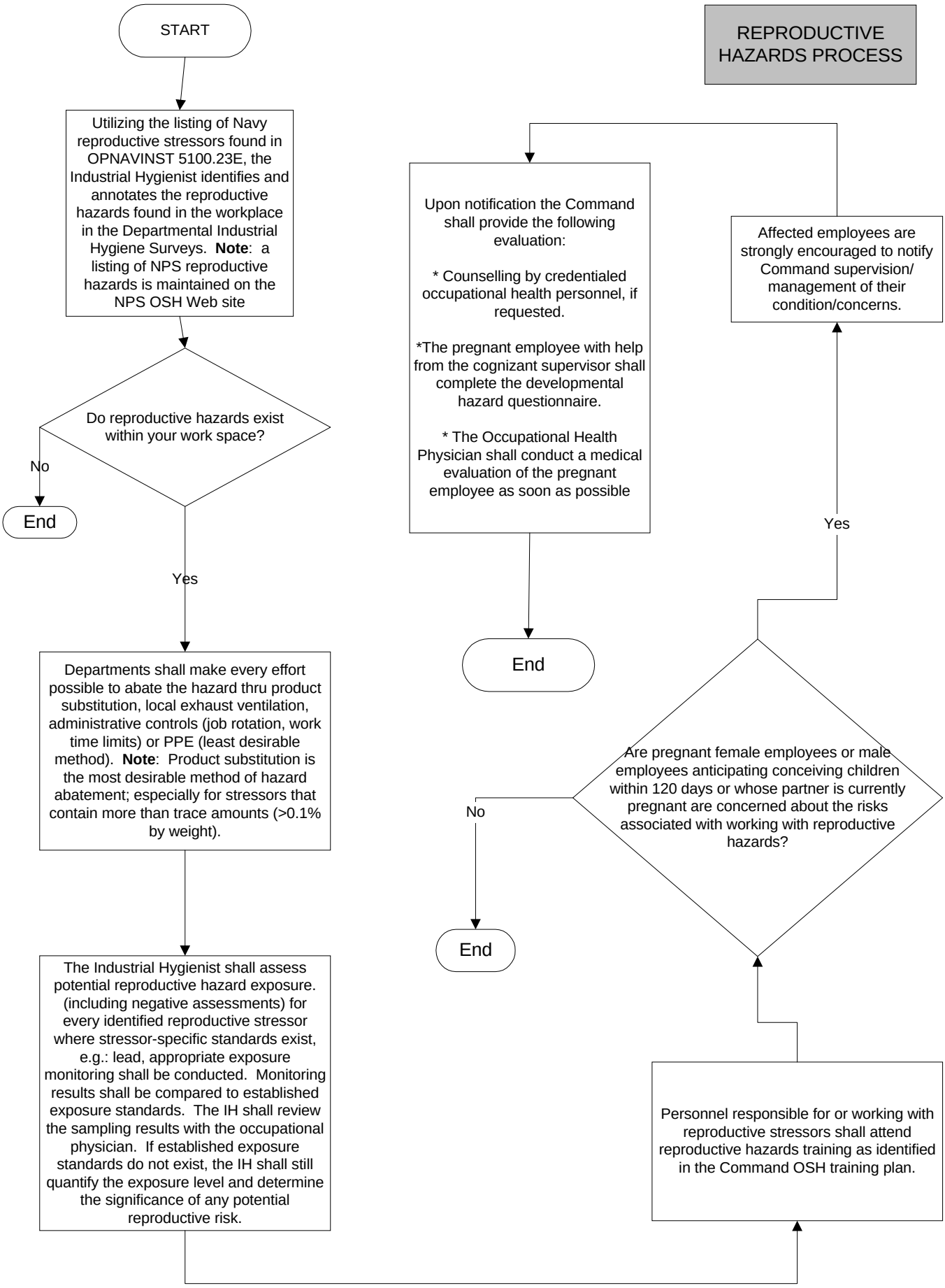
LEAD CONTROL PROCESS Page 2
Lead training is required for personnel who work in areas or conduct operations where the potential exists for Lead exposure at or above the ACTION LEVEL (30 micro-grams / cubic meter - 8 hour TWA) or where the potential for skin/eye exposure may occur as identified and scheduled per the annual Command NAVOSH Training plan. However, it should be noted that personnel exposed to any levels of Lead shall have Appendices A&B of 29 CFR 1910.1025 made available to them.
Respiratory protection qualifications for Lead work are determined by the Command Respiratory Protection Manager (X2475).
Supervisor assigned responsibility for conducting any type of Lead operation shall develop a Standard Operating Procedure (SOP) that details specific workplace control practices, I.A.W. applicable Federal & Navy regulations that include either some or all, but not limited to the following elements, depending on type & scope of operation:
* Local exhaust ventilation requirements
* Regulated area requirements
* Containment/enclosures
* Labeling/posting requirements
* Personal protective equipment
* Decontamination procedures
* Personal hygiene
* Waste disposal procedures
* Heating of Lead and ead containing materials shall be minimized
* Work surfaces shall be maintained as free of Lead as possible using HEPA vacuums - NO DRY SWEEPING OR COMPRESSED AIR.
* Newly applied paint shall be limited to a concentration of <.06% Lead
Responsible Supervisor coordinates the necessary air districts permits (if required) and waste disposal requests through the NPS Environmental office (X2841).
SOP is forwarded to the OSH office for review and approval.
OSH office coordinates personnel and general area air sampling requirements with the BUMED Industrial Hygienist (IH).
SOP Approved?
No
OSH office / BUMED IH coordinates the Lead work SOP with the responsible Supervisor to ensure all applicable regulations will be complied with.
Yes
Responsible individuals conduct the necessary Lead work & coordinate the required air sampling with the OSH office and/or BUMED IH.
Does the nature of the work, i.e., Lead paint removal, require Lead wipe clearance sampling?
No
Contact the OSH and / or Environmental office to conduct Clearance sampling.
Yes
Work crew conducts further clean-up and decontamination
Has the Lead wipe clearance sampling criteria been met?
No
Yes
Lead sampling records shall be retained for the period of employment plus 20 years or 40 years, whichever is longer.
End

BLOODBORNE PATHOGEN (BBP) PROCESS
Page 1

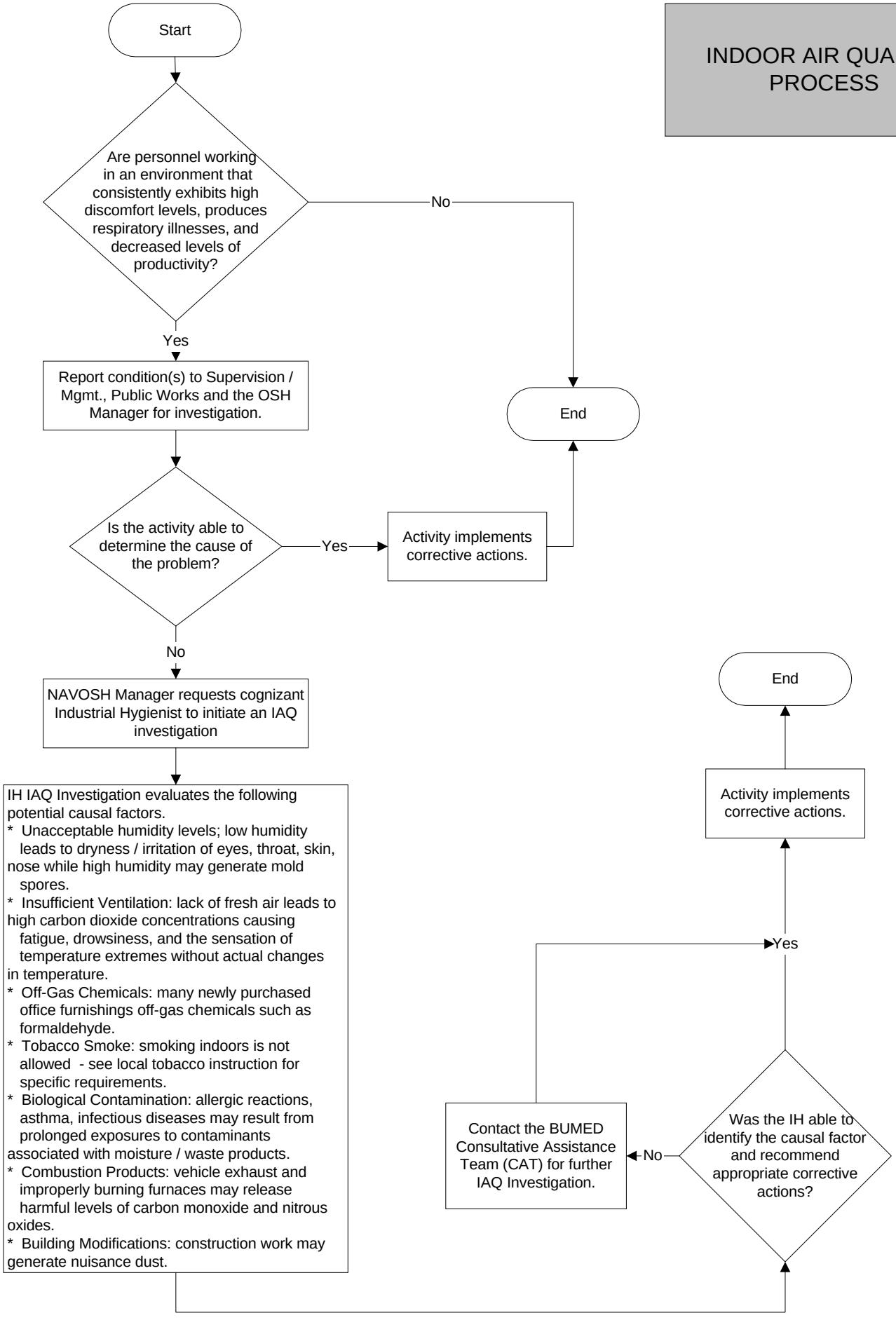


BLOODBORNE PATHOGEN (BBP) PROCESS
Page 2




REPRODUCTIVE HAZARDS PROCESS
START
Utilizing the listing of Navy reproductive stressors found in OPNAVINST 5100.23E, the Industrial Hygienist identifies and annotates the reproductive hazards found in the workplace in the Departmental Industrial Hygiene Surveys. **Note**: a listing of NPS reproductive hazards is maintained on the NPS OSH Web site
Do reproductive hazards exist within your work space?
No
End
Yes
Departments shall make every effort possible to abate the hazard thru product substitution, local exhaust ventilation, administrative controls (job rotation, work time limits) or PPE (least desirable method). **Note**: Product substitution is the most desirable method of hazard abatement; especially for stressors that contain more than trace amounts (>0.1% by weight).
The Industrial Hygienist shall assess potential reproductive hazard exposure. (including negative assessments) for every identified reproductive stressor where stressor-specific standards exist, e.g.: lead, appropriate exposure monitoring shall be conducted. Monitoring results shall be compared to established exposure standards. The IH shall review the sampling results with the occupational physician. If established exposure standards do not exist, the IH shall still quantify the exposure level and determine the significance of any potential reproductive risk.
Upon notification the Command shall provide the following evaluation:
* Counselling by credentialed occupational health personnel, if requested.
*The pregnant employee with help from the cognizant supervisor shall complete the developmental hazard questionnaire.
* The Occupational Health Physician shall conduct a medical evaluation of the pregnant employee as soon as possible
End
Are pregnant female employees or male employees anticipating conceiving children within 120 days or whose partner is currently pregnant are concerned about the risks associated with working with reproductive hazards?
No
End
Yes
Affected employees are strongly encouraged to notify Command supervision/ management of their condition/concerns.
Personnel responsible for or working with reproductive stressors shall attend reproductive hazards training as identified in the Command OSH training plan.

INDOOR AIR QUALITY PROCESS



OSH REGULATORY SUMMARY

Page

1. **OSH Regulatory Background** 2-3

A brief historical outline has been provided that depicts the development of OSH Regulations, associated with our Command OSH Instruction.

2. Workplace Hazard Identification Guide 2-6

This guide is to be used as a tool to help maintain a safe & healthy workplace. The guide lists and discusses common workplace hazards and was developed by re-viewing historical NPS NAVOSH Deficiency Notices and summarizing regulations from the General Industry (29 CFR 1910) and Construction (29 CFR 1926) standards. UNDER NO CIRCUMSTANCES DOES THIS GUIDE AND THE CONTENTS THERE OF REPLACE THE ESTABLISHED OSHA STANDARDS. THE OSHA standards should always be consulted when maintaining regulatory compliance in the workplace . OSHA Standards are easily researched by viewing the OSHA web site at: http://www.osha.gov/comp-links.html. Highlighted topics in this guide include:

- Housekeeping
- Storage
- Portable Fire Extinguishers
- Egress
- Guarding Floor & Wall Openings and Holes
- Fixed Industrial Stairs
- Portable Wood & Metal Ladders
- Scaffolds
- Fall Protection
- Flammable/Combustible Liquid Storage
- Personal Protective Equipment
- Emergency Washing Facilities
- Compressed Air Equipment
- Oxygen/Fuel Cylinders
- Electrical
- Tools/Machinery/Machine Guarding
- Powered Industrial Trucks

Page

3. OSHA Index To General Industry Regulations 2-25

4. OSHA Index To Construction Regulations 2-27

5. OSHA Index To Basic Program Elements For Federal Employee OSH Programs 2-30

Public Law 91-596

91st Congress, S. 2193
December 29, 1970

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled. That this Act may be cited as the "Occupational Safety and Health Act of 1970". This Act has been amended three times since then, the latest as of September 29, 1998. The basic purpose of the Act is to assure safe and healthful working conditions for working men and women; by authorizing enforcement of the standards developed under the Act; by providing for research, information, education, and training in the field of occupational safety and health; and for other purposes.

Executive Order 11612
July 1971

The Order stated that the Federal government has a special obligation to set an example for safe and healthful employment.

Executive Order 11807
September 1974

The Order tasked the Secretary of Labor to issue guidelines to assist Federal agencies in establishing their programs.

October 1974

The Secretary of Labor issued these "guidelines" as Title 29, Code of Federal Regulations, Part 1960, "Safety and Health Provisions for Federal Employees."

Executive Order 12196
February 1980

The Order made revisions to previous Orders and established the "Basic Program Elements for Federal Employee Occupational Safety and Health Programs." The heads of Federal agencies were specifically required to:

- Furnish to employee's places and conditions of employment that are free from recognized hazards that are likely to cause death or serious physical harm.

- Operate an occupational safety and health program in accordance with the requirements of this order and basic program elements promulgated by the Secretary.

- Designate an agency official with sufficient authority to represent the interest and support of the agency head to be responsible for the management and administration of the agency occupational safety and health program.

- Comply with al standards issued under section 6 of the Act, except where the Secretary approves compliance with alternative standards. When an agency head determines it necessary to apply a different standard, that agency head shall, after consultation with appropriate occupational safety and health committees where established, notify the Secretary and provide justification that equivalent or greater protection will be assured by the alternate standard.

- Assure prompt abatement of unsafe or unhealthful working conditions, it shall develop an abatement plan setting forth a timetable for abatement and a summary of interim steps to protect employees. Employees exposed to the conditions shall be informed of the provisions of the plan. When a hazard cannot be abated without assistance of the General Services Administration or other Federal lessor agency, an agency shall act with lessor agency to secure abatement.

- Establish procedures to assure that no employee is subject to restraint, interference, coercion, discrimination or reprisal for filing a report of an unsafe or unhealthful working condition, or participation in agency occupational safety and health program activities.

- Assure that periodic inspections of all agency workplace are performed by personnel with equipment and competence to recognize hazards.

- Assure response to employee reports of hazardous conditions and require inspections within twenty-four (24) hours for imminent dangers, three working days for potential serious conditions, and twenty working days for other conditions. Assure the right to anonymity of those making the reports.

- Assure that employee's representatives accompany inspections of agency workplace.

- Operate an occupational safety and health management information system, which shall include the maintenance of such records as the Secretary may require.

- Provide safety and health training for supervisory employees, employees responsible for conducting occupational safety and health inspections, all

members of occupational safety and health committees where established, and other employees.

- Submit to the Secretary an annual report on the agency occupational safety and health program that includes information the Secretary prescribes.

Department of Defense Instruction 6055.1
October 1984

The Department of Defense establishes a formal Occupation Safety and Health Program incorporating the elements of E.O. 12196 as DODI 6055.1

OPNAV Instruction 5100.23E
January 1999

OPNAVINST 5100.23E is the latest revision of the Navy's Occupation Safety and Health Program Manual. The instruction contains 32 Chapters and is the primary guidance for Navy personnel.

This guide is to be used as a tool to help maintain a safe and healthy workplace. The guide lists common workplace hazards and was developed by summarizing regulations from the General Industry (29 CFR 1910) and Construction (29 CFR 1926) Standards. UNDER NO CIRCUMSTANCES DOES THIS GUIDE, AND THE CONTENTS THEREOF REPLACE THE ESTABLISHED OSHA STANDARDS.

The OSHA standards should always be consulted when maintaining regulatory compliance in the workplace. OSHA standards are easily researched by viewing the OSHA website at: http://www.osha.gov/comp-links.html

Highlighted topics in this guide include the following:

- **HOUSEKEEPING**
- **STORAGE**
- **PORTABLE FIRE EXTINGUISHERS**
- **EGRESS**
- **GUARDING FLOOR & WALL OPENINGS & HOLES**
- **FIXED INDUSTRIAL STAIRS**
- **PORTABLE WOOD & METAL LADDERS**
- **FIXED LADDERS**
- **SCAFFOLDS**
- **FALL PROTECTION**
- **FLAMMABLE/COMBUSTIBLE LIQUID STORAGE**
- **PERSONAL PROTECTIVE EQUIPMENT**
- **EMERGENCY WASHING FACILITIES**
- **COMPRESSED AIR EQUIPMENT**
- **OXYGEN/FUEL CYLINDERS**
- **ELECTRICAL**
- **TOOLS/MACHINERY/MACHINE GUARDING**
- **POWERED INDUSTRIAL TRUCKS**
- **GENERAL DUTY CLAUSE**
- **OSHA GENERAL INDUSTRY REGULATIONS INDEX**
- **OSHA CONSTRUCTION REGULATIONS INDEX**
  BASIC PROGRAM ELEMENTS FOR FEDERAL EMPLOYEE OSH PROGRAMS

HOUSEKEEPING (29CFR1910.22)

- Aisles and Passageways - Where mechanical handing equipment is used, such as in warehouses, sufficient safe clearance shall be allowed for aisles, at loading dock, through doorways, and where ever turns or passage must be made. Aisles and passageways used by mechanical equipment shall be kept clear and in good repair with no obstruction across or in aisles that could create hazards.

- General housekeeping shall be maintained. No tripping hazards.
- All aisles should be maintained free of obstructions from tripping Hazards.
- Covers and/or guardrails shall be provided in aisles and passageways to protect personnel form the hazards of open puts, tanks, vats, and ditches.
- All places of employment, passageways, storerooms, and service rooms shall be kept clean and orderly and in a sanitary condition.
- All floors surfaces shall be kept clean, dry, and free from protruding nails, splinters, loose boards, holes, or projections.
- Floors/carpeting shall be free from tripping hazards, i.e., cords, frayed carpeting, packages left in aisles, etc.
- Where wet processes are used, drainage shall be maintained, and false floors, platforms, mats, or other dry standing places shall be provided where practicable.
- In every building or other structure, or part thereof used for mercantile, business, industrial, or storage purposes, the floor loading limit approved by the building official shall be marked on plates of approved design that shall be supplied and securely affixed by the owner of the building, or his duly authorized agent, in a conspicuous place in each space to which they relate. Such plates shall not be removed or defaced but, if lost, removed, or defaced, shall be replaced by the owner or his agent.
- It shall be unlawful to place, or cause, or permit to be placed, on any floor or roof of a building or other structure a load greater than that for which such floor or roof is approved by the building official.

STORAGE (29CFR 1910.176)

- Storage of materials shall not create a hazard. All stored materials stacked in tiers shall be stacked, blocked, interlocked, and limited in height so that they are secure against sliding or collapse.

- Storage areas shall be kept free from accumulation of materials that constitute hazards from tripping, fire, explosion or pest harborage. Vegetation control will be exercised when necessary.

PORTABLE FIRE EXTINGUISHERS (29CFR 1910.157)

- Where the employer has provided portable fire extinguishers for employee use in the workplace, the employer also shall provide an educational program to familiarize employees

with the general principles of fire extinguisher use and the hazards involved with incipient stage fire fighting.

- If portable fire extinguishers are provided for employee use, the employer shall mount, locate, and identify them so they are readily accessible to employees without subjecting the employees to possible injury. These fire extinguishers shall be maintained in a fully charged and operable condition and kept in their designated places at all times except during use.

- Fire Protection - Portable fire extinguishers shall be given maintenance service at least once a year and a written record kept to show the maintenance of recharge date. A record shall be maintained of the service.

- Travel distance for Class A fires for employees to any extinguisher is 75 ft. or less.

- Travel distance for Class B fires from the Class B hazard area to any extinguisher is 50 ft. or less.

- Travel distance for fire extinguishers used for Class C hazards shall be based on the appropriate pattern for the existing Class A or B hazards.

- Travel distance for Class D fires from the Class D hazard area to any extinguisher is 75 ft. or less.

Portable fire extinguishers shall be inspected monthly by the fire department.

EGRESS (29CFR 1910.36, 1910.37, 1910.38)

- No lock or fastening to prevent free escape from the inside of any building shall be installed except in mental, penal, or corrective institutions where supervisory personnel is continually on duty and effective provisions are made to remove occupants in case of fire or other emergency.

- Every exit shall be clearly visible or the route to reach it shall be conspicuously indicated in such a manner that every occupant of every building or structure who is physically and mentally capable will readily know the direction of the escape from any point, and each path of escape, in its entirety, shall be so arranged or mark that the way to a place of safety outside is unmistakable.

- In every building or structure equipped for artificial illumination, adequate and reliable illumination shall be provided for all exit facilities.

- Every automatic sprinkler system, fire detection and alarm system, exit lighting, fire door, and other item of equipment, where provided, shall be continuously in proper operating condition.

- Every building designed for human occupancy shall be provided with exits sufficient to permit the prompt escape of occupants in case of emergency.

- In hazardous areas, or where employees may be endangered by the blocking of any single means of egress due to fire or smoke, there shall be at least two means of egress remote from each other.

- Exits and the way of approach and travel from exits shall be maintained so that they are unobstructed and are accessible at all times.

- The minimum width of any way of exit access shall be in no case less than 28 inches.
- No furnishings, decorations, or other objects shall be so placed as to obstruct exits, access thereto, egress therefrom, or visibility thereof.
- The employer shall review with each employee upon initial assignment those parts of the fire prevention plan which the employee must know to protect the employee in the event of an emergency.
- All exits shall discharge directly to the street or other open space that gives safe access to a public way.
- Exit doors serving more than *50* people, or at high hazard areas, shall swing in the direction of exit travel.
- Exits shall be marked by readily visible, suitably illuminated exit signs. Exit signs shall be distinctive in color and provide contrast with surroundings. The word "EXIT" shall be of plainly legible letters, not less than 6 inches (15 centimeters) high.
- Fire Exit's shall be illuminated.
- Any door, passage, or stairway that is neither an exit nor a way of exit access and that is so located or arranged as to be likely to be mistaken for an exit, shall be identified by a sign reading "Not an Exit" or similar designation.
- Emergency Action Plans - An emergency action plan to ensure employee safety in the event of fire and other emergencies shall be prepared in writing and reviewed with affected employees. The plan shall include the following elements: escape procedures and routes, critical plant operations, employee accounting following an emergency evacuation, rescue and medical duties, means of reporting emergencies, and persons to be contacted for information or clarification.
- Emergency Action Plans - Employers should apprise employees of the fire hazards of the materials and processes to which they are exposed.

GUARDING FLOOR AND WALL OPENINGS AND HOLES (29CFR 1910.23)

- Every stairway and ladderway floor opening shall be guarded by standard railings with standard toeboards on all exposed sides except at the entrance. For infrequently used stairways, the guard may consist of a hinged cover and removable standard railings. The entrance to ladderway openings shall be guarded to prevent a person walking directly into the opening.
- Every skylight floor opening and hole shall be guarded by a standard skylight screen or a fixed standard railing on all exposed sides.
- Every hatchway and chute floor opening shall be guarded by a hinged floor opening cover equipped with standard railings to leave only one exposed side or a removable railing with toeboards on not more than two sides and a fixed standard railing with toeboards on all other exposed sides.
- Every floor hole into (an opening measuring less than 12 inches but more than I inch in its least dimension; a floor opening is an opening measuring 12 inches in its least dimension) which persons can accidentally walk shall be guarded by either a standard railing with standard

toeboards on all exposed sides, or a floor hole cover that should be hinged in place. While the cover is not in place, the floor hole shall be attended or shall be protected by a removable standard railing.

- Every open-sided floor, platform or runway 4 feet (1.2 meters) or more above adjacent floor or ground level shall be guarded by a standard railing with toeboards on all open sides, except where there is entrance to a ramp, stairway, or fixed ladder. Runways not less than 18 inches (45 centimeters) wide used exclusively for special purposes may have the railing on one side omitted where operating conditions necessitate.

- Regardless of height, open-sided floors, walkways, platforms, or runways above or adjacent to dangerous equipment shall be guarded with a standard railing and toeboards.

A standard railing shall consist of top rail, intermediate rail, and posts, and shall have a vertical height of 42 inches *(1.05* meters) from upper surface to top rail and/or platform.

- A railing for open-sided floors, platforms, and runways, shall have toeboards whenever, beneath the open sides, persons can pass, there is moving machinery, or there is equipment with which falling material could cause a hazard.

- Railings shall be of such construction that the complete structure shall be capable of withstanding a load of at least 200 pounds (90 kilograms) in any direction on any point on the top rail.

- A stair railing shall be of construction similar to a standard railing, but the vertical height shall be no more than 34 inches (85 centimeters) nor less than 30 inches (75 centimeters) from upper surface of top rail to surface of tread in line with face of riser at forward edge of tread.

- Railings protecting floor openings, platforms, and scaffolds shall be equipped with toeboards whenever persons can pass beneath the open side, wherever there is moving machinery, or wherever there is equipment with which falling material could cause a hazard.

- A standard toeboard shall be at least 4 inches (10 centimeters) in height and may be of any substantial material, either solid or open, with openings no to exceed 1 inch (2.5 centimeters) in greatest dimension.

- On stairways less than 44 inches wide having both sides enclosed, at least one handrail is required - right side descending.

- On stairways less than 44 inches wide having one side open, at least one stair railing on the open side is required.

- On stairways less than 44 inches wide having both sides open, one stair railing on each side is required.

- On stairways more than 44 inches wide but less than 88 inches wide, one handrail on each enclosed side and one stair railing on each open side is required.

- On stairways 88 inches wide one handrail on each enclosed side, one stair railing on each open side, and one intermediate stair railing located approximately midway of the width.

- Every manhole floor opening shall be guarded by a standard manhole cover which need not be hinged in place. While the cover is not in place, the manhole opening shall be constantly attended by someone or protected by removable railings.

FIXED INDUSTRIAL STAIRS (1910.24)

- Vertical clearance above any Stair tread to an overhead obstruction shall be at least 7 ft. measured from the leading edge of the tread.
- Every flight of stairs having four or more risers shall be provided with a standard railing on all open sides. Handrails shall be provided on at least one side of closed stairways, preferable on the right side descending.
- Stairs shall be constructed so the rise height and tread width are uniform throughout.
- Fixed stairways shall have a minimum width of 22 inches (55 centimeters).
- Fixed stairways shall be provided for access from one structure to another where operations necessitate regular travel between levels, and for access to operating platforms at any equipment which requires attention routinely during operations. Fixed stairs shall also be provided where access to elevations is daily or at each shift where such work may expose employees to harmful substances, or for which purposes the carrying of tools or equipment by hand is normally required. Spiral stairways shall not be permitted except for special limited usage and secondary access situations where it is not practical to provide a conventional stairway.

PORTABLE WOOD (29CFR 1910.25) & METAL LADDERS (29CFR 1910.26):

- Step-ladders shall be equipped with a metal spreader or locking device of sufficient size and strength to securely hold the front and back sections in an open position.
- Ladders shall be inspected frequently and those that have developed defects shall be withdrawn from service for repair or destruction and tagged or marked as "Dangerous, Do Not Use."
- Non self-supporting ladders shall be erected on a sound base with the base of ladder a distance from the wall or upper support equal to one-quarter the length of the ladder and placed to prevent slipping.
- The top of a ladder used to gain access to a roof should extend at least 3 feet (0.9 meters) above the point of contact.
- Ladders with broken or missing steps, rungs, cleats, broken siderails or other faulty equipment shall not be used; improvised repairs shall not be made.
- Tops of ordinary types of step ladder shall not be used as steps.
- Extension ladder overlap shall be at a minimum:

  3 ft. for ladders up to 36 ft. in length.

  4 ft. for ladders up to 48 ft. in length.

  5 ft. for ladders up to 60 ft. in length.

- OSHA requires portable ladders to have non-conductive side rails if used by employees who would be working where they might contact exposed energized circuit parts.

- Rungs and steps of metal ladders shall be corrugated, knurled, dimpled, coated with skid resistant material, or otherwise treated to minimized the possibility of slipping.

FIXED LADDERS (29CFR 1910.27)

- All rungs shall have a minimum diameter of 3/4 inch (1.8 centimeters), if metal, or 1 118 inches (2.8 centimeters), if wood. They shall be a minimum of 16 inches (40 centimeters) wide and should be spaced uniformly no more than 12 inches (30 centimeters) apart.

- Cages, wells, or ladder safety devices for ladders affixed to towers, water tanks, or chimneys shall be provided on all ladders more than 20 feet (6 meters) long. Landing platforms shall be provided each 30 feet (9 meters) of length, except where no cage is provided, landing platforms shall be provided for every 20 feet (6 meters) of length.

- Tops of cages on fixed ladders shall extend 42 inches (I meter) above the top of landing, unless other acceptable protection is provided, and the bottom of the cage shall be no less than 7 feet (2.1 meters) nor more than 8 feet (2.4 meters) above the base of the ladder.

- Side rails shall extend 3 ½ feet (1 meter) above the landing.

SCAFFOLDS (28CFR 1910.28)

- The footing or anchorage for scaffolds shall be sound, rigid, and capable of carrying the maximum intended load without settling, or displacement. Unstable objects such as barrels, boxes, loose brick, or concrete blocks shall not be used to support scaffolds or planks.

- Scaffolds and their components shall be capable or supporting without failure at least four times the maximum intended load.

- Scaffold planks shall extend over the end supports not less than 6 inches nor more than 18 inches.

  Scaffold planking shall be overlapped a minimum of 12 inches or secured from movement.

- Any scaffold damaged or weakened from any cause shall be immediately repaired and shall not be used until repairs have been completed.

- All planking shall be Scaffold Grade as recognized by grading rules for the species of wood used. The maximum permissible spans for 2 X 9 inch or wider planks are as follows:

	Full Thickness Undressed Lumber			Nominal Thickness Lumber	
Working Load (p.s.f.)	25	50	75	25	50
Permissible Span (ft.)	10	8	6	8	9

- The maximum permissible span for 1¼ X 9 inch or wider plank of full thickness is 4 ft. with medium loading of 50 p.s.f.

- Scaffold planks shall extend over their end supports not less than 6 inches nor more than 18 inches.

- Employees shall not work on scaffolds during storms or high winds.
- Platform planks shall be laid with their edges close together so the platform will be tight with no spaces through which tools or fragments of material can fall.

FALL PROTECTION (DUTY TO RAVE FALL PROTECTION 29CFR 1926.501)

- Each employee on a walking I working surface (horizontal and vertical surface) with an unprotected side or edge which is 6 feet (1.8 m) or more above a lower level shall be protected from falling by the use of guardrail systems, safety net systems, or personal fall arrest systems.
- When the employer can determine that it is infeasible or creates a greater hazard to use these systems, the employer shall develop and implement a fall protection plan which meets the requirements of paragraph (k) of 1926.502.
- Each employee at the edge of a well, pit, shaft, and similar excavation 6 feet (1.8 m) or more in depth shall be protected from falling by guardrail systems, barricades, or covers.
- “Roofing work on Low-slope roofs." Except as otherwise provided in paragraph (b) of this section, each employee engaged in roofing activities on low-slope roofs, with unprotected sides and edges 6 feet (1.8 m) or more above lower levels shall be protected from falling by guardrail systems, safety net systems, personal fall arrest systems, or a combination of warning line system and guardrail system, warning line system and safety net system, or warning line system and personal fall arrest system, or warning line system and safety monitoring system. Or, on roofs 50-feet(15.25 m) or less in width (see Appendix A to subpart M of this part), the use of a safety monitoring system alone[i.e. without the warning system] is permitted.
- “Steep roofs." Each employee on a steep roof with unprotected sides and edges 6 feet (1.8 m) or more above lower levels shall be protected from falling by guardrail systems with toeboards, safety net systems, or personal fall arrest systems.

FALL PROTECTION (SYSTEMS CRITERIA & PRACTICES 29CFR 1926.502)

- Top edge height of top rails, or equivalent guardrail system members, shall be 42 inches (1.1 m) plus or minus 3 inches (8cm).
- Midrails, screens, mesh, intermediate vertical members, or equivalent intermediate structural members shall be installed between the top edge of the guardrail system and the walking *I* working surface when there is no wall or parapet wall at least 21 inches (53 cm) high.
- Guardrail systems shall be capable of withstanding, without failure, a force of at least 200 pounds (890 N) applied within 2 inches (5.1 cm) of the top edge, in any outward or downward direction, at any point along the top edge.
- Top rails and mid rails shall be at least one-quarter inch (0.6 cm) nominal diameter or thickness to prevent cuts and lacerations. If wire rope is used for top rails, it shall be flagged at not more than 6-foot (1.8 m) intervals with high-visibility material.
- Safety nets shall be installed as close as practicable under the walking I working surface on which employees are working, but in no case more than 30 feet (9.1 m) below such level.

When nets are used on bridges, the potential fall area from the walking *I* working surface to the net shall be unobstructed.

- Safety nets shall be installed with sufficient clearance under them to prevent contact with the surface or structures below when subjected to an impact force equal to the drop test specified in paragraph (C)(4)(i) in this section.

- Safety nets and their installations shall be capable of absorbing an impact force equal to that produced by the drop test specified in paragraph (C)(4)(i) of this section. Except as provided in paragraph (C)(4)(ii) of this section, safety nets and safety net installations shall be drop-tested at the jobsite after initial installation and before being used as a fall protection system, whenever relocated, after major repair, and at 6-month intervals if left in one place. The drop-test shall consist of a 400 pound (180kg) bag of sand 30+1-2 inches (75 ~*I*- 5 cm) in diameter dropped into the net from the highest walking *I* working surface at which employees are exposed to fall hazards, but from less than 42 inches (1.1 m) above that level.

Safety nets shall be inspected at least once a week for wear, damage and other deterioration.

- The maximum size of each safety net mesh opening shall not exceed 36 square inches (230 cm 2) nor be longer than 6 inches (15 cm) on any side, and the opening, measured center-to center of mesh ropes or webbing, shall not be longer than 6 inches (15 cm). All mesh crossings shall be secured to prevent enlargement of the mesh opening.

- Effective January 1, 1998, body belts are not acceptable as part of a personal fall arrest system.

Connectors shall be drop forged, pressed or formed steel, or made of equivalent materials.

- Connectors shall have a corrosion-resistant finish, and all surfaces and edges shall be smooth to prevent damage to interfacing parts of the system.

- Dee-rings and snaphooks shall have a minimum tensile strength of 5,000 pounds (22.2 kN). Anchorages used for attachment of personal fall arrest equipment shall be independent of any anchorage being used to support or suspend platforms and capable of supporting at least 5,000 pounds (22.2 kN) per employee attached, or shall be designed, installed, and used as follows:

As part of a complete personal fall arrest system which maintains a safety factor of at least two; and

Under the supervision of a qualified person.

- Personal fall arrest systems when stopping a fall shall:

Limit maximum arresting force on an employee to 900 pounds (4 kN) when used with a body belt;

Limit maximum arresting force on an employee to 1,800 pounds (8 kN) when used with a body harness;

Be rigged such that an employee can neither free fall more than 6 feet (1.8 m), not contact any lower level.

- The attachment point of the body belt shall be located in the center of the wearer's back. The attachment point of the body harness shall be located in the center of the wearer's back near shoulder level, or above the wearer's head.

- Personal fall arrest systems shall be inspected prior to each use for wear, damage and other deterioration, and defective components shall be removed from service.

- Personal fall arrest systems shall not be attached to guardrail systems, nor shall they be attached to hoists except as specified in other subparts of this part.

- Positioning devices shall be rigged such that an employee cannot free fall more than 2 feet (.6m).

- Positioning devices shall be secured to an anchorage capable of supporting at least twice the potential impact load of an employee's fall or 3,000 pounds (~3.3 kN), whichever is greater.

The warning line shall be erected around all sides of the roof work area.

- When mechanical equipment is not being used, the warning line shall be erected not less than 6 feet (1.8 m) from the roof edge. Warning lines shall consist of ropes, wires, or chains, and supporting stanchions erected as follows:

The rope, wire, or chain shall be flagged at not more than 6-foot (1.8 m) intervals with high-visibility material;

The rope, wire, or chain shall be rigged and supported in such a way that its lowest point (including sag) in no less than 34 inches (.9 m) from the walking *I* working surface and its highest point is not more than 39 inches (1.0 m) from the walking *I* working surface;

After being erected, with the rope, wire, or chain attached, stanchions shall be capable of resisting, without tipping over, a force of at least 16 pounds (71 N) applied horizontally against the stanchion, 30 inches (.8 m) above the walking *I* working surface, perpendicular to the warning line, and in the direction of the floor, roof, or platform edge;

The line shall be attached at each stanchion in such a way that pulling on one section of the line between stanchions will not result in slack being taken up in adjacent sections before the stanchion tips over.

Safety Monitoring Systems. Safety monitoring systems [see section 1926.501(b)(l0) and *1926.502(k)]* **and their use** shall comply with the **following provisions:**

- The employer shall designate a competent person to monitor the safety of other employees and the employer shall ensure that the safety monitor complies with the following requirements:

The safety monitor shall be competent to recognize fall hazards;

The safety monitor shall warn the employee when it appears that the employee is unaware of a fall hazard or is acting in an unsafe manner;

The safety monitor shall be on the same walking *I* working surface and within visual sighting distance of the employee being monitored;

The safety monitor shall be close enough to communicate orally with the employee; and

The safety monitor shall not have other responsibilities, which could take the monitor's attention from the monitoring function.

- Mechanical equipment shall not be used or stored in areas where safety-monitoring systems are being used to monitor employees engaged in roofing operations on low-slop roofs.

- No employee, other than an employee engaged in roofing work [on low-sloped roofs] or an employee covered by a fall protection plan, shall be allowed in an area where an employee is being protected by a safety monitoring system.

- Each employee working in a controlled access zone shall be directed to comply promptly with fall hazard warnings from safety monitors.

Fall Protection Plan. This option is available only to employees engaged in leading edge work, precast concrete erection work, or residential construction work (See section 1926.501(b)(2), (b)(12), and (0)(13) who can demonstrate that it is infeasible or it creates a greater hazard to use conventional fall protection equipment.

- The fall protection plan shall be prepared by a qualified person and developed specifically for the site where the leading edge work, precast concrete work, or residential construction work is being performed and the plan must be maintained up to date.

- Any changes to the fall protection plan shall be approved by a qualified person.

- A~ copy of the fall protection plan with all approved changes shall be maintained at the job site.

- The implementation of the fall protection plan shall be under the supervision of a competent person.

- The fall protection plan shall document the reasons why the use of conventional fall protection systems (guardrail systems, personal fall arrest systems, or safety nets systems) are in feasible or why their use would create a greater hazard.

- The fall protection plan shall include a written discussion of other measures that will be taken to reduce or eliminate the fall hazard for workers who cannot be provided with protection from conventional fall protection systems. Where no other alternative measure has been implemented, the employer shall implement a safety monitoring system. The fall protection plan must include a statement, which provides the name or other method of identification for each employee who is designated to work in controlled access zones. No other employees may enter controlled access zones.

FALL PROTECTION (TRAINING REQUIREMENTS 29CFR 1926.503)

- The employer shall provide a training program for each employee who might be exposed to fall hazards. The program shall enable each employee to recognize the hazards of falling and sh~l train each employee in the procedures to be followed in order to minimize these hazards.

- The employer shall assure that each employee has been trained, as necessary, by a competent person qualified in the following areas:

  The nature of fall hazards in the work area;

  The correct procedures for erecting, maintaining, disassembling, and inspecting the fall protection systems to be used;

  The use and operation of guardrail systems, personal fall arrest systems, safety net systems, warning line systems, controlled access zones, and other protection to be used;

The role of each employee in the safety monitoring system when this system is used;

The limitations on the use of mechanical equipment during the performance of roofing work on low-sloped roof,

The correct procedures for the handling and storage of equipment and materials and the erections of overhead protection; and

The role of employees in fall protection plans;

The standards contained in this subpart.

- The employer shall verify' compliance with paragraph (a) of this section by preparing a written certification record. The written certification record shall contain the name or other identity of the employee trained, the. date(s) of the training, and the signature of the person who conducted the training or the signature of the employer. If the employer relies on training conducted by another employer or completed prior to the effective date of this section, the certification record shall indicate the date the employer determined the prior training was adequate rather than the date of actual training.

FLAMMABLEICOMBUSTIBLE LIQUID STORAGE (29CFR 1910.106)

Flammable liquids shall be kept in covered containers or tanks when not actually in use.

Flammable, combustibles, and acids should not be stored together.

No more than 120 gallons of Class I, II and III A liquids in a storage cabinet and of this 120 gallons, not more than 60 gallons shall be of Class I and II.

(Examples)

Class I	Class II	Class III
(Flashpoints <I 00^{0}F)	(Flashpoints >100^{0}F & <140^{0}F)	(Flashpoints >140^{0}F)
Gasoline	Acetic Acid	Phenol
Formic Acid	Mineral Spirits	JP-5
Ethyl Ether	Fuel Oil #4 or #5	Fuel Oil ~6
Petroleum Ether	Ethyl Alcohol (10%)	Ethyl Alcohol (5%)

- There shall be no more than three flammable lockers next to each other. Exceptions allowed in an industrial environment, and if more than three lockers are required, they need to be separated by 100 feet.
- Flammable storage cabinets require the metal bungs to be installed.
- Outside storage areas shall be graded so as to direct spills away from buildings or other exposures, or be surrounded with curbs at least 6 inches high with appropriate drainage to a safe location for accumulated liquids.

PERSONAL PROTECTIVE EQUIPMENT (29CFR 1910.132)

- Proper personal protective equipment - including covers for the eyes, face, head, and extremities, respiratory devices, and protective shields and barriers - shall be provided, used,

and maintained in a sanitary and reliable condition where there is a hazard from processes or environments that may cause injury or illness to the employee.

EMERGENCY WASHING FACILITIES (29CFR 1910.151)

- Where the eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use.

- All plumbed eyewash and emergency shower stations shall be activated weekly for a minimum of3 minutes, to flush the line and to verify proper operation (OPNAVINST 5 l00.23E).

COMPRESSED AIR EQUIPMENT (29CFR 1910.242)

- Compressed air used for cleaning purposes shall not exceed 30 pounds (13.5 kilograms) per square inch *(6.5* square centimeters) when the nozzle end is obstructed or dead-ended, and then only with effective chip guarding and personal protective equipment.

OXYGENIFUEL CYLINDERS (29CFR 1910.253)

- Compressed gas cylinders shall be kept away from excessive heat, shall not be stored where the might be damaged or knocked over by passing or falling objects, and shall be stored at least 20 feet (6 meters) away from highly combustible materials.

- Where a cylinder is designed to accept a valve protection cap, caps shall be in place except when the cylinder is in use or is connected for use.

- Inside of buildings, cylinders shall be stored in a well protected, well-ventilated, dry location at least 20 feet (6 meters) from highly combustible materials such as oil or excelsior. Cylinders should be stored in definitely assigned places away from elevators, stairs, or gang ways. Assigned storage spaces shall not be kept in unventilated enclosures such as lockers and cupboards.

- Acetylene cylinders shall be stored and used in a vertical, valve-end-up position only.

- Under no conditions shall acetylene be generated, piped (except in approved cylinder manifolds) or utilized at a pressure in excess of 15 pounds per square inch (psi) (103 kPa gauge pressure) or 30 psi (206 kPa absolute). The use of liquid acetylene is prohibited.

- Oxygen cylinders in storage shall be separated from fuel-gas cylinders or combustible materials (especially oil or grease) a minimum distance of 20 feet (6 meters) or by a noncombustible barrier at least 5 feet high (1.5 meters) having fire-resistance rating of V_2 hour.

- All compressed gas cylinders shall be secured in such a manner as to prevent them from tipping over.

ELECTRICAL (29CFR 1910.304)

- Electrical equipment shall be free from recognized hazards that are likely to cause death or serious physical harm to employees.

- Electrical outlets shall not be wired for reverse polarity.

- For a grounded system, a grounding electrode conductor shall be used to connect both the equipment grounding conductor and the grounded circuit conductor to the grounding
  electrode. Both the equipment grounding conductor and the grounding electrode conductor shall be connected to the grounded circuit conductor on the supply side of the service
  disconnecting mans or on the supply side of the system disconnecting means or over current devices if the system is separately derived.

- For an ungrounded service-supplied system, the equipment grounding conductor shall be connected to the grounding electrode conductor at the service equipment.

  The frames of portable electrical tools and equipment, except when UL-approved double-insulated construction shall be properly grounded

- All non-current carrying metal parts of portable equipment and fixed equipment including their associated fences, housings, enclosures, and supporting structures shall be grounded.

GENERAL ELECTRICAL REQUIREMENTS (29 CFR 1910.303)

- Circuit breaker panels shall have a minimum three-foot *(36-inch)* clearance.

- Electrical cords not be strained and in good condition (no exposed conductors).

- Listed or labeled equipment shall be used or installed in accordance with any instructions included in the listing or labeling.

- Electrical wiring shall not exhibit exposed conductors. Power cord insulation shall not show signs of fraying.
- Conductors shall be spliced or joined with devices identified for such use or by brazing, welding, or soldering with a fusible alloy or metal. All splices, joints, and free ends of conductors shall be covered with an insulation equivalent to that of the conductor or with an insulating device suitable for the purpose.

WIRING METHODS AND COMPONENTS (29 **CFR 1910.305)**

- Flexible cords and cables shall be protected from accidental damage.

- Unless specifically permitted, flexible cords and cables may not be used as a substitute for the fixed wiring of a structure, where attached to building surfaces, where concealed or where run through holes in walls, ceilings, or floors, or where nun through doorways, windows, or similar openings. Flexible cords shall be connected to devices and fittings so that strain relief is provided that will prevent pull from being directly transmitted to joints or terminal screws.
- Electrical wiring shall not be permitted to run through doorways, walls, windows, and ceilings.
- Extension cords are not authorized electrical strips with circuit breaker and surge suppressor is used are permitted.
- Damaged or cracked electrical receptacle covers are not permissible.
- Ground Fault Circuit Interrupter (GFCI) electrical receptacles, shall be utilized at all sink locations.
- Use of "handi-boxes" and extension cords are prohibited.
- Electrical, Openings - Unused openings in cabinets, boxes and fittings shall be effectively closed.

TOOLS /MACHINERY/MACHINE GUARDING: (29CFR 1910.212)

- Powder actuated fastening tools have method of control, inspection records, and training records. Abrasive blasting glove boxes may not have leaks.

- Hooks and chains shall be visually inspected daily and monthly with a full, written, dated, and signed report of condition kept on file and be readily available to appointed personnel. Running ropes shall be inspected monthly and written report of condition kept on file and be readily available to appointed personnel.

- All U-bolt rope clips on hoist ropes on overhead and gantry cranes shall be installed so that the U-bolt is in contact with the dead end (short or non load carrying end) of the rope. Clips shall be installed in accordance with the clip manufacturer's recommendation. All nuts on newly installed clips shall be tightened after 1 hour of use.

- All weight handling equipment hooks have been uniquely identified.

- Hoist ropes on crawler, locomotive, and truck cranes shall be free from kinks or twists and shall not be wrapped around the load.

- Each employer shall be responsible for the safe condition of tools and equipment used by employees, including tools and equipment which may be furnished by employees.

- All hand tools shall be kept in a safe condition. Handles of tools shall be kept tight in the tool and wooden handles shall be free of splinters or cracks. Wedges and chisels shall be free of mushroomed heads. Wrenches shall not be used when sprung to the point that slippage occurs.

- Machine guarding shall be provided to protect employees in the machine area from hazards such as those created by point of operation, nip points, rotating parts, flying chips, and sparks. The guard shall be such that it does not offer an accident hazard in itself.

- Abrasive Bench Grinders the grinding wheels should be free of embedded metal in the wheel.

- The point-of-operation guarding device shall be so designed as to prevent the operator from having any part of his body in the danger zone during the operating cycle.

- The point-of-operation of machines (where possible injury could occur) are provided with guard.

- Special supplemental hand tools for placing and removing material shall permit handling of material without the operator placing a hand in the danger zone.

- When the periphery of the blades of a fan is less than 7 feet (2.lmeters) above the floor or working level, the blades shall be guarded. The guard shall have openings no larger than ½inch *(12.5* millimeters).

- Fans less than seven feet from floor - shall have protective cover guard over blades with openings less than '/2~'.

- Machines designed for a fixed location shall be securely anchored to prevent walking or moving, or designed in such a manner that they will not move during normal operation.
- Machines designed for a fixed location are securely anchored to prevent walking or moving.
- Belt and sanding machines used for woodworking shall be provided with guards at each nip point where the sanding belt nuns onto a pulley and the unused run of the sanding belt shall be shielded to prevent accidental contact.
- All woodworking machinery - such as table saws, swing saws, radial saws, band saws, jointers, tenoning machines, boring and mortising machines, shapers, planers, lathes, sanders, veneer cutters, and other miscellaneous woodworking machinery - shall be enclosed or guarded, except that part of the blade doing the actual cutting, to protect the operator and other employees from hazards inherent to the operation.
- Power control devices shall be provided on each machine to make it possible for the operator to cut off the power to the machine without leaving his/her position at the point of operation.
- Power controls and operating controls should be located within easy reach of the operator while at his/her regular work location, making it unnecessary for the operator to reach over the cutter to make adjustments. This does not apply to constant pressure controls used only for setup purposes.
- *Re-starts.* In operations where injury to the operator might result if motors were to restart after power failures, provisions shall be made to prevent machines from automatically restarting upon restoration of power.
- *Band saw* blades shall be enclosed or guarded except for the working portion of the blade between the bottom of the guide rolls and the table. Band saw wheels shall be fully encased. The outside periphery of the enclosure shall be solid. The front and back shall be either solid or wire mesh or perforated metal.
- *Circular table saws* shall have a hood over the portion of the saw above the table mounted so that the hood will automatically adjust itself to the thickness of and remain in contact with the material being cut.
- *Circular table saws* shall have a spreader aligned with the blade, spaced no more than ½ inch (8 millimeters) behind the largest blade mounted in the saw. The provision of a spreader in connection with grooving, dadoing, or rabbeting is not required.
- *Circular table saws* used for ripping shall have nonkickback fingers or dogs.
- *Inverted swing or sliding cut-off saws* shall be provided with a hood that will cover the part of the saw that protrudes above the top of the table or material being cut.
- *Radial saws* shall have an upper guard that completely encloses the upper half of the saw blade. The sides of the lower exposed portion of the blade shall be guarded by a device that will automatically adjust to the thickness of and remain in contact with the material being cut.
- Radial Saws - saw returns to starting position after the operator releases the saw (return spring not worn)
- *Radial saws* used for ripping shall have nonkickback fingers or dogs.
- *Radial saws* shall have an adjustable stop to prevent the forward travel of the blade beyond the position necessary to complete the cut in repetitive operations.

- *Radial saws* shall be installed so that the cutting head will return to the starting position when released by the operator.

- *Rio saws* shall have a spreader aligned with the blade and shall be no thinner than the blade. The provision of a spreader in connection with grooving, dadoing, or rabbeting is not required.

Rio saws shall have non-kickback fingers or dogs.

- *Self-feed circular saws'* feed rolls and blades shall be protected by a hood or guard to prevent the hand of the operator from coming into contact with the in-running rolls at any point.

Swing or sliding cut- off saws shall be provided with a hood that will completely enclose the upper half of the saw.

Swing or sliding cut- off saws shall be provided with limit stops to prevent the saws from extending beyond the front or back edges of the table.

- *Swing or sliding cut-off saws* shall be provided with an effective device to return the saw automatically to the back of the table when released at any point of its travel.

- All belts, pulleys, sprockets and chains, flywheels, shafting and shaft projections ,gears, and couplings, or other rotating or reciprocating parts, or any portion thereof, within 7 feet (2.1 meters) of the floor or working platform shall be effectively guarded.

- All guards for inclined belts shall conform to the standards for construction of horizontal belts, and shall be arranged in such a manner that a minimum clearance of 7 feet (2. meters) is maintained between the belt and floor at any point outside the guard.

- Flywheels located so that any pant is 7 feet (2.1 meters) or less above the floor or platform shall be guarded with an enclosure of sheet, perforated, or expanded metal or woven wire.

- Flywheels protruding through a working floor shall be entirely enclosed by a guardrail and toeboard.

- Where both nuns of horizontal belts are 7 feet (2.1 meters) or less from the floor or working surface, the guard shall extend at least 15 inches (37.5 centimeters) above the belt or to a standard height except that where both nuns of a horizontal belt are 42 inches (1.05 meters) or less from the floor, the belt shall be fully enclosed by guards made of expanded metal, perforated or solid sheet metal, wire mesh on a frame of angle iron, or iron pipe securely fastened to the floor to the frame of the machine.

- Gears, sprocket wheels, and chains shall be enclosed; unless they are more than 7 feet (2.1 meters) above the floor or the mesh points are guarded

- Couplings with bolts, nuts or set screws extending beyond the flange of the coupling shall be guarded by a safety sleeve.

POWERED INDUTRIAL TRUCKS (29CFR 1910.178)

- If at any time a powered industrial truck (forklift) is found to be in need of repair, defective, or in any way unsafe, the truck shall be taken out of service until it has been restored to safe operating condition.

- High-lift rider trucks shall be equipped with substantial overhead guards.
- Fork trucks shall be equipped with vertical-load backrest extensions when the types of loads presenrthe possibility of the load or pant of it from falling rearward.
- The brakes shall be set and wheel chocks placed under the rear wheels to prevent the movement of trucks, trailers, or railcars while loading or unloading.
- It is the responsibility of the employer to ensure that each powered industrial truck operator is competent to operate a powered an industrial truck safely as demonstrated by the successful completion of training and evaluation.
- Modifications and additions which affect the capacity and safe operation shall not be performed by the user without the manufacturers prior written approval. Capacity, operation, and maintenance instruction plates, tags or decals shall be changed accordingly.
- When a powered industrial truck is left unattended (operator > *25* ft. away), load engaging means shall be fully lowered, controls shall be neutralized, power shall be shut off, and brake set. Wheels shall be blocked if the truck is on an incline.
- An overhead guard shall be used as protection against falling objects. It should be noted that an overhead guard is intended to offer protection from the impact of small packages, boxes, bagged material, etc., representative ofthe job application, but not to 'withstand the impact of a falling capacity load.
- Arms or legs are prohibited from being placed between the uprights of the mast or outside the running lines of the truck.
- Unauthorized personnel shall not be permitted to ride on powered industrial trucks.
- The driver shall be required to slow down and sound the horn at cross aisles and other locations where vision is obstructed. If the load being carried obstructs forward view, the driver shall be required to travel with the load trailing.
- When ascending or descending grades in excess of 10 percent, loaded trucks shall be driven with the load upgrade.
- On all grades the load and load engaging means shall be tilted back if applicable, and raised only as far as necessary to clear the road surface.
- Motorized hand trucks must enter elevators or other confined areas with load end forward.
- Fuel tanks shall not be filled while the engine is running and spillage shall be avoided.
- Industrial trucks shall be examined before being placed in service if the examination shows any condition adversely affecting the safety of the vehicle. Such examination shall be made at least daily. Where industrial trucks are used on a round-the-clock basis, they shall be examined after each shift. Defects when found shall be immediately reported and corrected.

GENERAL DUTY CLAUSE

- File drawers shall be maintained in closed position (when not in use).

- File cabinets shall not be top heavy - store lower drawers with heavier items.
- File cabinets - not more than one drawer opened at one time - tipping hazard.
- Coffee makers, space heaters or hot plates are maintained 18" from combustible material (wood, paper, plastics, etc.).
- Tall shelf cabinets shall be secured to wall (over 6').
- Overhead storage shall be secured on shelves.
- Overhead stored materials are not stacked and/or are not heavy in nature - could injure someone if it fell.
- Computer keyboard users utilize wrist rests.
- Computer monitors are positioned directly in front of user at eye level.
- Material safety data sheets (MSDS) are at work site for items, i.e. toner for copy machine, glass cleaner, etc.
- No excessive storage, boxes or trash.
- Coffeepot not located on a combustible surface.
- Overhead storage shall have the minimum 18" clearance of sprinkler head.
- Trash containers are not over filled.

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OSHA REGULATION FOR GENERAL INDUSTRY

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1926.1109 beta-Naphthylamine.
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1926.1112 Ethyleneimine.
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1926.1114 2-Acetylaminofluorene.
1926.1115 4-Dimethylaminoazobenzene.
1926.1116 N-Nitrosodimethylamine.
1926.1117 Vinyl chloride.
1926.1118 Inorganic arsenic.
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1926.1144 1.2 dibromo-3-chloropropane.
1926.1145 Acarylonitrile.
1926.1147 Ethylene oxide.

1926.1148 Formaldehyde.
1926.1152 Methylene chloride.

29 CFR 1960
BASIC PROGRAM ELEMENTS FOR FEDERAL EMPLOYEE OCCUPATIONAL SAFETY & HEALTH PROGRAMS

PART 1960 – BASIC PROGRAM ELEMENTS FOR FEDERAL
EMPLOYEE OCCUPATIONAL SAFETY AND HEALTH
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1960.54 Training of top management officials.
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1960.67 Log of occupational injuries and illnesses.
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Subpart J – Evaluation of Federal Occupational Safety and Health Programs

1960.79 Self-evaluations of occupational safety and health programs.

OCCUPATIONAL SAFETY & HEALTH

FORMS, CHARTS, AND TABLES

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1. General Mishap Investigation Report 3-7
   This report is to be completed by the Supervisor of the injured employee with input from the Mishap Investigation Team for injuries that result in one or more lost workdays. Employees that experience mishaps resulting in no lost workdays have the option of completing this same report. The Mishap Investigation Report is due to the OSH Office within 6 working days of the mishap.

2. General Mishap Investigation Report References . . . . . 3-10 These reference pages provide a variety of mishap terminology that may be used to more appropriately describe mishaps and their causal factors on the General Mishap Investigation Report.

3. Safetygram 3-14
   This form shall be completed by any individual that experiences a "near-miss" mishap (avoidance of a fatality or catastrophic loss merely by chance; i.e., if someone says, "We're lucky we didn't kill somebody,") and submitted to the OSH Office ASAP.

4. Mishap Investigation Promise of Confidentiality . . . . . 3-15 Military and Federal Courts recognize information given under promises of confidentiality and the findings, conclusions and recommendations of mishap investigations and endorsers are protected under Executive Privilege. Although witnesses' names maybe released, witness statements and the deliberative analyses of the mishap investigation are privileged. Promises of confidentiality may be given by members of the Mishap Investigation Team. Members must judge whether confidentiality is necessary to ensure that witness' full cooperation. When granted, the protected witness must sign the Promise of Confidentiality.

5. Department of Defense OSH Protection Program . . . . . 3-16 The DOD OSH Protection Program document that highlights the responsibilities and rights of employees working at DOD facilities shall be posted on all official bulletin boards.

6. Navy Employee Report of Unsafe or Unhealthful Working Conditions and Appeals Procedures 3-17

All employees shall orally report unsafe or unhealthful working conditions to their immediate supervisor who shall promptly investigate the situation and take appropriate corrective actions. In the event a supervisor fails to take corrective action, this form shall be completed and submitted to the OSH Office. Forms are available on all official bulletin boards as well as on the OSH web site.

7. NAVOSH Deficiency Notice (NDN's) 3-19

Occupational Safety and Health professionals utilize this form to document all workplace hazards identified during workplace safety inspections. NDN's are required to be posted at the site of all workplace hazards with a Risk Assessment Code of 1,2, or 3. Upon abatement of an identified hazard, the individual having responsibility for abatement action shall annotate a description of the abatement action on the NDN, sign and date it, and return it to the OSH Office, as soon as possible.

8. Risk Assessment Code Matrix 3-20

A risk assessment code (RAC) represents the degree of risk associated with identified hazards and combines the element of hazard severity and mishap probability. The RAC assigned to each hazard identified on a NAVOSH Deficiency Notice is developed using the matrix and is a method for prioritizing abatement actions.

9. Asbestos Training & Certification Requirements Listed By Type of Operation 3-21

Federal required training requirements for conducting asbestos work are dependent upon type of operation and are somewhat complex. The table provided simplifies the training requirements.

10. Hearing Protective Devices With Positive & Negative Features 3-24

Every effort shall be made to issue personal hearing protective devices suited to the location and duration of use. This listing of recommended hearing protective devices identifies hearing personal protective equipment available through Navy supply systems.

11. Radio Frequency Permissible Exposure Limits (PEL's) For

Uncontrolled & Controlled Environments 3-26
Limited information on RF PEL's is provided in these tables. Those persons conducting RF hazard analysis and evaluations, should consult the more extensive technical guidance identified in ANSI/IEEE C95.1-1992. Controlled environments are areas where exposure may be incurred by personnel who are aware of the potential for RF exposure as a result of employment or duties, by individuals who knowingly enter areas where higher RF levels can reasonably be anticipated to exist and by exposure incidental to transient passage through such uncontrolled environments generally include public areas, living quarters and workplaces where there is no expectation that higher RF levels should be encountered.

12. Laser Classifications & Warning Labels 3-28
The Navy has adopted a system for categorizing the hazards of lasers which provides a practical means for determining safety requirements appropriate for different types of lasers. Information is provided on laser classification, types of laser warning signs and labels.

13. Employee Comfort Survey 3-30
An example employee discomfort survey has been provided. The employee comfort survey shall be used to determine the need for and to assist with the development of a more detailed ergonomics survey for employees experiencing discomfort in their work environment.

14. Ergonomic Checklist for Industrial Shops 3-32
The checklist for evaluation of ergonomic stress in industrial shops shall be used to identify ergonomic risk factors that can be reduced or eliminated.

15. Ergonomic Checklist For Video Display Terminal Workstations 3-34
The checklist for evaluation of ergonomic stress at work-stations equipped with video display terminals shall be used to identify ergonomic risk factors that can be reduced or eliminated.

16. Pregnancy Employment Policy 3-35
Specific information regarding pregnancy employment policies has been reprinted from OPMINST 335 as well as Questions & Answers on the Pregnancy Discrimination Act from 29 CFR 1504.

17. Navy Occupational Reproductive Chemical Stressors List 3-36
This list provides the names of common chemicals that may be present in general Navy workplaces. Every effort, on all levels, shall be made to purchase hazardous materials that do not contain these chemicals. A matrix that describes specific NPS reproductive hazardous chemicals, the department, location, and operation in which they are used may be viewed at http://www.nps.navy.mil/safety/

18. Workplace Exposures of Reproductive Concern Joint Supervisors & Workers Statement 3-38
The Navy strongly encourages all female employees who become pregnant to notify their commands immediately. Upon notification, the pregnant employee with help from the cognizant supervisor shall complete the developmental hazard questionnaire.

19. Request for Occupational Health Medical Evaluation 3-39
The request for occupational health medical evaluation form is completed by the supervisor of an employee that will receive an occupational medical surveillance exam for one of the requirements identified in block #9. Upon completion of the form the employee takes this form with him/her to the exam.

20. Personal Protective Equipment Training Certification 3-40
Supervisors that are responsible for employees that are required to wear various types of personal protective equipment shall provide training to those employees that includes: when and what type of PPE is necessary, how to properly wear PPE, the limitations of PPE, and the proper care, storage, and maintenance of PPE. Such training shall be documented utilizing the provided PPE Training Certification form.

21. Hand Protection and Glove Chart 3-42
This information and table, serves as a guide to the different types of glove materials and the chemicals and physical stressors that they can be used against.

22. Heat Related Emergencies 3-44
Symptoms and First-Aid procedures are provided for exposures to excessive heat.

23. Notification of Intent to Enter A Confined Space 3-46
This form is initiated by the ROICC Office and is utilized to notify Public Works Department and the OSH Office of the purpose, date, and location of entry into NPS confined spaces by contracted personnel.

24. Confined Space Entry Permit 3-47
The Confined Space Entry Permit must be completed and signed, to include atmospheric testing of the confined space by the Entry Supervisor, Confined Space Program Manager and/or Confined Space Competent Person prior to entry of any confined space.

25. Confined Space Entry Program Attendant, Entrant, and Entrant Supervisor Duties 3-48
Occupational Safety & Health Standard Operating Procedures have been provided for Confined Space Attendants, Entrants, and Entry Supervisors.

26. Request for Forklift License 3-50
This form is completed by individuals and their supervisors that need to operate forklifts and other heavy construction equipment. Upon completion, the form is sent to the OSH Office to determine medical surveillance exam requirements prior to being forwarded to the Command Licensing Examiner, Code 2311.

27. Application for Construction Equipment Operator License 3-51
This form is completed by the applicant desiring to operate forklifts and other heavy construction equipment to request the appropriate test, examination and issuance of license.

28. Workplace Inspection Guide 3-53
Inspection guidance has been provided for departments to conduct and document own departmental workplace monthly OSH inspections.

29. Hazardous Materials Control & Management Requisition Screening Form 3-64
This form must be completed for all purchases of hazardous materials which does not include commonly used office products. The form is then submitted to the Departmental HAZMAT Program Manager for review and approval prior to forwarding to the Command HMC&M Coordinator.

30. Command HMC&M Program Exemptions, Criteria, Disposal Instruction & Unique Hazards 3-65
A listing of commonly used products that may be found in the workplace and that are exempt from some HMC&M Program requirements, such as inventories, hazardous materials requisition screening, and MSDS identifier assignment has been provided. However, despite the provided exemption criteria if these commonly used products are improperly used and/or disposed of, there is a risk of damage to human health and the environment. With that in mind, specific disposal instructions for these products as well as the potential health risks and basic first-aid procedures have been provided. Because it is the right of every employee to know of the hazards and/or potential hazards encountered in the workplace it is imperative that all employees read this material.

31. Individual Safety Recognition Award Nomination 3-70
All employees will be considered for award presentation based upon significant on-the-job accident prevention initiatives, identification of unsafe work practices and/or suggested/implemented an improvement or corrective action that contributed to a safer work environment. Nomination forms shall be submitted by the Department Head to the OSH Office.

32. Materials Handling & Construction Equipment Safety Recognition Award Nomination 3-71
All employees whose daily assignment includes driving of Navy owned materials handling equipment and/or construction equipment that exhibits exceptional driving records shall be nominated by their Department Head for award presentation by utilizing this form.

GENERAL MISHAP INVESTIGATION REPORT

PERSONNEL_//

1. Employee Name: _____ 2. Military/Civilian (Circle one)
3. Command: _____ 4. Department _____
5. Job Title: _____ 6. Rank/Rate/Grade: _____
7. SSN: _____ 8. Age: _____ 9. M / F (Circle one)

MISHAP_DESCRIPTION_//

10. Date of Mishap: _____ 11. Time of Mishap: _____ 12. Injured Body Part: _____
13. Describe Mishap Location: _____ 14. Number of Lost Workdays/ Excluding Date of Mishap: _____ 15. If Applicable, Describe First Aid Measures: _____
16. Was Medical Treatment Sought? _____Describe: _____
17. Which OWCP Forms were Submitted? _____ Date(s): _____
18. Describe the specific job or task and physical activity that the individual was engaged in at the time of the mishap: _____
19. If applicable, describe the Personal Protective Equipment (PPE) that was worn at the time of the mishap: _____
20. Was the PPE required for the job being performed? _____

21. Was the PPE that was used or should have been used available, adequate, and properly used? _____

22. Describe the injury or illness (burn, laceration, sprain, etc.): _____

_____

CAUSAL_FACTORS //

23. Environmental Causal Factors: (Describe the environmental conditions at the time and location of the mishap (dim lights, rain, etc.): _____
24. Personnel Causal Factors: (Describe the personnel error(s) that contributed to the injury/illness. Who was responsible? What did the involved fail to do? Why was there a failure? Was the worker qualified to perform the task? Did the worker receive adequate training?): _____
_____

25. Procedure Causal Factors: (Describe the procedure or method that contributed to the injury/illness. What was the procedure? What was wrong with the procedure? Why did the procedure fail? Was there an SOP or JSA associated with the task?): _____
_____

26. Equipment Causal Factors: (Describe the piece of equipment/material that failed, that may have contributed to the injury/illness? Why did the equipment malfunction and how did the equipment cause the injury?): _____
_____

27. Describe other factors that may have contributed to the mishap? _____

_____

_____

_____

_____

_____

LOSS DESCRIPTION_//

28. Loss Potential

- **Estimated # of lost man hours of the injured:**

- **Estimated # of man hours of personnel conducting the mishap investigation:**

- **Describe the jobs or tasks that will either not be accomplished or will have to be delegated to someone else because either the injured individual is not at work or is at work on light duty:**

- **Estimate the cost of the damaged equipment/property/material.**

- **Estimate the cost of replacing the damaged equipment/property/material.**

- **Estimate the man-hours involved with replacing/repairing the damaged equipment/property/ material.**

- **Describe other real or potential losses.**

CORRECTIVE ACTIONS_//

29. List all the possible corrective actions that may prevent the injury/illness from recurring.

30. List recommended corrective actions, due dates, and responsibilities.

MISCELLANEOUS_//

31. Describe the chain of events leading up to, through and subsequent to the mishap.

_____

_____

32. Date of investigation: _____

33. Names, Departments, Phone #'s of Mishap Investigation Team.

NAME **DEPARTMENT** **PHONE NUMBER**

_____

_____

_____

_____

_____

34. Describe areas requiring further investigation or areas of concern where more facts are needed, the individuals responsible for the further investigation and completion dates.

_____

_____

_____

_____

35. Name, signature, date of the individual submitting the investigation report if different from the supervisor.

NAME _____ SIGNATURE/DATE _____

36. Name, signature, date of the supervisor.

NAME _____ SIGNATURE/DATE _____

37. Name, signature, date of the department head.

NAME _____ SIGNATURE/DATE _____

38. Corrective actions approved by DH? YES/NO (Circle One) If NO, provide justification. _____

_____

GENERAL MISHAP INVESTIGATION REPORT
REFERENCE PAGE

BODY PART INJURED

Abdomen
Arm(s) upper
Buttocks
Elbow
Ankle(s)
Back (lumbar region)
Chest
Eye(s)
Arm(s) Lower
Body Systems (specific in region)
Ear(s)
Face
Foot (includes toes)
Heart
Knee
Lungs
Groin
Hip(s)
Leg(s) Lower
Mouth
Hand(s) (includes fingers)
Internal Organs
Leg(s) Upper
Multiple Body Parts
Neck
Ribs
Thorax
Wrist(s)
Nose
Shoulder
Total Body
Other (specify)_____
Pelvis
Skull/Head
Vertebras (unknown)

NATURE OF INJURY OR ILLNESS

Abrasion
Asphyxia/Strangulation
Blister
Burn (chemical)
Burn (thermal)
Concussion
Decapitation
Acoustic Trauma
Bite
Body Reaction to Temp. (cold)
Burn (electrical)
Bursitis
Contusion
Dermatitis
Amputation
Blindness (traumatic)
Body Reaction to Temp.(Hot)
Burn (mechanical)
Carpal Tunnel Syndrome
Crushing
Dislocation
Division of Nerves
Electrical Shock
Fracture
Gunshot (self-inflicted)
Hearing Loss/impairment
Hernia
Injury (compression w/o fracture)
Drowning
Exhaustion
Fracture (simple)
Gunshot (inflicted by others)
Hematoma
Hypothermia
Injury (internal)
Drug use
Foreign Body (N.E.C.)
Fracture with Dislocation
Hav's/White Finger/Raynaud's
Hemorrhage
Inhalation (damaging or noxious material)
Laceration
Radiation burn)
Scratch
Strain
Tear (muscle/ligament/other part)
Upper Extremity

Perforation/Puncture
Radiation poisoning)
Shock (Traumatic)
Stress (emotional)
Tendentious
Wound (open)

Poisoning (systemic)
Rupture
Sprain
Stress (physical)
Unconsciousness
Other (specify)_____

PHYSICAL ACTIVITY AT TIME OF MISHAP

Bending
Driving
Lifting
Pushing
Running
Stretching
Walking
Carrying
Jumping
Lying Down
Reaching
Sitting
Using Stairs
Other (specify)_____
Climbing
Kneeling
Pulling
Riding
Standing
Using Tool/Equipment

GENERAL MISHAP INVESTIGATION REPORT
REFERENCE PAGE

MISHAP TYPE

Absorption
Bite/Sting/Scratch
Contact Electrical Current

Airplane Crash (etc…)
Bodily Reaction
Contact Extreme Temperature

Asphyxia
Caught in (under or between)
Contact with Caustic/Toxic or

Contac t with Radiation
Drowning
Impact with Water or Submerged Object or Bottom
Cut/Laceration
Exposure to Blast
Ingestion
Over-Exertion
Noxious Substance
Exposure to Noise/Sound
Inhalation
Repeated Motion/pressure

Rubbed/Abraded
Struck Against
Struck By

Slip/Trip/Fall/Jump (from elevation)
Other (specify')_____

Slip/Trip/Fall/Jump (from same elevation)

ENVIRONMENTAL CAUSE FACTORS

Air Quality
Humidity
Lightning
Radiation
Temperature
Vibration
Other (specify)

Contaminated Atmosphere
Hurricane
Noise Level
Seas
Tides
Visibility

Current
Lighting
Precipitation
Swell
Ventilation
Wind

PERSONNEL CAUSE FACTORS

(Note any person may have more than one failure and more than one reason.)

PERSONNEL ERROR (WHO WAS RESPONSIBLE?)

Independently Assigned
Operator
Quality Assurance/Control
Watch stander

Maintenance Worker
Other Non-DOD Person
Inspector
Other (specify) _____

Off-Duty Military'
Public Visitor
Supervisor/Foreman

PERSONNEL ERROR (WHAT DID INVOLVED FAIL TO DO?)

Coordinates Tasks
Follow Other Standard Operating Procedure

Correctly Operate Controls/Monitor Displays/Equipment Interfered With

Be Present When Should Have Been
Inspect Completed Work

Match Task to Person's Ability
Properly Lockout/Tagout During PMS
ACTMTY Perform PMS/Maintenance Properly/Completed
Provide Work/ Rest Cycle
Lockout/Tagout System During PMS
Plan Adequately
Provide Training

Supervise Progress of Work
Use/properly Use Tool/Equipment for Job

Take Corrective Action
Use Protective Equipment
Other (specify)_____

Recognize Hazardous Situation
Use Proper Caution for Known Risk (time available)

GENERAL MISHAP INVESTIGATION REPORT
REFERENCE PAGE

PERSONNEL ERROR
(WHY WAS THERE A FAILURE?)

Alcohol Use/Abuse/Hangover
Drug Abuse
Excessive Motivation
Habit

Disrupted Communications
Drug Use
Failure 10 Detect Waning
Haste

Distracted
Emotionally Aroused (Angry/Worried)
Fatigue

Inadequate Communication Standards
Inadequate Work Space
Lack of Ability Apart from Training/Experience
Inadequate Knowledge of Method/Equipment
Inattentive
Lack of Concern/interest
Not Convenient/Comfortable
Illness
Inadequate/Unavailable Tools/ Equipment
Insufficient Experience/Skill/Training

Personnel/Equipment Interference
Poor Design/Location of Controls/Displays

Physical Condition
Restricted Vision
Other (specify)_____

Misunderstanding
Overconfidence
Physical Handicap/Impairment
Task Fixation

PROCEDURE CAUSE FACTORS

PROCEDURE FACTOR
(FAULTY PROCEDURE/METHOD)

Installation Procedure
Safety Precaution
Maintenance Procedure
Operating Procedure
Test Procedure
Other (specify) _____

PROCEDURE FACTOR
(WHAT WAS WRONG WITH PROCEDURE/METHOD?)

Inadequate
Non-Existent
Incomplete
Not Posted
Incorrect
Other (specify)

PROCEDURE FACTOR
(WHY DID PROCEDURE/METHOD FAIL?)

Caused Confusion
Follow-up Procedures Missing
Not In Proper Sequence
Required Material/Safety Equipment Not Available
Critical Steps Omitted
Impracticable
Not Logical
Safety Precaution Not Listed
Too Generalized
Details Missing
Not Applicable
Procedures Wrong
Too Detailed
Other (specify)

GENERAL MISHAP INVESTIGATION REPORT
REFERENCE PAGE

EQUIPMENT CAUSE FACTORS

EQUIPMENT FACTOR
(WHY DID EQUIPMENT MALFUNCTION?)

Adjustment Improper	Age	Cannibalized
Clearance Improper	Contaminated	Corrosion
Design Problem	Deteriorated	Excessive Vibration
Foreign Object	Fuse Too Large	Fuse Too Small
Humidity	Improper Fit	Improper Use
Inaccessible	Inadequate Maintenance	Inadequate Mnfact of Equip.
Insufficient PMS	Insulation Inadequate	Installation Faulty
Interference	Jury-rigged	Limits Exceeded
Location Faulty	Lubrication Lost	Manufacturer 5 Defect
Missing Part	Normal Wear	Not Balanced
Not Connected	Not Current	Not Grounded
Not IAW MIILSPEC	Not IAW SYSCOM Directives	Not Marked
Not Shielded	Not Tested	Oil Saturated
Packing Faulty	Part Defective	Pressure Too High
Pressure Too Low	Size Too Large	Size Too Small
Stowage Inadequate	Water (Saturated)	Other (specify)_____

EQUIPMENT FACTOR
(HOW DID EQUIPMENT MALFUCTION TO CAUSE INJURY OR DAMAGE?)

Arced	Bent	Binding
Buckled	Burned	Chafed
Charred	Clogged	Closed
Contacts - Improperly	Corroded	Cracked
Open/Close/Reverse	Disconnected	Dropped
Elongated	Encrusted	Eroded
Exploded	Failed to Operate	Flattened
Flooded	Frayed	Frozen
Fused	Glazed	Grounded
Hydraulic Leak	Intermittent Operation	Jammed
Kinked	Leaking	Loose
Melted	Misaligned	Oil Saturated
Other Not Elsewhere Coded	Overheated	Overload
Oversped	Overstressed	Parted/Separated
Pierced	Pitted	Radiated
Released	Requires Rewinding	Ruptured
Rusted	Scaled	Scored
Siezed	Sheared	Shorted
Slipped	Split	Sprung
Stopped	Stressed	Stripped
Struck	Stuck	Torn
Tripped	Warped	Worn
Opened		

SAFETYGRAM

(Mark X in appropriate box to indicate type of Command)

☐ Surface Ship ☐ Submarine ☐ Diving/Salvage ☐ Aviation ☐ Shore

Command, Ship or Ship Class

References: (Plan No/Tech Manual/etc.)

STATE: What, where, why; how it can be prevented or corrected.

SIGNATURE (NOT REQUIRED)

SAFETY INVESTIGATION REPORT (SIR) ENCLOSURE
ADVICE TO WITNESS
(PROMISE OF CONFIDENTIALITY)

THIS IS PART OF A LIMITED USE NAVY SHORE MISHAP INVESTIGATION REPORT
LIMITED DISTRIBUTION AND SPECIAL HANDLING REQUIRED BY OPNAVINST 5100.23E
THIS STATEMENT IS PRIVILEGED AND IS EXEMPT FROM DISCLOSURE

PLEASE READ THIS STATEMENT CAREFULLY
CERTIFY THAT YOU UNDERSTAND IT BY YOUR SIGNATURE AT THE BOTTOM

I understand that:

a. I have been requested to voluntarily provide information to a SIR Board conducting an investigation of a defined Navy shore mishap.

b. I AM NOT being requested to provide statement under oath or affirmation.

c. Disclosure of personal information by me is voluntary, and that failure to provide such information will have no direct effect on me.

d. The purpose of the information provided by me is to determine the cause of a mishap and/or the damage and/or injury occurring in connection with that mishap.

e. All information provided by me to the Mishap Board will be used ONLY for safety purposes.

f. The information provided by me shall NOT be used:
   (1) In any determination affecting my interests.
   (2) As evidence to obtain evidence in determining misconduct or line of duty status of killed or injured personnel.
   (3) As evidence to determine my responsibility or that of other personnel from the standpoint of discipline.
   (4) As evidence to assert affirmative claims on behalf of the government.
   (5) As evidence to determine the liability of the government for property damage caused by the mishap.
   (6) As evidence before administrative bodies, such as Officer/Enlisted Separation Boards, Judge Advocate General Manual investigations/inquiries, Naval Aviator/Naval Flight Officer Evaluation Boards (FNAEB) or Marine Corps Field Flight Performance Boards (FFPB).
   (7) In any other punitive or administrative action taken by the Department of the Navy.
   (8) In any other investigation or report of the mishap about which I have been asked to provide information.

g My signature acknowledges that I do not need a full Promise of Confidentiality as a condition on my willingness to provide testimony to the Board and I understand that statements given without a Promise of Confidentiality may be released. **(If the witness has any reservations about their statement being released to anyone outside the board itself, entitled persons in the safety endorsement process, or the public under FOIA, a Promise of Confidentiality should be offered to ensure forthright, candid testimony).**

1. STATEMENT (Continue on reverse and/or attach separate sheet(s) as necessary)			
2. PRINTED NAME (First, Middle, Last)	3. SIGNATURE		
4. DATE	5. RANK/RATE	6. SERVICE	7. TELEPHONE NUMBER
8. ADDRESS WHERE YOU MAY BE LOCATED			

DEPARTMENT OF DEFENSE SAFETY AND OCCUPATIONAL HEALTH PROTECTION PROGRAM

THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, EXECUTIVE ORDER 12196 AND 29 CFR 1960 REQUIRE THE HEADS OF FEDERAL AGENCIES TO ESTABLISH PROGRAMS TO PROTECT THEIR PERSONNEL FROM JOB SAFETY AND OCCUPATIONAL HEALTH HAZARDS.

1. THE DEPARTMENT OF DEFENSE (DOD) DESIGNATED AGENCY SAFETY AND OCCUPATIONAL HEALTH OFFICIAL IS THE ASSISTANT SECRETARY OF DEFENSE (FORCE MANAGEMENT AND PERSONNEL).

2. THE_____
DOD COMPONENT

DESIGNATED SAFETY AND OCCUPATIONAL HEALTH OFFICIAL IS

_____
TITLE ADDRESS

3. THE_____
NAME OF INSTALLATION/FACILITY

SAFETY AND OCCUPATIONAL HEALTH DESIGNEE IS

_____
NAME/TITLE

4. THE_____
NAME OF INSTALLATION/FACILITY

SAFETY POINT OF CONTACT IS

_____
NAME TELEPHONE NUMBER

5. THE_____
NAME OF INSTALLATION/FACILITY

OCCUPATIONAL HEALTH POINT OF CONTACT IS

_____
NAME TELEPHONE NUMBER

_____
NAME OF INSTALLATION/FACILITY

HAS THE RESPONSIBILITY TO:

1. COMPLY WITH THE APPLICABLE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)/DOD/DOD COMPONENT SAFETY AND OCCUPATIONAL HEALTH STANDARDS.
2. SET UP PROCEDURES FOR SUBMITTING AND RESPONDING TO EMPLOYEE REPORTS of unsafe and unhealthful working conditions.
3. ACQUIRE, MAINTAIN, AND REQUIRE the use of approved personal protective equipment and safety equipment.
4. INSPECT ALL WORKPLACES with participation by civilian employee representatives to identify potential hazards.
5. ESTABLISH PROCEDURES TO ASSURE that no worker is subject to restraint, interference, coercion, discrimination, or reprisal for exercising his/her rights under the DOD safety and occupational health program.
6. POST NOTICES of unsafe or unhealthful working conditions found during inspections.
7. ASSURE PROMPT ABATEMENT of hazardous conditions. Workers exposed to the conditions shall be informed of the abatement plan. Imminent danger corrections must be made immediately.
8. SET UP A MANAGEMENT INFORMATION SYSTEM to keep records of occupational accidents, injuries, illnesses and their causes; and to post annual summaries of injuries and illnesses for a minimum of 30 days at each installation/facility.
9. CONDUCT SAFETY AND OCCUPATIONAL HEALTH TRAINING for management, supervisors, workers and worker representatives.

DOD PERSONNEL HAVE THE RESPONSIBILITY TO:

1. COMPLY with all applicable OSHA/DOD/DOD component safety and occupational health standards.
2. COMPLY with_____
NAME OF INSTALLATION/FACILITY
policies and directives relative to the safety and occupational health program.
3. USE personal protective equipment and safety equipment provided by your installation/ facility.
4. REPORT hazardous conditions, injuries, illnesses, or other mishaps promptly to your supervisor or to the safety or occupational health point of contact for your installation/ facility.

DOD PERSONNEL AND CIVILIAN EMPLOYEE REPRESENTATIVES HAVE THE RIGHT TO:

1. HAVE ACCESS to applicable OSHA/DOD/DOD component standards, installation/facility injury and illness statistics, and safety and occupational health program procedures.
2. COMMENT on alternate standards proposed by DOD/DOD component.
3. REPORT AND REQUEST INSPECTIONS OF UNSAFE AND UNHEALTHFUL WORKING CONDITIONS to appropriate officials who include, in order of preference: the immediate supervisor, the safety or occupational health point of contact, the safety and occupational designee for your installation/facility, the installation/facility commander, the safety and occupational health designee for your DOD component, the safety and occupational designee for DOD, and the Secretary of Labor. However, the Secretary of Labor encourages personnel to use DOD procedures for reporting hazardous conditions as the most expeditious means to achieve abatement. The hazard report form provided by your installation/facility should be used for this purpose. Anonymity, when requested, is assured.
4. PARTICIPATE in the installation/facility safety and occupational health program. Civilian workers shall be authorized official time to participate in the activities provided by the DOD safety and occupational health program.

OTHER INFORMATION:

1. When the safety or occupational health point of contact for your installation/facility is notified by a worker of a hazardous worksite condition, he/she will insure an inspection of the worksite and he/she will report the results of the inspection in writing to the worker making the report.
2. Inspector General channels may be used to investigate complaints from either DOD civilian or military personnel concerning alleged acts of discrimination or reprisal due to participation in safety and occupational health activities. For DOD civilian personnel, allegations of reprisal may also be initiated by them in accordance with applicable appeal procedures, or administrative or negotiated grievance procedures.
3. For further information about the installation/facility safety and occupational health program, procedures, standards, committees, Federal laws, or other related matters, contact the safety or occupational health point of contact for your installation/facility as noted on this poster.
4. How well you carry out your safety and occupational health responsibilities will be an important factor in the success of the program.

NAVY EMPLOYEE REPORT
OF UNSAFE OR UNHEALTHFUL WORKING CONDITION

THIS FORM IS PROVIDED FOR THE ASSISTANCE OF AN EMPLOYEE
AND IS NOT INTENDED TO CONSTITUTE THE ONLY METHOD BY WHICH A REPORT MAY BE SUBMITTED

1. THE UNDERSIGNED (check one) ☐EMPLOYEE ☐REPRESENTATIVE OF EMPLOYEES

BELIEVES THAT A VIOLATION OF AN OCCUPATIONAL SAFETY OR HEALTH STANDARD WHICH IS A JOB SAFETY OR HEALTH HAZARD HAS OCCURRED AT

a. Navy installation/activity and mailing address

b. Building or worksite where alleged violation is located, including address

2. NAME AND PHONE NUMBER OF GOVERNMENT SUPERVISOR AT SITE OF VIOLATION

3. DOES THIS HAZARD IMMEDIATELY THREATEN DEATH OR SERIOUS PHYSICAL HARM? ☐NO ☐YES

4. BRIEFLY DESCRIBE THE HAZARD WHICH EXISTS INCLUDING THE APPROXIMATE NUMBER OF EMPLOYEES EXPOSED TO OR THREATENED BY SUCH HAZARD

5. IF KNOWN, LIST BY NUMBER AND/OR NAME, THE PARTICULAR STANDARD (OR STANDARDS) ISSUED BY THE AGENCY WHICH OU CLAIM HAS BEEN VIOLATED

6. TO YOUR KNOWLEDGE, HAS THIS VIOLATION BEEN THE SUBJECT OF ANY UNION/MANAGEMENT GRIEVANCE OR HAVE YOU(OR ANYONE YOU KNOW) OTHERWISE CALLED IT TO THE ATTENTION OF, OR DISCUSSED IT WITH, THE GOVERNMENT SUPERVISOR

☐NO ☐YES (List results, including any efforts by management to correct violation)

7. EMPLOYEE NAME (PLEASE PRINT OR TYPE CLEARLY)	8. EMPLOYEE SIGNATURE
9. EMPLOYEE ADDRESS	10. EMPLOYEE PHONE NUMBER
11. MAY YOUR NAME BE REVEALED? ☐NO ☐YES	12. ARE YOU A REPRESENTATIVE OF EMPLOYEES? ☐NO ☐YES (List organization name)
13. DATE FILED:	

APPEAL PROCEDURES

1. If the originator of a report is dissatisfied with the assessment of the alleged hazard made by the activity Safety Office or with the actions taken to abate a confirmed hazard, he/she shall be encouraged to confer with the activity Safety Office to discuss the matter further. If after this discussion the originator remains dissatisfied, an appeal to the activity Commanding Officer may be made. The appeal (or report) shall be in writing and contain at least, the following information:

   - A description of the alleged hazard including its location and standards violated, if known (a copy of the original hazard report shall suffice)

   - How, when, and to whom the original report of the alleged hazard was submitted

   - What actions were taken as a result of the original report.

2. The activity Commander or his representative, shall respond to the originator of the appeal within 10 working days. An interim response will suffice if the Commander's investigation is incomplete at that time. The final response shall contain the office and address of the next higher level of appeal.

3. If the employee is still dissatisfied or has not received a response within 20 working days, he/she may appeal to the next higher level of command. Subsequent appeals may be submitted if the originator is still not satisfied with the action taken as a result of the previous appeal.. The sequence of appeals shall be through Field Support Activity, the Chief of Naval Operations, the Assistant Secretary of the Navy, and the Assistant Secretary of Defense. Each appeal shall include the information prescribed above with emphasis on the actions taken by the reviewing authority on the previous appeal and reasons why the originator is still not satisfied. Each response by the reviewing authority shall be as prescribed above.

4. The final appeal authority for military personnel is the Assistant Secretary of Defense. In the event that a civilian employee is not satisfied with the response from the ASD, he/she may contact, in writing the Office of Federal Agency Safety Programs, U.S. Department of Labor, Washington, D.C. 20210. This final appeal must describe in detail the entire previous processing of the appeal and objections thereto.

5. Appeal Chain of Command. The following list is the Chain of Command for the Naval Postgraduate School and Naval Support Activity Monterey Bay:

1) Superintendent
Naval Postgraduate School
Monterey, CA 93943

2) Director, Field Support Activity
Field Support (Code OIP)
Washington, D.C. 20314

3) Chief of Naval Operations
Navy Department
Washington, D.C. 20350

4) Secretary of the Navy
Navy Department
Washington, D.C. 20350

5) Assistant Secretary of Defense
(Manpower, Reserve Affairs and Logistics)
Navy Department
Washington D.C. 20350

NAVOSH DEFICIENCY NOTICE

SECTION A - DEFICIENCY INFORMATION	I.D. NO.:
Organization:	Location:
Description of Hazard:	
Standard Violated:	RAC:
OSH Official:	Date:

SECTION B - ABATEMENT STATUS (COMPLETE ALL APPLICABLE PARTS)

- INTERIM CONTROLS

- ABATEMENT PROJECT INITIATED

Project Description:	Action Taken (Included Work Orders/Purchase Request numbers and date as appropriate):	
	Cost Estimate:	Completion Date (Est):

- DEFICIENCY CORRECTED

Corrections Made:	Date:	
	Cost	
	Labor:	Material:

Signature:

SECTION C - COMMENTS

Risk Assessment Code Matrix

Hazard Severity	Mishap Probability			
	A	B	C	D
I	1	1	2	4
II	1	2	3	4
III	2	3	4	5
IV	4	4	5	5

a. Risk Assessment. The activity OSH office shall assign each identified/validated hazard, that cannot be corrected immediately, a Risk Assessment Code (RAC). The RAC represents the degree of risk associated with the hazard and combines the elements of hazard severity and mishap probability, taking into account potential health effects from the hazard.

(1) Hazard Severity. The hazard severity is an assessment of the worst reasonably expected consequence, defined by degree of injury or occupational illness which is likely to occur as a result of a hazard. Activities shall assign hazard severity categories by Roman numeral according to the following criteria:

(a) Category I - Catastrophic The hazard may cause death.

(b) Category II - Critical: May cause severe injury or severe occupational illness.

(c) Category III - Marginal: May cause minor injury or minor occupational illness.

(d) Category IV - Negligible: Probably would not affect personnel safety or health, but is, nevertheless, in violation of a Navy Occupational Safety and Health (NAVOSH) standard.

(2) Mishap Probability. The mishap probability is the probability that a hazard will result in a mishap, based on an assessment of such factors as location, exposure in terms of cycles or hours of operation and affected population Activities shall assign a letter to mishap probability according to the following criteria:

(a) Subcategory A - Likely to occur immediately

(b) Subcategory B - Probably will occur in time

(c) Subcategory C - Possible to occur in time

(d) Subcategory D - Unlikely to occur.

ASBESTOS TRAINING AND CERTIFICATION REQUIREMENTS
LISTED BY TYPE OF OPERATION

TYPE OPERATION	TYPE PERSONNEL	TYPE ACCREDITATION REQUIRED *	IINITIAL TRAINING REQUIREMENT	ANNUAL RECERT OR REFRESHER & LENGTH	REGULATORY CITATION
DESIGN OF PROJECTS WHICH INVOLVE REMOVAL OF ACM OR WORK IN PROXIMITY OF ACM/PACM	ARCHITECTS, ENGINEERS, PLANNERS, ESTIMATORS (P&Es) & APMs	ABATEMENT PROJECT DESIGNER	3-DAY ABATEMENT PROJECT DESIGNER COURSE	YES 1 DAY	** 40 CFR 763.92
REVIEW OF PROJECTS TO DETERMINE ADEQUACY OF CONTROL	ENGINEERS, INDUSTRIAL HYGIENISTS, SAFETY PERSONNEL & APMs	ABATEMENT PROJECT DESIGNER	3-DAY ABATEMENT PROJECT DESIGNER COURSE	YES 1 DAY	** 40 CFR 763.92
PERSON RESPONSIBLE FOR ASBESTOS REMOVAL, ENCAPSULATION, ENCLOSURE AND/OR REPAIR (CLASS I AND II ASBESTOS WORK)	ASBESTOS ABATEMENT SUPERVISOR OR COMPETENT PERSON, QUALIFIED PERSON, ROICC PERSONNEL	ASBESTOS ABATEMENT CONTRACTOR/ SUPERVISOR	5-DAY ASBESTOS ABATEMENT CONTRACTOR/ SUPERVISOR TRAINING COURSE	YES 1 DAY	29 CFR 1915.1001(o)(4)(i) 29 CFR 1926.1101(o)(4)(i) ** 40 CFR 763.92 40 CFR 61 Subpart M
PERSON RESPONSIBLE FOR MAINTENANCE AND HOUSEKEEPING (CLASS III AND IV ASBESTOS WORK)	MAINTENANCE AND HOUSEKEEPING SUPERVISORS, COMPETENT, QUALIFIED PERSON	NONE	2-DAY OPERATIONS AND MAINTENANCE TRAINING	YES NOT SPECIFIED	29 CFR 1915.1001(o)(4)(ii) 29 CFR 1926.1101(o)(4)(ii)
PHYSICAL GATHERING OF SUSPECTED ACM/PACM SAMPLES FOR LAB I.D.	SAFETY PERSONNEL INDUSTRIAL HYGIENIST, P&Es, & FACILITY INSPECTORS	ASBESTOS INSPECTOR	3-DAY ASBESTOS INSPECTOR COURSE	YES 1 DAY	29 CFR 1915.1001(k)(5) 29 CFR 1926.1101(k)(5) ** 40 CFR 763.92
DEVELOPMENT OF ASBESTOS MANAGEMENT PLANS & ASBESTOS O&M PLANS	FACILITY INSPECTORS, SAFETY PERSONNEL & IHs	ASBESTOS MANAGEMENT PLANNER	2-DAY ASBESTOS MANAGEMENT PLANNER COURSE (INSPECTOR ACCREDITATION REQUIRED AS PREREQUISITE)	YES 1 DAY	** 40 CFR 763.92
LABORATORY ANALYSIS OF	INDUSTRIAL HYGIENE,	PROFICIENCY ANALYTICAL	5-DAY NIOSH 582 COURSE OR	ES	29 CFR 1910.1001 APP. A 29 CFR 1915.1001 APP. A

* A LIST OF ACCREDITED TRAINING SOURCES MAY BE OBTAINED FROM EPA-AHERA-NDAAC, C/O VISTA COMPUTER SERVICES SUITE 304, 6430 ROCKLEDGE DRIVE, BETHESDA, MD 20817. **1-800-462-6706**

** APPLIES TO PUBLIC AND COMMERCIAL BUILDINGS

TYPE OPERATION	TYPE PERSONNEL	TYPE ACCREDITATION REQUIRED *	IINITIAL TRAINING REQUIREMENT	ANNUAL RECERT OR REFRESHER & LENGTH	REGULATORY CITATION
AIRBORNE SAMPLE	SAFETY PERSONNEL	TESTING (PAT) ROUNDS	EQUIVALENT	(PAT)	29 CFR 1926.1101 APP. A
PERSONNEL WHO ENGAGE IN CLASS I WORK	ABATEMENT WORKERS	ASBESTOS ABATEMENT WORKERS	4-DAY ASBESTOS ABATEMENT WORKER COURSE; OR 5 DAY ASBESTOS ABATEMENT CONTRACTOR/ SUPERVISOR TRAINING COURSE.	YES 1 DAY	29 CFR 1915.1001(k)(9) 29 CFR 1926.1101(k)(9) ** 40 CFR 763.92
PERSONNEL WHO ENGAGE IN CLASS II WORK ONLY	ABATEMENT WORKERS	NONE	8-HOUR ASBESTOS TRAINING. REQUIREMENTS ARE RELAXED WHEN ONLY ONE GENERIC CATEGORY OF BUILDING MATERIAL IN CLASS II WORK IS DONE.	YES NOT SPECIFIED	29 CFR 1915.1001(k)(9) 29 CFR 1926.1101(k)(9)
PERSONNEL WHO ENGAGE IN CLASS III OPERATIONS ONLY	MAINTENANCE WORKERS	NONE	16-HOUR OPERATIONS & MAINTENANCE. REQUIREMENTS ARE RELAXED WHEN ONLY ONE GENERIC CATEGORY OF BUILDING MATERIAL IN CLASS III WORK IS DONE.	YES NOT SPECIFIED	29 CFR 1915.1001(k)(9) 29 CFR 1926.1101(k)(9)
PERSONNEL WHO ENGAGE IN CLASS IV OPERATIONS ONLY AND HOUSEKEEPING WHERE ACM OR PACM IS PRESENT	MAINTENANCE & CUSTODIAL WORKERS	NONE	2-HOUR ASBESTOS AWARENESS TRAINING	YES 2 HOURS	29 CFR 1910.1001 (j)(7) 29 CFR 1915.1001(k)(9) 29 CFR 1926.1101(k)(9)
RESPONSIBLE FOR OVERALL ASBESTOS PROGRAM	ACTIVITY ASBESTOS PROGRAM MANAGERS	LETTER OF APPOINTMENT FROM COMMANDING OFFICER	3-DAY ABATEMENT PROJECT DESIGNER COURSE AND 2 DAY ASBESTOS INSPECTOR/ MANAGEMENT PLANNER COURSE, NFESC ASBESTOS PROGRAM MANAGER COURSE (INSPECTOR ACCREDITATION REQUIRED AS PREREQUISITE)	YES 1 DAY	RECOMMENDED TRAINING
AIR SAMPLING	ASBESTOS	NONE	2 DAYS AND ON THE	NONE	RECOMMENDED TRAINING

* A LIST OF ACCREDITED TRAINING SOURCES MAY BE OBTAINED FROM EPA-AHERA-NDAAC, C/O VISTA COMPUTER SERVICES SUITE 304, 6430 ROCKLEDGE DRIVE, BETHESDA, MD 20817. **1-800-462-6706**

** APPLIES TO PUBLIC AND COMMERCIAL BUILDINGS

TYPE OPERATION	TYPE PERSONNEL	TYPE ACCREDITATION REQUIRED *	IINITIAL TRAINING REQUIREMENT	ANNUAL RECERT OR REFRESHER & LENGTH	REGULATORY CITATION
	WORKPLACE MONITORS AND CLEARANCE SAMPLERS		JOB TRAINING		
AUTOMOTIVE BRAKE AND CLUTCH	AUTO MECHANICS	NONE	2-HOUR AWARENESS PLUS HANDS-ON TRAINING	NONE	29 CFR 1910.1001(j)(7) 29 CFR 1915.1001 APP. L
GENERAL INDUSTRIES OPERATIONS ABOVE PEL (NOT OTHERWISE CLASSIFIED)	VARIOUS	NONE	2-HOUR AWARENESS AND OPERATION SPECIFIC	YES NOT SPECIFIED	29 CFR 1910.1001(j)(7)

* A LIST OF ACCREDITED TRAINING SOURCES MAY BE OBTAINED FROM EPA-AHERA-NDAAC, C/O VISTA COMPUTER SERVICES SUITE 304, 6430 ROCKLEDGE DRIVE, BETHESDA, MD 20817. **1-800-462-6706**

** APPLIES TO PUBLIC AND COMMERCIAL BUILDINGS

Hearing Protective Devices

Manufacturer's Nomenclature/NSN	Type of Protector	Federal Nomenclature
Ear Defender V-51R	Insert Earplug	Plug, Ear, Noise Protection
6515-00-442-4765	(sized) 24's	(X-Small) (White)
6515-00467-0085	(sized) 24's	(Small) (Green)
6515-00-467-0089	(sized) 24's	(Medium) (Int'l Orange)
6515-00-442-4807	(sized) 24's	(Large) (Blue)
6515-00-442-4813	(sized) 24's	(X-Large) (Red)
Comfit, Triple Flange	Insert Earplug	Plug, Ear, Noise Protection
6515-00-467-0092	(sized) 24's	(Large) (Blue)
6515-00-442-481 8	(sized) 24's	(Regular) (Orange)
6515-00-442-4821	(sized) 24's	(Small) (Green)
Silaflex (Blister Pack)	Non-Hardening	Plug, Ear, Noise Protection
6515-00-1 33-5416	Silicone	Cylindrical, Disposable 200's
EAR or Deci-Damp	Foam Plastic	Plug, Ear, Noise Protection
6515-00-1 37-6345	Insert	Universal Size, Yellow 200 pr
Straightaway Muffs	High Performance	Aural Protector
4240-00-759-3290	Circumaural Muffs	Sound 372-9 AN/w
4240-00-674-5379	For 9 AN/2	Replacement Filter, Dome
4240-00-979-4040	For 9 ANI2	Replacement Seal, Dome
Ear Plug Cases		
6515-01-212-9452		Case, Earplug 12's
6515-01-100-1674	Non-reflective	Case, Earplug 20's
Sound-Ban	Headband, Earcaps	Plug, Ear, Hearing
6515-00-392-0726		Protection, Universal Size
Circumaural Muff	Type I Overhead	Aural Protector, Sound
4240-99-691-5617	Headband	
Circumaural Muff	Type II	Aural Protector, Sound
4240-00-022-2946	Napeband (for use with hard hat)	

POSITIVE AND NEGATIVE FEATURES OF HEARING PROTECTION DEVICES

Type	Positive	Negative	Duration
Insert V-1R Triple Flange	After adaptation can be used for long periods. Relatively inexpensive.	Individual fittings by medical personnel required. Frequent fitting causes irritation.	Long-term (3 - 4 hours)
Disposable Silafiex, EAR or Deci Damp	Comfortable. Individual fitting not required. Relatively inexpensive	Molded by hand. Easily Soiled. Difficult to clean.	Infrequent use. Transitory noise exposure.
Circumaural Muffs Type I and II 372-9 and ANI2	May be worn over plugs. Most efficient universal device.	Expensive. Heavy. Difficult to carry. Hair or eyeglasses may reduce effective ness.	Long or short term

One single type of hearing protective device will not meet the needs of all personnel in a hearing conservation program. Activities shall select the appropriate type of hearing protection device based upon a consideration of the factors listed above in addition to the degree of attenuation required in a particular situation. The most convenient method of making this determination is the Noise Reduction Rating (NRR) developed by the Environmental Protection Agency (EPA). The NRR is usually shown on the hearing protector package. The NRR is then related to an individual workers noise environment in order to assess the adequacy of the attenuation of a given hearing protector.

Since there are a wide variety of noise measuring instruments in use, personnel conducting sound level measurements shall use one of the following methods. In each case, they should take a sufficient number of measurements to achieve a representative noise sample.

a. When using a dosimeter that is capable of C-weighted measurements:

(1) Obtain the C-weighted dose for the entire workshift, and convert to TWA sound level (see dosimeter instruction manual for conversion table).
(2) Subtract the NRR from the C-weighted TWA to obtain the estimated A-weighted TWA under the ear protector.

b. When using a dosimeter that is not capable of C-weighted measurements, the following method may be used:

(1) Convert the A-weighted dose to TWA (see dosimeter instruction manual)
(2) Subtract 7 dB from the NRR value.
(3) Subtract the remainder from the A-weighted TWA to obtain the estimated A-weighted ~'A under the ear protector.

c When using a sound level meter set to the A-weighting network:

(1) Obtain the A-weighted TWA.
(2) Subtract 7 dB from the NRR and subtract the remainder from the A-weighted TWA to obtain the estimated A-weighted TWA under the ear protector.

d. When using a sound level meter set on the C-weighting network:

(1) Obtain a representative sample of the C-weighted sound levels in the environment.
(2) Subtract the NRR from the C-weighted average sound level to obtain the estimated A-weighted TWA under the ear protector.

This manual considers the effectiveness of any combination of insert plugs with Circumaural muffs (double protection) to be at least 30 dB. If an activity determines the result of subtracting the estimated reduction value of a particular device or combination of devices from the measured workplace sound level is at or below 84 dB(A), the protection is adequate. However, should the value exceed 84 dB(A) or 140 dB peak, activities shall institute administrative controls to reduce personnel exposure to acceptable levels.

RF Permissible Exposure Limits For Uncontrolled Environments

A. Radio Frequency Fields

Frequency Range (f) (MHz)	Electric Field (E) (V/m)	Magnetic Field (H) (A/m)	Power Density (S) (mW/cm^2) (E, H Fields)	Averaging Time(T_{avg}) (minutes) E^2, S or H^2	
.003 - 0.1	614	163	$(10^2, 10^6)$	6	6
.1 - 1.34	614	$16.3/f$	$(10^2, 10^4/f^2)$	6	6
1.34 - 3.0	$823.8/f$	$16.3/f$	$(180/f^2, 10^4/f^2)$	$f^2/0.3$	6
3 - 30	$823.8/f$	$16.3/f$	$(180/f^2, 10^4/f^2)$	30	6
30 - 100	27.5	$158.3/f^{1.668}$	$(.2, 9.4x10^5/f^{3.336})$	30	$.0636f^{1.337}$
				$0636f^{1.337}$	
100 - 300	27.5	0.0729	0.2	30	30
300 - 3000			$f/1500$	30	-
3000 - 15000			$f/1500$	$900000/f$	-
15000 - 300000			10	$616000/f^{1.2}$	-

B. Induced and Contact Current Restrictions

Frequency Range (f) (MHz)	Maximum Current Through Both Feet (mA)	Maximum Current Through Each Foot (mA)	Contact Current (mA)
0.003 - 0.1	$900f$	$450f$	$450f$
0.1 - 100	90	45	45

C. Pulsed Radio Frequency Fields

Frequency Range (f) (MHz)	Peak Electric Field (E) (kV/m)	Peak Power Density/Pulse for Pulse Duration < 100 msec (mW/cm^2)
0.1-300000	100	$(PEL)(T_{avg})/(5)$(pulse width)

D. Partial- Body Exposures

Frequency Range (f) (MHz)	Peak Value of Mean Squared Field (V^2/m^2 or A^2/m^2)	Equivalent Power Density (mW/cm^2)
0.1 - 300	<20 E^2 or 20 H^2	
300 - 6000		4
6000-30000		$f/1500$
30000 - 300000		20

RF Permissible Exposure Limits For Controlled Environments

A. Radio Frequency Fields

Frequency Range (*f*) (MHz)	Electric Field (E) (V/m)	Magnetic Field (H) (A/m)	Power Density (S) (mW/cm^2) (E, H Fields)	Averaging Time(T_{avg}) (minutes) E^2, H^2, S
.003 - 0.1	614	163	(10^2, 10^6)	6
.1 - 3.0	614	16.3/*f*	(10^2, $10^4/f^2$)	6
3 - 30	1842/*f*	16.3/*f*	($900/f^2$, $10^4/f^2$)	6
30 - 100	61.4	16.3/*f*	(1.0, $10^4/f^2$)	6
100 - 300	61.4	0.163	1.0	6
300 - 3000			*f*/300	6
3000 - 15000			10	6
15000 - 300000			10	$616000/f^{1.2}$

B. Induced and Contact Current Restrictions

Frequency Range (*f*) (MHz)	Maximum Current Through Both Feet (mA)	Maximum Current Through Each Foot (mA)	Contact Current (mA)
0.003 - 0.1	2000*f*	1000*f*	1000*f*
0.1 - 100	200	100	100

C. Pulsed Radio Frequency Fields

Frequency Range (*f*) (MHz)	Peak Electric Field (E) (kV/m)	Peak Power Density/Pulse for Pulse Duration < 100 msec (mW/cm^2)
0.1-300000	100	(PEL)(T_{avg})/(5)(pulse width)

D. Partial- Body Exposures

Frequency Range (*f*) (MHz)	Peak Value of Mean Squared Field (V^2/m^2 or A^2/m^2)	Equivalent Power Density (mW/cm^2)
0.1 - 300	<20 E^2 or 20 H^2	-
300 - 6000	-	<20
6000-96000	-	$<20(f/6000)^{0.25}$
96000 - 300000	-	40

Laser Classification, Labeling, Warning Signs, Technical Assistance, and Exposure Incidents

CLASS I LASERS

Lasers which by inherent design normally cannot emit radiation levels in excess of the permissible exposure limits. Not hazardous under almost all operational or viewing condition. No controls required.

CLASS II LASERS

Low-powered lasers and laser systems which emit less than 1mW visible continuous wave (CW) radiation. Not considered hazardous for momentary exposure. These lasers carry a CAUTION label.

CLASS III LASERS

Lasers which do not present a diffuse reflection hazard.

Class IIIa

Low-powered laser systems which emit 1 to 5 mW visible CW radiation. Lasers or laser systems of less than 2.5 mW/cm^2 are not considered to be hazardous for momentary (0.25 seconds) unintentional exposures unless the beam is viewed with magnifying optics. These lasers carry a CAUTION label. Lasers which exceed 2.5 mW/cm^2 carry a DANGER label and should not be directly viewed even momentarily.

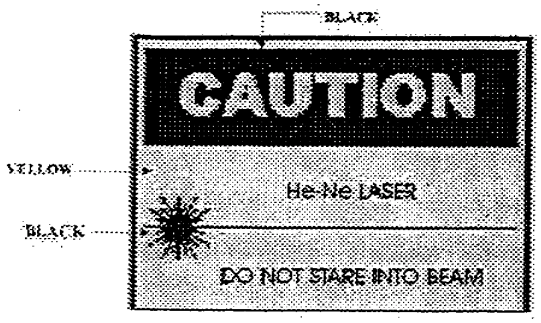
Class IIIb

Medium-powered lasers or laser systems considered to be hazardous when the direct or specularly reflected beam is viewed without protection. Special care is required to prevent intrabeam viewing and to control specular reflections from mirror-like surfaces. These lasers carry a DANGER label and require the use of protective eyewear.

CLASS IV LASERS

High-powered lasers or laser systems which can be hazardous to the eye from intrabeam viewing, specular reflections or diffuse reflections. They may also be hazardous to the skin or ignite flammable materials. These lasers carry a DANGER label. Strict controls are required, including use of protective eyewear and door interlocks.

Example of a Class II Laser Warning Label



Example of a Class IV Laser Warning Label

Laser safety warning signs for posting at laser facilities and at laser ranges are stocked at the Naval Inventory Control Point, Naval Publication and Forms Branch, 700 Robbins Ave., Philadelphia, PA 19111-5098. For Information concerning these forms contact: commercial (215)(697-2626), or DSN (442-2626). Order on MILSTRIP via Defense Automated Addressing Systems. The following signs are available:

Sign Contents:	"DANGER, LASER, KNOCK BEFORE ENTERING"
Type:	Laminated 10 inches high by 14 inches wide
Form No.:	0118-LF-114-8900

Sign Contents:	"DANGER, LASER RANGE IN USE, DO NOT ENTER"
Type:	Laminated 18 inches high by 24 inches wide
Form No.:	0118-LF-020-1100

EMPLOYEE COMFORT SURVEY

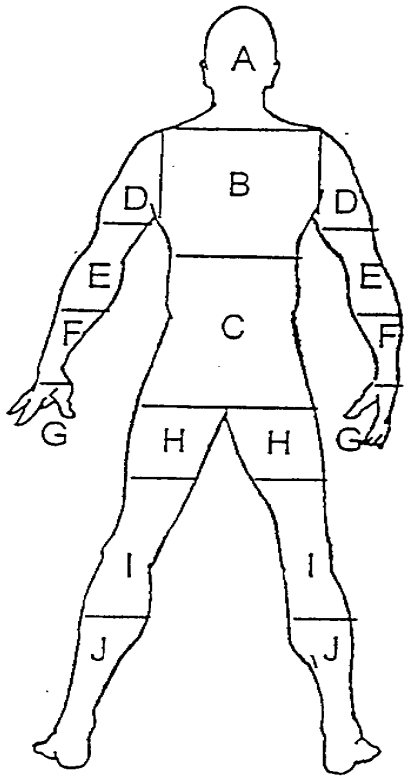
ased on an average day, please inform us about your comfort at work. Fill in all the boxes below. Please respond honestly and thoughtfully.

Name: _____
Date _____
Dept _____

Rate your comfort for each region (A - J) by writing a number (0 to 10) in the box provided.
(Make no distinction right or left)

COMFORT RATING

	Very Comfortable		Very Uncomfortable
A) Head/Neck/Eyes	0...	☐	10
B) Upper/mid Back	0...	☐	10
C) Lower Back/Pelvis	0...	☐	10
D) Shoulder/Upper Arm	0...	☐	10
Elbow/Mid Arm	0...	☐	10
) Forearm/Wrist	0...	☐	10
G) Hand	0...	☐	10
H) Upper Leg/Hip	0...	☐	10
I) Mid Leg/Knee	0...	☐	10
J) Lower Leg/Foot	0...	☐	10



Please respond to each of these questions in the boxes provided.

	Very Little		Very Much
How hard is your work? (physically/mentally)	0...	☐	10
How much energy do you have after work?	0...	☐	10
How would you rate your job satisfaction?	0...	☐	10

Please complete other side

Ergo Questionaire

JOB TITLE: _____

DESCRIBE YOUR JOB:

_____

_____

_____

a. Computer Work (keyboarding _____%, mousing _____%, numerical _____%)
b. Handwriting _____%
c. Lifting (Boxes, Heavy equipment, Binders, Folders, Computer Runoffs) _____%
d. Phone _____% (Phone while on the computer? (Y / N) Do you use a headset? (Y / N))
e. Standing _____%
f. Bending _____%
g. Pushing / Pulling _____%

4. How many hours per day do you normally work? _____ Hrs.

5. How many breaks do you take per day? (count lunch) _____ How long are your breaks? _____

6. How long have you done this type of work? (Here and other places) _____

7. GENDER: Male ☐ Female ☐ Height: _____

AFTER WORK

1. Hobbies (Describe):

_____

_____

_____

2. Another Job (Describe):

_____

_____

_____

a. How long have you had a second job? _____

3. How many times a week do you participate in sports or exercise? _____

Checklist for Evaluation of Stress in Industrial Shops

	Yes	No	N/A
1. Physical Stress:			
1.1 Does the job require contact of fingers or wrist with sharp objects?			
1.2 Do hand tools or process equipment vibrate the worker's hands, arms, or whole body?			
2. Force:			
2.1 Does the job require more than 10 pounds of force?			
2.2 Does the job require using a pinch grip (between the thumb and fingers)?			
2.3 Are gloves used, increasing the force needed for motion of the fingers?			
2.4 Does the job require frequent heavy lifting (>18 kg or 40 lbs., 2 hours per day)?			
2.5 Does the job require occasional very heavy lifting (>23 kg or 50 lbs.)?			
2.6 Does the job require handling items that are difficult to grasp?			
3. Posture:			
3.1 Does the job require flexion or extension (bending up or down) of the wrist?			
3.2 Does the job require deviating the wrist side to side (ulnar or radial deviation)?			
3.3 Is the worker seated while performing the job?			
3.4 Does the job require "clothes wringing" motion?			
3.5 Does the job require extended reaches, beyond normal arm reach?			
3.6 Does the job require awkward lifts or carries that are near the floor, above the shoulders, or far in front of the body?			
3.7 Does the job require exertion of pushing, pulling, lifting, or lowering forces in awkward positions to the side, overhead, or at extended reaches?			
3.8 Do workers sit on the front edge of their chairs?			
3.9 Is the worker required to maintain the same posture, either sitting or standing, all the time?			
4. Workstation hardware:			
4.1 Is the orientation of the work surface non-adjustable?			
4.2 Does the work surface appear to be too high or too low for many operators?			
4.3 Is the location of the tool non- adjustable?			
4.4 Does the job require handling over sized objects that require two person lifting?			
4.5 Is there an absence of material handling aids, such as air hoists and scissors table?			

Checklist for Evaluation of Stress in Industrial Shops

	Yes	No	N/A
4.6 Do workers attempt to modify their chairs or work surfaces by adding cushions or pads?			
5. Repetitiveness:			
5.1 Does the job require that one motion pattern be repeated at a high frequency?			
5.2 Is the cycle time for repetitive operations less than 30 seconds?			
5.3 Is the work pace rapid and not under the operator's control?			
6. Tool design:			
6.1 Is the handle too large for the thumb and finger to slightly overlap around a closed grip?			
6.2 Is the span of the tool's handle less than 5 cm (2 inches)?			
6.3 Is the handle of the tool made of metal?			
6.4 Is the weight of the tool greater than 10 lbs.?			
6.5 Are heavy tools lacking devices to suspend some of their weight?			
6.6 Does use of the tool require flexion or extension of the wrist (bending up or down)?			
6.7 Does the tool require ulnar or radial deviation of the wrist (bending to either side)?			
7. Work environment:			
7.1 Are housekeeping practices poor, e.g., aisles cluttered, waste on the floor?			
7.2 Are floors uneven or slippery?			
7.3 Does the job require frequent (daily) stair or ladder climbing?			
7.4 Do the work tasks contain significant visual components, requiring good lighting?			
7.5 Does the worker's eye have to move periodically from dark to light areas?			
7.6 Is the air temperature uncomfortably hot or cold?			

Score (count all "yes" answers) _____

Comments: _____

_____

_____

_____

Prepared by: _____ Date: _____

Shop/Task Identification: _____

Operator's Name: _____

Evaluation: When a group of workstations are evaluated using this checklist by the same individual, the workstations with the higher scores should be the ones most likely to cause ergonomic stress. It is not necessary for each workstation to achieve a "zero", or perfect score, on this checklist. Common sense should be used to determine where modifications are necessary, reasonable, and feasible.

Checklist for Evaluation of Ergonomic Stress at Workstations Equipped with Video Display Terminals

	Yes	No	N/A
1. VDT stations are arranged so that lighting does not reflect directly off the screen.			
2. The seat and backrest of the chair support comfortable posture permitting occasional variation in the sitting position.			
3. Seat height is adjustable so that the entire sole of the foot rests on the floor or footrest, and the back of the knee is slightly higher than the seat of the chair.			
4. Backrest height is adjustable.			
5. Backrest angle is adjustable.			
6. Footrest provided if desired by individual.			
7. The height of the surface on which the keyboard rests is adjustable, allowing the worker's forearms, with fingers resting on the keyboard, to be nearly horizontal or inclined slightly upward.			
8. The workstation is adjusted so that the wrist is in a straight line, i.e., not bent up or down.			
9. The topmost line of the screen is slightly below eye level.			
10. Screen position can be tilted.			
11. Document holder is positioned at the same height and at the same distance from the viewer as the screen.			
12. Work surface is large enough to hold all needed reference material (at least 35 inches wide).			
13. Paper can be easily and conveniently loaded into printers without the need for lifting heavy boxes in awkward postures.			
14. Screen has color, brightness, and contrast satisfactory with the operator.			
15. The illumination level at the VDT station is between 45 and 70 foot candles (500 and 700 lux).			
16. Characters on the screen are clear and free of flicker or jitter.			
17. There is adequate room under the work table to permit movement of operator's legs and a foot rest where necessary.			
18. Task schedules allow the operator to perform duties not requiring use of the VDT at least 15 minutes during each 2-hour period.			
19. Are all adjustments easy to make with a single lever or are controls known? (Equipment that is difficult to adjust will probably not be adjusted properly.)			

Score (count all "yes" answers) _____

Comments: _____

Prepared by: _____ **Date:** _____

Shop/Task Identification: _____

Operator's Name: _____

Evaluation: When a group of workstations are evaluated by the same evaluator, the higher scores should indicate which workstations are more likely to cause ergonomic stress. It is not necessary for each workstation to achieve a perfect score on this checklist. Common sense should be used to determine where modifications are necessary, reasonable, and feasible.

Pertinent Reference Information On Pregnancy Employment Policies

1. Federal Personnel Manual, subchapter 13, Article 13-5, paragraph a.(2)

Agencies should always be aware of working conditions or strenuous requirements in the workplace that could have an adverse effect on an expectant mother. If, after consulting her doctor, an employee asks for a change in duties or assignment, every reasonable effort should be made to accommodate her. Agencies may request medical certification of the nature of the limitations recommended by the employee's doctor. Sick leave may also be used for physical examinations.

2. 29 CFR 1604 Appendix - Questions and Answers on the Pregnancy Discrimination Act

a. **Question**: If, for pregnancy-related reasons, an employee is unable to perform the functions of her job, does the employer have to provide her an alternative job?

Answer: An employer is required to treat an employee temporarily unable to perform the functions of her job because of her pregnancy-related condition in the same manner as it treats other temporarily disabled employees, whether by providing modified tasks, alternative assignments, disability leaves, leave without pay, etc. For example, a woman's primary job function may be the operation of a machine, and, incidental to that function, she may carry materials to and from the machine. If other employees temporarily unable to lift are relieved of these functions, pregnant employees also unable to lift must be temporarily relieved of the function.

b. **Question**: What procedures may an employer use to determine whether to place on leave a pregnant employee who claims she is able to work or deny leave to a pregnant employee who claims that she is disabled from work?

Answer: An employer may not single out pregnancy-related conditions for special procedures for determining an employee's ability to work. For example, if an employer requires its employees to submit a doctor's statement concerning their inability to work before granting leave or paying sick benefits, the employer may require employees affected by pregnancy-related conditions to submit such statement. Similarly, if an employer allows its employees to obtain doctor's statements from the personal physicians for absences due to other disabilities or return dates from other disabilities, it must accept doctor's statements from personal physicians for absences and return dates connected with pregnancy-related disabilities.

c. **Question**: Can an employer have a rule that prohibits an employee from returning to work for a predetermined length of time after childbirth?

Answer: No.

d. **Question**: If an employee has been absent from work as a result of a pregnancy-related condition and recovers, may her employer require her to be on leave until after her baby is born?

Answer: No. An employee must work at all times during she is able to perform her job.

e. **Question**: Must an employer hold open the job of an employee who is absent on leave because she is temporarily disabled by pregnancy-related conditions?

Answer: Unless the employee on leave has informed the employer that she does not intend to return to work, her job must be held open for her return on the same basis as jobs are held open for employees on sick or disability leave for other reasons.

f. **Question**: Must an employer hire a woman who is medically unable, because of pregnancy-related conditions, to perform a necessary function of a job?

Answer: An employer cannot refuse to hire a woman because of her pregnancy-related condition so long as she is able to perform the major functions necessary to the job. Nor can an employer refuse to hire her because of its preferences against pregnant workers or the preferences of coworkers, clients, or customers.

Occupational Reproductive Chemical Stressors List[A]

Chemical	Class	PEL	TLV	Type of Stressor		
Acetohydroxamic acid	*	-	-			D
Aminopterin	Insecticide	-	-		F	D
Arsenic	Pesticide	+	+			D
Benomyl	Fungicide	+	+	M		D
Benzene	*	+	+	M		D
Bromoxynil	Herbicide	-	-			D
Cadmium	Metal	+	+	M		D
Carbon disulfide	Solvent	+	+	M	F	D
Carbon Monoxide	*	+	+			D
Chlordecone(Kepone)	Insecticide	-	-			D
Cyanazine	Herbicide	-	-			D
Cycloheximide	Fungicide	-	-			D
Cyhexatin	Insecticide	-	+			D
ɔcap	Insecticide	-	-			D
..ioseb	Insecticide	-	-	M		D
1,2-Dibromo-3-chloropropane	Nematocide	+ R	-	M		
m-Dinitrobenzene	*	+	+	M		
o-Dinitrobenzene	*	+	+	M		
p-Dintrobenzene	*	+	+	M		
Epichlorohydrin	Solvent	+	+	M		
Ethylene glycol monoethyl ether	Solvent	+	+	M		D
Ethylene glycol monoethyl ether acetate	Solvent	+	+	M		D
Ethylene glycol monomethyl ether	Solvent	+	+	M		D
Ethylene glycol monomethyl ether acetate	Solvent	+	+	M		D
Ethylene oxide	Sterilizing Agent	+ R	+		F	
Hexachlorobenzene	*	-	+			D
Hydroxyurea	*	-	-			D

Chemical	Class	PEL	TLV	Type of Stressor		
				M	F	D
Lead	Metal	+ R	+			D
Mercury and mercury compounds	Metal	+	+			D
Methyl bromide	Fumigant	+	+			D
Methyl mercury	Organometal	+	+			D
Nickel carbonyl	*	+	+			D
Polybrominated biphenyls (PBBs)	*	-	-			D
Polychlorinated biphenyls(PCBs)	*	+	+			D
2,3,7,8-Tetrachloro-dibenzo-para-dioxin (TCDD)	*	-	-			D
Toluene	Solvent	+	+			D
Urethane	Polymer	-	-			D
Warfarin	Rodenticide	+	+			D

[A] = Source for this information is 31 March 1998 Navy Reproductive Hazards Review Board Meeting
M = Male
F = Female
D = Developmental
* = Unable to classify into a single functional class
PEL = OSHA's permissible exposure limit (PEL)
TLV = ACGIH threshold limit value (TLV)
+ = Exists
- = Does not exist
R = Level considers reproductive effects

WORKPLACE EXPOSURES OF REPRODUCTIVE CONCERN
JOINT SUPERVISOR's AND WORKER's STATEMENT

The supervisor and the worker are to complete this form at the time of a female worker's confirmed pregnancy or any time a male or female worker is concerned about workplace reproductive hazards.

Name_____Rank/Rate_____Command/Shop_____
Brief description of job duties (not job title)_____
Supervisor_____

CHECK ALL THAT ARE APPROPRIATE

Workplace:_____shipboard_____shop_____office_____outdoors_____other

HAZARDS(specify)	WORKER EXPOSED	WORKER IN MED SURVEILLANCE
CHEMICAL		
Solvents_____	_____yes _____no	_____yes _____no
Metals _____	_____yes _____no	_____yes _____no
Pesticides _____	_____yes _____no	_____yes _____no
Antineoplastics_____	_____yes _____no	_____yes _____no
Anesthestics _____	_____yes _____no	_____yes _____no
Other_____	_____yes _____no	_____yes _____no
PHYSICAL		
Heat_____	_____yes _____no	_____yes _____no
Nonionizing radiation_____	_____yes _____no	_____yes _____no
Noise_____	_____yes _____no	_____yes _____no
Vibration_____	_____yes _____no	_____yes _____no
BIOLOGICAL (infectious agents)___	_____yes _____no	_____yes _____no
OTHER HAZARDS(specify)		
_____	_____yes _____no	_____yes _____no
_____	_____yes _____no	_____yes _____no
_____	_____yes _____no	_____yes _____no

PERSONAL PROTECTIVE EQUIPMENT REQUIRED:
_____none_____respirator_____gloves_____hearing protection_____protective clothing

DATE OF MOST RECENT INDUSTRIAL HYGIENE (IH) SURVEY
(Attach if available):_____
ATTACH RELEVANT MATERIAL SAFETY DATA SHEETS (MSDS)

JOB ACTIVITIES/CONDITIONS:

_____jumping
_____heavy pushing/pulling
_____heavy/repetitive lifting of:
_____lbs(weight)
_____times/hour(frequency)
_____climbing
_____crawling
_____prolonged standing for
_____work in hot environment
_____shift or night work
_____working at heights
_____hours/day

OCCUPATIONAL MEDICINE (OM) EVALUATION RECOMMENDED _____yes _____no

_____	_____	_____	_____
Worker's Signature	Date	Supervisor's Signature	Date

This form must be maintained in the command's occupational safety and health office. If an OM evaluation is recommended, provide a copy of this form to the cognizant OM provider.

Request for Occupational Health Medical Evaluation

To be Completed by Supervisor

1. Employee Name | 2. Date of Birth | 3. SSN | 4. Job Series/Code

5. Duty Station | 6. Section/Dept/Bldg# _____ | 7. Phone _____ | 8. Job Title _____

a. Presidio of Monterey _____
b. Naval Postgraduate School _____
c. POM Annex _____
d. Other _____

9. Specific Duty Requirements	YES	NO	
a. Motor Vehicle License (Special)	____	____	
b. Respiratory Protection	____	____	
c. Hearing Conservation	____	____	
d. Vision Conservation	____	____	
e. Petroleum Products	____	____	
f. Solvents/Cleaners	____	____	
g. Paints	____	____	
h. Video Display Terminal	____	____	
i. Hazardous Chemicals	____	____	
j. Radiation Protection	____	____	
If yes,	Ionizing ____	Non-ionizing ____	
a. Asbestos	____	____	
If yes,	Current ____	Past ____	
a. Metals Exposure	____	____	
If yes,	Lead ____	Cadmium ____	Other _____
a. Other Hazards	____	____	

Supervisor's Name & Signature | 11. Phone = | 12. Organization

Appointment Part One | Date: _____ | Time: _____
Appointment Part Two | Date: _____ | Time: _____

To Be Completed by Occupational Health

1. Current Additional Required Appointments:
   a. Occ Health _____ b. Hearing _____ c. Vision _____ d. Spirometry _____ e. EKG _____
   f. Immunizations _____
1. Medical Evaluation Findings:
   a. Within Normal Limits _____ b. Negative _____
   Comments _____
1. Duty Restrictions/Modifications:
   a. Yes _____ b. No _____
   Comments _____
1. Additional Comments/Remarks: _____

Privacy Act Statement

Authority: 29 CFR, Chapter XVII, Occupational Safety and Health Standards; 5 U.S.C., Section 150; and Executive Orders 11612 and 11807.
Purposes: This information is to identify and monitor data relative to each DOD employee who may be exposed to a hazardous workplace or operation.
Routine Uses: This information provides potential exposure histories to the Occupational Health Clinic and to Health Care Providers for any given worker.
Mandatory or Voluntary Disclosure and Effect on Individual not Providing Information: None, however, nondisclosure may result in untimely provision of proper medical monitoring.

TRAINING CERTIFICATION

PERSONAL PROTECTIVE EQUIPMENT

DATE: _____

NAME: _____ SIGNATURE: _____
SSN: _____
JOB TITLE: _____
DEPT: _____
SUPERVISOR: _____

HEARING PROTECTION:

- INSERTS _____
- MUFFS _____

SIGHT CONSERVATION

- SAFETY GLASSES _____
- IMPACT GOGGLES _____
- CHEMICAL GOGGLES _____
- WELDERS HELMET _____
- LASER GOGGLES _____
- FACE SHIELD _____
- EYE WASH _____

HEAD PROTECTION:

- HARD HATS _____
- HELMET _____

HAND PROTECTION:

- GLOVES _____
- LIST TYPE _____
  _____
  _____

FOOT PROTECTION:

- STEEL TOE BOOTS _____
- HV BOOTS _____
- RAIN BOOTS _____

ELECTRICAL PROTECTIVE DEVICES:

- RUBBER INSULATING GLOVES _____
- RUBBER INSULATING MATTING _____
- RUBBER INSULATING BLANKETS _____
- RUBBER INSULATING LINE HOSE _____
- RUBBER INSULATING SLEEVE _____
- OTHER _____

ERGONOMICS:

- BACK BELTS _____
- LIFTING PROCEDURES _____

SPECIFIC FIREFIGHTING/SECURITY EQUIPMENT:

PLEASE LIST _____
_____
_____
_____
_____

NOTE: RESPIRATORY PROTECTION: THIS CERTIFICATION IS CONDUCTED BY THE NPS RESPIRATORY PROTECTION MANAGER.

I CERTIFY THAT TRAINING OF THE PROPER USE OF PERSONAL PROTECTIVE EQUIPMENT IDENTIFIED ABOVE HAS BEEN PERFORMED FOR THIS EMPLOYEE AND THIS INDIVIDUAL HAS ADEQUATELY DEMONSTRATED PERSONAL PROTECTIVE EQUIPMENT KNOWLEDGE AND SKILLS.

SUPERVISORS SIGNATURE _____

PERSONAL DATA

THE ATTACHED CONTAINS IDENTIFIABLE PERSONAL DATA WHICH ARE TO BE SAFEGUARDED PURSUANT TO THE PRIVACY ACT. THIS INFORMATION IS TO BE RELEASED TO AUTHORIZED PERSONNEL HAVING A NEED FOR OFFICIAL USES. WHEN NOT IN USE, THE ATTACHED IS TO BE STORED IN A LOCKED CABINET OR SECURED ROOM. COMPUTER PRINTOUTS SHOULD BE DESTROYED BY BURNING OR SHREDDING WHEN NO LONGER NEEDED

HAND PROTECTION & GLOVE CHART

Hand Protection

Skin contact is a potential source of exposure to toxic materials; it is important that the proper steps be taken to prevent such contact. Most accidents involving hands and arms can be classified under four main hazard categories: chemicals, abrasions, cutting, and heat. There are gloves available that can protect workers from any of these individual hazards or any combination thereof.

Gloves should be replaced periodically, depending on frequency of use and permeability to the substance(s) handled. Gloves overtly contaminated should be rinsed and then carefully removed after use.

Gloves should also be worn whenever it is necessary to handle rough or sharp-edged objects, and very hot or very cold materials. The type of glove materials to be used in these situations include leather, welder's gloves, aluminum-backed gloves, and other types of insulated glove materials.

Careful attention must be given to protecting your hands when working with tools and machinery. Power tools and machinery must have guards installed or incorporated into their design that prevent the hands from contacting the point of operation, power train, or other moving parts. To protect hands from injury due to contact with moving parts, it is important to:

- Ensure that guards are always in place and used.
- Always lock-out machines or tools and disconnect the power before making repairs.
- Treat a machine without a guard as inoperative; and
- Do not wear gloves around moving machinery, such as drill presses, mills, lathes, and grinders.

The following is a guide to the most common types of protective work gloves and the types of hazards they can guard against:

a. Disposable Gloves. Disposable gloves, usually made of light-weight plastic, can help guard against mild irritants.
b. Fabric Gloves. Made of cotton or fabric blends are generally used to improve grip when handling slippery objects. They also help insulate hands from mild heat or cold.
c. Leather Gloves. These gloves are used to guard against injuries from sparks or scraping against rough surfaces. They are also used in combination with an insulated liner when working with electricity.
d. Metal Mesh Gloves. These gloves are used to protect hands form accidental cuts and scratches. They are used most commonly by persons working with cutting tools or other sharp instruments.
e. Aluminized Gloves. Gloves made of aluminized fabric are designed to insulate hands from intense heat. These gloves are most commonly used by persons working molten materials.
f. Chemical Resistance Gloves. These gloves may be made of rubber, neoprene, polyvinyl alcohol or vinyl, etc. The gloves protect hands from corrosives, oils, and solvents. The following table is provided as a guide to the different types of glove materials and the chemicals they can be used against. When selecting chemical resistance gloves, be sure to consult the manufacturers' recommendations, especially if the gloved hand will be immersed in the chemical.

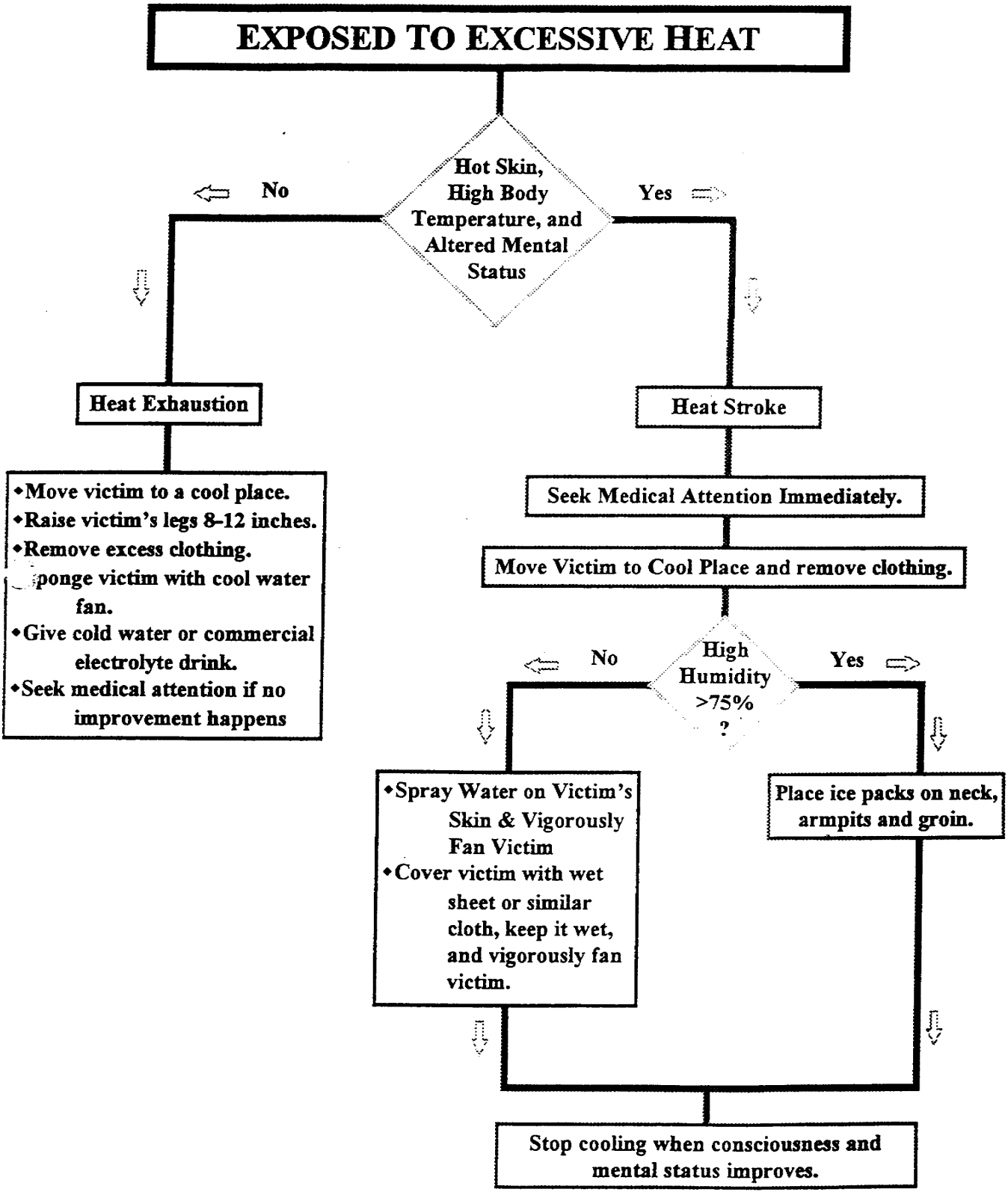
Glove Chart

Type	Advantages	Disadvantages	Use Against
Natural rubber	Low cost, good physical properties, dexterity	Poor vs. oils, greases, organics. Frequently imported; may be poor quality	Bases, alcohols, dilute water solutions; fair vs. aldehydes, ketones.
Natural rubber blends	Low cost, dexterity, better chemical resistance than natural rubber vs. some chemicals	Physical properties frequently inferior to natural rubber	Same as natural rubber
Polyvinyl chloride (PVC)	Low cost, very good physical properties, medium cost, medium chemical resistance	Plasticizers can be stripped; frequently imported may be poor quality	Strong acids and bases, salts, other water solutions, alcohols
Neoprene	Medium cost, medium chemical resistance, medium physical properties	NA	Oxidizing acids, anilines, phenol, glycol ethers
Nitrile	Low cost, excellent physical properties, dexterity	Poor vs. benzene, methylene chloride, trichloroethylene, many ketones	Oils, greases, aliphatic chemicals, xylene, perchloroethylene, trichloroethane; fair vs. toluene
Butyl	Speciality glove, polar organics	Expensive, poor vs. hydrocarbons, chlorinated solvents	Glycol ethers, ketones, esters
Polyvinyl alcohol (PVA)	Specialty glove, resists a very broad range of organics, good physical properties	Very expensive, water sensitive, poor vs. light alcohols	Aliphatics, aromatics, chlorinated solvents, ketones (except acetone), esters, ethers
Fluoro-elastomer (Viton) ™ *	Specialty glove, organic solvents	Extremely expensive, poor physical properties, poor vs. some ketones, esters, amines	Aromatics, chlorinated solvents, also aliphatics and alcohols
Norfoil (Silver Shield)	Excellent chemical resistance	Poor fit, easily punctures, poor grip, stiff	Use for Hazmat work

HEAT-RELATED EMERGENCIES

INDICATORS	HEAT SYNCOPE (least serious)	HEAT CRAMPS (more serious)	HEAT EXHAUSTION (Serious)	HEAT STROKE (Most Serious)
MUSCLE CRAMPS	NO	YES	NO	NO
SKIN	Normal, Moist	Normal, Moist-Warm	Cold, Clammy	Hot, Dry
TEMPERATURE	Normal	Normal	Normal or Slightly Elevated	>105^{0}F
LOSS OF CONSCIOUSNESS	YES	Seldom	Sometimes	Usually
PERSPIRATION	Normal to Heavy	Heavy	Heavy	Little or None
FIRST AID	Move to cool place	Move to cool place	Move to cool place	IMMEDIATELY ACTIVATE EMS
	Lie Down	Rest Affected Muscle	Elevate Legs	Move to cool place
	Give Water	Give a lot of cold water	Cool Victim	Immediately cool victim
		DO NOT MASSAGE	ACTIVATE EMS	Elevate head and shoulders
			Monitor ABC's	Monitor ABC's

HEAT-RELATED EMERGENCIES



NOTIFICATION OF INTENT TO ENTER
A CONFINED SPACE

Delivery Order # _____ requires _____a Navy contractor to enter a confined
Contractor

space located at _____to _____. The contractor is
Specific location **Purpose of entry**

scheduled to enter space(s) on _____. The contractor is responsible to ensure that all
Date

aspects of his confined space entry program are in accordance with Federal, State and local regulations. The laws and regulations make no provisions for Navy personnel to issue permits for contractor operations nor authorize contractors to use government owned and controlled equipment to evaluate confined spaces. In all cases involving contractor operations, the contracting Officer must ensure that the contractor's confined space entry personnel are adequately qualified. In addition the contractor shall conduct all operations per the statutory and regulatory requirements due to Navy personnel and facilities that may also be at risk.

_____
ROIC AUTHORIZED SIGNATURE

PUBLIC WORKS COMMENTS: _____

_____

_____

_____
PW AUTHORIZED SIGNATURE

CONFINED SPACE PROGRAM MANAGER COMMENTS: _____

_____

_____

_____
CSPM AUTHORIZED SIGNATURE

CONFINED SPACE ENTRY PERMIT

Date of Permit:	Expiration Date/Time:
Location: (NPS, La Mesa, Golf Course, Annex [FNMOC/NRL])	Description: (manhole, etc.)
Authorized Activity: (cleaning, repair, etc.)	
Authorized Entry Personnel: (list all personnel; FULL NAMES)	

ATMOSPHERIC TEST DATA

Test	Pre-Entry	Follow-up				
Oxygen Content						
Explosive (%LEL)						
Toxins (Specify)						
Tested By: Date & Time:						

Instrument	Model	Serial No.	Field Calibration Date	Calibration Expiration Date	Comments

REQUIRED SAFETY PRECAUTIONS

Requirement	Yes	No	Specifics
Attendant (Name)			
Respiratory Protection			
Protective Clothing			
Fire Extinguisher			
Rescue Equipment			
Lockout/Tagout			
Ventilation			
Follow-up Testing			
Other Controls			
Communication Practices			

Emergency Contact: FIRE DEPARTMENT Phone: 2333

Other Comments:

Entry Supervisor's Signature:	Confined Space Program Manager's (or qualified assistant signature)

Original – Entry Supv. White Copy 1 – Post at Site Yellow Copy 2 – CSPM (OSH Ofc) Green

CONFINED SPACE ENTRY PROGRAM
ATTENDANT DUTIES

The attendant stays at his/her post to observe conditions and to support the entrant:

1. As an attendant, you must know the hazards of the permit space and the Signs of exposure.
2. Keep a current count and be able to identify all entrants.
3. Stay in continuous contact with the entrant.
4. Be sure only authorized people enter the space or the surrounding area.
5. Order all workers out of the space in any of these conditions:
   - You see a condition not allowed by the entry permit.
   - You notice signs of exposure in any entrant.
   - You see something outside the permit space that could cause danger inside.
   - You must focus your attention on the rescue of entrants from another permit space.
6. An attendant must never leave the observation post for any reason.
7. If the entrants need to escape or there is an emergency, call the rescue team at once: NPS personnel contact (the NPS Fire Department at Extension 2333); POM-Annex personnel will radio dispatch to shop to notify (the NPS Fire Station #2), and POM personnel will contact (the Monterey Fire Department at Ext *911),* and attempt a non-entry rescue by use of lifeline, body harness, and tri-pod, until Fire Department arrives. Do not enter the permit space.

ENTRANT DUTIES

As an entrant, be sure you know the hazards of the space and the signs of exposure. For example, lack of oxygen can cause:

- Loss of muscle control
- Mental confusion
- Breathing difficulty
- Misguided feeling of well-being
- Ringing in the ears
- Death

⟹ Follow your personal protective equipment (PPE) training carefully.
⟹ Keep in contact with the attendant, and leave the space at once if you are ordered to evacuate.
⟹ Always be ready to evacuate quickly and, if possible, without help.
⟹ If you see that you are in danger, leave the space and tell the attendant.

CONFINED SPACE ENTRY PROGRAM
ENTRY SUPERVISOR DUTIES

ENTRY SUPERVISOR: The entry supervisor makes sure conditions are safe.
• Before entry, the supervisor verifies that the permit is filled out completely and all safety steps listed on it are taken, then signs the form.

1. During entry, the entry supervisor checks conditions to make sure they stay safe throughout the work.
2. If conditions become unsafe, the permit is canceled and everyone is ordered out of the space.
3. The entry supervisor must see that any unauthorized people are removed.
4. When the work is finished, the entry supervisor cancels permit and concludes operation.

PRE-ENTRY PLAN

- **Preparing for entry:**
  - Check for completion of permit
  - Erect barriers around the space
  - Cap, blind or disconnect all input lines
  - Clear and ventilate the. space of harmful vapors and residue
  - Make sure all participants understand the Emergency Action Plan

- **Verifying air quality:**
  - Person testing/monitoring must use respiratory protection or test from outside
  - Oxygen level must be between 19.5 and 22.0 percent
  - Flammable gasses must not be over 10 percent of (Lower Flammable Limit)LFL Toxic concentrations must not be over (Permissible Exposure Level) PEL
  - Tests for heat stress with Wet Bulb Globe Thermometer.
  - All tests must be complete, accurate and documented before entry

SAFETY MEASURES

Equipment:

- All personal protective equipment and non-entry emergency escape equipment (lifeline, harness, tri-pod) for permit required confined spaces must be available on site.

Emergency Notification:

- Naval Postgraduate School: (NPS Fire Department) must be notified (Ext 2333 or Radio Dispatch to shop)
- POM Annex: (NPS Fire Station #2) must be notified (Radio Dispatch to shop for notification to NPS Fire Station #2)
- POM: must be notified (Extension 911) with exact location, condition of personnel, whether it is a flammable, toxic gas or lack of oxygen situation.
- Attendant may only attempt non-entry rescue with lifeline/body harness and tri-pod, as applicable.

REQUEST FOR FORKLIFT LICENSE

To: Command Licensing Examiner, Code 2311
Via: OSH Office

Department Code: _____

Applications Name: _____

SSN: _____ Date of Birth: _____

Drivers License Number: _____

Applications Signature: _____ Date: _____

Supervisors Signature: _____ Date: _____

OSH OFFICE

Medical Surveillance Required: _____

Medical Surveillance Completed: _____

OSH Signature: _____ Date: _____

Read the PRIVACY ACT STATEMENT on the reverse before completing this application

APPLICATION FOR CONSTRUCTION EQUIPMENT OPERATOR LICENSE

NAVFAC 11260/1 (REV. 6/76)

PART I – APPLICATION

1. NAVAL ACTIVITY	2. APPLICANT"S NAME	3. RANK, RATE OR CIVILIAN STATUS

4. DEPARTMENT, DIVISION AND/OR SHOP ASSIGNED TO	5. APPLICANT'S JOB TITLE

6. DESCRIPTION OF EQUIPMENT LICENSE REQUESTED

(a) TYPE OF EQUIPMENT	(b) TYPE OF CONTROL	(c) TYPE OF ATTACHMENT

7. STATEMENT OF QUALIFYING EXPERIENCE

8. DESCRIPTION OF EQUIPMENT APPLICANT IS CURRENTLY LICENSED TO OPERATE

9. SPONSOR'S STATEMENT OF APPLICANT'S READINESS AND/OR PREPARATORY TRAINING FOR TEST. (NOTE: The sponsor can be either a qualified instructor or licensed operator)

Signature _____

Sponsor

PART II – REQUEST FOR ADMINISTERING TESTS AND EXAMINATIONS AND ISSUEING LICENSE

FROM: Date

TO:

It is requested that the license for equipment described in item 6 above be issued to this applicant upon his/her successful completion of the required examinations and tests.

Signature _____ Title _____

Department, Division or Shop Supervisor

(OVER) Page 1 of 2

PART III – ACTION ON SUBJECT APPLICATION

FROM: **Date**

TO:

☐ **Arrangements will be made to proceed with examinations and tests as requested.**

☐ **No action will be taken on this application for the following reason:**

Signature _____ Title _____

PART IV – LICENSE ACTION

FROM: **Date**

TO:

☐ **The subject license has been issued to the applicant as requested.**

☐ **The applicant has failed his/her physical examination:**

☐ **The applicant has failed to qualify for the subject license.**

_____ number of days *(the established waiting period)* must elapse before a new application may be made for this license.

Signature _____ Title _____

PRIVACY ACT STATEMENT

This statement is provided in compliance with the provisions of the Privacy Act of 1974 (PL-93-579) (N00011 CO2) which require federal agencies must inform individuals who are requested to furnish information about themselves as to the following facts concerning the information requested.

1. **AUTHORITY: 5 U.S.C. 301 Departmental Regulations**
2. **PRINCIPAL PURPOSE (S): To apply for a license to operate government-owned vehicles.**
3. **ROUTINE USE (S): To be used by agency officials to determine the employee's eligibility to operate government-owned vehicles. May be used by safety and security officials to verify individual's qualifying experience.**
4. **MANDATORY OR VOLUNTARY DISCLOSURE: The disclosure of information requested is voluntary. However, failure to complete the form will result in nonissuance of license.**

Code:

Bldg. :

Date:

SAT UNSAT

Yes No

1. HOUSEKEEPING:
   A. Overhead storage secured on shelves?

      Location/Rm:

      Date corrected:

   B. No tripping hazards exist?

      Location/Rm:

      Date corrected:

   C. Are trash containers are over filled?

      Location/Rm:

      Date corrected:

2. ELECTRICAL:
   A. Is electrical wiring permitted to run through doorways, walls, windows, ceilings?

      Location/Rm:

      Date corrected:

   B. Only authorized extension cords – are electrical strips with circuit breaker and surge suppressor is used?

      Location/Rm:

      Date corrected:

Highlighted items on the checklist indicate deficiency-type issues identified during previous NAVOSH IG Inspections

WORKPLACE INSPECTION GUIDE

Code:

Bldg. :
Date:

SAT UNSAT

Yes No

C. Electrical receptacle covers - no evidence of damage.

Location/Rm:

Date corrected:

D**. Are electrical cords not strained and in good condition (no exposed conductors)?**

Location/Rm:

Date corrected:

E. Circuit breaker panel has a minimum three-foot (36 inch) clearance?

Location/Rm:

Date corrected:

F. Ground Fault Circuit Interrupter (GFCI) electrical receptacles are utilized at all sink locations?

Location/Rm:

Date corrected:

G. **Electrical outlets are not wired for reverse polarity.**

Location/Rm:

Date corrected:

H. **Does any power cord insulation show signs of fraying?**

Location/Rm:

Date corrected:

I. **Are use of "handi-boxes" and extension cords are prohibited?**

Location/Rm:

Date corrected:

J. **Do circuit breaker panels have no unprotected spaces on the panel?**

Location/Rm

Date corrected:_____

WORKPLACE INSPECTION GUIDE

Code: Bldg. :
Date:

SAT UNSAT

Yes No

K. **Plugs on electrical equipment (provided with grounding pins) are they in place?**

Location/Rm:_____

Date corrected:_____

L. **Flexible electrical wiring (cords) are not permitted to run through doorways or through walls?**

Location/Rm: _____

Date corrected:_____

8. HAZARD COMMUNICATION PROGRAM:

A. Are containers of hazardous chemicals are properly labeled?

Location/Rm:

Date corrected:

B. Is authorized use list available for hazardous materials/chemicals?

Location/Rm:

Date corrected:

C. Food designated refrigerators are not utilized for chemical storage (film, batteries, etc.)?

Location/Rm:

Date corrected:_____

4. FIRE PREVENTION:

A. No excessive storage, boxes, trash.

Location/Rm:

Date corrected:

B. Coffee pot located on a non-combustible surface.

Location/Rm:

Date corrected:

Code: Bldg. :
Date:

SAT UNSAT

Yes No

C. Fire extinguisher secured to wall.

Location/Rm:

Date corrected:

D. Overhead storage maintains the minimum 18" clearance of sprinkler head.

Location/Rm:

Date corrected:

5. OFFICE-TYPE DEFICIENCIES:

A. File drawers are maintained in closed position (when not in use).

Location/Rm:

Date corrected:_____

B. Floors/carpeting free from tripping hazards, i.e., cords, frayed carpeting, packages left in aisles, etc.

Location/Rm:

Date corrected:

C. File cabinets are not top heavy - store lower drawers with heavier items.

Location/Rm:

Date corrected:

D. File cabinets - not more than one drawer opened at one time - tipping hazard?

Location/Rm:

Date corrected:

E. Overhead stored materials are not stacked and are not heavy in nature - could injure someone if it fell.

Location/Rm:

Date corrected:

WORKPLACE INSPECTION GUIDE

Code: Bldg. :
Date:

SAT UNSAT

Yes No

F. Coffee makers, space heaters or hot plates are maintained 18" from combustible material (wood, paper, plastics, etc.)

Location/Rm:

Date corrected:

G. Computer keyboard users utilize wrist rests.

Location/Rm:

Date corrected:

H. Computer monitors are positioned directly in front of user at eye level.

Location/Rm:

Date corrected:

I. Fire EXITs are illuminated?

Location/Rm:

Date corrected:

J. All aisles are maintained free of obstructions from tripping Hazards?

Location/Rm:

Date corrected:

K. Storage Room - maintain 18" clearance below sprinklers?

Location/Rm:

Date corrected:

L. Are material safety data sheets (MSDS) at work site for items, i.e. toner for copy machine, glass cleaner, etc.?

Location/Rm:

Date corrected:

M. General housekeeping maintained?

Location/Rm:

Date corrected:

Code: Bldg. :
Date:

SAT UNSAT

Yes No

N. Tall shelf cabinets shall be secured to wall (over 6').

Location/Rm:

Date corrected:

6. PERSONAL PROTECTIVE EQUIPMENT:

A. Appropriate eye protection signs are posted where required?

Location/Rm:

Date corrected:

B. Is proper eye protection provided where required?

Location/Rm:

Date corrected:

C. Are appropriate hearing protection signs posted where required?

Location/Rm:

Date corrected:

D. Provided foot protection is utilized by employees?

Location/Rm:

Date corrected:

7. EMERGENCY WASHING FACILITIES:

A. Eye/face wash station - flushed weekly and documented?

Location/Rm:

Date corrected:

B. Shower station - flushed weekly and documented?

Location/Rm:

Date corrected:

8. COMPRESSED AIR EQUIPMENT/COMPRESSED GAS:

A. Acetylene - Welding/Burning:

(1) Gages - annual inspection date posted?

Location/Rm:

Date corrected:

WORKPLACE INSPECTION GUIDE

Code: Bldg. :
Date:

SAT UNSAT

Yes No

B. Oxygen Cylinders:
(1) Storage ANo Smoking≅ sign posted?

Location/Rm:

Date corrected:

(2) Store tanks upright?

Location/Rm:

Date corrected:

(3) Store away from fuel gases, oil, and highly combustible material?

Location/Rm:

Date corrected:

9. MACHINERY/MACHINERY GUARDING:

A. **Are machines designed for a fixed location securely anchored to prevent walking or moving?**

Location/Rm:

Date corrected:_____

B. **Does the point of operation of machines (where possible injury could occur) provided with guards?**

Location/Rm:

Date corrected:

C. Are belts and pulleys guarded?

Location/Rm:

Date corrected:

D. Fans less than seven feet from floor - does protective cover guard over blades have openings less than ½ "?

Location/Rm:

Date corrected:

WORKPLACE INSPECTION GUIDE

Code: Bldg. :
Date:

SAT UNSAT

Yes No

E. **Where injury to the operator might result after power failures, provision shall be made to prevent machinery from automatically restarting upon restoration of power?**

Location/Rm:

Date corrected:

F. **Abrasive Bench Grinders – are the grinding wheels free of embedded metal in the wheel**? _____ _____

Location/Rm:_____

Date corrected:_____

G. **Radial Saws – do saws return to starting position after the operator releases the saw (worn return spring)?** _____ _____

Location/Rm:_____

Date corrected:_____

H. All weight handling equipment hooks are they uniquely identified?

Location/Rm:

Date corrected:

H. **Forklift Operation - does operator verify a daily inspection Check on NAVFAC 9-11240/13 Operator's Inspection Guide And Trouble Report – and maintain a file copy?** _____ _____

Location/Rm:_____

Date corrected:_____

10. FLAMMABLE/COMBUSTIBLE LIQUID STORAGE:

A. Are flammable, combustibles, and acids _____ _____not stored together?

Location/Rm_____

Date corrected:_____

Code: Bldg. :
Date:

SAT UNSAT

Yes No

B. **No more than 120 gallons of Class I, II and III A liquids in a storage cabinet and of this 120 gallons, not more than 60 gallons are of Class I and II.**

Location/Rm:

Date corrected:

Class I	Class II	Class III
Gasoline	Acetic Acid	Phenol
Formic Acid	Mineral Spirits	JP-5
Ethyl Ether	Fuel Oil #4 or #5	Fuel Oil #6
Petroleum Ether	Ethyl Alcohol (10%)	Ethyl Alcohol (5%)

Max Container Size: One pint

Example of Max Container Size: One Gallon

Toluene	Turpentine	
Hexane	Xylene	
Methyl Ethyl Ketone		Butyl Alcohol

Example of Max Container Size: One Quart
Acetone

Location/Rm:

Date corrected:

C. **Are there no more than three flammable lockers next to each other except in an industrial environment? If more than three lockers are required, they need to be separated by 100 feet.**

D. **Do flammable storage cabinets have the metal bungs installed?**

Location/Rm:

Date corrected:

E**. Does** e**very hazardous material in the work place, have a material safety data sheet in the workplace?**

Location/Rm:

Date corrected:

WORKPLACE INSPECTION GUIDE

Code: Bldg. :
Date:

SAT UNSAT

Yes No

11. TOOLS:
    A. **Do powder actuated fastening tools have method of control, inspection records, and training records?**

       Location/Rm:

       Date corrected:

    B**. Do abrasive blasting glove boxes have no leaks.**

       Location/Rm:

       Date corrected:

12. NOISE HAZARDS:
    A. **Employees operating equipment labeled as "noise hazardous" wearing hearing protection?**

       Location/Rm:

       Date corrected: _____

    B. Are all personnel that work in designated "hazardous noise" environments entered into the Hearing Conservation Program and receive annual hearing tests?

       Location/Rm:

       Date corrected:

13. FALL PROTECTION:
    A. Does any floor opening measuring twelve inches or more guarded by a standard railing and toeboards?

       Location/Rm:

       Date corrected:

    B. Does any floor opening less than twelve inches but greater than one inch, covered by a floor hole coverd?

       Location/Rm:

       Date corrected:

WORKPLACE INSPECTION GUIDE

Code: Bldg. :
Date:

SAT UNSAT

Yes No

C. Are personnel protected from falling distances of six feet or greater from one surface to another by means of guardrail systems, safety net systems, or personal fall arrest systems?

Location/Rm:

Date corrected:

D. **Step Ladders – are ladders stable and foot grips in place and in good condition?**

Location/Rm:_____

Date corrected:_____

Naval Postgraduate School
1 University Circle, Code 223, Monterey, CA 93943-5000

HAZARDOUS MATERIAL CONTROL & MANAGEMENT REQUISITION SCREENING FORM

PRODUCT NAME: _____ MANUFACTURER: _____

DEPT CODE: _____ FAX # : _____

REQUESTED QTY: _____ CONTAINER TYPE: _____ UNIT SIZE: _____ (e.g. oz, gl, etc.)

Part A - Department Process Upgrades/Changes Requiring New HM Product Purchase

1. Product User Info: Name _____ Sex _____
   Job Title: _____
2. Number of Employees Exposed: Male _____ Female _____
3. Safe(r) Substitute: _____
4. Average Time Spent on Operation: _____
5. Amount Used Per Operation: _____
6. Frequency & Application Method: _____
7. Type of PPE required to be used: _____
8. Location of Product Use: Bldg# _____, Room# _____, Type of Ventilation _____

Part B - HM Purchase Awareness/Verification

1. MSDS# _____ Quantity Left On Hand _____
2. This Request: For Replenishment of Stock☐ Requires Incease to DAUL☐ One Time Use Only☐ New Item☐
   Product Storage Location : Bldg No: _____, Room No: _____, Amt. Authorized: _____
4. DAUL Product Replacement: MSDS#_____ replaces MSDS#: _____ (both on Dept. DAUL)
5. Justification: _____

EAL ADDITION: ☐ HMC&M Initial _____ COMMONLY USED PRODUCT: ☐ HMC&M Initial _____

(HMC&M Coordinator completes this section only, authorization is specific to item annotated with HMC&M Initials)

CERTIFICATION APPLIES TO PARTS A & B ABOVE

I certify that I am the knowledgeable person designated as the Department HM Program Manager. The items requested above have approved HM Storage, proper personnel protective equipment available, employees have received information on the specific hazards related to the requested HM and information of the protective measures in case of spills/incidents to ensure the safe and proper use, storage and disposal of the item being requested.

_____ _____

(Signature) (Date) (Print Name) (Phone)

This Section to be completed by Command HMC&M Coordinator or designee.

ASSIGNED HM CODE: _____

HMC&M Comments / Special Instructions: _____

_____

_____

1 Approved ☐ Disapproved: Signed: Date:

COMMAND HAZARDOUS MATERIAL CONTROL & MANAGEMENT (HMC&M) PROGRAM EXEMPTIONS

Program exemptions consist of items listed below, which under specific criteria do not require them to be regulated under the Command HMC&M Program requirements; e.g. inventory, HM screening for purchase, MSDS identifier assignment, etc.

PRINTER TONER CARTRIDGES -

EXEMPTION CRJTERIA: Attachment **1,** Item **1.**
DISPOSAL REQUIREMENT. Attachment 2, Item 1, apply.
HAZARDS: None expected by consumers when used for the purpose intended.
However, if excessive exposure occurs thru inhalation, ingestion, skin or eve contact, attachment 3 applies.

PRINTER INK CARTRIDGES/REFILLS -

EXEMPTION CRJTERIA: Attachment 1, Item **1.**
DISPOSAL REQUIREMENT: Attachment 2, Item 2, apply.
HAZARDS: None expected by consumers when used for the purpose intended.
However, if excessive exposure occurs thru inhalation, ingestion, skin or eve contact, attachment 3 applies.

FAX TONER CARTRIDGES -

EXEMPTION CRITERIA: Attachment 1, Item 1.
DISPOSAL REQUIREMENT: Attachment *2,* Item *2,* apply. *7*
HAZARDS: None expected by consumers when used for the purpose intended. However, if excessive exposure occurs thru inhalation, ingestion, skin or eve contact, attachment 3 applies.

COPY MACHINE TONER -

EXEMPTION CRITERIA: Attachment 1, Item **1.**
DISPOSAL REQUIREMENT: Attachment 2, Item 4, apply
HAZARDS: None expected by consumers when used for the purpose intended. However, if excessive exposure occurs thru inhalation, ingestion, skin or eve contact, attachment 3 applies.

BATTERIES -

EXEMPTION CRITERIA: Attachment 1, Item 2.
DISPOSAL REQUIREMENT: Attachment 2, Item 3, apply.
HAZARDS: None expected by consumers when used for the purpose intended.
However, if excessive exposure occurs thru inhalation, ingestion, skin or eve contact, attachment 3 applies.

HOUSEHOLD CLEANERS -

EXEMPTTON CRITERIA: Attachment **1,** Item 4.
DISPOSAL REQUIREMENT: Attachment **2,** Item **2,** apply.
HAZARDS: Read Manufacturer's label prior to use.

HAND CLEANER -

EXEMPT[ON CRITERIA: Attachment 1, ltem3.
DISPOSAL REOUIREMET Attachment 2, Item 2, apply.
HAZARDS: None expected by consumers when used or the purpose intended. However, if excessive exposure occurs thru inhalation, ingestion, skin or eye contact, attachment 3 applies.

OFFICE SUPPLIES -

(e.g. white out, glue sticks, ink pad **ink,** etc.)
EXEMPTION CRITERIA: Attachment **1,** Item 1.
DISPOSAL REQUIREMENT: Attachment 2, Item 2, apply
HAZARDS: None expected by consumers when used for the purpose intended. However, If excessive exposure occurs thru inhalation, ingestion, skin or eve contact, attachment 3 applies.

SPECIFIC CRITERIA FOR WHICH A HAZARDOUS MATERIAL (HM) EXEMPTION WOULD APPLY

Item **#1** - An exemption would apply when as an Office Product Only. Quantities on hand are limited to the product being used and two additional stored for stock. Rotation of stock is required, using the oldest pr6duct first.

Item #2 - An exemption would apply for Alkaline Batteries any size and Maintenance Free Rechargeable batteries (lithium, nickel cadmium, lead acid); e.g. batteries used in radios, cell phones, exit signs, personal computers, etc. This exemption does not include Automotive Batteries, large UPS System Batteries, or Mercury Batteries.

Batteries are not authorized for storage in refrigerators. Batteries will react with water and/or condensation of moisture generated in refrigeration systems. Stock rotation is required, using the oldest product first.

Item #3 - An exemption would apply for hand soaps and industrial hand cleaners, when used for the purpose intended. Manufactures labels for industrial hand cleaners must be visible and legible to all users until container is emptied. Label information must be read and understood by each user prior to use. Regular Bath Bar Soap does not require manufacturer labeling. Limited Quantities should be based on the amount used in a six month period. Stock a six month supply or less in washroom areas only; e.g under bathroom sink, kitchen sink, laundry sink, etc.

Item #4 - An exemption would apply for furniture polish, general purpose cleaner, window cleaner, abrasive cleanser, dish soap and air fresheners, sold in department stores and supermarkets/grocer stores when stored in limited quantities. Quantity limits are based on one in use container and two additional stored as stock. Offices that may employ more than one person are not authorized an open container for each employee, the office as a whole will be limited to one in use container and two stored for stock.

ATTACHMENT (1)

DISPOSAL INSTRUCTIONS FOR ITEMS QUAUHED FOR HAZARDOUS MATERIAL (HM) EXEMPTION

Item #1 - Printer toner cartridge are sent with a Manufacturer's self addressed UPS shipping label or postal label. Simply take Out the label when replacing cartridge. Package the used cartridge, being replaced, in the box that new cartridge came in. Seal box with packing tape and affix the manufacturer's UFS/ Postal label on the outside. UPS may pick up the UPS labeled boxes, ii asked, during their next scheduled delivery to your area. The post office labeled boxes may need to be hand carried to the post office. Guard mailing these boxes to our local post office may or may nor be allowed.

Item #2 - Dispose of all **"empty"** containers in regular trash.

Item #3 - "ALL" batteries are regulated, by the State of California, for disposal when used for business, industry, etc. Based on the stringent laws set forth by the State of California we are obligated to comply with the laws set forth. In order to meet the requirements of that law, all used batteries must be collected and turned into the Command Environmental Department - Code N3OETh~V. Notify Al Heinetz for more information at (831) 656-2~.

Item #4 - Copy machines are contracted to a private industry. The representative servicing the Copv machines at NPS must dispose of their empty containers. Ensure the service representative picks up the empty containers, which previously held toner, whenever they are available in your area; e.g. during routine maintenance, when called to service, etc.

ATTACHMENT (2)

HAZARDS UNIQUE TO OFFICE PRODUCTS

Toner Cartridges (including fax) – Toner is a finely divided solid. Do not breathe the dust. Remove to fresh air if any effects occur. Eyes may become irritated upon contact. Flush eyes with plenty of water (15 min. normally) and seek medical treatment. Wash skin with soap and water. No special controls required for storage or use under normal conditions. Clean up with a vacuum cleaner.

"*White Out*", *Correction Fluid* – White or colored fluid with a pungent solvent odor. The product is non-hazardous when used as directed in an office/room with normal air circulation. There is not any anticipated health effects under normal use conditions. However, irritation to the skin during prolonged contact, but not likely to happen in short term contact. Wash with soap and water. Eye contact requires flushing with plenty of water. If irritation persists obtain medical attention. If ingested; consult a physician.

Furniture Polish – Opaque, viscous liquid or spray, pleasantly scented. May cause eye irritation. Flush with water and call physician if irritation persists. May cause skin irritation upon prolonged contact. HARMFUL OR FATAL IF SWALLOWED; ASPRIATION OF LIQUID MAY CAUSE CHEMICAL PNEUMONITIS. Store in a dry cool area. Keep from freezing. KEEP OUT OF REACH OF CHILDREN. Read entire label before using.

Ink Pad Inks – Water-soluble material to be cleaned at once. Will cause staining in very high concentration. Wash with soap and water. Drink several glasses of water if ingested.

White Board Cleaner – Cloudy aqueous solution with a slight sweet aroma. Soluble in water; keep product out of sewer, watershed, and water system. Use chemical absorbent for large spills. Can cause moderate to severe irritation to the eyes. Flush eyes with water for at least 15 minutes; get medical attention. Amounts ingested incidental to normal use is not likely to cause injury, however, large amounts ingested may cause injury up to death in extreme cases. Do not induce vomiting. Get medical attention immediately. Inhalation of large amounts of concentrated vapor may irritate the nose and throat. Remove person to fresh air. Wash skin with soap and water while removing contaminated clothing (large spill onto a person).

Batteries – **(Other than Mercury batteries)** Normally batteries are non-hazardous to the user, except when they leak. In general, if contact is make with the skin, wash thoroughly. Eye contact: flush eyes with water for at least 15 minutes and see a physician. Clean up of LITHIUM battery spill should be neutralized with a solution of soda ash (phone HAZMAT or the Fire Department for help). For battery leaks, use neoprene, rubber, latex-nitride gloves. In the event of an accident or during of batteries. Exit the area and notify the Fire Department immediately.

Glass cleaner – There are many differences between various brand name formulas. Some have ammonia; others are blue, green, etc. They may have a perfumed smell, or hospital smell. Used under normal conditions, no adverse effects are expected. OVEREXPOSURE may cause nausea if ingested. Contact the hospital, poison control center, or the Fire Department for directions concerning EMERGENCY AND FIRST AID PRODECURES ABOUT INGESTION.

INDIVIDUAL SAFETY RECOGNITION AWARD NOMINATION

MEMORANDUM

From:_____
(Nominating department head)
(Nomination may be made by supervisor or department head)

To: **Occupational Safety and Health Office (Code 223)**

Subj: **NOMINATION FOR INDIVIDUAL SAFETY RECOGNITION AWARD (Individual Employee)**

Ref: **(a) OPNAVINST 5100.23E**

1. The following employee is nominated and considered eligible to receive the Individual Safety Recognition Award:

Full Name:_____

Position Title:_____

Length of Service at NPS:_____

2. The following eligibility criteria is submitted for consideration:

a. Significant on-the-job accident prevention initiative, i.e., identified an unsafe work practice and or suggested/ implemented an improvement or corrective action that contributed to a safer work environment. Provide a statement to justify nomination (state contribution):

_____
_____
_____

b. Continuous commitment to safety, i.e., demonstrates continuous concern for safety in all aspects of his/her job performance and for fellow employees, i.e., (conduct monthly safety training, assigned safety coordinator, etc.). Provide a statement to justify nomination:

_____
_____
_____

c. Has not experienced an on-the-job injury within CY__:
YES _____ NO _____

_____
Department Head

MATERIALS HANDLING EQUIPMENT
OPERATOR'S SAFETY AWARD AND/OR CONSTRUCTION EQUIPMENT OPERATOR'S SAFETY AWARD NOMINATION
(Nomination will be made by the supervisor)

MEMORANDUM

From: _____
(Nominating department head)
To: Occupational Safety and Health Office (Code 223)

Subj: NOMINATION(S) FOR DEPARTMENT OF THE NAVY MATERIALS HANDLING/CONSTRUCTION EQUIPMENT OPERATOR'S SAFETY AWARD

Ref: (a) OPNAVINST 5100.23E

1. Per reference (a), the following individual(s) is/are nominated and considered eligible to receive the Department of the Navy Materials Handling Equipment Operator's Safety Award:

Full Name and Position Title: _____
Type of Equipment Operated: _____
Length of Service at NPS: _____
Length of time without a vehicle operator's accident (months): _____

2. Per reference (a), the following individual(s) is/are nominated and considered eligible to receive the Department of the Navy Construction Equipment Operator's Safety Award:

Full Name and Position Title: _____
Type of Equipment Operated: _____
Length of Service at NPS: _____
Length of time without a vehicle operator's accident (months): _____

3. The following eligibility criteria is submitted for consideration (i.e., fork trucks, cranes, elevating platform trucks, bulldozers, road rollers, graders, and power shovels):

a. Driver has not experienced an accident or any other record violation during CY__:
YES_____ NO_____

b. Driver's daily assignment include driving of Navy-owned materials handling equipment and/or construction equipment:
YES _____ NO _____

_____
Department Head

GLOSSARY

Abate - To eliminate or reduce permanently an unsafe or unhealthful working condition by coming into compliance with the applicable NAVOSH standard.

Accident - Any unplanned or unexpected event causing material loss or damage or causing personnel injury or death.

Accident investigation - The investigation of the facts surrounding the causes of an accident.

Accident Report - The formal report of an accident investigation.

ACGIH - American Conference of Governmental Industrial Hygienists.

ANSI - American National Standards Institute, a national consensus standard developing organization.

Anthronometric - Pertaining to the measurement of the size and proportions of the human body.

Atmosphere Immediately Dangerous to Life or Health (IDLH) - Any atmosphere that poses an immediate hazard to life or produces immediate irreversible debilitating effects on health.

Attendant - An individual stationed on the outside of a confined space for the purpose of monitoring the activities of those inside and requesting assistance in the event of an emergency.

Audiometer - A graph or table showing hearing threshold levels as a function of frequency.

Audiometer - Instrument used to measure hearing sensitivity using pure tones.

A-Weighted Sound Level - Sound level in decibels as measured on a sound level meter using an A-weighted network. This network attempts to reflect the human ear's decreased sensitivity to low frequency sounds.

Bloodborne Pathogens - Pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, Hepatitis B Virus HBV) and Human Immune Deficiency Virus (HIV).

Class I Asbestos Work - Activities involving the removal of thermal system insulation or surfacing ACM/PACM.

Class II Asbestos Work - Activities involving the removal of ACM, which is neither TSI, or surfacing ACM. This includes, but is not limited to, the removal of asbestos-containing wallboard, floor tile and sheeting, roofing and siding shingles, and construction mastics.

Class Ill Asbestos Work - Repair and maintenance operations, whore ACM, including TSI and surfacing ACM and PACM, is likely to be disturbed (see definition of disturbance).

Class IV Asbestos Work - Maintenance and custodial activities during which employees contact but do not disturb ACM and PACM and activities to clean up dust, waste and debris from Class 1, II, and Ill activities.

Concentration - The quantity of a substance per unit volume (in appropriate units).

The following are examples of concentration units:

mg/m3 - milligrams per cubic meter for vapors, gases, fumes, or dusts
ppm - parts per million for vapors or gases fibers/cc - fibers per cubic centimeter for asbestos

Confined Space - A space that is not designed for routine and/or continuous occupancy, is large enough and so configured that an employee can bodily enter to perform work, and is poorly ventilated and/or has limited or restricted means for entry or exit.

Confined Space Entry Permit - A special written permit/form issued by the CSPM, or a qualified person under the direction of the CSPM, which authorizes entry into certain confined spaces under a given set of conditions and safety precautions.

Confined Space Program Manager (CSPM) - An individual who has successfully completed course number *A-493*- 0030, Confined Space Safety, conducted by the Naval Occupational Safety and Health and Environmental Training Center ~AVOSHENVTRACEN) or equivalent training approved by the Echelon 2 occupational safety and health manager, and has been appointed in writing, by the commanding Officer to implement a comprehensive Confined Space Entry Program (Non-Maritime).

Contaminant - A material or agent not normally present in the atmosphere, e.g. I dust, fume, gas, mist or vapor, which can be harmful, irritating, or a nuisance.

Contractor Workplace - Any place on a Navy installation, located within the United States, its territories, or possessions, where work currently is being, recently has been, or is scheduled to be performed by contractor employees under a Navy contract, including a reasonable access route to and from the workplace. The term contract or workplace does not include any area structure, machine, apparatus, device, equipment, or material therein, with which a contractor employee is not required or reasonably expected to have contact nor does it include any working condition or which OSHA jurisdiction has been preempted under section 4(b)(1) of the OSHA Act.

Cumulative Trauma Disorders (CTDs) - Health disorders arising from repeated biomechanical stress. Other terms that have been used for such disorders include ‘repetitive motion injury," ‘occupational overuse syndrome," and 'repetitive strain injury." CTD are a class of musculoskeletal disorders involving damage to the tendons, tendon sheaths, and related bones, muscles, and nerves of the hands, wrists, elbows, shoulders, neck, and back. Disorders in this class include carpal tunnel syndrome, tennis elbow, tendinitis, tenosynovitis, DeQuervain's Disease, and low back pain.

dB (A) - A sound level reading in decibels as measured on the A-weighted network of a sound level meter. (See A-weighted Sound Level)

Decibel-dB - A unit used to express sound pressure levels; specifically, 20 times the logarithm of the ratio of the measured sound pressure to a reference quantity, 20 micropascals (0.0002 microbars). In hearing testing, the unit used to express hearing threshold levels as referred to audiometric zero (re: ANSI S3.6, 1969 (NOTAL)).

Disability - The incapacity, because of injury or illness in employment, to earn the wage which the employee was receiving at the time of such injury or illness.

Disabling Work/Duty injury- (Lost Workday Case) Any impairment resulting from an accident or occupational disease which prevents a military person from performing his/her regularly established duty or work for a period of 24 hours or more, subsequent to 2400 on the day of injury or onset of illness; or causes a civilian employee of the Navy from performing work for a full shift on any day subsequent to the day of injury or onset of illness.

Disturbance Asbestos - means activities that disrupt the matrix of ACM or PACM, crumble or pulverize ACM or PACM, or generate visible debris form ACM or PACM. Disturbance includes cutting away small amounts of ACM and PACM, no greater than the amount, which can be contained in one standard sized glove bag or waste bag, in order to access a building or vessel component. In no event shall the amount of which can be contained in one glove bag or waste bag, which shall not exceed 60 inches in length and width.

Dosimeter - A device for measuring cumulatively the exposure of an individual over a period of time.

Dust - Small solid particles created by the breaking up of larger particles by processes such as crushing, grinding, or explosion. Examples of processes that generate dust: Use of machine shop tools, paint chipping, sanding, woodworking, and abrasive blasting.

Entry - The act by which a person intentionally passes through an opening into a permit-required confined space and includes ensuing activities. The entrant is considered to have entered if any part of the entrant's face breaks the plane of an opening into the space.

Entry supervisor - The supervisor of the employees authorized entry into a confined space.

Ergonomics - The study of the design of work in relation to the physiological and psychological capabilities of people. The aim of the discipline is the evaluation and design of facilities, environments, jobs, training methods, and equipment to match the capabilities of users and workers, and thereby to reduce the potential for fatigue, error, or unsafe acts.

Ergonomic Hazards - Workplace conditions that pose a biomechanical stress to a worker's body as a Consequence of posture and force requirements, work/rest regimens, repetition rate, or other similar factors. Faulty workstation layout, improper work methods, or improper tools may contribute to such conditions.

Ergonomic Risk Factors - Conditions of a job, process, or operation that contribute to the development of CTD.

Excursion Limit - A limitation on short-term exposures, which are, called for by industrial hygiene considerations, when toxicological data are unavailable.

Explosive or Flammable Limits - The range of concentration of a material, expressed in percent in air that will burn or explode if ignited. The lower explosive limit is the minimum percent by volume of a gas or vapors that, when mixed with air at normal temperature and pressure, will form a flammable mixture.

First Aid Case - Any case that requires one or more visits to a medical facility for examination or treatment during working hours beyond the date of injury, as long as no leave or continuation of pay (COP) is charged to the employee and no medical expense is incurred. Also, a case, which requires two or more visits to a medical facility for examination or treatment during non-duty hours beyond the date of injury as long as no leave or COP is charged and no medical expense, is incurred.

Forces Afloat - U.S. Navy surface ships and submarines including embarked troops, staffs. Detachments, and' aircraft squadrons.

Fumes - Fumes are found when the material from a volatilized solid condenses in cool air. The solid particles that are formed make up a fume that is extremely fine - usually less than 1.0 micrometer in diameter. In most cases, the hot vapor reacts with the air to form an oxide.

Gas - Diffuse, formless fluid normally in a gaseous state.

Hazard - A workplace condition that might result in injury, health impairment. Illness, disease, or death to any worker who is exposed to the condition, or damage or loss to property/equipment.

Hazard Category A workplace condition as defined below:

(I) Category I - Catastrophic: The hazard may cause death or loss of a facility.

(2) Category II - Critical: May cause severe injury, severe occupational illness, or major property damage.

(3) Category III - Marginal: May cause minor injury, minor occupational illness, or minor property damage.

(4) Category IV - Negligible: Probably would not affect personnel safety or health, but is nevertheless in violation of specific criteria.

Hazardous Chemical - Any chemical that is a physical hazard or a health hazard per 29 CFR Section 1910.1200 (c), and with some exceptions as specified in the Community Right to. Know Law of 1986 (Superfund Amendments and Reauthorization Act (SARA). Title III). See "Hazardous Material."

Hazardous Material (HMI - For the purpose of preparing the Material Safety Data Sheet, a hazardous material is defined as a material having one or more of the following characteristics: (a) has a flashpoint below 2000F (93.30c) closed cup, or is subject to spontaneous heating or is subject to polymerization with release of large amounts of energy when handled, stored, and shipped without adequate control; (b) has a threshold limit value below 1000 PPM for gases and vapors, below 500 mg/rn3 for fumes, and below 30 mppcf for dusts; (c) a single oral dose which will cause 50 percent fatalities to test animals when administered in doses of less than 500 mg per kilogram of test animal weight; (d) is a strong oxidizing or reducing agent; (e) causes first degree burns to skin in short time exposure or is systematically toxic by skin contact; (f) in the course of normal operations, may produce dusts, oases, fumes, vapors, mists, or smokes with one or more of the above character-

Hazardous Substance (HSI - Any substance that, because of its quantity, concentration, or hazardous properties, may pose a substantial hazard to human health or the environment when purposely released or accidentally spilled.

Hazardous Waste (HW) - Any discarded or abandoned hazardous substance as defined in 40 CFR 261 or applicable state regulations where the state has been granted enforcement authority by EPA. It may include any discarded liquid, semisolid, solid, or containerized gaseous material. Hazardous waste does not include IEHM with expired shelf life unless determined as such by a Defense Reutilization and Marketing Office (DRMO).

Hazardous Waste Minimization (HAZMIN) - Consists of three parts:

a. Avoiding HW generation by minimizing and controlling HM acquisition and use, and by applying best management, engineering, and equipment to Navy processes and procedures.

b. Recycling HW to reduce it to a ready-for-use state.

c. Treating HW to reduce the volume or to reduce it to a non-hazardous state.

High-Efficiency Particulate Air (HEPA) Filter - A filter capable of trapping and retaining at least 99.97 percent of 0.3 micrometer diameter mono-dispersed particles.

Human Factors - The application of behavioral principles to the development of technological Systems to make such systems work more efficiently and productively and to make it easier for people to operate and maintain these systems.

IDLH - Immediately Dangerous to Life or Health. An atmosphere that poses an immediate threat to life, would cause irreversible adverse health effects, or would impair an individual's ability to escape from a dangerous atmosphere.

Illness - Any abnormal condition or disorder, other than one resulting from an injury, caused by exposure to conditions associated with the occupational environment.

Impulse or Impact Noise - Sound of short duration, usually less than I second, with an abrupt onset and rapid decay. Also, those variations in noise levels that involve maximum at intervals greater than 500 milliseconds. Where the intervals are less than 500 milliseconds, the noise is considered continuous.

Incident (Confined Space) - A mishap resulting in death, injury, property damage and/or situations involving unauthorized (inadvertent or willful) entry into a PRCS, disregard of permit requirements, improper testing or issuance of a permit without evaluation of space conditions.

Iniurv - Traumatic bodily harm, such as a cut, fracture, burn, or poisoning, caused by a single or 1 –day exposure to an external force, toxic substance, or physical agent.

Laboratory - A term referring to research laboratories and chemical analytical laboratories that are managed and staffed by academically trained and -qualified professionals and chemists. This term, as used in this instruction, does not include entire installations having "laboratory" in their organization name, or material laboratories that mainly characterize the physical properties of materials. The term is intended to describe functional room(s) or area(s) where specific analytical and research tasks are performed by highly trained professionals under the supervision of highly trained and qualified professional chemists.

Lost Time Case - nonfatal traumatic injuries that causes any loss of time from work beyond the day or shift it occurred:
Or for each case of nonfatal illness/disease that causes disability at any time.

Material (Property) Damage - Mishap- related damage of facilities, equipment, or material (property) to which a dollar expenditure would accrue to repair or replace.

Material Safety Data Sheet (MSDS) - OSHA Form 174 or an equivalent form containing the identical data elements, must be used by manufacturers of chemical products to communicate to users the chemical, physical, and hazardous properties of their product to comply with the OSHA Hazard Communication Standard, 29 CFR 1910.1200. The completed form identifies key information on the product: ***A*** Name, address, and emergency contact for the manufacturer; the identity of hazardous ingredients; physical/chemical characteristics; fire and explosion hazard data; reactivity data; health hazard data; precautions for safe handling and use; and control measures. It should be emphasized that OSHA Form 20 or DD- 1813 forms are considered obsolete and should not be used for supplying MSDS information, All data submitted must comply with provisions of FED-STD 31 3C (NOTAL). See chapter 7.

Mishap - Any unplanned or unexpected event or series of events that result in damage to DOD property; occupational illness or injury to on-duty DOD military or civilian personnel: or damage to public and private property or injury and illness to non-DOD personnel caused by DOD operations.

Mishap Severity Classification - DOD mishaps are classified according to the severity of resulting injury, occupational illness or property damage. Property damage severity is generally given in terms of cost and is calculated as the sum of the costs associated with DOD property and non-DOD property that is damaged in a DOD mishap. Additionally, if a reportable occupational injury or occupational illness results, the event

is reportable even if the associated costs are less than the minimum dollar criteria. The following classifies DOD mishaps:

(1) Class A Mishap. The resulting total cost of reportable material property damage is $1,000,000 or more; or an injury or occupational illness results in a fatality or permanent total disability.

(2) Class B Mishap. The resulting total cost of reportable material (property) damage is $200,000 or more, but less than $1,000,000; or an injury or occupational illness results in permanent partial disability; or three or more personnel are inpatient hospitalized.

(3) Class C Mishap. The resulting total cost of reportable material (property) damage is $10,000 or more, but less than $200,000; a non-fatal injury that causes any loss of time from work beyond the day or shift on which it occurred; or a non-fatal illness or disease that causes loss of time from work or disability at any time (lost time case). For reporting purposes, refer to paragraph 1408a.

(4) Class D Mishap. The resulting total cost of reportable material (property) damage is less than S 10,000, or a non-fatal injury (no lost time or first aid case) that does not meet the criteria of a Class C mishap.

Mist - Finely divided liquid droplets suspended in air and generated by condensation or by atomization.

Monitoring (Medical Surveillance) - The preplacement and periodic evaluation of the health status of workers exposed to toxic substances or physical agents in the workplace - measures the effects of contaminant on a worker's body functions and tissues, e.g., decreased lung function, dermatitis, abnormal blood count.

Navy Occupational Safety and Health INAVOSHI Standards - Occupational safety and health standards published by the Navy which include, are in addition to, or are alternatives for the OSHA standards which prescribe conditions and methods necessary to provide a safe and healthful working environment.

Negative Exposure Assessment (Asbestos) - For any one specific asbestos job performed by employees who have been trained in compliance with 29 CFR
1910.1001, 1915.1001 and 1926.1101, the employer may demonstrate that employee exposures will be below the PEL's.

NIOSH - National Institute for Occupational Safety and Health.

No Lost Time Case - A non-fatal traumatic injury or occupational illness or disease that does not meet the definition of Lost Time Case or First Aid Case. This definition includes each case where medical expense is incurred but no lost time from work is incurred as represented by a charge to leave or COP. Occupational Health - That multidisciplinary field of general preventive medicine that is concerned with prevention and/or treatment of illness induced by factors in the workplace environment. The major disciplines involved are occupational medicine, occupational health nursing, epidemiology, toxicology, audiology, industrial hygiene, and health physics.

Occupational Illness - A physiological harm or loss of capacity that by systemic infection; continued or repeated stress or strain; exposure to toxins, poisons, fumes, etc.; or other continued and repeated exposures to conditions of work environment over a long period of time procedures For practical purposes, an occupational illness or disease is any condition not meeting the definition of occupational injury that activities report.

Occupational Injury - A wound or other condition of the body external force, including stress or strain causes. The injury is identifiable as to time and place of occurrence and member or function of the body

affected and results from 8 specific event or incident, or series of events or incidents within a single day or work shift. The injury must arise out of or in the course of employment or performance of duty. All injuries occurring aboard Navy service craft and small boats are occupational injuries.

Occupational injury or Illness Categories- 29 CFR 1960 and enclosure (5) of reference 14-I list the following injury category definitions. They apply to on-duty military and civilian personnel.

(1) Fatal Occupational injury or Occupational Illness. One that results in death from a mishap or the complications arising therefrom, regardless of the length of time between the mishap and a subsequent death.

(2) Permanent Total Disability. Any non4atal injury or occupational ill-ness that in the opinion of competent medical authority, permanently and totally incapacitates personnel to the extent that they cannot follow any gainful occupation.

NOTE: The Navy considers the loss or the loss of use of both hands, both feet, both eyes, or a combination of any of these body parts as a result of a single mishap to be a permanent total disability.

(3) Permanent Partial Disability. An injury' or occupational illness that does not result in death or permanent total disability but, in the opinion of competent medical authority. results in the loss or permanent impairment of any part of the body, with the following exceptions:

(a) Loss of teeth

(b) Loss of fingernails or toenails

(c) Loss of tip of finger or tip of toe. (The Navy considers loss of complete first joint to be a permanent partial disability and the loss of any part of the thumb or great toe a permanent partial disability.)

(d) Inguinal hernia, if it is repaired

(e) Disfigurement

(f) Sprains or strains which do not cause permanent limitation of motion.

(4) Lost Time Case. A non-fatal traumatic injury that causes any loss of time from work (even if the person chooses to use sick or annual leave instead of continuation of pay (COP) as long as there is medical justification) beyond the day or shift it occurred; or a non-fatal, non-traumatic illness or disease that causes disability at any time. Office of Worker's Compensation Program (OWCP) defines disability as the incapacity, because of injury in employment, to earn the wage, which the employee was receiving at the time of such injury or ill-ness. For military on-duty injuries or illnesses, lost work time results if the military person is sick in quarters ($]Q), hospitalized, or on convalescent leave. The Navy requires medical documentation to justify lost time cases. If a physician or equivalent returns a person to work and the person elects on his or her own to take sick or annual leave, activities shall not count such time as lost time for mishap recording purposes.

(5) No Lost Time Case. A nonfatal traumatic injury or occupational illness or disease that does not meet the definition of Lost Time Case or First Aid Case (these are cases where employees incur medical expense but not lost time from work as represented by a charge to leave or COP).

(6) First Aid Case. (Civilians Only) A first aid case is a specific type of no lost time case, which meets one of the following criteria:

(a) A non-fatal traumatic injury or occupational illness or disease that requires one or more visits to a medical facility for examination or treatment during on-duty hours beyond the date of in- jury as long as employees incur no medical expense and activities charge no leave or COP to the employee.

(b) A non-fatal traumatic injury or occupational illness or disease that requires two or more visits to a medical facility for examination or treatment during non-duty hours beyond the date of injury as long as activities charge no leave or COP and incur no medical expense.

OSHA - Occupational Safety and Health Administration, Department of Labor (DOL).

OSHA Standards - OSHA standards are those standards issued by the DOL's Occupational Safety and Health Administration under Section 6 of the OSH Act.

Particulate Matter - A suspension of fine solid or liquid particles in air, such as:
Dust, fog, fume, mist, smoke, or spray. Particulate matter suspended in air is commonly known as an aerosol.

PEL - Permissible Exposure Limit. The maximum permissible concentration of a toxic chemical or exposure level of a harmful physical agent (normally averaged over an 8-hour period) to which an employee may be exposed.

Permit Required Confined Space (PRCS) - A confined space that, based on a hazard analysis by the CSPM, requires a special permit for entry.

Presumed Asbestos Containing Material - (PACM) - Thermal system insulation and surfacing material found in buildings constructed no later than 1980.

Protective Clothing - An article of clothing furnished to an employee at government expense and worn for personal safety and protection in the performance of work assignments in potentially hazardous areas or hazardous conditions.

Protective Equipment - A device or item to be worn, used, or put in place for the safety or protection of an individual or the public at large, when performing work assignments in or entering hazardous areas or under hazardous conditions. Equipment includes hearing protection, respirators, electrical matting, barricades, traffic cones, lights, safety lines, life jackets, etc.

Radiofreqencv Radiation (RFR) - Electromagnetic radiation at frequencies between 10 kHz and 300 GHz.

Recordable Mishap - An on-duty occupational injury or illness meeting the definition of fatality, lost time case, no lost time case, or first aid case. (The 'first aid case" designation only applies to civilian personnel.) The Navy requires activities to enter these cases on the appropriate injury and occupational illness log.

Recordable Occupational Injuries or Illnesses - Any occupational injuries or illnesses which result in:

a. Fatalities, regardless of the time between the injury and death, or the length of the illness

b. Lost time cases

c. Lost workday cases

d. No lost time cases

e. First aid cases.

Regulated Area (Asbestos) - An area established by the employer to demarcate areas where Class I, II, and Ill asbestos work is conducted, and any adjoining area where debris and waste from such asbestos work accumulate; and a work area within which airborne concentrations of asbestos, exceed or there is a reasonable possibility they may exceed the permissible exposure limit.

Reportable Mishap - Any mishap as defined in Section 1408. Activities should not consider the *criteria all - inclusive*; if there is a "lesson to be learned," whether or not it meets the criteria, then activities should submit a report

Reportable Occupational Injuries and Illnesses

a. All fatalities resulting from occupational injuries or illnesses, regardless of the time between the injury and death, or the length of the illness

b. All lost workday cases involving the loss of 120 hours or more for military and 5 days or more for civilians

c. Electric shock - Any case ashore resulting from equipment design deficiency

d. Chemical or toxic exposure or oxygen deficiency - All cases requiring medical examination or attention. (Excluded are cases in which medical attention was solely due to medical surveillance requirements.)

e. Any student mishap at a training command that results in termination of training.

Reproductive Hazard - Any occupational stressors (biohazard, chemical, or physical) that has the potential to adversely affect the human reproductive process.

Respiratory Protection Program Manager (RPPM) - An individual who meets the requirements of the Office of Personnel Management for safety and health personnel as defined in Section 0902b, has successfully completed the training requirements of chapter 1 5, and is designated as the RPPM in writing by the commanding officer.

RFR Permissible Exposure Limit *(PEL)* - The maximum level expressed in specific absorption rate (SAR) or derived equivalent power density, electric field strength, or magnetic field strength to which an individual may be exposed which, under the conditions of exposure, will not cause detectable bodily injury according to present medical knowledge.

Risk Assessment Code (RAC) - A simple expression of risk, which combines the elements of hazard severity and mishap probability. This assessment will be used to help prioritize abatement projects.

Significant Threshold Shift - A change of hearing threshold Level of] 5 dB or greater, in either ear, at any frequency (I '000 to 4,000 Hz) between the reference audiogram and any subsequent audiogram. In addition, a change in hearing threshold of an average of 10 dB or more at 2,000, 3,000, and 4,000 Hz in either ear shall be considered a significant threshold shift.

Smoke - Carbon or soot particles less than 0.1 micrometer in size resulting from the incomplete combustion of carbonaceous materials such as coal or oil.

Solvent - A substance, most commonly water, but often an organic compound, which is used to dissolve another substance.

Specific Absorption Rate (SAR) - The time rate at which RFR energy is imparted to an element of biological body mass. It is usually measured in W/kg or normalized to incident power density in W~kg/mW/cm2.

Standard - A rule, established by competent authority, which designates safe and healthful conditions or practices under which work must be performed to prevent injury, occupational illness, or property damage.

a. Criteria - hose parts of a standard that establish a measurable quality, e.g., specifications, inspection intervals, etc.

b. Equivalent Criteria - The measurement of equivalency shall be a judgment based on the preponderance of information available. Generally they must provide protection at least as effective as the criteria they replace.

Toxic Substance or Harmful Physical Agent - any chemical substance, biological agent (bacteria, virus, fungus, etc.), or physical stress, noise, heat, cold, vibration, repetitive motion, ionizing and non- ionizing radiation, hypo-hyperbaric pressure, etc., which:

a. Is regulated by any NAVOSH standard or Federal law or rule due to a hazard to health.

b. Is listed in the latest printed edition of the National Institute for Occupational Safety and Health (NIOSH) Registry of Toxic Effects of Chemicals.

TWA -Time-Weighted Average. An average value weighted in terms of the actual time that it exists during a given time interval.

OSH RESPONSIBILITIES

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OSH RESPONSIBILITIES

Discussion. A successful NAVOSH Program results when the visibility of the program permeates every level of the organization to the point of actually reducing work-related risks and mishaps. The maintenance of safe and healthful working conditions is a line management responsibility. To achieve success, the NAVOSH Program must be fully supported through the chain of command. All personnel employed by the Naval Postgraduate School (NPS), and tenant activities shall comply with the standards, codes, directives, etc., which are published in support of occupational safety and health. All other personnel utilizing NPS and tenant command facilities shall also be required to comply with these procedures applicable to the specific activities in which engaged.

Dissemination of Program Information. Personnel can review copies of the NAVOSH standards, records of safety and health committees and their actions and recommendations and various documentation concerning the command's OSH Program in the Safety Office and/or on the OSH web site at www.safety.navy.mil. Information regarding the NPS OSH Program shall be posted on or near activity bulletin boards where employee information is routinely posted. As a minimum, the following OSH Program data shall be posted:

- Minutes of current NPS OSH Committee Meetings (minimum of 30 days).
- Blank copies of OPNAV 5100/11, "Navy Employee Report of Unsafe or Unhealthful Working Condition", with reporting and appeals procedures.
- A copy of pertinent Standard Operating Procedures (SOP's) which apply to specific activity tasks.
- Annual mishap reports initiated by the OSH Office.
- DD Form 2272 "Department of Defense Occupational Safety and Health Protection Program" (copies of this form may be obtained from the OSH office)
- Superintendent's OSH Policy Statement.

Performance, Evaluation, and Discipline. The ability of a manager or supervisor to carry out his/her occupational safety and health responsibilities shall be a factor in overall job evaluations. Consideration should be given to departmental safety records when evaluating supervisors at any level. Performance evaluations shall reflect personal accountability, consistent with the duties of the position and with appropriate recognition of superior performance or conversely deficient performance as appropriate. Even though most individuals will understand the need for safety and health regulations and scrupulously abide by them, history shows that a small number of people will choose to disregard these rules, and thereby place themselves, fellow employees, and valuable equipment in hazardous circumstances. Violators of NAVOSH regulations shall be subject to disciplinary action in accordance with civilian personnel instructions or the uniform code of military justice.

Management/Supervisory Responsibilities. The first line supervisor is the "key" person in the safety program. Supervisory personnel includes all civilian supervisors and military, E-5 and above. Through leadership, the first line manager has the greatest impact on safety and health matters. Managers/Supervisors shall:

- Maintain a safe and healthful workplace for all personnel under their cognizance by ensuring the provisions of this instruction are enforced within their area of responsibility.
- Demonstrate good leadership through example by observing occupational safety and health regulations.
- Ensure that each person under their supervision is adequately trained concerning occupational safety and health rules, regulations, and processes pertinent to each job being performed, and that necessary safety precautions are being observed. Submit timely memoranda of all workplace safety training to the OSH Office.

- Ensure all injured personnel receive prompt medical attention and that all-occupational mishaps and illnesses are investigated and reported to the OSH Office.

- Encourage employees to report unsafe/unhealthful conditions. Personally, investigate and correct unsafe/unhealthful-working conditions.

- Provide the OSH Office with timely written and signed reports of actions taken to abate OSH inspection deficiencies including full explanation of pertinent circumstances of those deficiencies requiring over 30 days to correct.

- Inspect all assigned areas to identify hazards and unsafe practices. Immediately initiate necessary action to correct or control each discrepancy noted.

- Ensure approved personal protective equipment required for each specific job assignment is available and enforce the use of such equipment in all areas and processes.

- Encourage a free flow of information and ideas from employees on methods of improving the safety of their workplace, work practice, and work processes.

- Ensure that plans and specifications for research projects, new construction, and modification of buildings and facilities, have been prepared with thorough and critical consideration given to the safety of personnel and property. Those plans and specifications will be forwarded to the OSH Manager for review prior to final approval.

Employee Responsibilities. Personal awareness is the key to achieving safe and healthful workplaces. Each employee shall:

- Observe all occupational safety and health regulations and procedures applicable to the workplace.

- Report to immediate supervisor any condition, equipment or material considered to be unsafe or likely to develop into a hazard.

- Immediately cease the use of any equipment or appliance, which malfunctions, or is in violation of a safety or health standard or regulation.

- Warn others who may be endangered by known hazards.

- Report to supervisory personnel, any mishaps, injury, or evidence of impaired health occurring during the course of work.

- Wear or use protective clothing and equipment for the safe performance of the work being accomplished.

- Report for work suitably groomed and clothed for assigned tasks. Suitable clothing is that normally worn and in general use by members of the trade or profession involved. Certain hairstyles and beards become hazardous around machinery and open flames. They may also interfere with vision or use of respiratory protection devices. Long hair shall be suitably restrained in caps or nets and beards prohibited when considered a hazard in the workplace. Jewelry and loose clothing shall not be worn in areas where they subject the wearer to increased hazard. Eye, hearing, or prosthetic devices must be maintained in good functional order and utilized while in the workplace.

OSH Manager's Responsibilities. The Occupational Safety and Health Manager functions as an assistant to the Superintendent to manage and implement the OSH Program for NPS and tenant activities. The OSH Manager reports to the Superintendent, Naval Postgraduate School through the Deputy Superintendent for performance of assigned duties and has direct access to all Department Heads, Line Managers, and Supervisors in all matters pertaining to OSH. Personnel assigned to the OSH office report to the OSH Manager. The Occupational Safety and Health Manager, or designated representative, is authorized to stop

workplace operations when work practices or procedures create a serious unsafe or unhealthful working condition (imminent danger situation). The OSH Manager shall:

- Plan, organize, direct, operate, and evaluate the facility's OSH Program.
- Develop accident prevention and loss control measures and programs.
- Prepare specific rules and regulations for approval and promulgation by the Superintendent as required.
- Organize and conduct safety inspections and surveys to identify violations, hazards, and deficiencies in operations, work places, facilities, and equipment, ensure compliance with applicable instructions and procedures.
- Implement the workplace monitoring (industrial hygiene) program.
- Record safety and occupational health violations and deficiencies, coordinate actions for corrections, conduct follow up inspections, and maintain status report on actions taken.
- Develop and maintain a hazard abatement plan, coordinate actions and follow up to ensure that abatement projects are developed and executed to abate safety and occupational health deficiencies, and monitor status of abatement actions.
- Maintain complete and accurate records on the mishap, injury, and occupational illness experience of NPS and tenant activities, and fulfill the reporting requirements by submitting necessary reports to the Naval Safety Center.
- Conduct studies and analyze mishap investigation reports, reports of occupational injuries and illnesses, and property damage reports to identify causal factors and to determine trends; initiate program improvement actions accordingly.
- Maintain liaison with managers, supervisors, and planning and design officials on the adequacy of operating procedures, tools, facilities, designs, plans, and specifications from the safety and occupational health standpoint; ensure that safety and occupational health requirements are identified and implemented into all workplace operations, planning and design efforts.
- Coordinate occupational health support with Naval Air Station, Lemoore, and the Occupational Health Section, California Medical Detachments, U. S. Army, as appropriate. Consult as necessary with occupational health professionals in the identification, evaluation, and control of exposure to chemical, physical, biological stressors.
- Assist supervisors and training specialists in developing and conducting safety training, education, and indoctrination of new employees; ensure continuing training programs; require specific safety refresher training; and, where conditions warrant, specialized safety training.
- Provide advice and guidance to all school organizational elements, managers, and supervisors covering the technical aspects of safety, and principles of hazard recognition and control, and the application of these principles as they relate to the employee and the workplace.
- Foster personal safety awareness at all levels of NPS and tenant activities through appropriate promotional methods and channels of communication ensuring all employees are aware of their rights and responsibilities related to the NPS OSH program.
- Coordinate the preparation of the annual safety and occupational health budget submission.
- Establish written goals and objectives for the NPS OSH Program; evaluate program performance; then develop measures to recognize superior and deficient OSH performance.

- Serve as technical consultant to the Labor and Employee Relations Specialists in coordinating the NPS OSH Program with representatives of the labor organization as required by negotiated labor agreements.

- Implement and advertise a hazard reporting system that provides employees with a method of reporting unsafe or unhealthful working conditions.

- Serve as technical authority in the procurement of approved personal protective equipment, and as coordinator for all facets of the personal protection, noise control, and sight conservation programs.

- Provide data, as appropriate, for the evaluation of injury compensation claims submitted to the Civilian Personnel Office.

- Cooperate with, and provide advice to, medical and employment personnel on the proper selection and placement of personnel as they relate to Safety and Occupational Health.
- Attend and participate in safety and occupational health committee meetings, conferences, seminars, and workshops directly related to OSH functions.

- Provide Safety and Occupational Health Program support to tenant organizations where an inter-service support agreement exists.

Command Responsibilities. The Superintendent is responsible to ensure all of the following IAW reference (a) OPNAVINST 5100.23E:

- Implementing and conducting an aggressive and continuing OSH Program.

- Ensuring an OSH office is organized, staffed, and maintained.

- Issuing an OSH policy statement that reflects the Superintendent's commitment to the OSH program and to programs that prevent or minimize occupational mishaps.

- Ensuring that all responsibilities of the OSH Manager are properly carried out IAW this instruction.

- Semi-annually reviewing the activity hazard abatement program plan.

- Establishing and chairing or ensuring the executive officer or equivalent chairs the OSH Policy Council and ensuring minutes are issued and maintained.