North Carolina Department of Labor
Occupational Safety and Health Division

Raleigh, NC

Field Information System | Operational Procedure Notice 140

Subject: Special Emphasis Program for Food Manufacturing Facilities

A. **Purpose and Scope.**

This Operational Procedure Notice (OPN) describes the North Carolina Department of Labor (NCDOL) Occupational Safety and Health Division Special Emphasis Program (SEP) for inspections of establishments in NAICS 311, Food Manufacturing. The SEP will include interventions from the Compliance Bureau, the Consultative Services Bureau, and the Education, Training and Technical Assistance (ETTA) Bureau.

B. **Special Emphasis Program History.**

NCDOL data over the past five years shows several recurring hazards identified in the food manufacturing industry. In response to this information, the food manufacturing industry was added to the strategic management plan. During the 2009 federal fiscal year, NCDOL researched and investigated different ways to eliminate these hazards.

C. **Background and Discussion.**

In 2007, Bureau of Labor Statistics (BLS) data indicated that the national total recordable case rate and the days away, restricted or transferred (DART) rate for NAICS 311 industry groups were higher than the rate for all private industry. The food manufacturing DART rate was more than double the rate for general industry.

2007 National BLS Data	Total Recordable Case Rate	DART
All private industry	4.2	2.1
All manufacturing (NAICS 31, 32, 33)	5.6	3.0
Food manufacturing (NAICS 311)	6.8	4.4

North Carolina is a world leader in manufacturing animal products such as poultry and pork. The food manufacturing industry is a significant employer in the state. As the industry has developed in North Carolina and around the world, increased competition has required the industry to respond and produce products in a more efficient and expeditious manner in an industry which has traditionally been labor intensive. The nature of the work requires employees to work in close proximity to rapidly moving and operating equipment and systems. The industry has a wide variety of hazards and, as a result, employees are often injured. Based on North Carolina inspection data and consultative visits in the past five years, the following hazards have been found in food manufacturing facilities: ergonomics, machine guarding, electrical, hazard communication, combustible dust, and process safety management.

D. **Program Procedures.**

NAICS 311 food manufacturing assignments will be generated through fatalities, accidents, complaints, referrals, site specific targeting (SST) and general industry schedule criteria. The assignments have priority based upon the schedule in FOM Chapter II.E.

E. **Compliance Inspection Procedures**.

1. **General**.

a. Compliance activities conducted under this SEP will include both programmed [the general industry schedule and the SST schedule assigned from the OSH Division's targeting system] and unprogrammed [accidents, complaints, and referrals] inspections.

b. Partial scope inspections conducted at NAICS 311 sites will be expanded to include a review of the issues and standards listed in E.3 below. They may also be expanded based on the procedures in North Carolina Field Operations Manual (FOM) Chapter II.C.

2. **Pre-Inspection Preparation**.

a. District supervisors will consider the objectives of this SEP, the processes and hazard categories expected at individual locations to determine whether to assign specific inspections to individual CSHOs or to assign as a team inspection. Where appropriate, individual inspections may be assigned as joint safety and health inspections.

b. CSHOs assigned to conduct unprogrammed, partial-scope inspections (accidents, complaints, and referrals).

i. If the site has received a comprehensive safety or health inspection within the preceding 3 years (or 2 years for SST assignments), the expanded partial-scope inspection required under E.1.b may not be required. The CSHO will review the inspection file for the earlier inspection and confer with the district supervisor to determine which, if any, of the elements listed in E.3 should be addressed during the current inspection. This history must be documented in the OSHA-1 narrative for the current inspection.

ii. If the site has received an expanded partial-scope inspection within the past three years and the elements listed in E.3 were addressed, a second expanded partial-scope inspection will not be conducted. This history must be documented in the OSHA-1 Narrative for the current inspection.

iii. CSHOs will consult with a program quality verification (PQV) team leader or PQV team member in their district to discuss whether or not the site is in the scope of 29 CFR 1910.119, Process Safety Management of Highly Hazardous Chemicals

c. CSHOs assigned to conduct site inspections under this SEP will familiarize themselves with the following documents as appropriate:

i. NCFOM Chapter XVII – Ergonomics Inspection Procedures.
ii. CPL 02-00-135 - Recordkeeping Policies and Procedures.
iii. CPL 02-02-069 – Bloodborne Pathogens.

iv. CPL 03-00-008 – NEP Combustible Dust Explosion Prevention Program.
v. CPL 2.100 – Confined Spaces.
vi. CPL 2-2.45A – Process Safety Management.
vii. CPL 2-2.38D – Inspection Procedures for Hazard Communication.

d. In addition to the program documents listed above, ETTA has developed industry-specific Industrial Data Reports (IDRs) for several industry segments within NAICS 311 that describe the processes and identify the hazards common to that segment. The IDRs are accessible on ETTA's intranet page.

3. **Inspection Process**.

CSHOs will evaluate the following safety and health program issues during all compliance inspections conducted at NAICS 311 sites under this SEP:

a. **OSHA Recordkeeping**. Federal studies of the OSHA Data Initiative statistics have identified instances of under-reporting of OSHA recordable cases by employers in high hazard industries including employers within NAICS 311. During each inspection conducted under this SEP, CSHOs will evaluate the employer's recordkeeping process by completing the following:

i. Review the site's 300 and 300A forms for the preceding three calendar years and the year-to-date for the current year. Discuss any apparent discrepancies with the employer's OSHA 300 log record keeper or appropriate member of management.

ii. Record the required data from each OSHA 300A for entry on the OSHA-1.

iii. During employee interviews, question employees regarding work-related injuries they have had and/or their knowledge of work-related injuries involving other employees within the past three calendar years. Where the incidents appear to meet the OSHA recordable criteria, ensure the incidents are properly recorded on the appropriate OSHA 300 log. Discuss any apparent discrepancies with the employer's OSHA 300 log record keeper or the appropriate member of management. Appendix B of this OPN contains an employee questionnaire that can be used to record the employees' responses.

Additionally, CSHO's will evaluate the employer's recordkeeping logs per the requirements of 29 CFR Part 1904, Recording and Reporting Occupational Injuries and Illnesses and CPL 02-00-135 - Recordkeeping Policies and Procedures.

b. **Combustible Dust**. NAICS 311 sites may contain organic dusts including, but not limited to: flour, sugar, grains, and animal feeds. CSHOs will evaluate the facility to determine if potentially combustible dust concentrations exist and the employer's process and procedures for preventing or controlling the hazard. This assessment must include an evaluation of the dust collection systems in place at the facility. CSHO's will use CPL 03-00-008 – NEP*:* Combustible Dust Explosion Prevention Program when conducting inspections related to combustible dust.

c. **Confined Spaces**. Many NAICS 311 sites contain permit–required confined spaces including, but not limited to: silos, bins, below-ground pits, and limited-access spaces within production equipment that pose the potential for employee entrapment and serious injury. CSHOs will evaluate the employer's policies, procedures, and work-practices for compliance with the requirements of 29 CFR 1910.146, Permit-required Confined Spaces. Guidance is available in CPL 2.100, Application of the Permit-Required Confined Spaces (PRCS) Standard, 29 CFR 1910.146.

d. **Electrical**. Electrical hazards in NAICS 311 sites can be aggravated by the presence of wet-process areas and the industry's sanitation standards that require the use of chemical products that may corrode electrical enclosures and equipment. CSHOs will evaluate the condition of electrical equipment such as panels, cabinets, motor control centers, conduit, etc.; evaluate the appropriate use of GFCIs; and evaluate the use of water-proof receptacles and enclosures. CSHOs will also evaluate electrical work practices for compliance with the requirements of 29 CFR 1910.147, The Control of Hazardous Energy.

e. **Ergonomics**. Many production processes at NAICS 311 sites require the performance of repeated and sustained manual handling and manual exertion work tasks. CSHOs will evaluate the employer's policies, procedures and work practices to determine if they effectively eliminate and control ergonomic risk factors. The CSHO will review the employer's OSHA 300 logs to identify musculoskeletal disorders (MSDs) such as repetitive motion injuries, cumulative trauma disorders, etc. The CSHO will also calculate the MSD incident rates over the three year period preceding the inspection to determine if the rates are increasing or decreasing. Where rates are increasing and/or the employer's policies, procedures and work practices are not effective, CSHOs will refer to FOM Chapter XVII, Ergonomics Inspection Procedures for guidance.

f. **Hazard Communication**. CSHOs will evaluate the employer's use of chemicals in the work environment for compliance with 29 CFR 1910.1200, Hazard Communication. CSHO's will use CPL 2-2.38D, Inspection Procedures for the Hazard Communication Standard as guidance.

g. **Machine Guarding**. Accidents resulting from employee contact with or entrapment in moving machine parts have resulted in serious injuries, including deaths, in several NAICS 311 sites. CSHOs will:

   i. Evaluate the employer's process for the inspection and evaluation of new and/or rebuilt machinery to identify and correct hazards before the machinery is released for routine operation. Review written documentation.

   ii. Evaluate the employer's process for preventative maintenance / periodic self-inspection to identify and correct hazards. Review written documentation.

   iii. Evaluate the employer's control of hazardous energy program for compliance with the requirements of 29 CFR 1910.147.

   iv. Conduct a focused walk-through inspection to evaluate the guarding of machinery within the facility. This evaluation will include, but not be limited to:

      A. Conveyors.
      B. Points-of-operation including: in-running nip-points, cutters, shears, saws, presses, etc.
      C. Robotic equipment.

h. **Process Safety Management**. NAICS 311 sites with large refrigeration or freezer processes will have chemical products in sufficient quantities to place them within the scope of 29 CFR 1910.119, Process Safety Management of Highly Hazardous Chemicals. The two chemicals most likely to be found in quantities above the threshold quantity (TQ) at these sites are anhydrous ammonia (10,000 lbs. TQ) used for refrigeration and chlorine (1,500 lbs. TQ) used for water treatment.

   CSHOs will interview the appropriate management representative to determine:

1. If any processes use hazardous chemicals at or above the threshold quantities listed in 29 CFR 1910.119 Appendix A. [The list is in Appendix C of this OPN.]

2. If any processes use a flammable liquid or gas, as defined in 29 CFR 1910.1200(c), in quantities of 10,000 pounds or greater (excluding the quantity maintained in an atmospheric storage tank).

3. If the results of the screening interview indicate that highly hazardous chemicals listed are present at or above the threshold quantity amount or a flammable liquid or gas is present in quantities above 10,000 pounds, then the CSHO will determine if the employer has developed and implemented a process safety management program at the site.

   i) If the CSHO confirms or suspects the site might be covered by 29 CFR 1910.119, the CSHO will consult with their district supervisor or bureau chief regarding a referral for a process safety management inspection of the site.

   ii) If the CSHO has any questions regarding the process safety management standard, the CSHO will contact their district supervisor, bureau chief, process safety management coordinator, or any PQV team member.

NOTE: The screening process for coverage under the process safety management standard is contained in Appendix D of this OPN.

i. **Medical Records**. During evaluation of the employer's OSHA recordkeeping or ergonomics program, it may be necessary to access and obtain copies of employees' medical records. Medical records, as defined in FOM Chapter XVI, must be obtained and maintained in accordance with the requirements of FOM Chapters III, XIII, and XVI. CSHOs are reminded that all copies of employees' medical records obtained from the employer or other sources are to be maintained as a part of the inspection file in a separate brown Kraft envelope and marked "Medical Records – Confidential" with company name and inspection number.

US Health and Human Services' Standards for Privacy of Individually Identifiable Health Information (HIPPA), 45 CFR 164.512(b)(1)(v), state that an employer (or its health care provider) can disclose and use confidential employee health information when conducting or evaluating workplace medical surveillance; or to evaluate whether an employee has a work-related illness or injury; or to comply with OSHA requirements under 29 CFR parts 1904 through 1928, 30 CFR parts 50 through 90, or under state law having a similar purpose. A memo explaining this to employers is located in the memo folder on the director's intranet page.

4. **Post-Inspection Documentation**.

Following the completion of all inspections conducted at NAICS 311 sites under this SEP, CSHOs will complete the following:

a. **OSHA 300A Data**. CSHOs will enter the occupational injury/illness data collected from the employer's 300As into the OSHA-1. The CSHOs will print a copy of the OSHA 300A data sheet from the inspection and forward the sheet to the bureau chief of the Planning, Statistics, and Information Management Bureau (to be used by the Food Manufacturing SEP Team).

b. **Inspection Findings**. The CSHOs will complete their inspection documentation to include a summary of their findings regarding the safety and health program issues listed in 3.E. above.

This summary will be included in the safety and health programs section of the safety and health narrative portion of the OSHA-1. A sample template is contained in Appendix E.

c. **Citations**. If alleged violations of North Carolina's occupational safety and health standards are identified during an inspection, the CSHO will prepare citations as per the requirements of FOM Chapter V: Citations. Following approval by the district supervisor (and other division management as appropriate), the CSHO will make a copy of the Citation and Notification of Penalty pages from the citation package and forward these pages to the bureau chief of the Planning, Statistics, and Information Management Bureau (to be used by the Food Manufacturing SEP Team).

F. **Outreach.**

The Education, Training and Technical Assistance Bureau and the Consultative Services Bureau will conduct outreach in accordance with the goals set forth in the NCDOL Occupational Safety and Health Division's Strategic Management Plan, including but not limited to, marketing of services offered, educational workshops, and hazard related publications. The Consultative Services Bureau will focus efforts in NAICS 311 to increase requests and surveys. Surveys will focus on the hazards described in section E.3 of this OPN.

G. **Recording and Tracking.**

There is no special coding needed for this SEP since all inspections can be identified by their NAICS. If ergonomics hazard alert letters or citations are issued, codes S-17 and S-16 should be used respectively, in accordance with FOM Chapter XVII. Specific codes from other OPNs or CPLs used in conjunction with this SEP will be entered when appropriate (e.g. combustible dust).

H. **Program Evaluation.**

BLS data will be used to determine the effectiveness of this industry emphasis. This statistical data is reviewed annually by the state with outcome results included in both the State OSHA Annual Report and the Federal Annual Monitoring and Evaluation Report. State activity is tracked on a monthly basis and is reported on the performance indicator report.

I. **Effective Date.**

This OPN 140 is effective on the date of signature. It will remain in effect until revised or canceled by the director.

Signed on Original
Steve Davis
SEP Team Leader

Signed on Original
Allen McNeely
Director

10/13/2009
Date of Signature

APPENDIX A: NAICS Definitions for 311, Food Manufacturing (Mfg.)

3111 Animal Food Mfg.
31111 Animal Food Mfg.
311111 Dog and Cat Food Mfg.
311119 Other Animal Food Mfg.

3112 Grain and Oilseed Milling
31121 Flour Milling and Malt Mfg.
311211 Flour Milling
311212 Rice Milling
311213 Malt Mfg.
31122 Starch and Vegetable Fats and Oils Mfg.
311221 Wet Corn Milling
311222 Soybean Processing
311223 Other Oilseed Processing
311225 Fats and Oils Refining and Blending
31123 Breakfast Cereal Mfg.
311230 Breakfast Cereal Mfg.

3113 Sugar and Confectionery Product Mfg.
31131 Sugar Mfg.
311311 Sugarcane Mills
311312 Cane Sugar Refining
311313 Beet Sugar Mfg.
31132 Chocolate and Confectionery Mfg. from Cacao Beans
311320 Chocolate and Confectionery Mfg. from Cacao Beans
31133 Confectionery Mfg. from Purchased Chocolate
311330 Confectionery Mfg. from Purchased Chocolate
31134 Nonchocolate Confectionery Mfg.
311340 Nonchocolate Confectionery Mfg.

3114 Fruit and Vegetable Preserving and Specialty Food Mfg.
31141 Frozen Food Mfg.
311411 Frozen Fruit, Juice, and Vegetable Mfg.
311412 Frozen Specialty Food Mfg.
31142 Fruit and Vegetable Canning, Pickling, and Drying
311421 Fruit and Vegetable Canning
311422 Specialty Canning
311423 Dried and Dehydrated Food Mfg.

3115 Dairy Product Mfg.
31151 Dairy Product (except Frozen) Mfg.
311511 Fluid Milk Mfg.
311512 Creamery Butter Mfg.
311513 Cheese Mfg.
311514 Dry, Condensed, and Evaporated Dairy Product Mfg.
31152 Ice Cream and Frozen Dessert Mfg.
311520 Ice Cream and Frozen Dessert Mfg.

3116 Animal Slaughtering and Processing
31161 Animal Slaughtering and Processing
311611 Animal (except Poultry) Slaughtering
311612 Meat Processed from Carcasses
311613 Rendering and Meat Byproduct Processing
311615 Poultry Processing

3117 Seafood Product Preparation and Packaging
31171 Seafood Product Preparation and Packaging
311711 Seafood Canning
311712 Fresh and Frozen Seafood Processing

APPENDIX B: EMPLOYEE QUESTIONNAIRE: WORK-RELATED INJURIES & ILLNESSES

NAME: _____ JOB TITLE: _____

DEPARTMENT: _____ LENGTH OF SERVICE: _____

HAS YOUR EMPLOYER INFORMED YOU HOW TO REPORT WORK-RELATED INJURIES OR ILLNESSES?
YES: ____ NO: ____

WHAT IS THE REPORTING PROCESS? _____

_____

DID YOU EXPERIENCE A WORK-RELATED INJURY OR ILLNESS DURING THE PAST THREE YEARS?
YES: ____ NO: ____

DESCRIBE THIS INJURY OR ILLNESS: _____

_____

DID YOU REPORT THIS INJURY OR ILLNESS TO YOUR EMPLOYER? YES: ____ NO: ____

DID YOU RECEIVE MEDICAL TREATMENT FOR THIS INJURY / ILLNESS? YES: ____ NO: ____

WHO PROVIDED THIS TREATMENT? _____

DESCRIBE THE TREATMENT YOU RECEIVED. _____

_____

DID YOU MISS ANY TIME FROM WORK AS A RESULT OF THIS INJURY / ILLNESS OR MEDICAL TREATMENT?
YES: ____ NO: _____

HOW MANY DAYS DID YOU MISS FROM WORK? _____

WERE YOU ABLE TO PERFORM ALL OF THE DUTIES OF YOUR JOB AND/OR WORK A FULL WORK SCHEDULE FOLLOWING THIS INJURY / ILLNESS OR MEDICAL TREATMENT? YES: ____ NO: ____

DETAILS OF RESTRICTIONS: _____

_____

ARE YOU AWARE OF ANY WORK-RELATED INJURIES OR ILLNESSES EXPERIENCED BY ANY OF YOUR CO-WORKERS? YES: ____ NO: ____

DETAILS OF THESE INCIDENTS:

_____

_____

_____

APPENDIX C: PSM HIGHLY HAZARDOUS CHEMICALS – 29 CFR 1910.119, Appendix A

List of highly hazardous chemicals, toxics and reactives (mandatory). This appendix contains a listing of toxic and reactive highly hazardous chemicals which present a potential for a catastrophic event at or above the threshold quantity.

CHEMICAL NAME	CAS*	TQ**
Acetaldehyde	75-07-0	2500
Acrolein (2-Propenal)	107-02-8	150
Acrylyl Chloride	814-68-6	250
Allyl Chloride	107-05-1	1000
Allylamine	107-11-9	1000
Alkylaluminums	Varies	5000
Ammonia, Anhydrous	7664-41-7	10000
Ammonia solutions (> 44% ammonia by weight)	7664-41-7	15000
Ammonium Perchlorate	7790-98-9	7500
Ammonium Permanganate	7787-36-2	7500
Arsine (also called Arsenic Hydride)	7784-42-1	100
Bis (Chloromethyl) Ether	542-88-1	100
Boron Trichloride	10294-34-5	2500
Boron Trifluoride	7637-07-2	250
Bromine	7726-95-6	1500
Bromine Chloride	13863-41-7	1500
Bromine Pentafluoride	7789-30-2	2500
Bromine Trifluoride	7787-71-5	15000
3-Bromopropyne (also called Propargyl Bromide)	106-96-7	100
Butyl Hydroperoxide (Tertiary)	75-91-2	5000
Butyl Perbenzoate (Tertiary)	614-45-9	7500
Carbonyl Chloride (see Phosgene)	75-44-5	100
Carbonyl Fluoride	353-50-4	2500
Cellulose Nitrate (concentration > 12.6% nitrogen)	9004-70-0	2500
Chlorine	7782-50-5	1500
Chlorine Dioxide	10049-04-4	1000
Chlorine Pentrafluoride	13637-63-3	1000
Chlorine Trifluoride	7790-91-2	1000
Chlorodiethylaluminum (also called Diethylaluminum Chloride)	96-10-6	5000
1-Chloro-2,4-Dinitrobenzene	97-00-7	5000
Chloromethyl Methyl Ether	107-30-2	500
Chloropicrin	76-06-2	500
Chloropicrin and Methyl Bromide mixture	None	1500
Chloropicrin and Methyl Chloride mixture	None	1500
Cumene Hydroperoxide	80-15-9	5000
Cyanogen	460-19-5	2500
Cyanogen Chloride	506-77-4	500
Cyanuric Fluoride	675-14-9	100
Diacetyl Peroxide (concentration > 70%)	110-22-5	5000
Diazomethane	334-88-3	500
Dibenzoyl Peroxide	94-36-0	7500
Diborane	19287-45-7	100
Dibutyl Peroxide (Tertiary)	110-05-4	5000
Dichloro Acetylene	7572-29-4	250
Dichlorosilane	4109-96-0	2500
Diethylzinc	557-20-0	10000

CHEMICAL NAME	CAS*	TQ**
Diisopropyl Peroxydicarbonate	105-64-6	7500
Dilaluroyl Peroxide	105-74-8	7500
Dimethyldichlorosilane	75-78-5	1000
Dimethylhydrazine, 1,1-	57-14-7	1000
Dimethylamine, Anhydrous	124-40-3	2500
2,4-Dinitroaniline	97-02-9	5000
Ethyl Methyl Ketone Peroxide (also Methyl Ethyl Ketone Peroxide; concentration > 60%)	1338-23-4	5000
Ethyl Nitrite	109-95-5	5000
Ethylamine	75-04-7	7500
Ethylene Fluorohydrin	371-62-0	100
Ethylene Oxide	75-21-8	5000
Ethyleneimine	151-56-4	1000
Fluorine	7782-41-4	1000
Formaldehyde (Formalin)	50-00-0	1000
Furan	110-00-9	500
Hexafluoroacetone	684-16-2	5000
Hydrochloric Acid, Anhydrous	7647-01-0	5000
Hydrofluoric Acid, Anhydrous	7664-39-3	1000
Hydrogen Bromide	10035-10-6	5000
Hydrogen Chloride	7647-01-0	5000
Hydrogen Cyanide, Anhydrous	74-90-8	1000
Hydrogen Fluoride	7664-39-3	1000
Hydrogen Peroxide (52% by weight or greater)	7722-84-1	7500
Hydrogen Selenide	7783-07-5	150
Hydrogen Sulfide	7783-06-4	1500
Hydroxylamine	7803-49-8	2500
Iron, Pentacarbonyl	13463-40-6	250
Isopropylamine	75-31-0	5000
Ketene	463-51-4	100
Methacrylaldehyde	78-85-3	1000
Methacryloyl Chloride	920-46-7	150
Methacryloyloxyethyl Isocyanate	30674-80-7	100
Methyl Acrylonitrile	126-98-7	250
Methylamine, Anhydrous	74-89-5	1000
Methyl Bromide	74-83-9	2500
Methyl Chloride	74-87-3	15000
Methyl Chloroformate	79-22-1	500
Methyl Ethyl Ketone Peroxide (concentration > 60%)	1338-23-4	5000
Methyl Fluoroacetate	453-18-9	100
Methyl Fluorosulfate	421-20-5	100
Methyl Hydrazine	60-34-4	100
Methyl Iodide	74-88-4	7500
Methyl Isocyanate	624-83-9	250
Methyl Mercaptan	74-93-1	5000
Methyl Vinyl Ketone	79-84-4	100
Methyltrichlorosilane	75-79-6	500
Nickel Carbonyl (Nickel Tetracarbonyl)	13463-39-3	150
Nitric Acid (94.5% by weight or greater)	7697-37-2	500
Nitric Oxide	10102-43-9	250
Nitroaniline (para Nitroaniline)	100-01-6	5000
Nitromethane	75-52-5	2500
Nitrogen Dioxide	10102-44-0	250

CHEMICAL NAME	CAS*	TQ**
Nitrogen Oxides (NO; NO2;N2O4; N2O3)	10102-44-0	250
Nitrogen Tetroxide (also called Nitrogen Peroxide)	10544-72-6	250
Nitrogen Trifluoride	7783-54-2	5000
Nitrogen Trioxide	10544-73-7	250
Oleum (65% to 80% by weight; also called Fuming Sulfuric Acid)	8014-94-7	1000
Osmium Tetroxide	20816-12-0	100
Oxygen Difluoride (Fluorine Monoxide)	7783-41-7	100
Ozone	10028-15-6	100
Pentaborane	19624-22-7	100
Peracetic Acid (concentration > 60% Acetic Acid; also called Peroxyacetic Acid)	79-21-0	1000
Perchloric Acid (concentration > 60% by weight)	7601-90-3	5000
Perchloromethyl Mercaptan	594-42-3	150
Perchloryl Fluoride	7616-94-6	5000
Peroxyacetic Acid (concentration > 60% Acetic Acid; also called Peracetic Acid)	79-21-0	1000
Phosgene (also called Carbonyl Chloride)	75-44-5	100
Phosphine (Hydrogen Phosphide)	7803-51-2	100
Phosphorus Oxychloride (also called Phosphoryl Chloride)	10025-87-3	1000
Phosphorus Trichloride	7719-12-2	1000
Phosphoryl Chloride (also called Phosphorus Oxychloride)	10025-87-3	1000
Propargyl Bromide	106-96-7	100
Propyl Nitrate	627-3-4	2500
Sarin	107-44-8	100
Selenium Hexafluoride	7783-79-1	1000
Stibine (Antimony Hydride)	7803-52-3	500
Sulfur Dioxide (liquid)	7446-09-5	1000
Sulfur Pentafluoride	5714-22-7	250
Sulfur Tetrafluoride	7783-60-0	250
Sulfur Trioxide (also called Sulfuric Anhydride)	7446-11-9	1000
Sulfuric Anhydride (also called Sulfur Trioxide)	7446-11-9	1000
Tellurium Hexafluoride	7783-80-4	250
Tetrafluoroethylene	116-14-3	5000
Tetrafluorohydrazine	10036-47-2	5000
Tetramethyl Lead	75-74-1	1000
Thionyl Chloride	7719-09-7	250
Trichloro (chloromethyl) Silane	1558-25-4	100
Trichloro (dichlorophenyl) Silane	27137-85-5	2500
Trichlorosilane	10025-78-2	5000
Trifluorochloroethylene	79-38-9	10000
Trimethyoxysilane	2487-90-3	1500

*** Chemical Abstract Service Number.**
**** Threshold Quantity in Pounds (Amount necessary to be covered by this standard).**

APPENDIX D: SCREENING PROCESS FOR COVERAGE UNDER PROCESS SAFETY MANAGEMENT

I. Basic Screening (Non-PQV Trained CSHOs):

A. Initiate any inspection activity through normal channels: (FATCAT, Complaint, Referral, SST, Follow-Up, General Schedule SEP, etc.)

B. Ask if the employer has a Process Safety Management Program. If the response is "no", ask the employer about the use of the following at this site:

1. Is there an ammonia refrigeration system in operation at this site? What is the quantity of ammonia used or stored at this site? [Does this quantity approach or exceed 10,000 pounds?]

2. Is chlorine used for water treatment or any other processes at this site? What is the quantity of chlorine used or stored at this site? [Does this quantity approach or exceed 1,500 pounds?]

3. What flammable liquids are used or stored at this site? What is quantity of flammable liquids are used or stored at this site? [Does this quantity approach or exceed 10,000 pounds?]

4. Are any of the chemicals listed in 1910.119 Appendix A, used or stored at this site? Which chemicals and in what quantities? [Appendix A chemicals are listed in Appendix C of this OPN.]

C. If there is ANY indication of possible process safety management coverage at this site, CSHOs will contact their district supervisor or a PQV team member to determine if a referral for a process safety management inspection is to be made.

II. PQV Team Member (Process Safety Management Trained CSHO):

A. Give the non-trained CSHOs a list of information for chemicals/amounts to obtain from the employer at the site.

B. After the post-inspection consultation with the CSHOs, gather the other information as required. (This may be accomplished through a follow-up telephone discussion with the employer's representative.)

C. Coordinate with the district supervisor or bureau chief to select most appropriate PQV team leader for a process safety management inspection at the site based on workload, abilities, availability, etc.

III. Division Resources:

A. **PSM Coordinator:** Howard Laurie, Office (910) 251-2678 / Cell (910) 617-7461

B. **Supervisors/Facilitators:** Lafayette Atkinson, Nicole Brown, Bruce Miles, and Robby Jones.

APPENDIX E: SAMPLE OSHA-1 NARRATIVE TEMPLATE

SAFETY AND HEALTH NARRATIVE

INSPECTION NUMBER	

INTRODUCTION

SITE DESCRIPTION

PROCESS DESCRIPTION

SAFETY AND HEALTH PROGRAMS

During this inspection, the following Safety & Health issues were evaluated:

a) OSHA Recordkeeping:

b) Combustible Dust:

c) Confined Spaces:

d) Electrical Hazards:

e) Ergonomic Exposures:

f) Hazard Communication:

g) Machine Guarding Hazards:

h) Process Safety Management:

UNUSUAL CIRCUMSTANCES

GENERAL

PENALTY ADJUSTMENTS

CATEGORY	%	
Size		

History		
Safety & Health Programs		
Cooperation		
TOTAL		

CLOSING