# CONTRACTOR SAFETY MANUAL July 2023

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# **Mill Safe Practices**

## GENERAL SAFE PRACTICES

- A. Contractors are expected to follow company safety policies and procedures while conducting their work in a safe manner. Failure to do so could jeopardize future work at CPP.
- **B.** All Contractors are required to successfully complete our web-based contractor safety orientation annually prior to beginning work.
- C. Contractors are not allowed to enter the Georgia Pacific facility without first obtaining a Georgia Pacific pass.
- D. Before any new material will be allowed on the mill site, the requesting individual must take the following steps:
  - 1. Ensure that a SDS is provided by the manufacturer or supplier prior to bringing the material on the mill site.
  - 2. Provide an electronic copy of the SDS to the CPP Project Manager.
  - 3. Once the material is approved by the Environmental Manager or designee the CPP Project Manager will notify the contractor. See the section for the Written Hazard Communication Program.
- E. Wear proper protective equipment as required; refer to Safety Data Sheet, or PPE policies in this manual. PPE will be provided by the contractor. The following PPE is required.

- 1. Hard hats
- 2. Eye Protection
- 3. Hearing Protection
- 4. Safety-toed shoes
- 5. Escape respirator-North Safety 7902 or equivalent)
- F. Observe all posted mill speed and traffic signs. When mobile equipment is equipped with seat belts, contractors are required to wear them.
- G. All injuries, close calls, damage incidents, environmental issues and/or Process Safety Management (PSM) exposure or release must be reported to CPP as soon as possible following the incident.
  - 1. Contractors are required to complete an incident investigation and documentation before the contractor leaves the mill site.
  - 2. Contractors are required to provide a copy of the incident investigation form to the CPP Project Manager no later than 24 hours following the incident.
  - 3. A CPP incident investigation form can be provided if a contractor does not have one available.
- H. Know the location of emergency exits, first aid cabinets, eye wash/safety shower stations. Follow the evacuation procedures as written in the Emergency Response Plan; follow safe practices as required when any alarm sounds. See Emergency Response Plan page 31.
- I. Do not wear loose-fitting clothing or large pieces of jewelry in the operating areas of the mill.

- J. Use extreme caution when working around electrical equipment or any moving machinery.
- K. Protect all portable electric tools with a ground fault circuit interrupter (GFCI).
- L. Contractors will not use cell phones while driving or walking on the mill site. Stop and/or pull over while using a cell phone.
- M. Use caution walking through the operating areas of the mill.
- N. Do not walk under a drip unless certain that it is not a danger.
- O. Take proper precautions to safeguard those working below:
  - 1. Do not lay tools or other objects where they might fall below.
  - 2. Barricade the area with caution tape and the black and white Barricade tags communicating the overhead work hazards.
- P. Make sure tools are in good repair prior to use.
- Q. Horseplay in any area of the mill is not permitted.
- R. Clean the work area when finished with a job.
- S. Use caution on catwalks and stairs.
- T. Pedestrians whose work requires them to cross the wood storage area will do so only after receiving permission from the Lead Chip Pile Operator.
- U. Notify the area operator when performing maintenance in any operating area.
- V. Compressed air with Chicago style fittings must be secured with pins or other approved devices to prevent accidental disengagement.
- W. Blowing self-off with compressed air is not permitted.

- X. When using compressed air for blow-down or cleaning, employees will wear either goggles or a full-face respirator.
- Y. Contractors are allowed on the man-lift only if their contracting company has provided documentation, they have been trained to use the man-lift to the project manager. and the CPP Safety Department has given approval.
- Z. Hot Work permits are required.
- AA. Welding tanks must be securely fastened or be on portable carts. Gauges and other welding equipment must be in good repair.
- **BB.** Flash protection barriers must be used when welding and cutting.
- CC. Smoking, aerosolizing, or vaporizing is only allowed in designated areas.
- DD. Persons under the influence of alcohol or drugs are not allowed on the premises nor shall alcohol or drugs be brought on the premises. Violators will be evicted, barred from the premises, and prosecuted.
- EE. No firearms, explosive devices or other weapons are allowed on the premises.
- FF. Parking is allowed only in areas designated for contractor parking: contractor vehicles will be appropriately marked when on site.
- GG. No over-night camping in any form is allowed on the premises.

## BARRIER TAPE

Barricade tape (electrical) or Barricade tape with tags shall be used to limit or prohibit access to areas where a known

hazard poses a risk. The three types of barricade tape available for CPP employees to use on the mill site are Yellow Caution, Red Danger & Blue Electrical Boundary. Both Yellow and Red barricade tape must also be accompanied by a Black and White double-sided Barricade tag. Barricade tape and tag uses are listed below:

- A. **Caution Tape (**Yellow): Yellow Caution tape with "CAUTION" written continuously along the tape will be used to warn of a hazard inside the barricaded area.
  - 1. Where there is an alternate route around this barricaded area, then it should be used.
  - 2. If it is necessary to enter or cross through the area, before entering read the barricade tag attached to the caution tape to understand the hazards inside before entering the barricaded area.
  - 3. A Black and White Barricade tag must be completed and attached on all caution barricade tape being use with the Safe Side facing outward.
    - a. The tag should be placed at a location where it is visible to all personnel. More than one tag may be necessary.
    - b. The tag must be completely filled out with a Point of Contact. A Job Title or Crew may be listed as the point of contact.
  - 4. Never removed any caution tape or tags without permission from an authorized person from the department.
- B. **Danger Tape (**Red**):** Red Danger tape with "DANGER" written continuously along the tape will be used only where an immediate hazard exists inside the area barricaded off.

- 1. Never go into a danger taped area without permission. No one is allowed to cross through or enter an area barricaded with Danger tape unless given permission from the area supervisor or the point of contact in charge of the work.
- 2. When it is necessary to enter or cross a danger taped area, before entering read the barricade tag hanging on the danger tape to understand what the hazards are.
- 3. A Black and White Barricade tag must be completed and attached on all caution barricade tape being use with the Safe Side facing outward.
  - a. The tag should be placed at a location where it is visible to all personnel. More than one tag may be necessary
  - b. The tag must be completely filled out with a Point of Contact. A Job Title or Crew may be listed as the point of contact.
- 4. Never remove any caution tape or tags without permission from an authorized person from the department.
- C. Electrical Boundary tape (Blue): Blue Electrical Boundary tape with "ELECTRICAL BOUNDARY" written continuously along the tape will be used when there is an arc flash hazard or shock hazard present as a result of work being performed with exposed live parts. Electricians performing the work may elect to place this barrier tape at the "Limited Approach Boundary" or "Flash Hazard Boundary" whichever is greater to prevent entry by unqualified personnel.

- D. Barricade Tape removal: Tape removal should occur as soon as possible after the work is complete and/or hazards are removed.
- E. **Stores and Inventory Control:** The CPP Storeroom will only stock three types of barricade tape and barricade tags.
  - 1. Yellow tape labeled "CAUTION"
  - 2. Red tape labeled "DANGER"
  - 3. Blue tape labeled "ELECTRICAL BOUNDARY".
  - 4. White and Black Barricade tags will also be stocked.
- F. Radiation X-Ray Tape (Magenta and yellow) Magenta and yellow radiation tape is provided and used by contractors to designate a radiation boundary and prevent entry by unqualified personnel. Magenta and yellow tape comes in various designs. This tape is not for use by CPP employees; no tags are required on this type of tape.
- G. Contractors may add their own tags on barricade tape, but a CPP barricade tag must always be used.

## COMPRESSED AIR SAFETY

It is important to note that compressed air, used incorrectly, can cause air embolism, lacerations, hearing loss, inhalation of air borne dust, and/or foreign bodies in the eye, blisters, sprains, strains, 'struck by' injuries, etc. When using compressed air, the following procedures will be followed:

- A. Ensure Chicago style fittings are secured with pins or other approved devices to prevent accidental disengagement.
- B. Tight fitting, sealed goggles or full-face respirators are required PPE.
- C. Hearing protection is required.
- D. Depending on circumstances, a dust mask may be needed.
- E. Do not use if compressor, air hose, or wand is damaged.
- F. Using compressed air to remove dust from yourself or others is dangerous and strictly prohibited.
- G. Always keep air wand pointed away from body.
- H. When performing close-up work (2 feet or less) with compressed air, goggles and a face shield or a full-face respirator is required to prevent injury from blow-back.

## ELECTRICAL SAFETY

- A. Call an electrician if a motor kicks out.
- B. Report all electrical shocks received to the supervisor immediately.
- C. Use only fire extinguishers marked *Class C* for electrical fires. Do not use water.
- D. Report all open lighting, electrical panels, and open or damaged wiring to the supervisor (Arc Flash and Shock Hazard Boundaries apply).
- E. Floors and equipment should not be hosed down when there is danger of water splashing into electrical equipment, even if the equipment is shut down.
- F. Check all cords for damage and wear before plugging in. Plugs should not be frayed, spliced, or taped.

- **G.** Check the "Arc Flash and Shock Hazard" warning label on electrical equipment prior to any interaction with the equipment.
- H. Observe all boundaries on the "Arc Flash and Shock Hazard" warning label.
- I. Only qualified personnel (electricians) with proper PPE are allowed inside the boundaries on the "Arc Flash and Shock Hazard" warning labels.
- J. Do not store anything inside the Limited Approach Boundary identified on the "Arc Flash and Shock Hazard" warning label of electrical equipment.
- **K.** All portable corded electrical hand tools and devices require a Ground Fault Current Interrupter (GFCI) at the electrical outlet (see GFCI section).
- L. Wear personal protective equipment as required by the task being performed. A list of tasks associated with electrical equipment types is attached. Shock hazard PPE is identified in these tables. Arc flash hazard PPE shall be in accordance with NFPA 70E Table 130.7(C)(16).
- M. Ensure all portable electrical equipment such as drills, grinders, etc., is grounded.
- N. Treat all circuits as though they are live. Warn others accordingly.
- O. Take no risk even though voltage is not high.
- P. Substations are to be kept clean and locked.
- Q. Contact the Electrical Department for the Electrical Jumper policy.
- **R.** Completion and approval of an Energized Electrical Work Permit is required prior to working on live circuit(s).

### LADDER SAFETY

- A. All ladders will be inspected prior to each use and, if deemed unsafe based on the following criteria, will be taken out of service.
  - 1. The manufacturer's duty rating label is attached and legible.
  - 2. Ladders should be inspected for defects that would compromise structural integrity.
  - 3. Joints between the steps (rungs) and side rails will be tight. Rungs should not move when twisted by hand.
  - 4. All hardware and fittings will be securely attached.
  - 5. All moveable parts should operate freely without binding or undue play. Lubricate if necessary.
  - 6. Frayed or badly worn rope should be replaced.
  - 7. Safety feet should be sound and unbroken.
  - 8. Rungs/steps should be free of grease, oil, or any other substance that would make them slippery.
    - a. Under no circumstances should corrosive or alkali materials be used to remove grease or oil as these may compromise the structural integrity of the ladder.
    - b. Rungs/steps on metal ladders must be corrugated, knurled, or coated with a slipresistant material.
  - 9. No rungs/steps may be missing.
  - 10. Stepladders should have a metal spreader or locking device of sufficient size and strength to

securely hold the front and back sections in an open position.

- a. The spreader should not have any sharp objects protruding from it.
- 11. Ladders should not be painted or coated with any material that may cover up obvious defects.
- B. Ladders will only be used as intended by the manufacturer.
- C. All persons using ladders are required to have ladder safety training which includes selection, use and ladder inspection.

## MOBILE EQUIPMENT

Mobile Equipment is defined as all rolling stock-Golf Carts, Trucks, Cars, Front End Loaders, Dozers, forklifts, etc.

- A. Observe all posted mill speed limit and traffic signs.
- B. When mobile equipment is equipped with seat belts, contractors are required to wear them.
- C. Contractors must always travel in mobile equipment in a seat that is designated for that purpose.
- D. At no point should any part of the body extend beyond the cab of a vehicle while the vehicle is in motion.
- E. Lights shall remain on from sunset to sunrise or any other time when people and other mobile equipment are not <u>clearly</u> visible.
- F. When transporting materials, the materials must be carried in the vehicle by a device designated for that purpose (i.e., Pipe Rack, Toolbox, etc.).
- G. Use approved cylinder racks when transporting compressed gas cylinders.

H. Contractors are not permitted to use bicycles on the mill site.





For this policy, 'Overhead Crane' refers to all overhead cranes and mobile cranes.

#### TRAINING

Contractors using a crane must be trained to OSHA Standards 1926 Subpart CC Crane and Derricks in Construction prior to operating. **I N S P E C T I O N** 

- A. All cranes must be inspected by the operator of the crane prior to their use (Shift Inspection).
- B. All cranes will be inspected on a Frequent (Monthly) and Periodic (Quarterly and/or Annual) basis performed by a qualified inspector.
- USAGE
  - A. Loads will not be lifted that exceed the lifting capacity of any of the rigging devices or the crane rated load.
  - B. When the potential for an overload condition exists, a load indicator will be used to ensure the rigging or crane does not exceed its rated capacity.
  - C. When lifting loads greater than 10ft in elevation, access will be limited under the Vertical Drop Zone (VDZ) via the use of red danger barricade tape or permanent red chain and placards. Only those required for the lift will be in the VDZ during the lift. The VDZ will be evaluated based on the potential fall area and any other obstructions.
  - D. Designated Responsible Person for the Lift

- 1. Each lift will be controlled by a designated Responsible Person.
- 2. This person will be responsible for coordinating lift activities with all affected workers in the lift area.
- This person will be responsible for ensuring the area in the Vertical Drop Zone (VDZ) is clear prior to beginning a lift.
- E. The crane Operator will only be given signals (as needed) by a designated Signaler (more than one may be required based on the Lift Plan).

Prior to lifting, the Lift Plan will be reviewed and approved by the CPP Project Manager.

### PERSONAL PROTECTIVE EQUIPMENT

All contractors must wear the required personal protective equipment (PPE) as listed below. Personal protective equipment will be provided by the contractor.

#### ESCAPE RESPIRATORS

Escape respirators must be carried by all contractors or readily accessible. (North Safety 7902 or equivalent)

#### EYE PROTECTION

Eye protection with side shields must be worn from the start of the workday to the end of the workday in all areas of the mill excluding control rooms, restrooms, conference rooms. For some tasks, tight-fitting sealed goggles may be required.

#### FOOT PROTECTION

Safety-toed shoes are required for contractors working in all areas of the mill.

#### HAND PROTECTION

Proper use of hand protection is required on all tasks with the potential of causing injury to hands or fingers by:

- Skin cuts
- Abrasions
- Punctures
- > Dermatological, chemical, or solvent action
- > Damage or discomfort due to heat.

Hand protection needs to be carried by all contractors when entering any of the operating or maintenance areas in the mill. Areas excluded include control rooms, conference room, offices, lab areas if employees' activities do not expose their hands to hazards, break areas, locker rooms, or restrooms.

Decisions as to the type of hand protection to use will depend on the task being performed.

#### HEARING PROTECTION

Hearing protection is required in all areas where it is posted that noise levels exceed 85 dBA (all operating areas of the mill). Hearing protection is not required in control rooms, offices, or restrooms.

#### HEAD PROTECTION

Hard hats are required throughout the mill unless specific exceptions are made.

## SMOKING POLICY

Smoking, aerosolizing, or vaporizing is not allowed anywhere on the Halsey Mill Site except in Designated Areas.

Department superintendents have designated the following *outside* area(s) which are equipped with an appropriate receptacle and do not allow smoking, aerosolizing, or vaporizing within the confines of any buildings or within 10 feet of any doorway window or ventilation intake:

Recovery - SE corner of the Recovery Bldg. -West Side of Recovery Bldg. Filter Plant -East side door of Filter plant. Recaust -West door of Recaust control room. Pulp Mill -East entry to Pulp Mill ground floor -4<sup>th</sup> floor mezzanine, 10' from door Flakt Dryer - West side door by 49er - West side of Dryer building - Wet end catwalk Chip Yard - South side of chip shack at bottom of stairs Service Bldg.-West entrance and east entrance

### WAREHOUSE ENTRY

- A. High Visibility clothing or High Visibility vests must be worn in the Warehouse.
- B. Only personnel authorized by the CPP Project Manager are allowed in the Warehouse.
- C. Authorized personnel working in the warehouse must check in with a Loader.
- D. Pedestrians in the Warehouse will stay in the walkways.

- E. When a clamp truck driver approaches, pedestrians will step out of the way and make eye contact.
- F. Pedestrians will not cross a dock that is being actively loaded; they will wait out of the way until the clamp truck has left the dock area or stopped.
- G. The Warehouse is not to be used as a short-cut.
- H. Warehouse entry requirements apply at all times including when accessing the restrooms.
- I. High visibility vests are available at all entrances for those without high visibility clothing.
  - 1. Vests are to be left when exiting the warehouse.
  - 2. If there are no vests available, contact the Wet End Operator.
  - 3. Do Not Enter the warehouse without either high visibility clothing or a vest.
- J. Warehouse boundaries include:
  - 1. All entrance doors to the warehouse
  - 2. The area south of the unitizer maintenance area to the unitizer pick up conveyor defined by the walkway on the south edge.
  - 3. West wall at the blow line covers east to the unitizer line including the area in front of both bale pick up conveyors.

# **Chemical Handling**

## CHEMICAL HANDLING SAFETY

A chemical hazard is defined as any chemical that poses a physical or health threat. There are four major classes of chemical hazards:

Flammable Corrosive Toxic Reactive

Each class has different precautions.

- A. Flammables can burn when ignited.
- B. Corrosives can damage the body on contact.
- C. Toxic materials can enter the body and have immediate or long-term effects; these are often virtually invisible and come in the form of dust, vapors, mists, and gas.
- D. Reactive materials can become unstable when contaminated with other agents.

Two types of hazards are created by chemicals.

- A. Physical Hazards can burn, explode, or react.
- **B.** Health Hazards can impose dangers to health if not controlled. Effects of over-exposure to chemicals depend on the dose and toxicity. The effects can be either acute or chronic.
  - 1. Acute effects occur over a short time and are observable immediately.
  - 2. Chronic effects often cannot be seen and take a long time to accumulate.

C. Both effects are dangerous, and even though the effects may not be felt, need to be protected against.

Four main routes of exposure for Chemicals are:

- A. Ingestion or swallowing
- B. Inhalation
- C. Absorption through the skin or eyes
- D. Injection

Remember that protective equipment is a valuable safeguard against serious injury. Before handling any chemical, if the hazards are not known, always read the label and the **Safety Data Sheet (SDS)**. SDS *Right to Know* stations are located throughout the mill; see Hazard Communication Guidelines for locations.

In the event no SDS is available for chemicals on the mill site, contact the Technical Services department.

# PPE FOR SODIUM CHLORATE HANDLING

The following PPE is required when there is a reasonable expectation of exposure to sodium chlorate (changing filters, draining pumps, breaking lines, etc.)

- A. Impervious coveralls and jacket that fit snugly at the neck. Place the jacket sleeves and trouser legs outside to keep solution from running into the gloves and boots. Do not tuck the jacket in. This PPE is available in storage cabinets located in the chiller room and on the second floor by the chlorate filters.
- B. Rubber boots.

- C. Rubber or neoprene gloves. Gloves should be loosefitting for ease of removal in case the sodium chlorate does get inside.
- D. Close-fitting, splash-proof mono-goggles at all times. When appropriate, use a face shield to protect the rest of the face.

Chlorate PPE is not to be removed from the mill site due to the potential for chlorate contamination. Remove and wash contaminated clothing promptly; coordinate with Pulp Mill personnel for use of the designated washing machine in the pulp mill lab.

#### SPECIAL FIRE-FIGHTING PROCEDURES & PERSONAL PROTECTION

Avoid all bodily contact; wear protective equipment. Do not allow clothing and/or leather gloves to become impregnated with sodium chlorate solution. It will become dangerously combustible when dry and may be ignited by friction or heat. It is important to note that oxygen for a chlorate fire is supplied by the chlorate itself, thereby increasing the intensity of the fire greatly.

The general safety precaution required when dealing with sodium chlorate is to not allow it to come in contact with organic or combustible materials, acids, or reducing agents. Do not use any tools, equipment or supplies made of wood in the chlorate unloading area, chlorate storage areas, or inside the generator building. Acids present an additional hazard: acid and chlorate mixtures will generate toxic and/or explosive gases, namely chlorine dioxide, on contact.

## ASBESTOS

CPP Halsey Mill has asbestos containing material in various locations on the mill site. CPP's policy is to prevent the exposure of employees, visitors, or contractors to asbestos fibers while on the mill premises with the following exceptions. The exceptions include:

- A. Asbestos remediation is performed by licensed and certified contractors.
- B. Sample collection by licensed and certified contractors.

Projects which involve the removal of, or installation of asbestos insulating material require prior approval and will be coordinated with the Project Manager.

# **Specific Safe Practices**

## BLUE FLAG AND DERAIL POLICY

In order to load and unload Rail Cars, Mill Operators must be on, in, or around the rail car to complete their tasks. In addition, Maintenance or Contract Workers may have jobs that are on or around the rail tracks. An engine on the same tracks where work is being done has the potential to result in the unexpected movement of rail cars leading to personal injury or death.

In recognition of this danger, the railroads have adopted blue flag/blue signal protection rules to give employees the confidence to put themselves in vulnerable situations while working on the rails with the knowledge that an Engine will not interfere with their workspace. It is the policy of CPP for employees or contractors to set in place Blue Flags and Derails when jobs are occurring on or in close proximity to the Mill rail spurs. A Shift Supervisor lock will be applied before work begins.

#### Types of blue flags and placement

Blue flag protection consists of blue-painted metal signs and Derailers at both the Pulp Mill and Warehouse rail spurs and a flashing blue light at the Warehouse rail spur. To protect a stretch of track, flags are placed at right angles to the track, and a Derailer laid across the track.

**Pulp Mill Spur**: This spur is for Chlorate Unloading and is controlled by the Pulp Mill. <u>Any contractor must get</u>

approval from the Shift Supervisor prior to moving the Blue Flag/Derail. The Shift Supervisor will make the Pulp Mill aware of the change in Blue Flag status.

The Blue Flags and the Derails are located on the CPP side of the road. The flags must be up, and the derails set on each rail line to work on the mill side the track.

**Warehouse Spur**: This spur is for Loading Pulp and is controlled by the Flakt Dryer. The warehouse spur requires anyone working in, on, or around the rail line to apply their personal lock on the derailer before they start the work and to remove them prior to leaving the mill site. The Derailer may remain locked by the Supervisor Lock if the job is not completed by the end of the shift.

Any contractor must get approval from the Shift Supervisor prior to moving the Blue Flag/Derail. The Shift Supervisor will make the Flakt Dryer aware of the change in Blue Flag status.

The Flag is located just inside the rail gate east of the Service Building. The flag must be up, and the derail set on the rail to work on the mill side of the track.

#### What blue flags signal to the Railroad

A blue flag or signal located between the rails signifies that no rail cars or rail equipment may move past that point.

## FALL PROTECTION POLICY

This policy applies to all persons working at heights on Cascade Pacific Pulp premises, including but not limited to employees of Cascade Pacific Pulp, employees of any other employer, private consultants, or independent contractors, etc. CPP Fall Protection Policy requires compliance with applicable section of OSHA Fall Protection, General Industry, 29 CFR 1910 Subparts D, F, and I and OSHA Safety and Health Regulations for Construction, 29 CFR 1926 Subpart M Fall Protection.

#### PROCEDURE

- A. When persons working on surfaces (excluding ladders) with unprotected sides or edges which are four feet or more above a lower level or at any level above dangerous areas, they must be protected from falling by the use of fall protection systems.
- B. Personal fall arrest systems must be utilized when working six feet or more above a lower level when other fall protection is not available.
- C. Most elevated work areas have been provided with standard railings and toe boards to eliminate the need for fall protection.
- D. In the absence of standard railings, fall protection equipment is the preferred method of protection from fall hazards.
- E. Fall Protection equipment must comply with the provisions of 29 CFR 1926.502. Cascade Pacific Pulp standards for use of each of these precautions is explained below.
- F. All guardrails, toe boards, stair railing, fall arrest systems and fall restraint systems will comply with OSHA regulations.

#### ELEVATED WORK ON LADDERS

Elevated work on ladders will not require fall protection provided that:

- A. The ladder is properly secured (tied off, positioned, etc.)
- B. The worker can keep both feet on the ladder.
- C. The Ladder Safety rules in the Contractor Safety Manual are followed.

### FIRE SAFETY

- A. Learn the location of and how to use the fire extinguishers and fire hoses in the work area.
- B. Learn fire extinguisher codes and the proper use of each.
  - 1. Class A Ordinary combustibles (wood, paper, cloth, etc.)
  - 2. Class B Flammable liquids (grease, gasoline, paints, etc.)
  - 3. Class C Electrical equipment (motors, switches, etc.)
  - 4. Class D Rare metals, transition metals, etc.
- C. Some fire extinguishers may only be marked with the codes, so know their uses. Using the wrong type of extinguisher for a fire could be dangerous.
- D. After a fire extinguisher is used, notify the CPP Project Manager and they will exchange it for a full extinguisher.
- E. Keep all fire-fighting equipment clear and fire lanes open.
- F. Report missing, used, or inoperative fire-fighting equipment to a supervisor immediately.

- **G.** Obtain a permit before performing any hot work outside designated areas. See Hot Work Permit procedure in this manual.
- H. If unable to control a fire with a fire extinguisher, the ERT must be activated by calling Security at ext. 444 on a mill phone or from a cell phone call 541-369-1710; identify self, identify location, and identify the nature of the fire.

## FORK TRUCKS

- A. All fork truck operators must be trained per OSHA 1910.178(1)(4(i).
- **B.** Stay alert for personnel and allow no one under the forks with or without a load.
- C. Sound the horn when passing by or through doorways, around corners, and where vision is impaired.
- D. Follow all posted traffic rules.
- E. Always maintain control of the equipment.
- F. Always operate in reverse where vision is impaired by the load or when going down a grade.
- G. Use a spotter when necessary.
- H. When parking the truck, lower forks to floor, shut off the power, and set the brake.
- I. Do not leave a lift truck unattended with the motor running.
- J. Fill fuel tank only after the engine is turned off.
- K. Gloves and face shield must be worn when filling propane tanks.
- L. Keep arms and legs inside driver's compartment.
- M. Never allow others to ride on the equipment.

- N. Watch for wet or slick spots on the ground and drive accordingly.
- O. Do not exceed weight limit at any time.
- P. Wear seat belts always when operating the vehicle.

#### GROUND FAULT CIRCUIT INTERRUPTER

- A. All portable electrical hand tools and devices require a Ground Fault Current Interrupter (GFCI) at the electrical outlet.
- B. GFCI's will be plugged in at the source of the power supply, not at the end of an extension cord.
- C. Anyone using a GFCI will test for circuit operation before each use, as follows:
  - 1. Press test button.
  - 2. Red LED light should go out.
  - 3. Press Reset button.
  - 4. Red LED light should come on.
  - 5. If this does not happen, get a new GFCI.
- D. Never leave a cord plugged in with nothing connected to it.

## MANLIFT SAFETY

All Contractors will follow these procedures when riding the belt man-lift in the Pulp Mill and/or Powerhouse:

- A. Only contractors who have been adequately trained and authorized by their supervisor and CPP Project Manager may use the man-lift.
- **B.** Contractors will be required to verify their employees have been trained prior to using the CPP man-lifts.

Man -lift Training documentation and verification will be provided to the Project Manager and approved by the CPP Safety Department prior to any contractor using the CPP man-lifts.

- C. Face the belt, placing both feet squarely on step.
- D. Hold the hand grip firmly with **both** hands.
- E. Never carry tools or other objects in hands.
- F. Tool belts around the waist or any items carried over the shoulder are not allowed on the man-lift.
- G. *Do Not* leap to catch a step that has passed the floor landing.
- H. Notice the signs indicating where to get off. A red light under the floor marks the top floor and is also labeled with Top Floor - Get Off Here. To avoid being carried over the top, do not go beyond this floor. If someone does go beyond this floor landing, override limit switches will kill the power to the man-lift. If this occurs, the man-lift needs to be reset using the reset button on the top landing. NOTE: Before resetting the power to the man-lift, make sure that it is clear, and that restoring power will not result in injury to someone still on board or at the top floor.

## **RECLAIM ACCESS**

This procedure applies only to access the #2 and #3 reclaims and tunnel to the main plate. If work is to be done on any equipment the Lock-out/Tag-out Procedure still applies. When entering or working under or in the chained area behind the #2 or #3 reclaims and/or tunnel to the plate feeder:

- A. Inform the Lead Chip Pile Operator. The Lead Chip Pile Operator will ensure that the affected reclaim will not be fed while personnel are under the equipment. Prior to entering, the entrant will determine if a potentially hazardous atmosphere is likely to be present (i.e., hot work). If so, the confined space program will be used until there is no further potential for a hazardous atmosphere.
- **B.** Activate the blue light when entering and turn it off again when leaving.
- C. Inform the Lead Chip Pile Operator after the work is complete.

#### **RESPIRATORY PROTECTION**

#### ESCAPE RESPIRATORS

Escape respirators must be carried by all contractors or readily accessible.

#### CONTRACTORS

Contractors will be notified of potential hazards that might be encountered and are required to follow the OSHA's Respiratory Protection Program for the duration of their work while at this facility

#### WORKING ALOFT

#### SCAFFOLDING

Any scaffolding will be erected, moved, dismantled, and/or altered only under the supervision of a competent qualified person as defined in CFR 29, 1926, Subpart L and will meet or exceed all applicable state and/or federal requirements for such scaffolding. Prior to use, contractors should visually inspect and read the attached tag to verify it has been inspected. If there are any questions, contractors should contact the CPP Project Manager.

#### SELF-PROPELLED MOBILE ELEVATING WORKING PLATFORMS (Scissor Lift & Articulating Lift)

Only trained and authorized individuals will be allowed to operate any self-propelled mobile elevating work platform on the mill site. Authorized personnel will be trained prior to use and retrained at least every three years.
# EMERGENCY RESPONSE PLAN

The Halsey Mill Emergency Response Plan (ERP) is the guiding document for handling emergency conditions at the mill. Fifteen emergencies are addressed by the ERP.

- 1. Chemical Spill or Release
- 2. Medical
- 3. Medical-Heat Related Illness
- 4. Confined Space Rescue
- 5. Emergency in a Motor Control Center (MCC)
- 6. Fire or Explosion
- 7. Wildfire Smoke
- 8. Natural/Disaster/Extended Power Outage
- 9. Thunder & Lightning
- 10. Bomb Threat
- 11. Mill Muster
- 12. Unauthorized Access or Suspicious Behavior
- 13. Theft of PSM Chemical
- 14. Elevated, Specific, and Imminent Threats
- 15. Terrorist/Active Shooter Threat

Refer to the Emergency Response Plan for the specifics.

Below are the Emergency Muster Points & Pick-up Locations. In case of emergency, call ext. 444 (Guard Station 541-369-1710) or contact shift supervisor.





## Mill Alarm Systems

This section outlines the primary means of communication and alarms used at the Halsey facility.

## FIRE ALARM SYSTEM

A. Contractors are alerted to an emergency incident by way of the fire alarm horn blast system; codes are as follows:

General Alarms 1-1 All Clear (CPP or GP) 1-2 CPP Mill Muster 1-3 GP Mill Muster 3-3 ERT Muster (CPP or GP) 4-4 Chlorine Dioxide Muster (GP) *Active Shooter Continuous Horn Blasts (CPP or GP)* 

#### Fire Alarms-CPP

- 4-1 Pulp Mill
  4-2 Recovery
  4-3 Kiln-Filter Plant
  5-3 IGIC
  6-1-Chip Yard
  6-2 Silo
  6-3 Flakt Dryer
- 6-4 Paint Shop
- 6-5 Service Building

## Mill Emergency Number ext. 444 Guard Station-541.369.1710

#### Fire Alarms-GP

- 1-4 Secondary Fiber
- 1-5 South Finish Goods Warehouse
- 1-6 North Finished Goods Warehouse
- 1-7 #8 Tissue Building
- 2-1 South Warehouse-Tissue Bundlers
- 2-2 South Converting
- 2-3 Shops-5 Towel
- 2-4 Core Deck-Pulp Elevator-Storage Area
- 2-5 North Warehouse-Quick Stocks
- 2-6 Storeroom-Docks-Offices-6 Towel
- 3-1 Paper Mill
- 3-2 Auto Shop
- 3-4 Oil House-Paint Shop
- 3-5 Building 35 Converting Storage
- 3-6 Parent Roll Warehouse
- 3-7 Motor Storage Building (Bldg.34)
- 5-1 Human Resources Building
- 5-2 Administration Building
- B. Contractors are required to know the fire alarm code of the area in which they work.
- C. *Fire Alarm activation* a hand-pull station that is activated results in a local alarm and a signal being received in the guard office. The guard will then ensure ERT response by notifying the Incident Commander by radio of the incident location.
- D. *Sprinklers and hoses* When an automatic sprinkler head activates, or a fire hose is used an area alarm will activate for the area where the sprinkler or hose is located.

## CHLORINE DIOXIDE ALARM

#### CLO<sub>2</sub> ALARM SYSTEM

- A. The Chlorine Dioxide Alarm Systems are comprised of a series of alarms that alert personnel working in the Pulp Mill and ClO<sub>2</sub> Generator Buildings of the presence of ambient ClO<sub>2</sub> gas. The alarms consist of a series of warning lights (Amber and Red) and audible horns.
- B. There are two separate systems, one for the Pulp Mill Building and the other for the ClO<sub>2</sub> Generator Building and surrounding area.
- C. *The Pulp Mill System* includes alarm lights located on each floor of the Pulp Mill Building and an alarm panel located inside the Pulp Mill Control Room.
  - 1. All the **AMBER** alarm lights in the building and the appropriate alarm light(s) on the control room alarm panel are automatically activated when any of the sensors in the Pulp Mill detect Chlorine Dioxide at a concentration of 0.3 ppm or greater. **When the AMBER** alarm lights are flashing, all non-pulp mill-operating personnel must leave the building. They may not return to the Pulp Mill until they have been authorized to do so by an essential employee. Those employees remaining must wear a full-face respirator or SCBA while in the affected area.
  - 2. The appropriate **RED** alarm light(s) on the control room alarm panel are automatically activated when any of the sensors in the Pulp Mill detect Chlorine Dioxide at a concentration of 3.0 ppm or greater. At this point, the Lead Pulp Operator or designee will investigate the source and size of the leak. If it is

determined that conditions warrant, a Pulp Mill evacuation will be initiated by the operator activating one of the evacuation push buttons. A Pulp Mill evacuation will activate all the red alarm lights in the Pulp Mill as well as the Pulp Mill evacuation horn. When the RED alarm lights are flashing, all nonessential Pulp Mill personnel must immediately don escape respirators, evacuate the Pulp Mill, and proceed to the Pulp Mill evacuation muster point (located at the Flakt Dryer parking lot) to await further instructions.

- D. *The ClO<sub>2</sub> Generator System* includes alarm lights located on each floor of the ClO<sub>2</sub> Generator building and an alarm panel located inside the Pulp Mill Control Room.
  - 1. All the **AMBER** lights in and around the ClO<sub>2</sub> Generator Building and the appropriate alarm light(s) on the control room alarm panel are automatically activated when any of the sensors in the ClO<sub>2</sub> generator area detect Chlorine Dioxide at a concentration of 0.3 ppm or greater. When the **AMBER alarm lights are flashing, all non-pulp mill-operating personnel must leave the building.** They may not return to the area until they have been authorized to do so by an essential Pulp Mill employee. Those employees remaining must wear a full-face respirator or SCBA while in the affected area.
  - All the **RED** alarm lights in and around the Generator Building, the ClO<sub>2</sub> generator evacuation horn and the appropriate alarm light(s) on the control

alarm panel are automatically activated when any of the sensors in the ClO<sub>2</sub> generator area detect Chlorine Dioxide at a concentration of 3.0 ppm or greater. When the RED alarm lights are flashing, All Non-Essential Pulp Mill personnel must immediately don escape respirators, evacuate the Generator area and report to the Pulp Mill Control Room.

- E. The manlift and elevator are not to be used while any of the ClO<sub>2</sub> alarm lights in the Pulp Mill are flashing.
- F. The Chlorine Dioxide sensors are calibrated regularly, but failures can occur. Should the presence of Chlorine Dioxide be detected, and the lights are not flashing, activate the appropriate warning light (amber or red) by pushing one of the manual alarm/evacuation buttons and leave the area.
- G. Prior to performing work on a ClO<sub>2</sub> alarm system, including calibrating a sensor, the person performing the work should alert the Lead Pulp Operator and Bleach Operator of the work being done and the potential response of the alarm system (i.e., initiating the AMBER lights).

#### PULP MILL/GENERATOR BUILDING CLO2 SENSORS

There are sixteen (16) Chlorine Dioxide sensors in the Pulp Mill/Generator Building area. The purpose of these sensors is to detect Chlorine Dioxide, sound an alarm in the Control Room, and activate lights. The locations of these alarm sensors are:

### Pulp Mill

- A. Ground floor southeast of #1 HD
- B. Ground floor east of #5 Bleach Tower
- C. 2<sup>nd</sup> floor northeast corner by Chlorine Dioxide heater
- D. 2nd floor southeast by #1 Chlorine Dioxide mixer
- E. 3rd floor south wall
- F. 4th floor southeast corner by lab
- G. Roof southeast corner by top of 1st stage Bleach Tower
- H. Roof southwest corner by Bleach Plant Scrubber
- I. 4th Floor W Stage Washer

### Generator Building

- A. Generator Building, 1st floor
- B. Generator Building, 2<sup>nd</sup> floor
- C. Generator Building, 3rd floor
- D. Generator Building, 4th floor
- E. Chlorine Dioxide Storage Tanks, west
- F. Chlorine Dioxide Storage Tanks, north

#### STAND ALONE SENSOR LOCATIONS *Effluent Area*

There is one sensor north of the Clarifier at the Mix Trough.

### Power House

There is one sensor on the south wall outside the Recovery Building.

## Pulp Dryer

There are three sensors in the Dryer Building. One is between the roll-up door and man-door on southwest warehouse wall; one is north of the man-door on the southwest side in the dryer building; and one by the dry-end repulper.

#### Break Trailer

There is one sensor in the break trailer located east of the pulp mill.

# HYDROGEN SULFIDE GAS ALARM SYSTEM

There are thirteen (13) localized HYDROGEN SULFIDE GAS alarms in the plant. Each location alarms at 5ppm with a red flashing light and audio alarm that says *Hydrogen Sulfide* gas present please leave the area. For more information, please contact the Control Room.

- A. The alarms are located at the following places:
  - Ground floor North of the 7390 tank for the Hot Well. (Alarms locally and in the Power House Control Room.)
  - 2. 2nd floor of the Recovery building on the South wall for valving out of NCGs to Recovery. (Alarms locally and in the Power House Control Room.)
  - 3. Ground floor under the West Precipitator screw for Evaporator waste. (Alarms locally and in the Power House Control Room.)
  - 4. Ground floor in walkway North of the Recovery Building for Recovery area waste. (Alarms locally and in the Power House Control Room.)
  - 3rd floor by #1 Power Boiler (Alarms locally and in the Power House Control Room.)

- 6. On the lime kiln firing deck. (Alarms locally and in the Recaust Control Room.)
- 7. Water Treatment Plant, outside the east door
- 8. Water Treatment Plant, inside the east door by the pumps.
- 9. In the Recaust area, by the Formic Acid tank.
- 10. In the Recaust area, by the process sewer under the kiln.
- 11. Mix Trough (alarms locally)
- 12. In the dryer, by in-take of wet end air make-up unit
- 13. In the dryer, by the dry end repulper
- B. When any of these alarms sounds, all contractors, contractor employees, visitors, vendors, and Maintenance employees are to leave the area and must check with the respective Control Room to ensure that it is safe before re-entering.
- C. Prior to performing work on the H<sub>2</sub>S alarm system, including calibrating the sensor, the person performing the work will alert the Outside Operator and the Power & Recovery Lead Operator of the work being conducted and the potential response to the alarm system. For alarms in the Recaust area, the person performing work will also alert the Caustic Kiln Operator.

## **Procedures & Guidelines**

## CONFINED SPACE PROGRAM

#### DEFINITIONS

*Atmospheric testing* - All confined spaces will be tested for potential hazardous atmosphere which include: Oxygen levels (19.5 -23.5); flammability levels (less than 10% LEL); carbon monoxide levels (less than 35 ppm); and hydrogen sulfide levels (less than 10 ppm).

*Attendant* - A person stationed outside a permit space who monitors the authorized entrants. Refer to the "Personnel and Duties" section for more information.

*Authorized entrant* - An employee or contractor who is authorized by the employer to enter a confined space. Refer to the "Personnel and Duties" section for more information.

*Confined Space* - An enclosed space that meets all three of the following conditions:

- It is large enough and is so configured that an employee can bodily enter and perform assigned work.
- It has limited or restricted means for entry and/or exit; and
- > It is not designed for continuous human occupancy.

*Entry* - Entry means the action a person takes to pass through an opening into a confined space. It is considered to have occurred as soon as any part of the entrant's body breaks the plane of an opening into the space. *Entry supervisor* - The supervisor most directly responsible for the entrants is responsible for determining if acceptable entry conditions are present prior to entry into a confined space, for authorizing entry and overseeing entry operations, and for terminating entry as required.

(Note: An entry supervisor may also serve as an attendant or as an authorized entrant. In addition, the duties of entry supervisor may be passed from one individual to another during an entry operation. Refer to the "Personnel and Duties" section for more information.)

Hazardous Atmosphere - An atmosphere that may expose employees to a risk of death, incapacitation, and impairment of ability to self-rescue (that is, escape unaided), injury, or acute illness due to any atmospheric environment outside the safe parameters defined above in atmospheric testing section.

*Permit-Required Confined Space* - A confined space which meets one or more of the following conditions:

- Has the potential to contain a hazardous atmosphere. Note that entry into a confined space containing a hazardous atmosphere is prohibited
- > Contains a material that poses an engulfment hazard
- Has a converging bottom
- Contains any other recognized serious safety or health hazard

Although many of the confined spaces at the mill meet none of the above conditions, all confined spaces must be treated as permit-required, and the confined space entry procedure must be used for entry.

#### RESPONSIBILITIES

- A. The Human Resources Department is responsible for:
  - 1. The overall implementation and maintenance of any written program or any certification concerning the requirements of the Confined Space Entry Program at this facility.
  - 2. Ensuring that authorized entrants, attendants, entry supervisors, on-site rescue team members, and other authorized employees who may enter the space are properly trained and are provided refresher training.
  - 3. Ensuring that all equipment needed for safe entry into any confined spaces is available and in proper working order.
- **B.** The area superintendent is responsible for identifying all confined spaces at this facility.

## PERMIT SPACE IDENTIFICATION (INVENTORY)

CPP will conduct an inventory of all known confined spaces within which employees may be required to work. The inventory will record:

- A. The name and location of the confined space
- **B.** The type of work which might be performed within the permit space
- C. The recognized hazards to which entrants may be exposed while working within the confined space.
- D. The type of entry (side/ top/ bottom and ground level/elevated)
- E. The area superintendent will review the inventory whenever notified of:

1. Conditions of any confined space that have changed

- 2. A permit space that is not inventoried
- 3. A suspected change in the configuration or use of a confined space.
- F. Any employee who discovers any of these situations must immediately notify the area superintendent.

#### PREVENTION OF UNAUTHORIZED ENTRY

- A. It has been determined that:
  - 1. All confined spaces at this facility will be considered to be permitted confined spaces.
  - 2. Workers will not enter permitted confined spaces until the conditions of the entry permit have been satisfied.
- B. The area superintendent will inform workers of confined space locations and their associated hazards. Workers will be informed by the following methods:
  - 1. Initial training
  - 2. Periodic Refresher Training; and
  - 3. Placards affixed on entrances to all confined spaces.
- C. When a confined space will be unoccupied and unattended, the attendant will use red "Danger" barrier tape to prevent unauthorized entry.

#### WRITTEN ENTRY PROCEDURE

- A. A written confined space entry procedure has been developed. This procedure specifies the proper methods and equipment necessary to conduct the entry operation in a safe manner.
- B. Lock-out/Isolation checklists for each confined space have been completed. Checklists are found at P:/Safety/Confined Space Entry/ on mill computers.

- C. Area superintendents are responsible for ensuring that individual lock-out/isolation checklists are up to date.
- D. Completed/closed originals are stored in the Human Resources office for one year.

#### PERSONNEL AND DUTIES

Attendants - General responsibilities of the attendant:

- A. Must be posted at the confined space entrance at all times when someone is inside.
- **B.** Must be aware of the nature of the work being performed.
- C. Must be trained in and familiar with the hazards of confined spaces and be aware of behavioral effects of potential exposures.
- D. Must maintain an accurate list of entrants
- E. Must communicate with entrants as necessary to monitor their status and order their exit if necessary.
- F. Must be able to perform non-entry rescue procedures.
- G. Must be equipped with a two-way radio and be able to summon assistance.
- H. Must prevent unauthorized entry.
- I. Must monitor conditions in/around the confined space.
- J. Must record any problems that occurred during the entry (communication, unauthorized entry, attempted entry, etc.)
- K. Attendants are not to perform other activities that will interfere with their primary duty to monitor and protect the safety of authorized entrants and are not to leave their assigned station until relieved or the entry is

## complete. Attendants are not to enter the confined space to attempt a rescue.

Entrants - General responsibilities of the entrant:

- A. Be trained and familiar with the hazards of confined spaces and be aware of behavioral effects of potential exposures.
- **B.** Be familiar with the lockout/tagout and hot work permit procedures.
- C. Know how to properly use needed equipment.
- D. Communicate with the Attendant as necessary to enable the Attendant to monitor their status and alert them of the need to evacuate.
- E. Immediately notify the Attendant of any deviation from the permit entry conditions and must evacuate the space in an emergency.

*Entry Supervisor* - General responsibilities of the entry supervisor:

- A. Be trained in and familiar with the hazards of confined spaces and be aware of behavioral effects of potential exposures.
- **B.** Notify the appropriate operating departments of the planned entry.
- C. Verify that the confined space has been flushed and locked out in accordance with the Lockout/Tagout Procedure.
- D. Obtain any Hot Work Permit that may be required.
- E. Complete and sign the Confined Space Entry Permit, verifying that all hazards have been identified and controlled, safety and rescue equipment is available and calibrated, atmospheric testing has been conducted,

rescue resources are available, and all involved personnel are trained.

- F. Periodically reviews the confined space to ensure that entry conditions are still being met.
- G. Suspension & Cancellation of Permit- 1) If entry is interrupted on any deviation from acceptable entry conditions or if rescue resources are not available, entry will be suspended until conditions are acceptable and rescue resources are available. 2) The permit will be canceled when entry is either finished or interrupted for non-compliance with these procedures. Canceled permits are to be removed from the entry placard and returned to the responsible Department Superintendent.

#### CPP'S RESPONSIBILITIES WITH CONTRACTORS

- A. When contractors are involved in confined space entry work at our workplace, the manager responsible for the work will coordinate entry operations with and will inform them:
  - 1. Of the location of the confined spaces at our facility
  - 2. That entry into these spaces is only allowed through a permit space program
  - 3. Why the space was listed
  - 4. Precautions we have taken to protect people working in or near the space
- **B.** The manager responsible for the work will debrief the contractor at the completion of the entry operation.

#### CONTRACTOR'S RESPONSIBILITY WITH CPP

When contractors are hired to perform work in a confined space, they will obtain the following information from CPP and ensure the following tasks are performed:

- A. Obtain information on the hazards of the confined space and information from previous entry operations from Cascade Pacific Pulp.
- B. Determine if Cascade Pacific Pulp employees will be working in or near the space.
- C. If Cascade Pacific Pulp employees are working in or near the space during entry operations, the contractor will coordinate entry operations with the manager responsible for the work.
- D. Inform Cascade Pacific Pulp of the confined space to be entered.
- E. Hold a debriefing conference at the completion of the entry operations, or during the entry operation (if needed), to inform Cascade Pacific Pulp of any hazards encountered or created.

#### RESCUE & EMERGENCY SERVICE

- A. The Halsey Mill Emergency Response Plan addresses rescue and emergency action plans.
- **B.** CPP has on-site rescue services (including non-entry and entry rescue procedures).
- C. Human Resources Department will ensure that:
  - 1. Each member of CPP's rescue team is appropriately trained.
  - 2. Each member of the rescue team receives basic first aid and cardiopulmonary resuscitation (CPR).

- 3. At least one member must hold a current certification in first aid and CPR.
- 4. Rescue team members practice rescue techniques at least annually from actual or similarly configured spaces.
- D. The Human Resources Department has provided the on-site rescue service access to confined spaces to develop and practice appropriate rescue plans.
- E. In accordance with CPP's Emergency Plan for the Halsey Site, procedures for summoning rescue and emergency services for our workplace are:
  - 1. The Security Officer will be notified via phone or two-way radio that an emergency exists.
  - 2. The Security Officer will activate the Emergency Response Team.
  - 3. Upon assessing the extent and nature of the emergency, the responding Incident Commander may request assistance from a designated outside agency by notifying the Security Officer.
  - 4. In accordance with standing orders, the Security Officer will activate outside resources to respond.

#### TRAINING

- A. Training shall be provided so that all employees involved in confined space entry acquire the knowledge, understanding, and skills necessary for the safe performance of the assigned duties.
- B. The frequency of training shall be:
  - 1. Before the employee is first assigned duties
  - 2. Before a change in assigned duties

- 3. Whenever there is a change in procedures that could create a hazard about which the employee has not been trained.
- 4. Whenever there is reason to believe the space entry procedures are not being followed
- C. At a minimum, training will be provided annually.
- D. Documentation of training shall be retained in the Human Resources office.

## CONTRACTOR SAFETY

- A. Contractors on significant or major projects will be requested to complete a Safety Audit Form. Contractors will make available to Cascade Pacific Pulp any records which support statements made on the Audit form. CPP Purchasing will contact the contractor and provide the audit form and other safety documentation. These documents must be in place & approved before a Purchase Order can be issued by CPP.
- B. The Project Manager or Purchasing Manager will provide contractor representatives with the link to CPP on-line safety contractor training. Lock out/tag out policy, confined space policy, site hazards and work rules are covered. All contractor employees who will be working at the Halsey Mill must successfully complete the CPP on-line contractor safety trained prior to beginning work.
  - 1. The Project Manager will be responsible to audit contractor employees' use and understanding of site-

specific rules and regulations; this includes proper use of CPP equipment prior to use of said equipment.

- 2. Where verification of training is not adequate, the Contractor employee will be required to retake the CPP on-line safety contractor training. Project Manager will ensure successful re-training has been completed prior to allowing those employers to resume work.
- C. All contractor employees are expected to follow CPP safety rules while on the Halsey Mill site.
- D. Contractor Safety Orientation is completed on line. (http://www.abbottsfield.com/cascade-pacific-cso.) CPP on-line safety
- E. Any contractor injured and/or exposed to a hazardous chemical while on the mill site will submit an incident report to the Project Manager no less than 24 hours following the incident. A CPP Incident Investigation Report form may be used. The Project Manager will forward all incident reports to Human Resources within 48 hours of the incident.
- F. CPP Emergency Response Team (ERT) will respond to mill medical emergencies. Transportation to a hospital, when required, will be provided by an ambulance or a member of the contractor crew. The ERT has authority to determine when an ambulance is required for transportation.
- G. All contractor employees will be provided with a map of the mill site and a Contractor Safety Manual.
- H. Failure to abide by Cascade Pacific Pulp's policies may result in an individual contractor employee or the entire contractor crew being prohibited from the site.

## HOT WORK

For the purposes of this guideline, 'hot work' is defined as any flame or spark-producing activity on the work site. Examples

of hot work are: Gas welding, cutting, or brazing; electric welding or cutting; grinding; and any other spark or flame producing activity.

- A. Hot work which can be moved should be moved to an area free from combustibles.
- B. Hot Work Permits
  - 1. Hot work Permits will be required to be completed for all hot work activity that is **not** in a Designated Hot Work Area.
  - 2. The following precautions will be taken for all Hot Work:
    - a. Floors must be swept clean of combustibles for a radius of 35 feet around work area.
    - b. Other combustibles within the 35-foot radius must be relocated when practical.
    - c. When relocation is impractical, the combustibles will be shielded with flameproof covers or wet down if appropriate
    - d. Wall or floor openings within 35 feet of the work must be covered. If this is not practical, combustibles on the floor(s) below or on the opposite side must be removed or protected.
    - e. Suitable fire suppression equipment will be made available in the area where the hot work is to be performed.

- 3. Authorization to perform hot work can only be granted by the CPP Management person responsible for overseeing the work or CPP Contract Project Manager.
  - a. The individual signing as the 'Maintenance' authorizer, must ensure the following:
    - i. The area has been inspected and complies with this policy.
    - ii. The permit is filled out and appropriate precautions have been taken.
  - b. The individual signing as the 'Operations' authorizer, is agreeing to the following:
    - i. They understand that hot work is being completed in their area.
    - ii. They will follow-up after the hot work is completed as dictated by this policy.
- 4. The individual performing the hot work must place the Hot Work Permit near the work area so that it is clearly visible and available for inspection. Once hot work is complete, the permit must be returned to the authorizing Maintenance supervisor and the Shift Supervisor must notified that the work is complete. Completed Hot Work Permits will be sent to Human Resources.
- C. Fire Watch
  - 1. A Fire Watch will be required whenever a Hot Work Permit is filled out.
  - 2. The fire watch is authorized to stop any unsafe operation or activity.
  - 3. A Fire Watch will:

- a. Watch for fires, smoldering material, or other signs of combustion.
- b. Be aware of the inherent hazards of the work site and of the hot work.
- c. Ensure that safe conditions are maintained during hot work operations and stop the hot work operations if unsafe conditions develop.
- d. Have fire extinguishing equipment readily available and be trained in its use.
- e. Extinguish fires when the fires are obviously within the capacity of the equipment available. If the fire is beyond the capacity of the equipment, the fire watch is to pull the closest fire alarm or report the fire, by calling x444, or from a mill radio, contacting the main gate guard to activate the ERT.
- f. Be familiar with the facilities and procedures for sounding an alarm in the event of a fire.
- g. The fire watch cannot leave the area for any reason including breaks or lunch until the designated observation period has occurred.
- 4. Fire Watch Duration:
  - a. A fire watch shall be maintained for a minimum of **30 minutes** after the conclusion of the hot work to detect and extinguish smoldering fires.
  - b. For Hot Work High-Risk Areas, a fire watch shall be maintained for a minimum of **60 minutes** after the conclusion of the hot work to detect and extinguish smoldering fires.
- D. Hot Work High-Risk Areas

- 1. The following are designated Hot Work High-Risk Areas. These areas will require additional safety precautions be in place.
  - a. Chip Dump Area(s)
  - b. Chip Conveyor System(s)
  - c. Pulp Warehouse
  - d. Cat Pad
- 2. In Hot Work High-Risk Areas, the following additional precautions will be used:
  - a. Water will be applied to the combustible area prior to the hot work beginning.
  - b. Once notified the work is complete, the Shift Supervisor, or their designee, will conduct hourly inspections of the area for a minimum of 3 hours after the hot work has ended.
  - c. In areas without access to a water hose, the fire truck or water trailer will remain on stand-by during the 3-hour inspection period.
- E. Designated Hot Work Areas
  - The following are Designated Hot Work Areas. These areas do not require a Hot Work Permit to be completed.
    - a. Service Building Ground Floor (Maintenance Shops)
    - b. Pump Shop
    - c. Pulp Mill Pipefitter Area
    - d. Recovery Pipefitter Area
    - e. Flakt Dryer Pipefitter Area
  - 2. In all Designated Hot Work Areas, all combustible, ignitable, and flammable materials must be stored in an approved "flammable" metal storage cabinet.

- 3. With approval from the Maintenance Superintendent, or their designee, and Area Superintendent, or their designee, additional temporary Designated Hot Work Areas may be setup if needed.
- F. If hot work is to be performed on used containers (drums, barrels, tanks, etc.), they will be cleaned so thoroughly as to make absolutely certain that there are no flammable materials present or any substances such as greases, tars, acids, or other materials which when subjected to heat, might produce flammable or toxic vapors.
- G. Where the hot work is being performed on a pipe, tank, vessel, or other enclosed container, where there is a potential for an explosive atmosphere, a small hole must be made, and the atmosphere checked for explosive conditions before hot work is permitted. No work will be permitted where the Lower Explosive Limit (LEL) exceeds 10% unless approved by the Maintenance Superintendent, or their Designee, and the Area Superintendent, or their Designee.
- H. Welding arc shields must be used to minimize the exposure of Chlorine Dioxide-containing equipment to UV light.
- I. Hot work can only be approved by the Maintenance Superintendent, or their Designee, in the following conditions:
  - 1. In sprinklered areas while such protection is impaired.
  - 2. In the presence of explosive atmospheres greater than 10% LEL.

## INJURY/ILLNESS HANDLING

In the event of any injury/illness to any person at the mill site, it will be necessary to:

- A. Contact Security at x.444 to activate the Emergency Response Team (ERT). If the injury/illness is obviously serious or if unsure of the seriousness of the injury/illness, ask Security to call an ambulance.
  - 1. The individual calling security will provide their name, phone extension, location of the injured, the nature of the injury, and the closest emergency pickup location.
  - 2. While waiting for the ERT to respond, any available first aid trained employees may administer care to the injured/ill but will do so acting as a Good Samaritan.
  - 3. If necessary, a guide will be stationed at an easily found location to direct the ERT to the injured.
- B. The ERT is authorized to determine whether an ambulance is needed or not.
  - 1. If an ambulance is needed, the ERT will designate someone to call Security at x.444 and request an ambulance. When an ambulance is needed, a guide will be stationed at the nearest emergency pick-up location.
  - 2. If an ambulance has been called prior to arrival of the ERT, the ERT will determine whether the ambulance needs to continue to the mill or be sent back.
- C. The injured should not be moved unless the danger of additional injury is imminent.
- D. Injuries which require emergency transportation of the injured to a hospital will be reported to the CPP Project

Manager, Department Manager, Mill Manager, and the Human Resources Manager, as soon as practical after the incident. The CPP Project Manager is responsible for this notification.

## LOCK-OUT/TAG-OUT

#### LOCKS AND TAGS

- A. No combination locks are to be used.
- B. Contractors will be expected to furnish their own locks.
- C. Do not rely on interlocks or a stop button for an electrical interlock.
- D. Designated employees will be issued appropriate locks and keys at the company's expense. No other keys for those locks will be available.
- E. All locks must be identified with either the owner's name on the lock or a tag attached to the lock.
- F. Completed Maintenance Safety Cards for electrical lockouts must be sent to the Mill Electrical Supervisor for record keeping. Completed Maintenance Safety Cards for process piping lockouts will be sent to Human Resources for record keeping.

#### ELECTRICAL LOCK-OUT

- A. Before working on a piece of equipment, Operations must be notified to ensure the equipment is ready to be locked-out.
- B. If working on a piece of equipment could involve contact with process materials or if the process materials could mechanically affect the equipment being

worked on, the equipment will also require process piping lock-out as defined below.

- C. All individuals working on the equipment must attach their identified lock before starting any work.
- D. On electrical equipment which has no local disconnect, the individual who is performing the work will secure a qualified electrician to open the breaker for that piece of equipment in the Motor Control Center (MCC).
  - 1. Electrician's procedure for lock out at 480V MCC
    - a. Identify arc flash incident energy level from warning label on MCC.
    - b. Identify boundary conditions and observe
    - c. Don appropriate PPE.
    - d. Open switch, open door and verify no voltage with meter.
    - e. Close door, set hasp and tag.
  - Unqualified people may now place locks and later remove locks in non-hazardous conditions (consider wearing gloves).
  - 3. Electrician's procedure for removing lock out at 480V MCC:
    - a. Identify arc flash incident energy level from warning label on MCC.
    - b. Identify boundary conditions and observe.
    - c. Don appropriate PPE.
    - d. Close switch.
  - 4. Electrician's procedure for lock out at 2400V MCC:
    - a. Identify arc flash incident energy level from warning label on MCC.
    - b. Identify boundary conditions and observe.
    - c. Don appropriate PPE.

- d. Open switch, open door and verify no voltage with meter.
- e. Close door, set hasp and tag.
- 5. Unqualified people may now place locks and later remove locks in non-hazardous conditions (consider wearing gloves).
- 6. Electrician's procedure for removing lock out at 2400V MCC:
  - a. Identify arc flash incident energy level from warning label on MCC.
  - b. Identify boundary conditions and observe.
  - c. Don appropriate PPE.
  - d. Close switch.
- E. The "Ordered Safe By" line on the Maintenance Safety Card must be signed and dated by the first individual attaching a lock. This must be done in the presence of a qualified electrician. All lock-out locks must be attached with the use of a multiple lock mechanism leaving room for additional locks or multiple lock mechanisms. The electrician opening the breaker will sign and date the "Made Safe By" line on the Maintenance Safety Card.
- F. After the lock is in place and before work begins, the person performing the work will have a knowledgeable operator try to start the equipment to ensure the correct electrical source was locked-out.
- G. Begin and complete the necessary work.
- H. The individual removing the last lock must sign and date the "Ordered Ready to Run" line on the Maintenance Safety Card. This must be done in the presence of a qualified electrician if the lock-out is in a MCC (this does not include local disconnects). The

electrician present will then sign and date the "Made Ready to Run" line on the Maintenance Safety Card.

I. Any personnel not finding a lock and/or no signature on the "Ordered Ready to Run" line on the Maintenance Safety Card will <u>not</u> put the equipment back in service until the Area Supervisor and/or Maintenance Supervisor has made a visual inspection of the equipment and signs the "Ordered Ready to Run" line on the Maintenance Safety Card. If the lock-out is within an MCC, the signing must be done in the presence of an electrician.

#### ELECTRICAL DEPARTMENT LOCKS

As an additional layer of electrical safety to protect from electrical shock hazards, the following section is meant to complement the existing electrical lockout procedures.

- A. A department lock will be used whenever electrical equipment maintenance time extends over several shifts or days and could involve different individuals at various times.
- B. Electricians are responsible for notifying their supervisor of any work which will extend beyond their shift and an Electrical Department lock must be applied.
- C. The electrician assigned to the job will apply the department lock onto the appropriate lock out point (Breaker, Disconnect, etc.) but not on the Lock Boxes.
- D. An orange tag will be attached to the lock which will have the following information:1. Date.

- 2. Name of person locking out.
- 3. Equipment number.
- 4. Brief description as to why the equipment is locked out.
- E. The Electrician will then fill out the Electrical Department Lock out Logbook located in the electrical shop.
- F. Upon completion of electrical maintenance work the department lock will be removed and the Electrical logbook will be filled out indicating the lock removal date and name of person removing the lock.
- G. Remember personal locks are for your personal safety only! They should be removed at the end of your shift and if the job is not complete the above procedure must be followed.

#### PROCESS PIPING LOCK-OUT

- A. Before working on a piece of equipment, Operations must be notified to ensure the equipment is ready to be isolated and locked-out.
- **B.** If working on a piece of equipment involves electrical components, the activation of which could result in injury, the equipment will also require an electrical lock-out defined above.
- C. Individuals working on the equipment must attach their identified lock before starting any work.
- D. On equipment which has process connections, the individual who is performing the work will secure a knowledgeable operator to isolate the equipment for lock-out; this could include draining, flushing, gas testing, etc.

- E. A Maintenance Safety Card must be attached to each lock-out point using a multiple lock mechanism (gang hasp).
- F. Process lock-out points under the lock box system do not require a maintenance safety card (see Lock Box System).
- G. The "Ordered Safe By" line on the Maintenance Safety Card must be signed and dated by the first individual attaching a lock. This must be done in the presence of a knowledgeable operator. The knowledgeable operator isolating the system will sign and date the "Made Safe By" line on the Maintenance Safety Card.
- H. Proper process lockouts for lock application include:
  - 1. Hand valves which do not leak
  - 2. Blanks or blind flanges
  - 3. Automatic on/off valves which can be locked in place to prevent movement
  - 4. Control valves that can be locked in place or otherwise assured they will not change position
  - 5. Process lock-outs other than 1 through 4 above must be made using a Safety Work Order signed by both the Operations and the Maintenance Supervisor.
- I. Begin and complete the necessary work.
- J. The individual removing the last lock must sign and date the "Ordered Ready to Run" line on the Maintenance Safety Card. This must be done in the presence of an operator knowledgeable of equipment. The knowledgeable operator present will then sign and date the "Made Ready to Run" line on the Maintenance Safety Card.

K. Any personnel not finding a lock and/or no signature on the "Ordered Ready to Run" line on the Maintenance Safety Card will <u>not</u> put the equipment back in service until the Area Supervisor and/or Maintenance Supervisor has made a visual inspection of the equipment and signs the "Ordered Ready to Run" line on the Maintenance Safety Card. If the lock-out is on equipment which has process connections, the signing must be done in the presence of a knowledgeable operator.

#### SUPERVISOR LOCK-OUT

A supervisor lock-out including identification tag will be used whenever equipment down time extends over several shifts or days and could involve different individuals at various times. Personnel are responsible for notifying their supervisor of any work that will extend beyond their shift. A CPP supervisor must apply a supervisor's lock.

#### UNATTENDED LOCK REMOVAL

If the person who locked out a piece of equipment (as identified by the lock or tag) is not available to remove the lock, the following steps must be taken:

- A. Make a reasonable effort to locate or contact the person. If unable to reach him/her or if the person when contacted authorizes the lock removal, then contact his/her supervisor.
- B. Fill out a pink Safety Work Order (SWO)
- C. When (A) and (B) above are complete, the responsible department manager/supervisor, an electrician (if the lock-out is in an MCC) and a knowledgeable operator will inspect the equipment.

- 1. If the equipment is clear of personnel and ready to operate, the lock and tag will be removed; and all individuals involved in (C) will sign the SWO.
- D. A copy of the SWO will be turned in to Human Resources within 48 hours.

#### LOCK BOX SYSTEM

The lock box system may be used on any vessel or process system where its use will make identification of multiple lock-out points clearer and securing complex systems more efficient.

In using the lock-box system the following conditions will be incorporated into the Company's lock-out procedure:

- A. A Project Overseer will be assigned each time a lockbox is used. The Project Overseer is the person responsible for the use of the lockbox and could be a CPP employee or contractor.
- **B.** One authorized person, thoroughly knowledgeable with the equipment and/or system to be locked-out, will be assigned to work with the Project Overseer.
- C. The authorized person will place a primary lock and primary lock tag identifying the lock as a primary lock on each of the lock-out points of the system in accordance with the "Lock-Out Procedure" of this policy. A checklist of specific lock-out points developed by the operating department management for the system must be used for the lock-out. A copy of the lock-out checklist will be attached to the outside of the lock box.
- D. The authorized person will either be accompanied by the Project Overseer when locking out the system or
the Project Overseer will review the lock-out points prior to completing the lock-out. The lock-box procedure must always be completed by at least these two individuals.

- E. After completion of the primary lock-out of the system, the authorized person and Project Overseer will sign the lock-box checklist verifying all equipment and process piping has been made safe and proven inoperable.
- F. Once the system has been proven inoperable, the key or keys used for the primary locks will be placed in the lockbox along with the completed, signed lock-box checklist. The Project Overseer will place their own lock on the lockbox (secondary locks). This lock will also be the last lock removed.
- G. The lock-box procedure allows any employee or contractor to check any of the primary lock-out points and/or place their own locks at any of the primary lockout points for verification of their security. Any individual working on the protected system will place their identified lock on the lockbox (known as a secondary lock).
- H. Any individual's secondary lock will remain on the lockbox until their work is complete. In the case of a shift change, the outgoing workers will remove their locks until they return to work and the incoming workers will attach their locks. A shift change could also include a lock change by the Project Overseer.
- I. After the secondary locks of everyone working on the system have been removed, the authorized person who is thoroughly knowledgeable with the system that has been locked out will inspect the equipment or system to

verify it is clear and ready for start-up. The Project Overseer will remove his/her secondary lock from the lockbox allowing access to the keys for the primary locks. The authorized person will remove all primary locks that were placed on the system as needed.

- J. The shift supervisor will be notified by the authorized person that the equipment is ready for normal operation.
- K. The primary locks used for a lock-box system will be unique for that lockbox, be identified for that use, and have a single key. Extra keys will be destroyed.

#### REMOTE LOCK-BOX

CPP may authorize the use of a remote lockbox for a specific, identified project as follows:

- A. Request must be made by the Engineering Manager to the Department Superintendent or his/her designee prior to authorizing use of the remote lock box by a contractor.
- B. The Department Superintendent or his/her designee will notify the CPP Safety Specialist after approval.
- C. The remote lockbox will only be used in conjunction with a primary lock box.
- D. The remote lock-box lock will meet the following requirements:
  - 1. It will be an orange lock with a bright yellow tag to set it apart from other CPP locks.
  - 2. It will have a brightly colored tag identifying it as a remote lock box lock.

- 3. The tag will also include the location of the remote lock box and the name of the contractor supervisor.
- E. The remote lockbox will be set up in the area of the contractor's job trailer.
- F. After the primary lock box has been established, the department superintendent or his/her designee will lock the primary lock box.
- G. The remote lock box lock will be placed on the primary lock box.
- H. The remote lock box key will be placed in the remote lock box and secured by the department superintendent's personal lock.
- I. Contractor employees will put their locks on the remote box.
- J. When work has been completed and locks removed from both lock boxes, the department superintendent will remove the personal lock from the remote lock box, remove the remote lock box key then remove the remote lock from the primary lock box to allow for locks to be removed from the system so it can be made ready for service.
- K. Remote lock boxes will be subject to additional audits.

# PROCESS SAFETY MANAGEMENT (PSM)

#### PSM- INCIDENT INVESTIGATION

*Incident* - The release of PSM covered chemical (Chlorine Dioxide) into the workplace or an event which could have resulted in the release of PSM covered chemical into the workplace.

- A. An incident must be investigated when a PSM covered chemical is released or could have been released into the workplace.
- B. When an incident occurs, the CPP Project Manager must be notified immediately so that a timely investigation can be conducted. The investigation should be triggered by the area supervisor, as soon as possible, but not longer than 48 hours after the incident.
- C. The investigation team should include the following: 1. Area superintendent.
  - 2. Lead Pulp Operator or Bleach Plant Operator in the pulp mill.
  - 3. Contract employee if the incident involved work of a contractor.
- D. The object of the investigation is to determine the facts surrounding an incident and to develop corrective/preventive action.
- E. Once the facts have been determined, the Contractor and CPP Project Manager must complete a written incident investigation report. The report must include at a minimum the following items:
  - 1. The date of the incident.
  - 2. Date investigation began.
  - 3. A description of the incident.
  - 4. The factors that contributed to the incident and any recommendations resulting from the investigation.
  - 5. The area superintendent must address and assign responsibility to resolve the incident report findings and recommendations within five working days.
  - 6. The resolutions and corrective actions taken must be documented.

- F. The incident investigation report will be reviewed with all affected personnel whose job tasks are relevant to the incident findings including contract employees when applicable.
- G. The incident investigation report and resolutions and corrective action taken will be retained for five years in the Technical Services Department.

## RESTRICTED ENTRY AREAS

#### CLO2 GENERATOR BUILDING SIGN-IN PROCEDURE

The CLO<sub>2</sub> Generator Building is off-limits to all visitors unless prior approval has been granted by the Operations Manager or Pulp Mill Superintendent.

Everyone except area personnel entering the Chlorine Dioxide Generator Building is required to contact the Pulp Mill Control Room prior to entry and again on exiting. The Bleach Plant Operator will maintain a log of personnel entering the area.

#### PULP MILL SIGN-IN PROCEDURE

The Pulp Mill and ClO<sub>2</sub> generator buildings are off limits to all visitors unless prior approval has been granted by the Operations Manager or the Pulp Mill Superintendent.

Everyone except area personnel entering these areas must sign in at one of the following locations:

- Pulp Mill control room
- Pull Mill 3<sup>rd</sup> floor offices

Transitory personnel (mail person, lab testers, etc.) are not required to sign in.

Non-operating personnel entering the Pulp Mill or ClO<sub>2</sub> buildings are not required to sign-in during a scheduled maintenance shutdown, water wash, or annual shutdown.

#### RECOVERY AREA SIGN-IN PROCEDURE

The Recovery Building is off limits to all visitors unless prior approval has been granted by the mill manager or Recovery Superintendent.

A sign-in sheet must be filled out by everyone except area personnel that will be in the Recovery area. The sign-in sheet will be kept in the Control Room. If the Recovery Boiler is down (maintenance outage, annual shutdown, etc.) sign-in is not required by contractors or mill maintenance.

In case of Emergency Shutdown Procedure (ESP) or Hydrogen Sulfide Gas evacuation while in the Recovery Building, everyone except area personnel will proceed to the marked emergency exits - Northwest corner of the Recovery Building leading to the outside stairway. Do not use the elevator or man-lift. Proceed to the North/South roadway on the West side of the Recovery Building. Muster at this point so the sign-in sheet can be checked to account for visitors and non-operating personnel.

### WRITTEN HAZARD Communication program

#### SAFETY DATA SHEETS (SDS)

- A. Complete copies of SDS's (formerly known as MSDS) for all hazardous chemicals to which employees or contractors may be exposed will be kept in:
  - 1. Technical Services Lab
  - 2. Via computer in an on-line database in CPP Reports
- **B.** SDS's specific to an employee's work area are in the following locations:
  - 1. Pulp Mill Lab
  - 2. Recovery Control Room
  - 3. Recaust Control Room
  - 4. Flakt Dryer Lab
  - 5. Filter Plant Control Room
  - 6. Paint Shop
  - 7. Maintenance Shop
  - 8. ERT Aid Station
- C. If SDS's are not available, or new chemicals in use do not have an SDS, immediately contact the Purchasing Manager or the Environmental Manager.

#### INCOMING SDS

- A. Before any new material will be allowed on the mill site, the requesting Contractor must take the following steps:
  - 1. Ensure that an SDS is provided by the manufacturer or supplier prior to receipt of the material.

- 2. Provide an electronic copy of the SDS to the CPP Project Manager.
- 3. Once the Environmental Manager or designee has approved the material to be brought on site, the CPP Project Manager will notify the Contractor.
- **B.** Arrange/coordinate with the responsible department superintendent for training on the safe usage and cleanup of the material. Training must occur prior to receipt of the material on site.
- C. All steps must be completed whether requesting the material for purchase or bringing the material on site for a trial where the supplier is providing the material free of charge.
- D. The SDS books in the operating areas and other locations and the SDS computer database will be updated.
- E. In the event that a material needs to be brought on site sooner than this process allows, the individual requesting the material may obtain approval of the SDS directly from the Environmental Manager and then deliver the approved SDS to the Purchasing Department for routing.
  - 1. In this case, training of appropriate personnel must be arranged by the individual requesting the material and completed before the product is brought on site.
  - 2. This applies whether the product is being purchased or is just being brought on site for a trial.

#### SDS BOOKS

A. A list of all known Hazardous Chemicals in a work area is entered in each SDS notebook index. More

information on each chemical noted is available by reviewing the appropriate SDS within the notebook.

- **B.** Technical Services reviews updated safety data sheets as they are available on an on-going basis.
- C. SDS's for chemicals no longer in use will be removed from the books and a record will be maintained in an "Obsolete Chemical Log" for 30 years. The following information is required in the log, if available:
  - 1. Chemical name
  - 2. Manufacturer
  - 3. Where it was used
  - 4. When it was used

#### CONTAINER LABELING

- A. The person/department bringing the chemical on site will verify that all containers ordered for use will:
  - 1. Be clearly labeled as to the contents.
  - 2. Note the appropriate hazard warning.
  - 3. List the manufacturer's name and address; and
  - 4. Ensure that the Safety Data Sheet (SDS) is on file.
- **B.** It is the policy of this Mill that the department requesting hazardous chemicals will ensure that no container will be released for use in the mill until the above data is verified.
- C. The responsible manager in each department will ensure that all secondary containers are labeled with either an extra copy of the original manufacturer's label or with the "central stores" generic labels which have identification and hazard warning blocks. For help with labeling, contact the Technical Services Department.

#### ELECTRICAL SAFETY

- A. Only qualified electrical persons shall perform work on electrical conductors or circuit parts
- B. Call an electrician if a motor kicks out.
- C. Report all electrical shocks received to the supervisor immediately.
- D. Use only fire extinguishers marked *Class C* for electrical fires. Do not use water.
- E. Report all open lighting, electrical panels, and open or damaged wiring to the supervisor (Arc Flash and Shock Hazard Boundaries apply).
- F. Floors and equipment should not be hosed down when there is danger of water splashing into electrical equipment, even if the equipment is shut down.
- G. Check all cords for damage and wear before plugging in. Plugs should not be frayed, spliced, or taped.
- H. Check the "Arc Flash and Shock Hazard" warning label on electrical equipment prior to any interaction with the equipment.
- I. Observe all boundaries on the "Arc Flash and Shock Hazard" warning label.
- J. Only qualified personnel (electricians) with proper PPE are allowed inside the boundaries on the "Arc Flash and Shock Hazard" warning labels.
- K. Do not store anything inside the Limited Approach Boundary identified on the "Arc Flash and Shock Hazard" warning label of electrical equipment.
- L. All portable electrical hand tools and devices require a Ground Fault Current Interrupter (GFCI) at the electrical outlet (see GFCI section).

- M. Wear personal protective equipment as required by the task being performed. A list of tasks associated with electrical equipment types is attached. Shock hazard PPE is identified in these tables. Arc flash hazard PPE shall be in accordance with the Personal Protective Equipment table in the current version of NFPA 70E.
- N. Energized Work Permits will be required to be completed under any of the following conditions:
  - Unless troubleshooting, any work that has the potential to cross the "Restricted Approach Boundary" – as listed on the Arc Flash Warning Label – of exposed and energized electrical equipment, including but not limited to tools, unprotected conductors, etc.
  - 2. Removal or insertion of a bucket in an energized 480V motor control center.
  - 3. Removal or insertion of a contactor in an energized 2400V motor control center.
  - 4. Removal or insertion of a low voltage power circuit breaker in energized 480V switchgear.
  - 5. Removal or insertion of a 2400V circuit breaker in energized 2400V switchgear.
  - 6. Removal or insertion of a 12,470V circuit breaker in energized 12,470V switchgear.
  - 7. Opening covers on exposed and energized 2400V and 12,470V electrical equipment.
- O. Ensure all portable electrical equipment such as drills, grinders, etc., is grounded.
- P. Treat all circuits as though they are live. Warn others accordingly.
- Q. Take no risk even though voltage is not high.

- **R.** Before closing a switch, have full knowledge of the circuit and why the switch was opened. Ensure no one is in a position to be injured.
- S. Uncouple all motors from equipment when they are to be tried for direction.
- T. Substations are to be kept clean and locked.
- U. Contact the Electrical Department for the Electrical Jumper policy.
- V. Notification of area personnel is required when working on live circuit(s).

#### EMERGENCY RESPONSE IN A Motor control center (MCC)

- A. If an emergency is to occur inside an MCC Room, and it is not obviously apparent what the cause is, it must be assumed that it is due to an Arc Flash or a Shock Hazard. As such, it will be necessary to isolate the power to the room before permitting ERT entry.
  - 1. The Shift Electrician (or other Electrician or Shift Millwright as detailed below) will be responsible for isolating the MCC room from an upstream Magna-Blast feeder.
  - 2. No ERT member, any other mill personnel or contractor are to enter the MCC room until the room has been made safe by the Shift Electrician (or other Electrician or Shift Millwright as detailed below).
- B. Pre-defined rescue will be required in accordance with the Energized Work Permit when making repairs (not troubleshooting) within the "Restricted Approach Boundary" as listed on the Arc Flash Warning Label of exposed and energized electrical equipment.

- 1. The Electrician performing the work will be responsible for ensuring that the person who is designated to rescue them in an emergency knows the appropriate isolation point.
- C. The Shift Millwright will be given Arch Flash PPE as listed in the Electrical Department Basic PPE Policy so that they may rescue the Shift Electrician in an emergency when other Electricians are unavailable. Shift Millwrights will be provided FR Rated Coveralls to keep in their PPE bag until needed.
- D. The Shift Millwright will be shown the isolation points for each Mill MCC as part of their training and be able to isolate it in an emergency if the Shift Electrician or other Electrician is unavailable.
- E. Labels will be placed and maintained on the door to each MCC room indicating the appropriate isolation locations for the room and the maximum available Arc Flash Incident Energy.

#### MILL ALARM CODES

#### **General Alarms**

- 1-1 All Clear (CPP or GP)
- 1-2 CPP Mill Muster
- 1-3 GP Mill Muster
- 3-3 ERT Muster (CPP or GP)
- 4-4 Chlorine Dioxide Muster (GP)

Active Shooter Continuous Horn Blasts (CPP or GP)

#### Fire Alarms-CPP

- 4-1 Pulp Mill
- 4-2 Recovery
- 4-3 Kiln-Filter Plant
- 5-3 IGIC
- 6-1-Chip Yard
- 6-2 Silo
- 6-3 Flakt Dryer
- 6-4 Paint Shop
- 6-5 Service Building

#### Fire Alarms-GP

- 1-4 Secondary Fiber
- 1-5 South Finish Goods Warehouse
- 1-6 North Finished Goods Warehouse
- 1-7 #8 Tissue Building
- 2-1 South Warehouse-Tissue Bundlers
- 2-2 South Converting
- 2-3 Shops-5 Towel
- 2-4 Core Deck-Pulp Elevator-Storage Area
- 2-5 North Warehouse-Quick Stocks
- 2-6 Storeroom-Docks-Offices-6 Towel
- 3-1 Paper Mill
- 3-2 Auto Shop
- 3-4 Oil House-Paint Shop
- 3-5 Building 35 Converting Storage
- 3-6 Parent Roll Warehouse
- 3-7 Motor Storage Building (Bldg.34)
- 5-1 Human Resources Building
- 5-2 Administration Building

## Mill Emergency Number ext. 444 Guard Station-541.369.1710