Safe Contractors

When placing work orders with contractors/external companies, the contact person encloses these procedures concerning protection and safety. The procedures are also available on the SSG website.

Contents

1. Procedures for contractors/external personnel at the Metsä Board Husum Mill

The following applies to persons carrying out work at Metsä Board's, Husum Mill:

1. All contractors that carry out work within the mill area must have a valid SSG Entré pass. General part of SSG training and Husum mill specific training must be completed.
2. Department specific safety instructions are found at the end of this document. The sections covering the work in question and must be read before work is started.
3. The contractor is expected to take action to register riskful situations and/or work that is not scheduled, as well as to discontinue work that cannot be carried out in a safe manner. Incidents and accidents should be registered using a special form issued by contact person, and sent to the Mestä Board's Husum Mill work environment engineer at: per.haggmark@metsagroup.com within 3 days.
4. The contractor shall maintain good order at the workplace. Metsä Board is expecting the contractors to take part of common safe inspections.
5. All work shall be scheduled and the Contractor shall have knowledge of the work that affects the assignment in question.
6. A risk analysis for the work in question must be done before the work is started.
7. Special permission is required for closed spaces, safe stops mopeds, hot work, cranes and overhead cranes, fork lifts and tractors, LPG systems, mobile work platforms and EX classified areas. The contractor must have verification (valid licenses/training) for above mentioned to be able to receive a permit valid within the mill. No work may be started until the requisite permit is signed.
8. The contractor is expected to have the training required for the assignment.
9. Detailed information about risks and safety regulations for all chemicals registered by Metsä Board Husum can be found on the company's chemical register website. Ask the contact person or control room personnel for further information.
10. Work in restricted conductive spaces demands that the equipment is supplied using SELV (electrical safety connection device). Each contractor is responsible for ensuring that the necessary equipment is in place.
11. Any required distribution boards shall be equipped with an earth fault breaker, which shall be provided by the contractor.
12. On request the contractor should show verification -monitoring has be carried out on the provided electrical equipment.
13. On request the contractor should show verification that self-monitoring has been carried out on the provided lifting equipment
14. The information that must be e-mailed to the contact person is listed on the next page.

If you have any questions, contact the contact person

Metsä Board contact:	Mobile:

I have read and understood.

Name:	Signature:

I give my assurance that I will pass on this information to the personnel from the company I represent and to the subcontractors we engage, and ensure that they fully understand it. *Fill in as necessary*

Name:	Signature:

Information that shall be e-mailed to the contact person before work is started:

1. Risk analysis reports for the work to be carried out. A special risk analysis must be done if the work is to be carried out in an electrical room.

2. Contact information for the contact person at the contract company and a personnel register with current SSG Entrance pass numbers. Valid training certification such as, Verification of forklift and overhead crane training etc must be available on request

3. The chemical list and safety sheets for all the chemicals concerned shall be e-mailed to the contact person and be made available to the contractor.

4. The number of tool containers and their size

5. Power supply requirement

6. It is not normally permissible to drive vehicles into the mill area, but if it is necessary to carry out work, permission can be granted. If a vehicle pass is requested, special form issued by contact person must be filled in and sent to the safety officer, e-mail address jens.borjesson@metsagroup.com. A copy must always be sent to the contact person.

7. Verification that this procedure has been read and is being adhered to (scanned signature on page 2). In the case of companies that are permanently based here, the contact person makes a plan for how often and when this needs to be done; it must be done at least once a year.

2. Safety equipment, fire protection, permit

Safety equipment must always be carried in the way intended. It is up to the individual user to test and check the equipment to ensure correct functionality. The contractor must find out about the requirements for the work area in question, see department specific safety information, section 3.

2.1 Personal safety equipment, Pulp Mill

The following equipment must always be carried and used in the intended manner by all personnel in the production areas

- Helmet
- Ear protection
- Torch
- Emergency eye wash bottle 50 ml
- Safety goggles
- Safety shoes
- Gas meter for H_2S (required as from 01-01-2014)

Other personal safety equipment

- Visor
- Protective clothing
- Protective gloves
- Boots
- Gas mask or fresh air mask
- Hi-vis clothing

Corrosive media
If uncertain, check the safety sheets or contact your (supervisor?) contact person or control room

Low risk: (one drop)
- Visor/safety goggles, protective gloves and safety shoes.

Middle risk: (splash and jet)
- Visor, protective gloves (rubber), rubber boots, rain clothes.

High risk: (line breakdown, large scale discharge)
- Full face cover, chemical overall

Gas
Gas meter, gas mask or fresh air mask

Specific equipment for use in certain process sections:

Bleaching liquor production (with surrounding area) gas mask, ***full-mask*** model must be carried. It is the responsibility of the user to ensure that the correct filter is installed and that the equipment is in good order.

Wood/recycling
Safety clothes are required at the Wood yard, Port, storehouse P2/P3 and the band station.

2.2 Personal safety equipment, Board Mill

The following equipment must always be carried and used in the intended manner by all personnel in the production areas

- Safety shoes
- Ear protection
- Safety goggles
- Helmet

2.3 Fireguard

There must always be a fireguard present when cutting and welding work is being carried out

2.4 Work that requires a special permit

The relevant information is given out by contact person.

□ Breakers&Locks SG 575.15.10.010	□ Hot work SG 575.40.01.010	□ Work in closed spaces SG.575.40.01.020
□ Pack mopeds SG 575.20.01.040	□ Cranes, overhead cranes, telphers SG 575.20.01.020	□ Forklifts SG 575.20.01.010
Port area SB.575.04.01.120	□ LPG systems PI.020.12.05.025	□ Mobile forms of work SG 575.20.01.030

3. Environmental protection

Background

Metsä Board Sverige AB, Husum Mill has an environmental standard for its operations, which, among other things, means that there are set limitations with respect to discharge to water and air. In addition, there are regulations for, for example, waste and chemical handling as well as many other aspects.

The Husum Mill Environmental Management System is certified according to ISO 14001.

The above means that we place environmental demands on our contractors when they carry out work for the Husum Mill.

Regulations – Contractors

When carrying out work at the Husum Mill contractors shall:

- Have procedures for identifying and adhering to the applicable legislation and regulations.
- Prevent discharge and, as necessary, establish their own instructions and procedures for minimising environmental impact.
- Establish, together with the Metsä Board Sverige AB, Husum Mill, their own procedures regarding waste disposal.

Unless otherwise stated, the Husum Mill procedures for waste sorting, instructions YR.580.01.01.030 shall apply.

- Flammable/scrap/household waste is placed in different containers.
- If necessary, these criteria should be categorized more distinctly; see waste sorting instructions.
- Hazardous waste is handled as described in the waste sorting instructions. The contractor is responsible for the costs involved.

4. Product safety

Metsä Board Husum's factory operates in accordance with the ISO22000 global standard in order to ensure the food safety of its products.

Hand hygiene is important. Wash your hands if necessary, and always after visiting the toilet, eating, smoking and taking *snus*. Thorough handwashing using soap is sufficient. Cover wounds with a plaster or bandage.

Hygiene zone
Hygiene zones are marked around production areas where there is a risk of product contamination. The following rules are applicable within these zones:

- Drinks, food, *snus*, chewing gum and suchlike must not be brought in or consumed.
- Loose objects must not end up in the process. Make sure that you keep your pockets closed to prevent dropping items.
- Jewellery such as piercings, watches and suchlike must not be worn as there is a risk of these coming into contact with unprotected product and/or ending up in the process.
- The area has to be cleaned and there must be no loose objects left behind after completing work.

Clean and tidy surroundings
Food safety regulations must be observed in all parts of the factory so as to implement good manufacturing practice and guarantee product safety. Hygiene and clean and tidy surroundings are required in order to achieve this.

It is important for the work site to be kept clean and tidy in order to prevent fire or damage. Waste, residual materials, packaging and other flammable items must be removed as soon as possible. Spilt oil or chemicals must be cleared up immediately. Contractors are responsible for clearance and cleaning after the work elements included in the contract.

Sorting of waste at source
There are containers of various colours for sorting of waste on the industrial estate. These are labelled to indicate what can be placed in them. For more information, get in touch with your contact person.

What does it mean when you see the sign Hygienzon
You must not bring in or consume food or drink, but you are allowed to chew gum.
The area has to be cleaned and there must be no loose objects left behind after completing work.
You are allowed to wear visible jewellery if it has been cleaned properly.

Work environment
The Metsä Board Husum plant is working constantly to improve safety at the divisions and has zero tolerance for accidents. The commitment of everyone is required in order to achieve this.

5. Department specific safety information

The following pages contain department specific safety information. Information on the workplace in question must be read before work is started, for both your and my safety.

5.1 Wood handling department

Telephone no. control rooms:
Wood: 0663 -186 06
Biological treatment plant: 0663-185 87 (daytime)

Risks

- Risk of being run over and of high voltage by the railway. Only personnel with the requisite training may enter the railway area.
- Risk of being run over in the wood storage areas. Only authorised traffic may enter the area after registration at the control room.
- Risk of falling logs regarding the woodshed and conveyors.
- Wet floors = Risk of slipping.
- Risk for clamping with rotating equipment.
- Extreme fire risk – due to flammable material, e.g. dust, chips and bark.
    - Fire in, for example, a chips pile would have extreme consequences due to the large quantities of chips involved. The entire wood handling department is sprinkled and provided with a comprehensive smoke detection and fire warning system.
- Illness-causing bacteria, such as legionnaires' disease, are found in bio-sludge and process water.
  BAN ON VISITORS Biological treatment plant. Breathing filter/mouth mask class 3 shall be used when working in the area of the biological treatment plant.
- There are air bubbles in the aerated pond in the biological treatment plant meaning that swimming is not allowed in it. It is especially important to use lifelines when working above the pond.

Procedures
Start of work must be announced verbally to operating personnel and written up on the notice board (white board) in the department control room. The permits required for the work in question, for example, lock list, breaker card, must be signed. The contractor makes a final inspection with operating personnel to ensure that the work can be started. In the case of uncertainty regarding the content in pipes l and tanks, contact operating personnel.

Increased need for personal safety equipment:
Helmet, protective goggles, emergency eye wash bottle 50 ml, torch, gloves, safety clothes class 2 must be used in the area. Breathing filter/mouth mask class 3 shall be used when working in the area of the biological treatment plant. A life-line must be used when working above the ponds in the biological treatment plant.

Evacuation routes
Check the whereabouts of the closest emergency shower and eye shower, evacuation routes and the collection point to go to BEFORE starting the work.

5.2 Port

Telephone no. Coordinator: 0663 – 181 68 Port, 0663-193 65 P2/P3

Risks

- Risk of being run over. No access for unauthorised vehicles. Loading and unloading of ships, as well as of the vehicles that transport goods to and from the Port area.
- Hazardous goods transport, and other traffic.
- Loading and unloading of vehicles and load carriers inside and outside the magazine.

Procedures
Before work is started, all personnel that will enter the port area must be registered by the contact person. This is then forwarded to the gate personnel. The same applies when the work is completed. Special regulations for Port protection according to ISPS. Authorisation and the assignment verification must be available on request.

Gas measurement
The gas content must be measured before work is started in cargo holds with organic material.

Increased need for safety equipment
Helmets must be worn. Reflective clothes, safety shoes and protective goggles must be worn in the port area and the storehouse.

Evacuation routes
Are provided in each magazine. Always be aware of where the closest emergency shower and eye shower are and of which evacuation route to use, as well as the applicable collection point BEFORE starting work.

Other information
Department forklifts may only be used by department personnel.

5.3 Energy recovery

Telephone no. control room: 0663 – 181 38 Operator, 180 53 Recovery boilers, 182 14 Causticizing plant/Mesa furnace

Risks

- Gas risk (Poisoning/suffocation and explosion) in the evaporation plant and in the gas and condensation treatment system
- Risk for burn and corrosion injury when handling process lye.
    - o Lye (NaOH) can cause serious injury even when diluted. If it comes into contact with the skin or eyes, rinse with fresh water for at least 15 minutes. Seek medical assistance, preferably with eye rinse or buffer bottle during transportation.
- A hydrogen sulphide risk exists everywhere where black, diluted, green or white lye is handled.
  Take gas measurements as needed.
- In the event of an alarm in the hydrogen sulphide or soda plant, the premises must be evacuated immediately. Go to the collection point.
- Illness causing bacteria is found in bio-sludge in the sludge hydrolysis installation in the evaporation plant.
  Use a breathing filter/mouth mask class 3 in connection with work that forms aerosols (droplets in the air) that can be inhaled, e.g. with high pressure washing. Moisturise dried sludge to prevent dust forming.
- Extreme slipping risk where polymer is handled in the causticizing and sludge hydrolysis plants.

Procedures

Start of work must be announced verbally to operating personnel and written up on the notice board (white board) in the department control room. The permits required for the work in question, for example, lock list, breaker card, must be signed. The contractor makes a final inspection with operating personnel to ensure that the work can be started. In the case of uncertainty regarding the contents in pipes and tanks, contact operating personnel.

Increased need for safety equipment

Helmet, safety goggles, emergency eye wash 50 ml, torch must be used. Use a breathing filter/mouth guard class 3 for work that builds aerosols (drops in air) that can be inhaled, e.g. with high pressure washing in the Sludge hydrolysis plant. Breathing filter class 2 should be used for work in electrical filters, smoke fans and smoke ducts at the soda boilers.

Hydrogen sulphide/Soda plant alarm

Flashing light (white/red warning lamp) and sound alarm. When the alarm goes off, the entire boiler house must be evacuated immediately.

Evacuation routes

Check the whereabouts of the closest emergency shower and eye shower and of the evacuation routes, as well as of the applicable grouping location BEFORE starting the work.

5.4 Digester house

Telephone no. control room: 0663 – 182 42

Risks

- Hot corrosive substances such as lye and turpentine
  - Lye can cause serious injury even when diluted. If it comes into contact with the skin or eyes, rinse with fresh water for at least 15 minutes. Seek medical assistance, preferably with eye rinse during transportation.
  - Turpentine is classed as flammable and is therefore easily ignited, which means that it is covered by fire protection legislation for Hot work. Avoid skin contact and inhalation. The safety data sheet for the chemical is available in the Metsä Board chemical website system.
- Hazardous gases such as hydrogen sulphide (H2S).
  - There is a sound and light (red/white flashing) alarm for hydrogen sulphide. If the alarm goes off, the premises must be evacuated.
- Flammable gases hydrogen sulphide (H2S) and oxygen (O2)
  - High concentrations of oxygen result in extremely high fire or explosion risk. Good ventilation is very important.

Procedures
Start of work must be announced verbally to operating personnel and written up on the notice board (white board) in the department control room. The permits required for the work in question, for example, lock list, breaker card, must be signed. The contractor makes a final inspection with operating personnel to ensure that the work can be started. In the case of uncertainty regarding the contents in pipes and tanks, contact operating personnel.

Gas measurement
Gas measurements must always be taken before work on all pipelines and vessels

Increased need of safety equipment
Helmet, ear protection, safety shoes, safety goggles, emergency eye wash 50 ml, torch must be used. Other personal protective equipment that may be required is visors, protective gloves, boots, gas mask or fresh air mask

Evacuation routes
Check the whereabouts of the closest emergency shower and eye shower and of the evacuation routes, as well as of
the applicable grouping location BEFORE starting the work

5.5 Bleaching plant and bleaching liquor production

Telephone no. control room 0663 – 182 16

Risks

- Process chemicals
  - Sulphuric acid (H_2SO_4) can cause serious injury to eyes, mucous membranes and skin (even in the form of vapour and mist). In contact with metal, it can create explosive gas (hydrogen).
  - Lye (NaOH) can cause serious injury even when diluted. If it comes into contact with the skin or eyes, rinse with fresh water for at least 15 minutes. Seek medical assistance, preferably with eye rinse during transportation.
  - Hydrogen peroxide (H_2O_2) can cause ignition when in contact with flammable substances. Corrosive on contact with skin.
  - Sodium chlorate is a white powder with colourless crystals. Ignitable when mixed with organic material and must therefore be stored in a closed container. Spill on clothes must be avoided but if it happens, the clothes must be replaced immediately. Highly toxic when swallowed. Irritates skin and mucous membrane. Contaminates external environments.
- Hazardous gases
  - Chlorine dioxide (ClO_2) is a toxic and volatile gas that also impacts external environments. A chemical protection overall must be worn and must be handed in for washing immediately after use. In the event of a ClO_2 discharge, the premises must be evacuated and breathing protection used.
  - Sulphur dioxide (SO_2) is a volatile gas with a strong, pungent smell. Causes injury similar to burns on contact with mucous membrane and moist skin. Dangerous to inhale in high concentrations. Impacts the environment. In the event of a SO_2 discharge, the premises must be evacuated immediately. Gas detectors are installed at especially sensitive points.
  - High concentrations of oxygen result in extremely high fire or explosion risk. Good ventilation is very important.

Procedures. Start of work must be announced verbally to operating personnel and written up on the notice board (white board) in the department control room. The permits required for the work in question, for example, lock list, breaker card, must be signed. The contractor makes a final inspection with operating personnel to ensure that the work can be started. In the case of uncertainty regarding the contents in pipes and tanks, contact operating personnel.

Increased need of safety equipment
Helmet, ear protection, safety shoes, safety goggles, emergency eye wash 50 ml, torch must be used. Full mask or fresh air mask must be carried. Evacuation masks are available in all the lifts. Gas mask filters are available at the stores. Other personal protective equipment that may be required is visors, protective gloves and boots.

Permanent measurement with alarm is provided for hydrogen sulphide. In the case of work with chlorate, special equipment shall be used . The special clothing provided for the purpose must be worn. This applies to all personnel, internal and external. The clothing is found on the bottom floor at department Blekeri 5.
The clothing must be washed in a washing machine after use. Washing instructions are provided on the washing machine. It is the responsibility of users to wash the clothes they have used.

The instructions concerning chlorate must be read before work is started.

Gas measurement must be done before starting work on any lines containing flammable/toxic gas.

Evacuation routes. Always be aware of where the closest emergency shower and eye shower are and of which evacuation point to use BEFORE starting work (the information is available in the lifts)

5.6 Drying Machines

Telephone no. control room: 0663 – 184 73

Risks

- Caustic soda is used as washing agent.
    - Lye can cause serious injury even when diluted. If it comes into contact with the skin or eyes, rinse with fresh water for at least 15 minutes. Seek medical assistance, preferably with eye rinse during transportation.
- Vapour and condensation systems with pressures up to 13 bar.
- Remotely controlled conveyors that start without warning.
- Extreme risk of fire.

Procedures
Start of work must be announced verbally to operating personnel and written up on the notice board (white board) in the department control room. The permits required for the work in question, for example, lock list, breaker card, must be signed. The contractor makes a final inspection with operating personnel to ensure that the work can be started. In the case of uncertainty regarding the contents in pipes and tanks, contact operating personnel.

Increased need of safety equipment
Helmet, ear protection, safety shoes, safety goggles, emergency eye wash 50 ml, torch must be used. Other personal protective equipment that may be required are visors, protective gloves, boots, gas mask or fresh air mask. For work with caustic soda, protective clothing, safety goggles or visor and rubber gloves must be used.

Evacuation routes
Check the whereabouts of the closest emergency shower and eye shower and of the evacuation routes, as well as of
the applicable grouping location BEFORE starting the work

5.7 Board Machines BM1. BM2

Telephone no. control room BM1: 0663 – 182 95
Telephone no. control room BM2: 0663 – 180 34

Risks

- Burn injury from hot process parts
- Clamp injury caused by rotating tools etc.
- Clamp injury/crushing when lifting with overhead cranes
- Cut injury
- Fall and slip risks
- Corrosion injury caused by concentrated bases and acids
- Hydrogen sulphide risk through floor channels, vacuum pump channels, water trap cavities and tanks

Procedures

Before the work is started it must be announced verbally to operating personnel and written up on the notice board (white board) in the department control room. The permits required for the work in question, for example, lock list, breaker card, must be signed. The contractor makes a final inspection with operating personnel to ensure that the work can be started. In the case of uncertainty regarding the contents in pipes and tanks, contact operating personnel.

Gas measurement

The oxygen and hydrogen sulphide contents must be measured before work is started in floor channels, water trap cavities, vacuum pump channels and tanks?. The oxygen content must also be measured before entering closed spaces such as drying cylinders.

Increased need of safety equipment

Protective gloves

Evacuation routes

Information on evacuation routes is available in the control rooms. Always be aware of where the closest emergency shower and eye shower are and of which evacuation route to use, as well as the applicable collection point BEFORE starting work

5.8 Winding Machines

Telephone: control room Winder 8 (RM8): 184 08
Telephone: control room Winder 11 (RM11) 185 13

Risks

- Clamp injury caused by rotating tools etc.
- Cut injury caused by rotating knives
- Fall and slip risks
- Clamp injury/crushing when lifting with overhead cranes
- Impact and shock load injury due to tipping of narrow paper rolls
- Impact and shock load/crush injury due to rolling paper rolls
- Fall and tripping risk due to automatic conveyor start
- Collision risk with paper rolls on a conveyor
- Collision risk with forklifts

Procedures

Before the work is started, it must be announced verbally to operating personnel and written up on the notice board (white board) in the department control room. The permits required for the work in question, for example, lock list, breaker card, must be signed. The contractor makes a final inspection with operating personnel to ensure that the work can be started. In the case of uncertainty regarding the contents in pipes and tanks, contact operating personnel.

Increased need of safety equipment

Protective gloves

Evacuation routes

Information on evacuation routes is available in the control rooms. Always be aware of where the closest emergency shower and eye shower are and of which evacuation route to use, as well as the applicable collection point BEFORE starting work

5.9 Rollhandling (OR4, RP10, RP11, Pulp and broke preparation)

Telephone no. control room Pulp and broke preparation: 184 56
Telephone no. control room Wrapping machines (RP9/RP10): 195 50

Risks

- Clamp injury caused by rotating tools etc.
- Cut injury caused by rotating knives
- Fall and slip risks
- Clamp injury/crushing when lifting with overhead cranes
- Impact and shock load injury due to tipping of narrow paper rolls
- Impact and shock load/crush injury due to rolling paper rolls
- Fall and tripping risk due to automatic conveyor start
- Collision risk with paper rolls on a conveyor
- Collision risk with forklifts

Procedures

Before the work is started, it must be announced verbally to operating personnel and written up on the notice board (white board) in the department control room. The permits required for the work in question, for example, lock list, breaker card, must be signed. The contractor makes a final inspection with operating personnel to ensure that the work can be started. In the case of uncertainty regarding the contents in pipes and tanks, contact operating personnel.

Increased need of safety equipment

Protective gloves

Evacuation routes

Information on evacuation routes is available in the control rooms. Always be aware of where the closest emergency shower and eye shower are and of which evacuation route to use, as well as the applicable collection point BEFORE starting work

5.10 Storehouse P2, P3

Telephone no.	
Coordinator Storehouse P2,P3:	0663-193 65
P2:1	0663-194 07
P2.2:	0663-194 02
P3.1:	0663-194 03
P3.2:	0663-194 05
Tugmaster/Lushing station:	0663-180 00

Risks

- Risk of being run over. No access for unauthorised vehicles.
- Transportation of bulk goods and there is limited vision in the area. Risk of being run over.
- Loading and unloading of vehicles and load carriers inside and outside the magazine.

Procedures

That work is about to be started must be announced verbally to operating personnel and written up on the notice board (white board) in the department control room. The permits required for the work in question, for example, lock list, breaker card, must be signed. The contractor makes a final inspection with operating personnel to ensure that the work can be started. Operations personnel are contacted by phone.

Safety equipment

Protective gloves

Increased need for safety equipment

Helmets must be worn in the Lushing station. Reflective clothing and safety shoes must be worn in the storehouse area

Evacuation routes

Are provided in each magazine. Always be aware of where the closest emergency shower and eye shower are and of which evacuation route to use, as well as the applicable collection point BEFORE starting work.

Other information

Department fork lifts may only be used by department personnel.

5.11 Coating machine (CM1), Winder 9 (RM9)

Telephone no.
Control room CM1: 0663-195 20
Control room RM9: 0663-195 40

Risks

- Burn injury
- Clamp injury
- Cut injury
- Fall and slip injury
- Corrosion injury
- LPG
    - LPG is a heavy and highly flammable gas. In the event of leakage, the gas collects at low points such as drainage systems, channels and other recesses and can therefore be transported to a source of ignition a long way from where the leak occurs. This can result in explosion far from the leakage point.
    - In the event of a discharge, the premises must be evacuated.
- Ammonia
    - Ammonia is toxic and corrosive and must not be inhaled. It is flammable, extremely toxic and harmful to the environment.
    - Always use suitable safety equipment.
    - In the event of contact with the eyes, rinse immediately with a lot of water and seek medical help. Also seek medical help if you are feeling sick.

Procedures

Before the work is started, it must be announced verbally to operating personnel and written up on the notice board (white board) in the department control room. The permits required for the work in question, for example, lock list, breaker card, must be signed. The contractor makes a final inspection with operating personnel to ensure that the work can be started. In the case of uncertainty regarding the contents in pipes and tanks, contact operating personnel.

Gas measurement

The hydrogen sulphide content must be measured before work is started on water trap recesses, effluent tanks and broke tanks?
The un-combusted gas content must be measured before work is started on exhaust ducts and circulation channels for LPG driers and air drier combustion chambers.

Increased need of safety equipment

Protective gloves

Evacuation routes

Information on evacuation routes is available at operation points CM 1, RM 9 and at the Coated Paper office. Always be aware of where the closest emergency shower and eye shower are and of which evacuation route to use, as well as the applicable collection point BEFORE starting work.

Other information

All work concerning LPG installations requires special work orders issued by the LPG management's especially appointed representative.

5.12 Chemical Preparation

Telephone
Control room: 0663 – 193 67

Risks

- Burn injury
- Clamp injury
- Cut injury
- Fall and slip injury
    - Excessive slip risk at the retention agent dissolving plant
- Burns
    - Alkaline and acidic chemicals

Procedures

Before the work is started, it must be announced verbally to operating personnel and written up on the notice board (white board) in the department control room. The permits required for the work in question, for example, lock list, breaker card, must be signed. The contractor makes a final inspection with operating personnel to ensure that the work can be started. In the case of uncertainty regarding the contents in pipes and tanks, contact operating personnel.

Increased need of safety equipment

Protective gloves

Evacuation routes

Information on evacuation routes is available in the Chemicals production entrance office. Always be aware of where the closest emergency shower and eye shower are and of which evacuation route to use, as well as the applicable collection point BEFORE starting work.

Other

Welding work is forbidden on associated machine equipment during the emptying of starch from containers and on all equipment containing powder.