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## SHEET 1: CHEMICAL RISK

- Chemical agents hazardous for the health
- Hazardous Chemical agents

- 1.1 The Contractor, before start any activities that required chemical product use, shall give the safety sheets to the Customer for a check and a consequent joint assess of possible measures in addition to those ones included in the DUVRI.
- 1.2 Activities which generate dust: split the area in more sections, wet constantly debris if this don't generate more risk; go on with the activities when there is during hours or moments with less personnel presence in agreement with the Customer.
- 1.3 Activities that carry gases/vapours/mist/aerosol development e.g.: application of products to paint, use of solvents for the clearing etcetera; make sure that in the area there isn't personnel. Proceed with the activities during hours or moments with less personnel presence.
- 1.4 For all those activities above: contact the Customer to agree if necessary the conditioning/ventilation system shut off or in any case to adopt the actions to avoid circulation/diffusion of the dusts/pollutants in the no working areas as well.
- 1.5 In the areas where foods are handled: interventions shall be performed outside of foods handling, preparation, giving hours/moments and protecting the closed or lower areas, in any case contacting the HACCP Responsible and Canteen Responsible as well.
- 1.6 In the areas where "sensitive" categories (schoolchildren, children, mothers workers, pregnant women) may be present: the interventions that cause development/diffusion of chemical products shall be performed when there isn't presence of this personnel.
- 1.7 These measures of risk control are particularly important for the activities in the laboratories and shall be defined in detail with the Customer before start activities: in addition to the health protection may be necessary further safety measures with various purposes e.g. to not invalidate an experiment or a proof, to not influence the analytical data quality, etc
- 1.8 Laboratories: in case of minor accidents externally also common (e.g. abrasions) or improper movements (e.g. touch the mouth after having touched a desk, a FEM switch or light closed to fume hood, etcetera) contact immediately the Customer that will evaluate if and how operate.
- 1.9 Laboratories: Contractor's staff shall NEVER operate autonomously to absorb a laboratory's product/material accidental spill, to move, to operate on equipments, to switch on or switch off equipments, to disable extraction hood, to close or open consumptions (gas, water, vapour etcetera) without before contacting the Customer.
- 1.10 The Customer should take into consideration these external activities and evaluate the stop or the spacetime postponement of activities (e.g. laboratory's experiments) that may be a reasonable risk for Contractor's staff.

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- 1.11 Contractor's personnel shall never eat, drink, smoke in the laboratory's or foods giving/handling areas, touch objects or areas foreign to the commissioned activities; shall always interface with the Customer for any doubt, anomaly or clarification related to the works areas and to the safety measures.
- 1.12 In case of use by the Contractor of tools/equipments that cause not breathable gas emission (e.g. motor compressors), these shall be utilized in well ventilated or open air environments, in any case following the instructions of the equipments instructions book.

## **SHEET 2: BIOLOGICAL RISK**

### *- Biological hazardous agents*

- 2.1 The access and any kind of activity inside laboratories, where biological agents of category higher than 1 are handled or present, shall be agreed in advance with the Customer.
- 2.2 In any case the following general precautions, that are intended to reduce the exposure risk, shall be applied.
- 2.3 Verify always with the Customer if, before performing the works, the area shall be arranged e.g. scheduling remediation, sterilizations, surfaces cleaning.
- 2.4 Take care to wear the additional PPE, if foreseen, e.g. gowns, masks, helmet.
- 2.5 It has to be arranged and agreed the segregation/separation of the "yard"s areas from the works areas both to minimize the dust's diffusion and to reduce the contractors exposure risk.
- 2.6 Avoid to block in opening position the access doors, separations, revolving doors; often the laboratories areas are in negative pressure for safety reasons or experiment's quality necessity.
- 2.7 Always contact the Customer to agree the waste's disposal procedures: not always they can be disposed in the laboratory's vessels.
- 2.8 Always contact the Customer for the procedure's check/examination of the following activities: disinfection and cleaning, emergencies interventions in case of accidental exposure of contractors personnel.
- 2.9 Acquire information by the Customer on the necessity to wash separately the own works clothes and on the operative procedure to do that.
- 2.10 Acquire information by the Customer on the necessity to disinfect/remediate/treat the working tools and materials used in the laboratory.
- 2.11 Acquire information by the Customer on the necessity to foreseen personnel disinfection.
- 2.12 Contractor's personnel shall never eat, drink, smoke in the laboratory's areas, touch objects or areas foreign to the commissioned activities; shall always interface with the Customer for any doubt, anomaly or clarification related to the works areas and to the safety measures.

- 2.13 In case of minor accidents externally also common (e.g. abrasions) or improper movements (e.g. touch mouth/eyes/nose after a desk, a FEM switch or light closed to fume hood, etcetera) contact immediately the Customer that will evaluate if and how operate.
- 2.14 Never leave personal object in direct contact with surfaces: tissues, glasses, pullovers, clothes.
- 2.15 Contractor's staff shall never operate autonomously to disinfect or clean surfaces, absorb a laboratory's product/material accidental spill, to move, to operate on equipments, to switch on or switch off equipments, to disable extraction hood, to close or open consumptions (gas, water, vapour etcetera) without before contacting the Customer.
- 2.16 Pay attention to the areas and to the vessels marked with the following biological risk symbol; some vessels may contain cutting objects.



Biological Risk

## **SHEET 3: BURN RISK**

### *- Handling objects*


- 3.1 Interface with the Customer before touching/intervening on the laboratory instruments (e.g. gas chromatographs, analyses equipments, ovens, muffles).
- 3.2 Interface with the Customer before intervene near the traced lines either on lines containing high temperature fluids (e.g. diathermic oil, vapor, hot water) or on low temperature fluids (e.g. liquid nitrogen, gas nitrogen near the vaporizator, around the cryogenic tanks ).
- 3.3 Pay attention to the presence of cryogenic gas mobile containers, normally present in the laboratories: these are sizeable containers, big as a chair or more; before execute any activities and if they can interfere with them, ask to move them.
- 3.4 Always pay attention to the following signs:



Warm parts



Low temperature parts

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#### **SHEET 4: ELECTROCUTION RISK**

##### *- Electrical Risk*

- 4.1 Provisional electrical systems: foreseen mainly overhead line; in case of underground cables it has to be taken into consideration the possibility that they're stomped or damaged with vehicles or person and, in this case, protected through a channel.
- 4.2 Electrical systems shall be certified by a qualified technician and furnished with declarations of conformità.
- 4.3 The electrical lines for vehicles (e.g. concrete mixer) must be fixed, with a switchboard type ASC. The power cable must have a pole for the grounding system.
- 4.4 The electrical lines for portable tools may be extension cables but, as said above, it has to be taken into consideration the possibility that they're damaged by vehicles or may cause stumbling risk or may be stressed by e.g. main doors or doors, and if it's necessary protected through boards, wedges.
- 4.5 Must be used CEI cables suitable for movable cable laying (H07RN-F) in case of external use.
- 4.6 IAs a general rule: cables, light sockets etc. to power the equipments used outside shall be IP 55. The portable tools shall be at least IP 55; if they're used in wet/humid zones: double isolation. The ordinary and extraordinary maintenance activities shall foreseen the consumption' disconnection acting on upstream disconnector. To avoid untimely restart put a sign "work in progress: do not perform activities" and where is necessary locked the upstream disconnectors/switches.
- 4.7 Shall be always agree with the Customer the disconnection activities of switchboard that powered consumptions .This is valid particularly for biological, chemical, physical laboratories, for the fire detection systems, for the safety (ATEX) systems, for the sirens and alarm buttons, for all the areas where experiments are performed or where are used machineries whose power sudden stop and/or restart may cause incidents, accidents, fires, explosions, failures or damages.
- 4.8 Electrical works and in particular activities of disconnection, of putting in safe conditions and of reestablishment shall be performed always contacting the Customer and anyway following the general criteria stated in CEI 11-27 "works on electrical systems" regulation and shall foreseen work's activities individuation, the system's elements to denegize and to put in safety, arrange a working plan to define the preliminary activities and the working phases. Those measures shall stated in the Safety Plan edit by the Constructor and given to the Customer before start activities i.g. on time to agree on the safety measures.
- 4.9 Shall be always agree with the Customer the temporary power interruption activities as well, in order to avoid damages, accidents or data loss.

- 4.10 Shall be adopt measures to avoid that thirdy part can works on active systems parts or works being dangerous for him/herself or for the others.
- 4.11 As a rule, the Customer takes care to put in safe conditions the systems that have activities in MV/LV cabinet giving an "in safe" system to the Contractor.

#### **SHEET 5: LIGHTING RISK**


##### *- Lighting of the work spaces and place*

- 5.1 Transit way or work places shall be lighted.
- 5.2 If necessary arrange provisional lighting plants to assure visibility of transit ways, pedestrian routes, work sites, yard area fences or similar working area borders.
- 5.3 The fences of the yard area shall be visible through fixed red light signals powered with very low voltage (24V).
- 5.4 When entering places where it is reasonable to find low lighting /e.g. tunnels, technical spaces) , bring with you some portable lamps.

#### **SHEET 6: FIRE/EXPLOSION RISK**

##### *- Fire/explosion risks*

- 6.1 Use of oxyacetylene torch, LPG cylinders (e.g. to spread proofing sheathing) etc: before using check gas leak's absence from the valve, the pipes and the torch using a soapy solution.
- 6.2 The portable gas cylinders and inflammable products boxes (typically spray) shall be located in ventilated areas and protected from the sun rays and from any possible crashes therefore shall be located far from transit or movement's ways.
- 6.3 Do not never use spray on hot surfaces (>50°C) or on potential trigger's sources.
- 6.4 Shall never use equipments/ tools/utensil without before contacting the Customer for the joint check of the reducing risk measures specific for the area/activities.
- 6.5 Shall be located a fire extinguisher close to the working areas in which flames or sparks (acetylene or electrical welding, grinding, flexible utilization etc.) may be used.
- 6.6 Arrange that open flames or sparks are kept at a safe distance from flammable materials or fuels (including furniture, furnishings, carpet). If it is necessary locate movable walls to avoid sparks throwing (electrical welding, grinding).
- 6.7 Portable lamps: pay attention to the heat produced by the lamps that shall never come into contact with combustible products e.g. furniture, carpet, armchairs, furnishings, document.

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- 6.8 Shall be adequately ventilated the rooms where inflammable substances are stored before start activities inside: leaving open doors and windows for at least 6-7 minutes, moving outside when possible the inflammables tanks (e.g. acetone), in any case don't perform any activities at the same time of activities with inflammables handling (e.g. cleaning with solvent, painting activities performed by third part, etc).
- 6.9 The activities inside the following areas must be previously authorized: cylinders box, methane gas reduction box, laboratories, carriages recharge's area, trenches and underground passages, technical tunnels and in any case in ATEX zones.
- 6.10 Always contact the Customer to acquire information on potential presence and characteristics of explosion risk classified areas (ATEX or "AD" areas) where explosion atmospheres may develop and eventually to agree portable exposure meter's use as well.
- 6.11 Always contact the Customer before disabling or modifying working logic of fumes or gas detection's systems, fire safety systems, before keeping in open position REI doors for "site" need and before changing fire safety conditions of the interested area.

#### **SHEET 7: MACHINERY/EQUIPMENT RISKS**

- *Machines*
- *Portable Equipments and tools*

- 7.1 Comply with signs and the delimitation of the work areas of machine tools, robots and any equipment that can autonomously move: do not jump over signalling bands, shelters and do not transit outside the ground delimited areas.
- 7.2 As a general rule keep always distant from working equipments/robots.
- 7.3 Verify in advance with the Customer the compatibility of the maintenance activities to do by means of the machineries/equipments.
- 7.4 The proper working control of the machineries/plants that require temporary removals of protections, shelters and interlocks shall be agreed with the Customer; in particular for actions on automatic gates/doors shall be taken appropriate precautions to avoid crushing risk e.g. photocell temporary removal.

#### **SHEET 8: UNDER PRESSURE EQUIPMENTS RISK**

- *Pressure equipments*


- 8.1 Do not make any intervention on or near the high pressure hydraulic circuits (pipelines, connections, hydraulic power box, pumps), autoclaves, CPR air accumulation tanks, etc. without before contacting the Customer, who will evaluate the necessity to "place in safe" the machine/plant (e.g. by discharging the residual pressure) or to use specific PPE (glasses with material protection).

- 8.2 As a general rule the Contractor must avoid to stay during his/her activities near the overpressure discharge devices such as safety valves, PSV, breaking disks, explosion disks, explosion-proof doors, etc.
- 8.3 Should the Contractor use compressors during his/her activities, they can be used indoor only if electrically powered, with the cautions already stated for the explosion risk (SHEET 6).
- 8.4 Use the compressor or in any case under pressure equipments in order to avoid water hammers, pipe oscillations, due to sudden pressure discharge – as indicated in the usage manuals of the machine.

#### **SHEET 9: HANDLING RISK**

- *Loads, manual handling and repetitive movements*

- 9.1 The loading/unloading activities from means with crane shall be performed moving the load closet to crane's upright.
- 9.2 Handle materials using lifting equipments and/or tools or with more persons.
- 9.3 Do not stay in the action ray of the movimentation means, i.e. near the cranes, beyond the means, etc.
- 9.4 "No entry" signs and/or approach prohibition signs in the transit and handling areas.
- 9.5 Keep away from means in manoeuvre, including trucks.
- 9.6 Verify the correct working of the truck backup buzzer.
- 9.7 The means with stabilizer must have them completely extended before start activities
- 9.8 The means handling must be assisted from ground by an employer working as signalman.
- 9.9 During lifting activities it has to be taken into consideration the wind action and the meteo conditions effects as well.
- 9.10 Always check suitability of hook, ropes, chains, possible bar-bells and harnesses, safety device (tabs) on the hook and of all accessories that you want to use.
- 9.11 Take the necessary precautions against the accidental displacement of the stocked material.

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## SHEET 10: NON IONIZING EXPOSURE RISK

### - Non Ionizing radiation

- 10.1 Durante During torch or electrical welding activities, install movable screens if near there are working places occupied permanently.
- 10.2 DO NOT MAKE any intervention on laser machines, UV, IR, NMR and in general on equipments that emit elettromagnetic field when during working; interface in any case with the Customer for any necessity of power supply/control plant sectioning, power supply cutoff and reset.
- 10.3 Always comply with the signs placed in the areas/machines/laboratories and with the specific prescriptions for entering such areas.
- 10.4 The typical danger signs are:



Laser



Laser



Magnetic fields



Non ionizing radiation

- 10.5 It has to be taken into consideration that in each area where ionizing radiation are present, access can be forbidden to "sensitive" workers categories such as:  
Hearing aid carrier  
Pacemaker carrier  
Fixed prosthesis, dental implant carrier
- 10.6 Gli • Contractors shall consider the possibility of indirect effects, such as e.g. ferromagnetic objects propulsion that suddenly move start high speed moving la propulsione di oggetti ferromagnetici, che si mettono improvvisamente in movimento ad alta velocità attratti dal campo, il rischio di correnti di contatto indotte, etc..
- 10.7 Before access to the mentioned areas or perform interventions that may interfere with machinery/equipment mentioned, always contact the Customer.

## SHEET 11: IONIZING RADIATION EXPOSURE RISK

### - Ionizing radiation

In the JRC Ispra site there are areas where ionizing radiation sources may be present.

- 11.1 All areas and installations with radiologic risk are delimited and properly indicated according to the law.
- 11.2 Before entering these areas, both for a visit or for work, always contact the Buyer and in particular the Radioprotection Sector, who will evaluate all the necessary measures and cautions (e.g. supply of personal dosimeters, radiometric check-ups, etc.) and will advise the formalities for getting the entrance authorization to such zones. The suggestion is to contact the Radioprotection Sector in advance.
- 11.3 The contractor shall refer to the specific radioprotection procedures and prescriptions in force, to which we refer for any detail.
- 11.4 Areas where physical surveillance to radioprotection is necessary are e.g.:
- Edifici Buildings and installations inside **Area 40**
  - Buildings and installations inside ESSOR nuclear complex
  - Ciclotrone laboratory
  - Ispra 1 reactor
- 11.5 The contractor may never enter – if not clearly authorized – the premises, the areas and the installations where the following danger signs are present:



Ionizing Radiation Danger

And do not do any operation (not clearly and previously authorized) on equipments that show this symbol o that raise in any case the risk of exposure to ionizing radiations.

- 11.7 In some chemical or biological laboratories radioisotopes for the experiments may be present or utilized. The precautions stated in the sheets n. 1 and n. 2 , to which we refer, are still valid.

## SHEET 12: NOISE RISK

### - Noise

- 12.1 The noisy activities that stretch over considerable time (more than 3-4 minutes) shall be defined in agreement with the Customer to evaluate staff temporary change of position. This observation applies particularly to the activities comparable to office work, or wherever there is permanent staff.
- 12.2 If it is possibile, isolate area by soundproof removable walls. Example of noisy activities: flexible hoses use, hammer, pneumatic hammer, stripper hammer.etc..

- 12.3 Before entering the noisy premises/installations the contractor shall verify the presence of the following signs and shall always comply with the contractor's instructions



Hearing-protection devices obligation



Noise danger

#### SHEET 13: OBJECT FALLING RISK

- Fixed and portable ladders
- Fixed and mobile scaffolds, access systems, rope and further equipments for works at height
- Lifting equipments

- 13.1 Do not stay under the areas where are done works on high places or in site, which must always be indicated on ground (e.g. maintenance operations on high sites, lamp or lampholder dismounting operations or neon tubes, inspection or reparations operations, etc)
- 13.2 Do not stay under suspending loads, do not transit under the lift means work areas during their working
- 13.3 Do not leave tools or materials on the scaffoldings, support bases-including staircases- and in general on high work places
- 13.4 Do not overload the scaffoldings with the materials
- 13.5 Do not stay near machines, equipments, instruments on function, that can cause the throwing of pieces, splinters, components, unless protected
- 13.6 Should it be necessary to enter premises/areas where there is the risk of object falling, wear the protection helmet.



Objects Fall Danger



Suspending Loads Danger

#### SHEET 14: STUMBLING/SLIDING RISK

- Territorial risks, external areas and accesses
- Internal transit areas
- Doors and way exit in case of emergency

- 14.1 Level the routes in order to avoid differences in height, e.g. by using yard boards of appropriate thickness
- 14.2 The work area must be kept in order and free from materials.
- 14.3 Possibly avoid to lay objects or electric cables for tools/equipment power supply on transit and passage ways.
- 14.4 The electric cables shall be fixed or protected by temporary boards or raceway in order to reduce at minimum stumbling risks.
- 14.5 If though the adopted cautions the risk still rises stumbling risk, well show such risk by placing for example the following signs in the involved areas:



Stumbling Risk



Sliding Risk


- 14.6 Affix these signs is mandatory, in particular for the following areas: nursery school, gardenie, canteen, areas attended by the public, club house, guest quarters, porter's lodge, emergencies exits of any buildings, and in any areas where it is foreseen person passage

#### SHEET 15: CRASH RISK

- Structures, internal work spaces and furnitures
- Lifting equipments

- 15.1 During interventions in areas with crash risk against fixed or mobile installations always wear the protection helmet
- 15.2 Example of these areas are: rooms/buildings where materials handling systems are installed or utilized such as: crane, winche, hoist, etc, with passages and ways shorter than 2.00 mt, areas where piping, pipes, aree dove sono presenti tubazioni, condutture, air duct, strcutures and passages lower than 2.00 mt (tipically buildings basements, tunnels).
- 15.3 Show your face and make sure that the worker handling the overhead travelling crane or the block and tackle can see you



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- 15.4 In the areas where crane and loads lifting/handling equipments are used, always wear high visibility clothes EN 471.

#### **SHEET 16: VEHICLE CRASH RISK**

- Territorial risks , external areas and accesses
- Internal transit areas
- Objects and materials storage

- 16.1 Fare • During transit pay great attention to pipelines, concrete beds, pumps, penthouses (lorry and van drivers), hydrants
- 16.2 Pay attention before manouevring any vehicle: remind the position of fixed installations and vehicles dead angles (above all while backing up or when handling a vehicle with trailers). Ask for help in case of difficulty or doubts.
- 16.3 Use the acustic signals near the passages with bad visibility such as corners, bends, etc.
- 16.4 Pay attention to the safety signs and to the parked vehicles and in transit ones; above all pay attention when you meet the following sign:



Danger In Transit Trucks

#### **SHEET 17: COLLISION RISK**

- Territorial risks , external areas and accesses
- Lifting equipments
- Vehicles

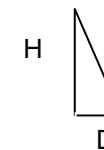
- 17.1 Highlight the work area; arrange safe ways, not obstructed by deposit of different nature materials
- 17.2 Keep away from driveways, operating means (lift trucks, bulldozers, cranes, etc.) in movement and do not narrow to backing up machines / vehicles
- 17.3 Use acustis signals (honk once) near the passages with bad visibility, such as building corners, bends, etc

- 17.4 Pay attention to the safety sings and to the parked vehicles and in transit for material load/discharge: the operators may be nearby, may be in hidden points that cannot be visible (e.g. behind the vehicle or at its side during the hose connections/disconnections) that might suddenly appear.
- 17.5 Pay attention to the areas where children may be present (nursery school, gardenie, club house)
- 17.6 Wear high visibilità clothes EN 471 when required by the Cusotmer (Joint inspection report)


#### **SHEET 18: FALL FROM TOP RISK**

- Fixed and portable ladders
- Fixed and mobile scaffolds, access systems, rope and further equipments for works at height

- 18.1 Use ladders for operations of short duration and according to EN 131 Norm and CE marked. In case of works at height use scaffoldings, standso, raising platforms or similars.
- 18.2 Verify good working for the device that blocks the double ladders opening further the safety limits. The simple ladders must be placed in the following way: food D of the ladder bases shall be about  $\frac{1}{4}$  of height H between floor and upper leaning point:



- 18.3 Works requiring use of DPI must foresee the organization and set up of procedures to guarantee the injured salvage in case of falling, insufficient time to avoid risks due to "motionless suspension".
- 18.4 Ladders must be fixed to the landing plane, stretch out from it of 1 mt. at least.
- 18.5 Ladder must be based on a flat and stable surface.
- 18.6 Cradle scaffolds and scaffoldings higher than 2 mts. must be provided with parapets.
- 18.7 Cradle scaffold must be complete according to constructor's indications and wheels must be complete with block devices. The wheel running plane shall be levelled and the cradle scaffold loard on the ground shall be apportioned by boards
- 18.8 Workers shall be protected against the fall from top risk by using approved baskets for people lifting, homologated oleodynamic drums, etc. and in any case by every means suitable to reduce to zero the falling risk. If necessary also use the suitable PPE and

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technics (body harnesses complete with thigh bands, retention devices and falling absorbers, positioning systems through ropes).

- 18.9 Who works in altitude must demonstrate he/she was trained according to the requirements as per law nr. 235/2003 and artt. 36 bis, 36 ter, 36 quater, 36 quinquies and art. 116 sections 2,3,4 of law nr. 81/08 and correlated measures and show the foreseen certification before activity beginning.
- 18.10 Should it be necessary to make hollows for the plants, protect them by scaffolding boards
- 18.11 Transit on roofs or penthouses or similar surfaces must always be authorized to verify with the Buyer the possibility of trampling upon them and the resistance of the sustaining structures; as a general rule avoid to walk on such areas by using alternative means (baskets, etc.) or by placing distribution boards.
- 18.12 The necessity of using against fall PPE and/or positioning systems means of ropes shall be pointed out at work beginning and according to information exchange between Customer and Contractor.
- 18.13 During activities that required PPE's use, it has to be foreseen organization and arrangement of procedures to assure injured person's recovery in case of fall to avoid "inert suspension" risk.

#### **SHEET 19: VIBRATION RISK**

- *Vibration*


- 19.1 The operators must use suitable equipment, designed in respect of ergonomics principles. Moreover the equipment must generate the lowest possible vibration level, taking in account the work to be performed.
- 19.2 Following the joint inspection and if it is considered necessary, the operators shall be provided of equipments to reduce the injury risks caused by vibration and suitable PPE, such as seat that mitigate effectively the vibrations transmitted to the whole body and handle bars or gloves that mitigate the vibrations transmitted to hand-arm system.
- 19.3 Person subject to mechanical vibrations shall show to have received suitable information and training on the correct and safe use of the work equipments and PPE, in order to reduce the exposure to this risk at the lowest level.
- 19.4 Contractor shall always follow the specific instructions of the Customer, before performing works on machineries or equipments that cause vibration's transmission to the hand-arm system.

#### **SHEET 20: ASBESTOS RISK**

- *Cancerogenic and mutagenic agents*

- 20.1 The concentration in the air of dust coming from asbestos or materials containing asbestos in the working places shall be reduced at the lowest level by the Customer and, in any case, below the limit value fixed by par. 254 Law 81/2008 (exposure limit value fixed to 0.1 fibres per cc of air).
- 20.2 In order to assure the respect of the exposure limit value and depending on the results of the initial assessment risk, the Employer customer perform periodically the measures of the asbestos fibre concentration except when the conditions as per comma 2 par 249 Law 81/2008 are applicable. The monitoring results shall be communicated to the Contractor.
- 20.3 The number of the exposed workers or of the workers that may be exposed to the dust from asbestos or materials containing asbestos shall be lower possible.
- 20.4 The exposed workers must always use the protective personal equipments (PPE) for the respiratory system with operative protection factor adequate to the asbestos concentration in the air. The protection shall guarantee, in any case, to the users that the estimation of the concentration in the air multiplied for the operative protection factor is no higher than a tenth of the exposure limit value.
- 20.5 PPE use must be broken up by rest period appropriate to the physical task required by the work.
- 20.6 The working processes shall be developed in order to avoid asbestos' dusts production or, if it isn't possible, to avoid asbestos' dust emission in the air.
- 20.7 The Customer will also supply the workers, before they are involved in activities with asbestos exposure risk, with the suitable information about:
  - a) Health's Risks due to the exposure to asbestos dust or materials containing asbestos;
  - b) the specific hygienic norms and the necessity not to smoke;
  - c) the cleaning instructions and the use and usage of protection cloths and PPE;
  - d) particular prevention measures to reduce exposure;
  - e) threshold limit value and the necessity of the environmental monitoring.
- 20.8 The Customer will inform the Contractor if, from the asbestos in the air concentration measures results, come out values upper to the exposure limit value. The customer will inform the contractor on the causes of the clearing and consult together on the measures to adopt or, in case of urgency the consultation isn't possible, the customer will suddenly inform the involved workers and their representative on the adopted measures.
- 20.9 The Customer guarantees that all workers exposed or potentially exposed to dust containing asbestos are trained in a proper way as established by par. 258 Law 81/2008.



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20.10 People that perform asbestos removal, dismantling or remediation activities shall demonstrate that have received training for these activities in compliance to Section III, Title IX Law 81/2008.