

Directive for Occupational Safety, Health and Environment for suppliers of IBC SOLAR AG

Basic Principle

The following directive applies to all external persons at all locations of IBC SOLAR AG. External persons within the meaning of this directive include all staff from external companies and suppliers as well as visitors and other guests. The following provisions are intended to protect our own staff as well as external persons and contractors and help to maintain health and safety, fire control, environmental protection and plant security.

1.1. Compliance with the Directive

Acceptance of and compliance with these directive is verified by IBC SOLAR AG and mutually recorded in the supplier rating. **All** contractors, subcontractors and suppliers must instruct their employees on the contents of this directive **in advance** of starting work and hand over the signed form of confirmation (see attachment) to the respective project manager/site manager of IBC SOLAR AG.

2. Occupational and Health Safety

A **coordinator for safety and health matters** will be appointed to ensure occupational safety on-site. His instructions are to be strictly observed to ensure a smooth and safe co-operation.

- ❖ Before you start a new task, make sure that you have proper instructions by our respective supervisor or his representative.
- ❖ Only use work equipment that is suitable for the task on hand.
- ❖ Observe all standard operating procedures for work equipment, hazardous substances or other products that may be hazardous.
- ❖ Observe all safety signs and instructions on-site (e.g. interdiction signs, warning signs, emergency signs).

- ❖ Tasks that include the risk of falls from a height can only be carried out when corresponding safety equipment like safety harness or safety rails is in place.
- ❖ A basic protection of residents against tremors, vibrations and noise must be ensured by the observance of legal requirements against construction noise. In addition, the use of noise intensive machines has to be avoided in off-hours (early morning, around noon, near closing time). The operation of these machines needs to be concentrated to reduce the stress to residents.
- ❖ Scaffoldings at buildings may be acceded only if there is an internal ladder access and safety rails consisting of handrail, midrail and toe board are available.
- ❖ Where an early detection of people is essential, e.g. in the vicinity of rail systems or as banks man on construction sites, reflective clothing must be worn
- ❖ Anyone working close to noise intensive machines is obligated to **always** wear ear protections. This is the only way to avoid irreparable damages to hearing.
- ❖ If dust is raised by earth-moving equipment or in dry weather conditions, it is recommended to wear a respirator mask to protect the respiratory system.

2.1. Personal safety equipment and working clothes

- ❖ Any necessary and suitable safety equipment and the working clothes will have to be provided by the respective contractor and needs to be used by **all** employees.
- ❖ In case the personal safety equipment is not worn, the coordinator for safety and health matters is entitled to prevent the contractor's personnel from any further work.

example:



2.2. How to react with accidents / First Aid

Before work can be started at a construction site, a responsible person of the contractor must inform himself about first aid measures, emergency escape routes as well as emergency care and first aid and has to instruct his employees.

On principle, any incident like fire, light and heavy injuries, the release of pollutants and other incidents, must be reported to the site manager and has to be recorded by him and by the contractor respectively.

Important phone numbers and contacts:

Emergency: (0) 112 (Emergency number Europe!)

When reporting please give the following information:

- What happened?
- Where did it happen?
- How many people are injured?
- What kind of injuries?
- Wait for questions!



Important Phone numbers can be found in the emergency coordination plan which is posted!



2.3. High-Risk Lone Working

On principle you should avoid high-risk lone working. If this cannot be avoided and a person carries out high-risk working alone, suitable procedures must be put in place by the contractor to monitor workers. This should be achieved by suitable technological or organisational personal safety measures.

2.4. Carrying the personal identity card//Proof of working hours

It is obligatory for all employees and **all** employees of contractors/subcontractors to carry a personal identity card. It has to be shown on request. Time keeping records are to be kept for **all** employees (employees of contractors) and have to be shown on request.

3. Site facilities and environmental protection

The Protection of the environment must be ensured:

- Prevention of air-, water and ground-pollution
- Waste disposal
- Noise protection

❖ The entire construction site has to be kept in a clean and orderly condition **at all times**.

- ❖ Emergency routes and exits, fire extinguishers and all other traffic routes giving access to them, must be free from obstruction at any time.
- ❖ Cables, pipes and conducts must not pose any hazard or hindrance to site operation.
- ❖ If the use of a power unit becomes necessary, this must be in good working order and leak proof.
- ❖ Setting up site containers is permissible in the allotted positions only.

The requisition, use and wastage of resources have to be kept as low as possible. It is not accepted to keep machines running when they are not in use, to shunt heavy machines unnecessarily, and to heat worker cabins while the windows are open.

For each task the most efficient machine must be used. Frequently, smaller machines have the advantage to require less fuel, to be more flexible and – depending on the kind of drive (caterpillar or wheels) - have less impact on the ground. On principle, construction equipment running on Diesel must be operated with a particle filter. In addition, biodiesel is to be used provided the equipment is suited for biodiesel and the procurement can be achieved at acceptable costs and efforts. In so far as they are subject to inspections, all construction site machines must show the valid inspection tag complying with the legal requirements. Operation of all machines is permissible only for employees that are entitled to do so. This has to be proven by a proof of authority (e.g. driving license) or at least a presentable copy. This has to be carried at all times together with a copy of the identity card, residence permit and/or work permit.

3.1. Substances hazardous to water

When dealing with substances that are hazardous to water, e.g. when refilling a construction machine on-site with fuel, with hydraulic fluid, or with transformer oil when setting up the transformer, the legal requirements regarding usage and disposal have to be strictly observed. Steps have to be taken in order to effectively prevent the infiltration of spilled liquids into the ground. Refilling of construction machines is only accepted in areas with proof against percolation. This may be achieved by particular plastic tarps. Transport of fuel in portable canisters is limited to 60 liters according to paragraph

1.1.3.3 Bst. a ADR¹. Mobile fuel stations need to show the valid inspection tag. All canisters must be suitable for fuel transport and properly secured during transport. Even quantities that are slightly in excess of the above limit are treated as hazardous materials transportation for which high security requirements (particular ADR-driver training, fire prevention, load securing) need to be fulfilled. The ADR and other legal requirements for the transport of hazardous goods must be strictly observed.

3.2. Waste disposal

Any waste has to be sorted into paper waste and residual waste, recyclables and scrap metal (the waste containers must be labeled accordingly). Any clipping and wastage of copper and aluminum from IBC products are the property of IBC SOLAR AG. Please make sure that all containers are in good condition, i.e. leak proof and equipped with the valid inspection tag.

In particular cases or if in doubt, the waste disposal has to be agreed with the internal Environmental management officer **in advance**.

3.3. Ground treatment

Raw materials and materials with immediate contact to the environment – in particular materials that are to stay on-site after clearing the site – have to be free of heavy metals and depleting materials like lead or cadmium as these can get into the ground and cause significant damage to the environment. Operational construction creates a heavy soil compaction, in particular on both construction and access roads. In order to keep any damages by high loading pressure from construction machines as low as possible, construction machines with caterpillar drive are to be preferred to those with wheel drive. Excavated earth has to be kept separate according to layers (surface soil, subsurface and subsoil) and re-filled in the right order. Building substances like asphalt are to be disposed properly and, if applicable, a proof of waste disposal has to be recorded.

3.4. Clearance of construction site

When the construction site is cleared the paragraph 3.2 of *Abfallentsorgung* (law on waste management) must be observed. In case of any crop damage caused by the contractor outside of the allotted usable areas, the original soil condition has to be re-established. For this purpose e.g. the soil has to be re-loosened and sown with suitable seeds.

¹ ADR: **European Agreement concerning the International Carriage of Dangerous Goods by Road**, January 2011

3.5. Plant operation and landscaping

During inspections and maintenance works the safety related protection measures (e.g. available warning and information signs or a safe access to the plant) are to be checked. Oil changes in the transformer stations have to be performed under observance to the valid environmental protection laws and the laws on waste management and are subject to suitable safety measures.

3.6. Civil engineering works

If civil engineering works are required, the contractor has to inform himself about the position of gas and water pipes and live power source lines, before the work is started. Instructions from specialist departments have to be strictly observed.

Building sites, pits, cavities, floor openings etc. have to be sufficiently secured. When it is dark, an adequate lighting has to be established.

4. Violations

Repeated or heavy violations against this directive will entitle the principal to take or arrange the following measures:

- ❖ To banish the contractor's employees from the site.
- ❖ To immediately stop all works and cancel the order, if the contractor and/or the person who has been appointed by the contractor for fulfilling his obligations violate this directive again despite having received a written warning.
- ❖ To temporary stop all works until the discovered faults, safety related or organisational, will have been rectified.

5. Risk assessment

To ensure the occupational health- and safety on site, every subcontractor has to have a risk assessment for the particular works/activities carrying out on site. The subcontractor has to show them on demand.



Confirmation of contractor/supplier

By signing the order the contractor/supplier confirms that he has been informed about the Directive for Occupational Safety, Health and Environment for suppliers of IBC SOLAR AG and will implement this Directive. The contractor/supplier commits to observe the instructions of this directive with **all** current and future works. He confirms that he has instructed his employees and the employees of his subcontractors about **all** stipulations. It is the contractor's/supplier's responsibility that all construction managers/supervisors (including the subcontractors) have been informed about the emergency coordination plan, the construction site regulations as well as the respective occupational health and safety regulations and accident prevention regulations.

Developed: *Ingeborg Frey*
Changed: *Franka Schneider*
Checked: *Franka Schneider*
Approved: *Falko Krause*

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