

# INTEGRATED SAFETY MANAGEMENT (ISM) CHECK QUESTIONS

The following questions are examples you might want to ask yourself during any ISM process and before commencing any work. Feel free to add your own.

## *Define the Work:*

- Are all tasks well defined from initiation to completion of the work?
- Has somebody done this work before?

## *Analyze the Hazards:*

- What could go wrong (risks, hazards, and environmental impacts)?
- Do I affect other people or equipment?
- Can I stop and walk away at any time?
- Is there stored energy in the system (rad, chem., elec., mechanic, pressure)?
- Is scaling up or the change in ratio/mixture safe?
- Is everything grounded?
- Is everything secured or could it move during the task?
- Is the equipment certified (e.g. UL listed) and/or accurately (e.g. pressure) rated?
- Will I produce waste or reactive byproducts – if so, where should they go?
- Will I exceed critical limits or cross important safety thresholds (>50VAC, >100VDC, >150psi...)?
- Are the tools and machines I am going to use in good shape?
- Did I read all (warning) labels and consult the MSDS?

## *Develop Controls:*

- Is everything bringing in energy (rad, chem., elec., mechanic, pressure) disconnected?
- Do I have the right training to do the task?
- Do I have the permission to commence work?
- Do I have the right PPE and is it fully functioning?
- Can I do this task alone or will I need assistance during any of the steps?
- Should I inform or warn other people (post signs, inform coworkers...)?
- Are laser beam-blocks in place to catch all back reflections from transmissive optics?
- Are all laser beam paths clearly laid out and properly enclosed (especially for vertical beams in periscopes)?

## *Perform the Work:*

- Are all identified risks and hazards well implemented and controlled?
- Do I have the appropriate time to perform the work safely?
- Do I have enough space, tools, hands, light, and electrical outlets?

## *Obtain Feedback and Improve:*

- What didn't work well and how can I do better and improve for the next time?
- When is a good time to pass my experience on to my team mates?

## **Your attitude counts – for safe work:**

- don't work under time pressure – hit the brakes and stop yourself
- communicate and team up – look out for and teach your friends
- learn from the past – check out lessons learned and get inspired
- concentrate on the task – don't get distracted
- don't be complacent – accidents can happen to anybody
- go the extra mile – be (pro)active and get the necessary information or fetch the additional tool or help...

