SOHELP PROGRAM IMPLEMENTATION IN ON SEMICONDUCTOR MALAYSIA SDN. BHD. (ISMF) - SEREMBAN

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● INTRODUCTION
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● PROMOTIONAL ACTIVITIES
● OVERALL OVERVIEW OF SOHELP
● RECOMMENDATIONS FOR FUTURE SOHELP ENHANCEMENTS
- ON Semiconductor is a leading supplier of semiconductor based solutions. It operates throughout North America, Europe and Asia Pacific regions.

- ON Semiconductor Malaysia Sdn. Bhd. was incorporated in 1979. It has two sites in Seremban, Malaysia that houses wafer manufacturing (ISMF) and assembly/test operations for a wide variety of semiconductor products.

- ISMF was established in 1987 approximately 1100 employees, which is a high volume wafer fab with 50,000 square feet of clean room space, located on a 6 acre campus, which has semiconductor manufacturing of 6”, 8” and 12” wafer.

- Our main products are:
  - automotive
  - computing
  - industrial
  - military
  - communications
  - consumer
  - medical
  - aerospace applications
SOHELP – NOISE IMPROVEMENTS

- Install sound proof equipment & building windows for the N2 plant area which is adjacent to the building (<80dB)
- New compressor heatless dryer – no intermittent purging (reduce <70dB)
- New gen set during purchase built in silencer (reduce <85dB)
- Install silencer for the exhaust system (<60dB)
Injection piling for building construction (<80dB) – minimal sound

Re-map the walking area & working area at hearing conservation area (yellow line) (<80dB)

Conduct noise exposure assessment for work areas

Complete and continuously monitor the actions from the assessment report
SOHELP – NOISE IMPROVEMENTS

**Conduct yearly audiometry testing for employees under hearing conservation program**

**Review audiometry results with OHD doctor and communicate with the employees**

**Identify and put signage & PPE instruction for high noise area**

**Conduct hearing conservation training for employees at the respective areas**
Lots or wafers were transported manually by climbing up the staircase

Lots and wafers were transferred using Dumbwaiter or good hoist

Manual handling of chemicals drums, transported by trolley

Chemical drums are transported using lifting mechanism - hand pallet jacks - reduce back pain and physical force
Improper inspection scope area with average lighting which cause blurry vision for employees.

Proper inspection work station with bright lights to reduce fatigues and prevent visionary issues.

Employees pursuing wafer inspection work in standing position causing back pain and fatigues.

Wafer Inspection area were provided with cushioned adjustable chairs with back rest to avoid back pain and fatigues.
Improper staging of by products and no implementation of 5S

OSH promotion towards 5S implementation - kanban marking for storage location

No awareness signage or posters for Ergonomics specifically

OSH awareness on Ergonomics - signage and posters are made available for employees
Conduct body symptom survey for ergonomics concern employees

Manual shoe cover – bend down

Automatic shoe cover – suitable for pregnant or back pain problem employees

Conduct ergonomics assessment for work stations
Proper storage cabinet and room for chemicals and automated dispensing system

Signage provision according to CLASS Reg. 2013

MSDS based on CPL Reg 1997

SDS provision according to CLASS Reg. 2013
LEV inspection - 100% depends on hired Hygiene Technician

Developed internal monthly LEV Checklist with technical expertise reference from Hygiene Tech

Older Chemical Register

Improvisation on the updated Chemical Register
CONCLUSIONS

The Chemical Health Risk Assessment was conducted at ON SEMICONDUCTOR SCG Industries Sdn Bhd, Lot 55, Senawang Industrial Estate, 70450 Seremban, Negeri Sembilan.

It was conducted from 12th November 2014 with final assessment on 5th January 2015 and last document confirmation on 9th January 2015 is in compliance to the requirement spelled out under the Occupational Safety and Health (Use and Standard of Exposure of Chemicals Hazardous to Health) Regulations 2000.

The assessment enabled the organization to make appropriate decisions on action to be taken to minimize further the workers exposure to chemicals hazardous to health used in the work place. Various recommendations which are deemed appropriate by the assessor have been listed in the report. It is hoped that the recommendations will help to create a better working environment, further improve the quality of work, health and safety standards in ON SEMICONDUCTOR SCG Industries Sdn Bhd. In conclusion, this assessment has successfully met its objectives.

- Conduct CHRA every 5 years
- Complete all the CHRA action items
- Yearly chemical exposure monitoring – area & personal
PROMOTIONAL ACTIVITIES

• Incorporate SOHELP concepts into our EHS Week 2016
  – Health Talks related to Ergonomics (Physiotherapy, Back Pain Management)

• Monthly EHS promotional activities
  – Noise related quizzes / information sharing
  – Chemical related communications
PROMOTIONAL ACTIVITIES

- Quarterly EHS video shooting
  - PPE during chemical handling awareness
  - Forklift safety awareness

- Monthly & Quarterly EHS award / recognitions
  - Unsafe act reporting related to EHS, not limiting to SOHELP contents
  - Unsafe condition reporting related to EHS, not limiting to SOHELP contents
OVERALL OVERVIEW OF SOHELP

- Good program to start off among the various industries in Malaysia
- Good consultation and able to bond a good working relationship among companies and DOSH officers
- DOSH to understand the difficulties faced by companies related to SOHELP issues and move towards enhancement
RECOMMENDATIONS FOR FUTURE SOHELP ENHANCEMENTS

- Better recognition & awards for the company and individuals related to SOHELP program implementation
- Detailed guideline by DOSH for implementations
- Fun motivating program rather than strict enforcement program
- Categorize the companies into industrial groups for better comparison and bench marking
THE END
– THANK YOU –