

**WELCOME TO THE LECTURE
ON HOUSEKEEPING
MATERIAL CONDITION
AND INDUSTRIAL SAFETY**

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**OSART EXPECTATIONS AND RESULTS IN HOUSEKEEPING,
MATERIAL CONDITION AND INDUSTRIAL SAFETY**

OBJECTIVES OF PRESENTATION

- SIGNIFICANCE OF THESE AREAS
- STANDARDS FOR HOUSEKEEPING AND CLEANLINESS
- MAINTAINING GOOD MATERIAL CONDITION
- STANDARDS FOR MATERIAL CONDITION
- INDUSTRIAL SAFETY
- OSART EXPERIENCE

DEFINITION

**HOUSEKEEPING, CLEANLINESS & MATERIAL
CONDITION PROGRAMMES REFER TO THE
PROCESSES WHICH ENSURE THAT
FACILITIES EQUIPMENT, WORK AREAS AND
ACCESS ROUTES ARE KEPT IN GOOD
CONDITION.**

DEFINITION

MATERIAL CONDITION

THIS REFERS TO THE DEGREE TO WHICH SYSTEMS AND EQUIPMENT ARE KEPT IN A WELL MAINTAINED STATE

HOUSEKEEPING

THIS REFERS TO THE DEGREE TO WHICH THE PLANT IS SAFELY ACCESSIBLE AND OPERABLE

CLEANLINESS

THIS REFERS TO THE PREVENTION OF THE ACCUMULATION OF DUST AND DEBRIS

WHY DOES IT MATTER?

- CREATES A VERY VISIBLE INDICATION OF THE STANDARDS ACCEPTED BY THE PLANT
- CREATES A SAFE WORKING ENVIRONMENT
- CREATES AN EFFICIENT WORKING ENVIRONMENT
- ENSURES THAT THE PLANT IS IN A GOOD STATE OF REPAIR AND THEREFORE LESS LIKELY TO SUFFER FROM UNPLANNED OUTAGES
- IT'S EITHER GETTING BETTER OR WORSE. IF THERE IS NOT A PROGRAMME TO IMPROVE THESE CONDITIONS, THEN THEY ARE DETERIORATING

STANDARDS

- WILL VARY DEPENDENT UPON CULTURE
- SHOULD BE CLEARLY UNDERSTOOD
- MUST BE VISIBLY REINFORCED BY PLANT MANAGEMENT
- SETTING UP AN AREA WHICH DEMONSTRATES THE STANDARD MAY BE HELPFUL
- SUFFICIENT EQUIPMENT AND MATERIALS MUST BE PROVIDED TO ENABLE THE STANDARD TO BE ACHIEVED
- IT IS EASIER TO KEEP A PLANT CLEAN & TIDY, THAN DIRTY & UNTIDY

REQUIREMENTS

- CLEAR INDICATION OF STANDARDS
- THOUGHTFUL TRAINING PROGRAMME
- SENSE OF COMPETITION
- PROVISION OF RESOURCES
- MONITORING OF STATUS
- REWARDING SUCCESS

EXAMPLES OF GOOD STANDARDS

- **CLEANLINESS AND ORDER EVIDENT THROUGHOUT THE PLANT**
- **PORTABLE EQUIPMENT SUCH AS LADDERS, SCAFFOLDING, HEAVY MAINTENANCE EQUIPMENT & FIRE EXTINGUISHERS PROPERLY STORED**
- **WORK AREAS TIDY**
- **EQUIPMENT FREE FROM ACCUMULATIONS OF DUST AND DEBRIS**
- **ACCESS TO EQUIPMENT NOT IMPEDED BY SCAFFOLD OR EQUIPMENT LAYDOWN AREAS**

EXAMPLES OF GOOD STANDARDS (cont)

- TRASH CONTAINERS AVAILABLE AND NOT OVERFLOWING
- PARTS AND MATERIAL NOT LAYING ABOUT IN INACTIVE WORK AREAS
- RADIOACTIVE STORAGE AREAS NOT CLUTTERED
- POOLS OF WATER OR OIL ARE NOT EVIDENT ON THE FLOOR
- MANY OTHERS

GOOD MATERIAL CONDITION

REQUIREMENTS

- THE DESIGN ORGANIZATION GIVES MAINTAINABILITY THE APPROPRIATE PRIORITY
- A VIGILANT OPERATING STAFF THAT IDENTIFIES SMALL MAINTENANCE PROBLEMS BEFORE THEY BECOME LARGE
- A DEFECT REPORTING SYSTEM WHICH IS SIMPLE TO USE
- RESPONSIVE WORK PLANNING GROUP
- AN EFFICIENT PROCESS TO ISOLATE PLANT FOR MAINTENANCE

GOOD MATERIAL CONDITION (cont)

REQUIREMENTS

- AN APPROPRIATE STOCK OF SPARE PARTS
- GOOD MAINTENANCE PROCEDURES
- RESPONSIVE MAINTENANCE ENGINEERING
- A BALANCED PREVENTIVE MAINTENANCE & BREAKDOWN MAINTENANCE PROCESS
- AN EFFECTIVE TRACKING PROCESS

GOOD MATERIAL CONDITION

MEASURES

- A LOW, STABLE BACKLOG OF MAINTENANCE DEFECTS
- A HIGH PERCENTAGE OF PLANT DEFECTS ARE CAPTURED BY THE DEFECT REPORTING SYSTEM
- VERY LITTLE EVIDENCE OF STEAM, WATER, OR OIL LEAKS
- VERY FEW ANNUNCIATORS OUT OF SERVICE IN THE CONTROL ROOM

EQUIPMENT CONDITION

EXAMPLE ITEMS TO LOOK AT:

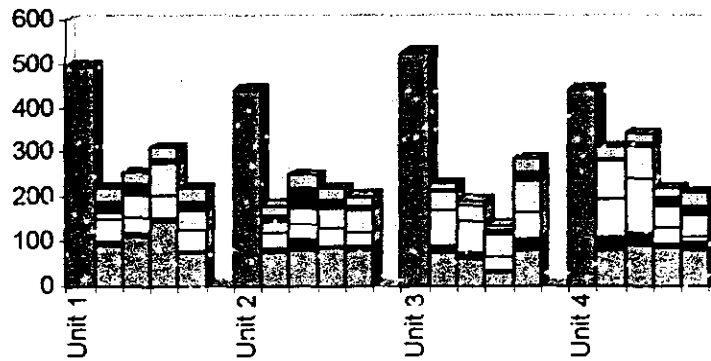
- CLEANLINESS
 - EQUIPMENT
 - SURROUNDINGS
- LUBRICATION
- VIBRATION
- TEMPERATURE
- LEAKS
- PROTECTION FROM ENVIRONMENT
- SEALS AND RUBBER PARTS
- CONDITION OF ELECTRICAL CONTACTS

EQUIPMENT CONDITION (cont)

EXAMPLE ITEMS TO LOOK AT:

- NUTS TIGHTENED
- EROSION AND CORROSION
- USE OF CONSUMABLE ITEMS
- OBSERVED ABNORMAL CONDITION OR OPERATION
- NON-DESTRUCTIVE EXAMINATION

Pickering Pride Program Units 1-4



Trash/Debris
 Prot Equip
 Wkng Equip
 Unstored Matl
 Leaks/Spills
 Matl Cond
 Jul-89

Quarterly Trend-starting 3rd 90

INDUSTRIAL SAFETY PROGRAMME

- POLICY
- PROGRAMME
- EVALUATION
- WORKER PARTICIPATION

HOUSEKEEPING & MATERIAL CONDITION

- **UPDATED PRIDE RESULTS**
- **ESTABLISHED PAINTING CREW AND WORK STARTED:**
 - **IX CLEANUP**
 - **UNIT ID #'S**
 - **OVERHEAD DOORS**
- **REINFORCED CREW SPECIFIC UNIT RESPONSIBILITY:**
 - **ASSESSED MAGNITUDE OF PROBLEM**
 - **START CLEANING EQUIPMENT**
 - **EQUIPMENT LABELLING**
 - **FIELD ASSISTS**

HOUSEKEEPING & MATERIAL CONDITION

MAJOR INCREASE IN DRUMS, SO WILL INCREASE IXCU EFFORT

- APPROVAL RECEIVED FOR WASTE STORAGE PRELIMINARY ENGINEERING
- AIFB CORRIDOR WASTE OIL PROCESSING COMPLETE, APPROVAL RECEIVED TO SHIP
- CLEANUP AND PAINTING EFFORT TO WTP
- MAJOR EFFORT TO CLEAN RB'S ON UNIT 5 AND 2 DURING OUTAGES
- IMPLEMENTING LEAK MONITORING BOOKS ON EACH UNIT

HOUSEKEEPING & MATERIAL CONDITION

EXCELLENT HOUSEKEEPING & MATERIAL CONDITIONS

RESULTS

- AN IMPROVED WORKING ENVIRONMENT THAT IS RECOGNIZED BY EVERYONE

MAJOR THRUSTS

- SET STANDARDS FOR MATERIAL CONDITION AND HOUSEKEEPING
- DEVELOP AND IMPLEMENT RESTORATION PROGRAMME BASED ON BACKLOG AND STANDARD
- COMMUNICATE EXPECTATIONS TO ALL STAFF
- INCREASED SUPERVISORY ATTENTION E.G. PRIDE

HOUSEKEEPING & MATERIAL CONDITION

EXCELLENT HOUSEKEEPING & MATERIAL CONDITIONS

MEASURES OF SUCCESS

- LICENSE RENEWAL
- NUMBER OF LEAKS, DRIPS PUDDLES
- PEER-MINI REVIEW RESULTS
- NUMBER OF ACCIDENTS ATTRIBUTABLE TO HOUSEKEEPING/MATERIAL CONDITION
- BACKLOG STATISTICS
- ACHIEVEMENT OF STANDARD IS A MEASURE