BBS Implementation Workshop in GAIL

by

OCC PRIVATE LIMITED
Agenda

1. Concept of Behavior Based Safety
2. BBS as OHSAS Compliance
3. Behavior Observation and Feedback process
4. Measurement of safe & unsafe Behaviors
5. Video – I chose to look another way
6. Zero accidents vs. zero unsafe behavior
7. Road Map: BBS Execution Plan for GAIL
8. BBS Statistics
9. BBS Posters and Banners
10. Video – safety review
11. Tasks of BBS Core & Steering Teams
12. An Indian Experience on Behavior Based Safety
13. BBS Project organization
14. Participants’ learning assessment & queries
15. Workshop Evaluation & Valediction
16. Vote of Thanks
Dr. H.L. Kaila is a Professor of Psychology, Mumbai. He has over 30 years professional experience and has to his credit several projects with ICSSR, UGC, NSC and World Health Organization; and has authored 12 books, and a large number of articles for refereed journals and newspapers. He has also appeared several times on television for providing his expert views. Dr. Kaila represented India at the International Conferences at New York, Berlin, Rome and Sydney. He is an Editor of the Journal of Psychosocial Research and Vice-President: Counselors Association of India. He is only industrial psychologist who is regular BBS trainer and implementer and popularized BBS in India.

Dr H L Kaila has conducted about 600 BBS workshops for organizations such as ITC, ESSAR, RIL, Colourtex, Reliance Energy, Ulratech, GAIL, SAIL, CFCL, KAPS, RCF, SEML, HPCL, BPCL, L&T, NPCIL, HWB, Voltas, Bajaj Auto, BFL, NFCL, Whirlpool, DFL, PPL, VSL, ITD, JK Lakshmi, Amaraja, IGL, IGF, ONGC, GE, BFL, FMC, PI Industries, M&M, BHEL, ICC, Excel, Bayer CropScience, Sanofi-Aventis, Foseco, IOCL, Vedanta, Aarti industries and conducted 30 safety awareness surveys in India.
• BBS means to include everyone to care for and remove/correct unsafe behavior on the spot.
• Unsafe behavior is recognized as the root cause for all accidents.
Research Experience Indicate that:

• Almost 100% of the accidents are due to unsafe acts

• 40-50% of the unsafe behaviors are noticeable at any plant at any given point of time;

• 25-30% of safety awareness is lacking among employees which gets reflected in their unsafe behaviors;

• Every organization has thousands of unsafe behaviors

• Targeting zero accident does not ensure that your plant is safe.
the organization shall establish, implement and maintain a procedure for:

“the participation of workers by their appropriate involvement in hazard identification, risk assessments and determination of controls”.

BBS : BASIC to BROAD SAFETY

- Unsafe Behaviors
- Near Misses
- Injuries
- Fatalities
BOFP METHOD

- Behavior
- Observation
- Feedback
- Process
DO IT
MEASUREMENT OF SAFE & UNSAFE ACTS

BEHAVIOUR CATEGORIES

<table>
<thead>
<tr>
<th></th>
<th>SAFE</th>
<th>At-risk</th>
<th>Corrections</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housekeeping</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using tools</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body positioning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Material handling</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Following procedures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visual focusing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using mobile at work</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Link to Video: I chose to look another way
• An awareness on BBS for management staff at all levels.

• Awareness training of employees across the plant;

• Select (20%) observers from BBS trained employees; and Form steering team of 8-10 people.

• One day in-plant practical training of BBS observers and steering team members

• At this stage BBS observers and steering team members ready to implement BBS at workplace.
Questions asked by management before BBS launch

- How to select observers?
- Are there any implementation problems?
- Who should form a steering committee?
- Is separate training necessary for observers?
- Is training required for steering committee?
- Who should be an observer?
BBS LEADS TO REDUCTION IN UNSAFE BEHAVIOURS AND THUS A FALL IN ACCIDENTS
Cost per unsafe behavior

- Number of injuries last year $\times$ tentative cost per injury / Number of unsafe behaviours observed. $= 112 \times Rs 8,482 / 10,200 = Rs. 93$ per unsafe behaviours.

- The cost of unsafe behaviours is huge which differs from organization to organization depending upon the number of injuries last year, tentative cost per injury, and the number of unsafe behaviours observed.

- Total cost of unsafe behaviours per day: Rs. 9, 48, 600.
I Chose to Look the Other Way

• I could have saved a life that day, But I chose to look the other way. It wasn't that I didn't care, I had the time, and I was there.
• But I didn't want to seem a fool, Or argue over a safety rule. I knew he'd done the job before, If I spoke up, he might get sore.
• The chances didn't seem that bad, I'd done the same, He knew I had. So I shook my head and walked on by, He knew the risks as well as I.
• He took the chance, I closed an eye, And with that act, I let him die. I could have saved a life that day, But I chose to look the other way.
• Now every time I see his wife, I'll know, I should have saved his life. That guilt is something I must bear, But it isn't something you need share.
• If you see a risk that others take, That puts their health or life at stake. The question asked, or thing you say, Could help them live another day.
• If you see a risk and walk away, Then hope you never have to say, I could have saved a life that day, But I chose, to look the other way.
• Don Merrell
सिलवासा बी.बी.एस. पर्यवेक्षक कार्ड

पर्यवेक्षक का नाम: ___________________ दिनांक: / /
परीक्षणार्थी का नाम: ___________________
जाँच: ___________________

<table>
<thead>
<tr>
<th>अ.नं.</th>
<th>व्यवहार श्रेणिया</th>
<th>सुरक्षित व्यवहार</th>
<th>असुरक्षित व्यवहार</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>सुरक्षा परिधान (पी.पी.ई.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>खानपीपिंग कार्यस्थल की साफ सफाई</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>ऑनजारो और उपकरणों का प्रयोग</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>शरीर स्थिति और बचाव</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>सामग्री रखरखाव</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>संचार (एक दूसरे से वार्तालाभ मौखिक और अमौखिक)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>प्रक्रियाओं का पालन (एस.ओ.पी.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>कामकर नजर रखना (सावधानी)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>कार्य करने समय मोबाइल का प्रयोग करना</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

कुल

सुरक्षित व्यवहार के लिए दिक्रत पैदा करने वाली स्थितिया/तरीका: ___________________

सेसा स्टरलाइट
a vedanta group company
Inauguration

• Ceremonial launch of BBS programme by Top/Senior Management;

• Announcing BBS project on company portal as corporate initiative; and

• An official written announcement of BBS project to all locations
BBS Project Coordinator

• Nomination of a dedicated BBS Project Coordinator for each location

• Conducting one-day BBS training for Top Management team, Apex BBS Implementation and Steering Teams.
Steering BBS Team for each location

• Formation of Steering BBS Team for each location

• Ensuring strong leadership drive by all OICs/HODs for BBS project activities
Linking BBS with performance objectives

- Linking BBS observation card as part of PMS/KRA

- Conducting Safety Perception Survey/BBS Survey and report on SUSA
BBS Practical Awareness

• One-day BBS practical awareness training as BBS observers for each location,

• Issuing BBS sticker to be put on the helmet as an identity;

• Participants Evaluation of BBS Training
BBS implementation

- Developing BBS Lead Trainers and bimonthly project guidance at each location
- Displaying BBS banners/posters at each location for Advertisement
- IT enabling BBS Observation checklist
- Issuing Attendance Certificate to lead trainers as motivation factor
BBS implementation

• The two week programmes at sites shall include Systemic Changes at sites, identification of weak areas with respect to Physical Safety, Process Safety, Electrical Safety etc. and Improvement Measures to be put in place as per Site Specific recommendations based on Gap Assessment Analysis Report.

• The Systemic Changes shall include but not limited to
  • Formation of Usar Steering Committee on BBS
  • Formation of Functional Committees on BBS like Committee on Road Safety, Committee on Working at Height, Committee on Electrical Safety, Committee on Process Safety, Safety During Hot Works
BBS implementation

• Functional Committee shall meet at a periodic interval say once in a month and lay down site specific standards, Study Best Practices and implement suitably duly approved by OIC.

• Steering Committee to meet once in two months.

• Roles & Responsibilities of the Steering Committee & Functional Committee shall be laid and discussed.

• Process specific BBS checklist shall be prepared during 5 days roll-out to capture Safety Data etc.
BBS Monthly Review

- BBS Monthly Review by Steering Teams by each location and Compliance with its proceedings
- Corporate Apex Implementation Team Review on BBS monthly progress
- Rewarding best BBS observers based on maximum observation.
- Celebration of BBS annual day
Visible Outcomes

- Comparing injury data every 6 months before/after launch date of BBS and
- Observable decline in unsafe behaviours/conditions
- Organizations that fail to take a scientific approach to safety’s human-behavior element are gambling with their futures and are ultimately only safe by accidents.
FINALLY

Our target is zero accident by focusing on ‘zero unsafe behaviour’ (which is the root cause of any incident by involving all employees and contractors' workmen in BBS approach.)
BBS Recommendations

• Safety Statistics board should also reflect the percentage of SUSA.

• Safety Motivation / recognition need to be introduced in the plant.

• BBS Observations to be linked to performance objective.

• HSE Index should include the monthly % of Unsafe/at-risk behaviour which is the “root cause” of any incident in the plant.
Framework for Zero Accidents

- Zero accidents/injuries at work place requires
  - Safety (change) management initiatives
    - Review of safety systems & behavioral safety implementation
      - Appraisal of organizational safety values (human life considerations)
        - Safety leadership (at all levels)
          - Linking safety to employee performance objectives
BBS Structure

- Corporate level steering team + dedicated BBS coordinator
  ↓
- Location level steering team + BBS coordinator
  ↓
- Location level Lead trainers (for creating BBS awareness to all employees & contract workmen)
  ↓
- Location level BBS Observers
  ↓
- BBS leadership by all HODs
BBS Statistics:
Average Reduction of Injury Frequency

- Implementation of BBS
  - After 1 year 34%
  - After 2 years 44%
  - After 3 years 61%
  - After 4 years 71%
## Safety Intervention Strategies (By NSC)

<table>
<thead>
<tr>
<th>Approach</th>
<th># of Studies</th>
<th># of Subjects</th>
<th>Reduction %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavior Based</td>
<td>7</td>
<td>2,444</td>
<td>59.6%</td>
</tr>
<tr>
<td>Ergonomics</td>
<td>3</td>
<td>n/a</td>
<td>51.6%</td>
</tr>
<tr>
<td>Engineering Change</td>
<td>4</td>
<td>n/a</td>
<td>29.0%</td>
</tr>
<tr>
<td>Problem Solving</td>
<td>1</td>
<td>76</td>
<td>20.0%</td>
</tr>
<tr>
<td>Gov’t Action</td>
<td>2</td>
<td>2</td>
<td>18.3%</td>
</tr>
<tr>
<td>Mgt. Audits</td>
<td>4</td>
<td>n/a</td>
<td>17.0%</td>
</tr>
<tr>
<td>Stress Management</td>
<td>2</td>
<td>1,300</td>
<td>15.0%</td>
</tr>
<tr>
<td>Poster Campaign</td>
<td>2</td>
<td>6,100</td>
<td>14.0%</td>
</tr>
<tr>
<td>Personnel Selection</td>
<td>26</td>
<td>19,177</td>
<td>3.7%</td>
</tr>
<tr>
<td>Near-miss Reports</td>
<td>2</td>
<td>n/a</td>
<td>0%</td>
</tr>
</tbody>
</table>
BBS OUTCOMES STATISTICS - INDIA

- Behavioral trends on an average across companies is 72% of safe behaviours; at-risk behavior of 28% and at-risk behaviours corrected is 2% by each observer.
- The number of safe behaviours has increased from 60% up to 96% within 6 months of launch of BBS.
- The number of observers has also increased every month.
- The number of unsafe conditions and unsafe behaviours has drastically gone down.
- BBS has been recommended to other locations of the company with an introduction of BBS in one location.
- The management commitment for safety has gone up due to involvement.
- Safety has become a real line function due to BBS approach.
- The incident reporting is not there from locations where BBS is implemented.
- There is a significant decline in Near miss and injuries.
- There is an increased reporting of unsafe behaviours.

Note: This data has been drawn from many companies (where BBS is introduced for the last 5 years) such as Vedanta, L&T, IOCL locations, India Glycols, Paradeep Phosphates Ltd, Bayer CropScience, Aarti industries, Sarda Energy & Minerals Ltd.
Thanks

Pray for health & safety of everyone
Back-up Slides
Organizations that fail to take a scientific approach to safety’s human-behavior element are gambling with their futures and are ultimately only safe by accidents.”

Our target is zero accident by focusing on ‘zero unsafe behavior’ (which is the root cause of any incident as shown on BBS Triangle) by involving all employees in BBS approach.
REASONS FOR UNSAFE ACT

- Absent Mindedness
- Carelessness
- Casual Approach
- Indiscipline
- Dangerous Act
- Experiment
- No Knowledge
- Tiredness

- Drinking

असुरक्षित कार्य की वजह
अनुपस्थित दिमाग लापरवाही
अनुशासनहीनता
खतरनाक कार्य प्रयोग करना
जानकारी न होना
श्रकना
Overview

- **Skills for Effective Coaching**
- **Observation Strategy**
- **Recording Observations**
- **Video on Identifying and Recording Observations (Exercise)**
- **Effective feedback**
  - Influences affecting feedback
  - Barriers to giving feedback
  - Resistance to feedback
  - Giving rewarding feedback
  - Giving correcting feedback
- **Exercise strategy for effective feedback**
BBS Posters and Banners
BBS is Brother-to-Brother Safety.
BBS Principle

Observe & correct unsafe behavior on the spot.
व्यावहारिक सुरक्षा का नारा,
भाई बंधु की सुरक्षा उद्देश्य हमारा।
Thanks for your Safe behavior.
One man’s care is another man’s Safety.
Save others, Save Yourself.
Unsafe behavior leads to Loss of – Safety, Production, increment, Business as well as motivation & morale.
BBS IS AN ART OF SAFE LIVING.
असुरक्षित व्यवहार अस्वीकार,
सुरक्षित व्यवहार बार बार।
BBS NAVRATNAS

BEHAVIOUR CATEGORIES

1. PPE
2. Housekeeping
3. Using tools and equipment
4. Body positioning / protecting
5. Material handling
6. Communication
7. Following Procedure
8. Visual focusing (attentiveness)
9. Using mobile while working
HEALTH CHECKUP

PRESCRIPTION FOR COUGH, FEVER, MALARIA, T.B., ...

PRESCRIPTION FOR NEAR MISSES, ACCIDENTS, UNSAFE BEHAVIORS
BBS Poster
BBS increases safe behaviours and therefore reduces injuries, illnesses and related financial costs.
BBS involves a process of observation and feedback, a system of collecting, analyzing and dissemination of data, and a proactive support of management.
BBS is not punishment or disciplinary action or focusing on incident rate, or personal prejudice, or top-down implementation. It’s a praise, encouragement and reinforcement of safe behaviors.
BBS is based on the established principles of behavior theory in Psychology.
Behavior based safety (BBS) is concerned about correcting unsafe behaviors for reduction of accidents and promoting safe behaviors for developing injury free culture in their organizations.
BBS Poster

BBS is
by the people,
of the people,
......
for the people

UNSAFE CONDITIONS

Meketre
BBS project at India glycols (IGL) Kashipur
In Hindi language, BBS is all about dekho, and bolo with sensitivity and concern.
Observers’ eight P

Observers need to follow these behaviours with an observee during BOFP:

- Prikarma: take an observation round of your unit/plant.
- Prashan: put a question to an observee whether he is safe.
- Prashansa: praise for his safe behaviours to reinforce.
- Privartan: convert his unsafe behaviours to safe.
- Prashiksan: educate/re-train him for his unsafe behaviours.
- Pratigya: take an oath from that he will not repeat unsafe behaviours.
- Parchar: ask an observee to observe another co-worker.
- Prathna: repeatedly request for safe behaviour.
BBS Implementation problems include lack of work force buy-in; unsafe behaviors not defined with precision; accident records / near miss injuries not analyzed properly for targeting accident causing behaviors.
BBS is an active partnership between managers, observers and shopfloor members of the steering team.
### Some Names for BBS Project

- **BEHAVIORAL SAFETY PROJECT (BSP)**
- **BEST SAFETY PROJECT (BSP)**
- **BROTHER TO BROTHER SAFETY (BBS)**
- **PEER TO PEER SAFETY (PPS)**
- **BHAJAN BANDU KI SURKSHA (BBS)**
- **BEST SURKSHA MARG (BSM)**
- **DEKHO BOLO SURKSHA (DBS PROJECT)**
- **UNSAFE TO SAFE PROJECT (USP)**
- ‘SAFETY FOR EACH OTHER’ PROJECT
- **BHARAT BANE SURKSHIT**
- **BABUJI BAHUT SOCHKE**
- **BOL BOL KAR SURKSHA**
- **BIHAR SE BRITON TAK SURKSHA**
- **MANVIY SURKASHA CARE (MSC)**
- **BASIC TO BROAD SAFETY**
- **BOTTOM TO BOARDROOM SAFETY**
- **BHAGIDARI SE BANE SURKSA**
- **BAHUT BAHUT SHUBKAMNAYE**
- **BHAJAN BANDU SHIKSAK**.
- **BECOME BROTHERS OF SAFETY**
- **BACCHO SE LEKAR BADO TAK KI SURKSHA**
Questions that are asked by the managements before BBS launch

- Roles & Responsibilities of Steering Committee
- How to form a steering committee?
- Who should be an observer?
- Badge on observer’s chest
- What should be the title for BBS project?
- How to launch BBS?
- How to select BBS observer?
- Are there any implementation problems?
- Sigh! Now we are ready to go for BBS!
Slide title: Industrial Safety

Observe both at risk behaviors and safe behaviors.