



***Johns Manville***



# Johns Manville (JM)

- Johns Manville, a Berkshire Hathaway company, is a leading manufacturer of premium-quality building products, fibers and nonwovens.



- In business since 1858, with annual sales of approximately \$2.5 billion.
- JM employs approximately 7,000 people and operates 45 manufacturing facilities in North America, Europe and China.

# Hearing Loss Prevention Team

- The JM Hearing Loss Prevention Program (HLPP) Team is comprised of Industrial Hygienists, Occupational Health, Safety and Operations team members



LEFT TO RIGHT:

**Charles M. Carter, CIH**

Manager Industrial Hygiene

**Jeanne Virtue, CIH**

Environmental, Health & Safety Manager - JMTC, WHQ, WTC and NA Field Employees

**Barb Menard, MSc, CIH**

Senior Manager, Product Stewardship & Industrial Hygiene

**James F. Smith, MA, RN, COHN-S, CPEA, CSP**

Manager of Occupational Health

# Problem Statement

- Prior to 2010, JM HLPP processes were heavily focused on regulatory compliance and on standard threshold shift (STS) case management.
  - Total Case Incident Rate (TCIR) goals, including STSs, were set annually, with Operations Leaders being held accountable for the results of noise exposures that pre-dated their leadership by decades; this approach was not facilitating current noise exposure control efforts and proactive interventions.

# Goal Setting & Meaningful Metrics

*“That which gets measured gets improved”*

# Goal Setting Innovation

- JM adopted a goal setting approach to distinguish between injury reporting and STS reporting, and to set targets for meaningful hearing loss prevention efforts which were immediately within the control of the plant management teams.
- As a result, JM successfully re-directed H&S leader efforts towards noise reduction, improved hearing protection and valuable training.

# HEARING LOSS PREVENTION PYRAMID

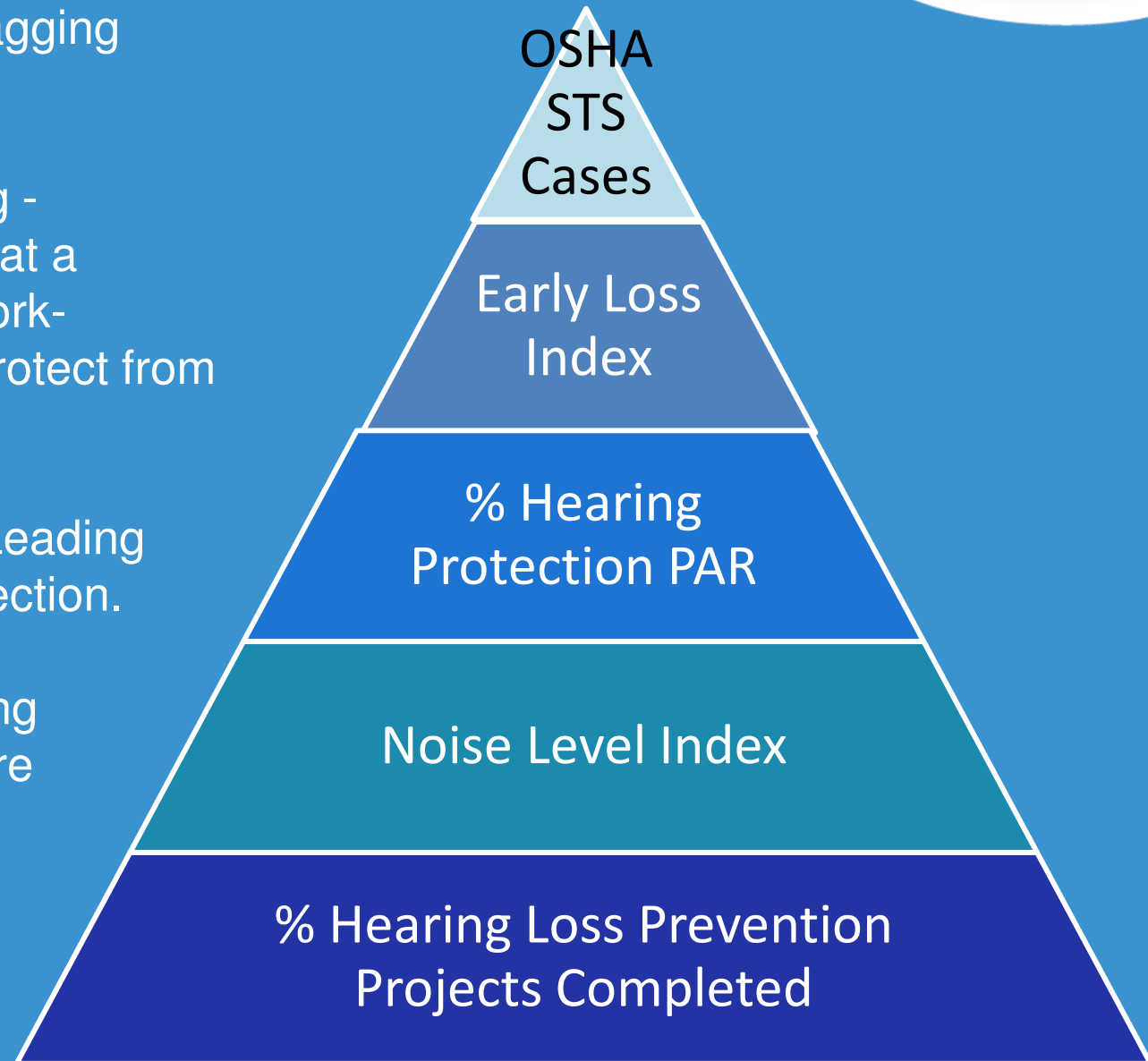
**CONFIRMED STS CASES:** lagging indicator

**EARLY LOSS INDEX:** Lagging - Evidence of NIHL, but not yet at a regulatory recordable level. Work-relatedness TBD; Chance to protect from NIHL.

**% EMPLOYEES WITH PAR:** Leading indicator of exposure and protection.

**NOISE LEVEL INDEX:** Leading indicator of Control of Exposure

**STATUS of HLP PROJECTS:** Leading indicator of Control of Exposure





# Metrics Compilation:

- Lagging Indicators (Recordable STS, Total STS)
  - from Audiologist Reviews
- Early Loss Index
  - from HearTrak™ reports (Audiologist, Corporate Occupational Nurse)
- PAR Rate
  - From Plant Activities; Watch for template in Hearing Loss Prevention Program Folder for PAR / 3M™ E-A-RFit™ data
- Noise Level Index
  - From Employee Exposure Assessments (EEA)



# HLPP Annual Action Plans

Facility driven selection of HLPP Action Plan based on local status / opportunities / other activities

Prioritizing highest noise level index line items, create action plan for reducing noise level index for facility

- Increase certainty of current noise exposures by:
- Identify opportunities for improved administrative controls
- Identify opportunities for improved engineering controls

Upload facility specific HLPP action plans to corporate site for maximum visibility / idea sharing and status tracking

## CHANGED EXPECTATIONS:

- In-House noise monitoring program utilizing new noise dosimeters
- Comparison of OSHA versus ACGIH
- Proactive noise initiative versus compliance
- Detailed evaluation of noise exposures to assist in noise control efforts
- Exposure assessments of potential STSs
- Noise mapping tool

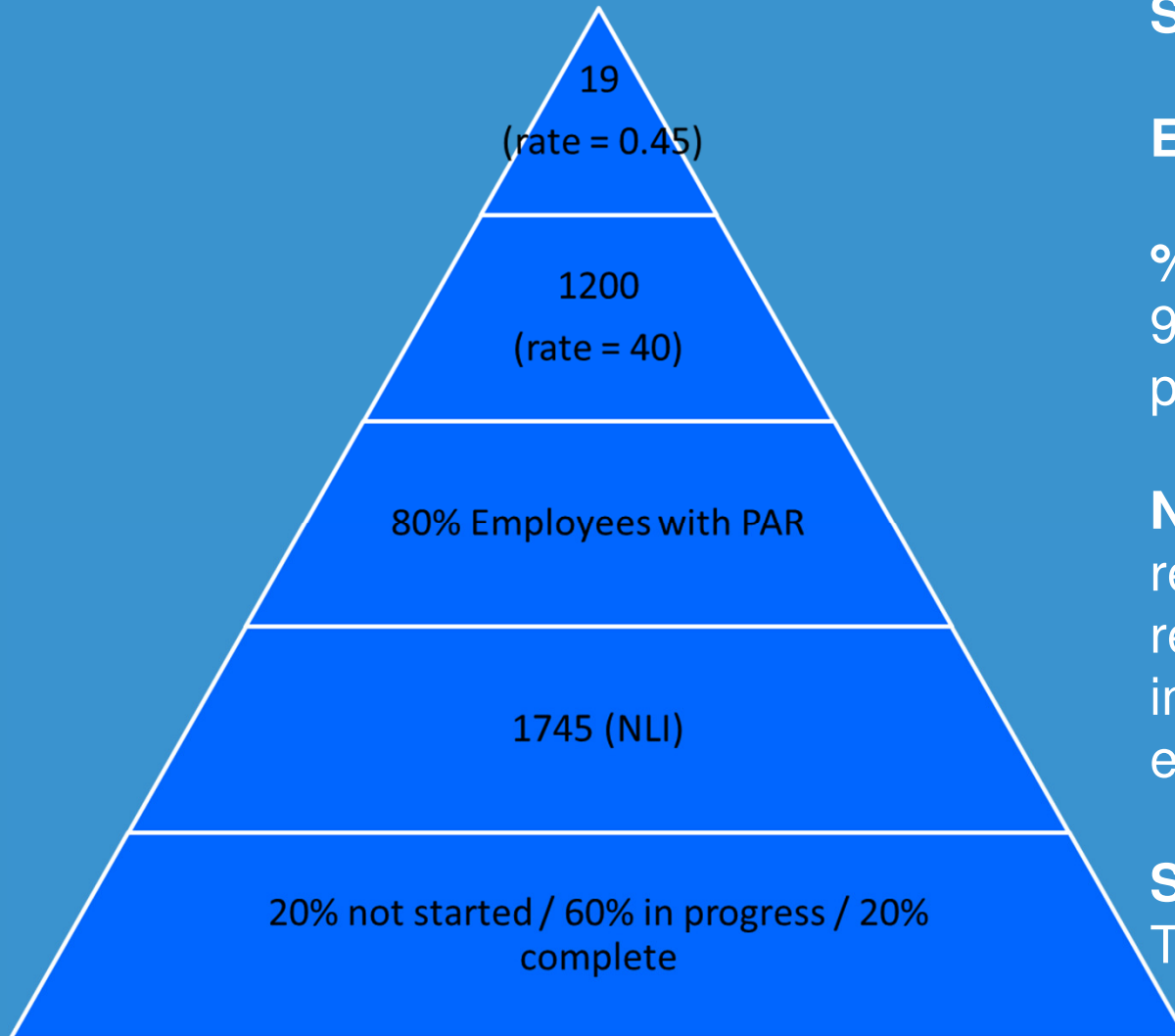


# HLPP Pyramid Approach

- Provides a mechanism to balance lagging indicators and leading indicators of actual / potential hearing loss
- Provides a mechanism to track trends over time within and between plants and divisions
- Provides a mechanism to compare employees in similar exposure groups (SEGs)
- Provides a mechanism to support development, prioritization and execution of plant-driven hearing loss prevention projects

# Establish Baseline & Targets

*(hypothetical)*



**STS CASES:** No target

**EARLY LOSS INDEX:** No target

**% EMPLOYEES WITH PAR:** Target 95% . Improve amount and degree of protectiveness. Ongoing re-training.

**NOISE LEVEL INDEX:** Target 5% reduction over 5 years. Set realistic reduction targets with continuously improved use of administrative and engineering controls.

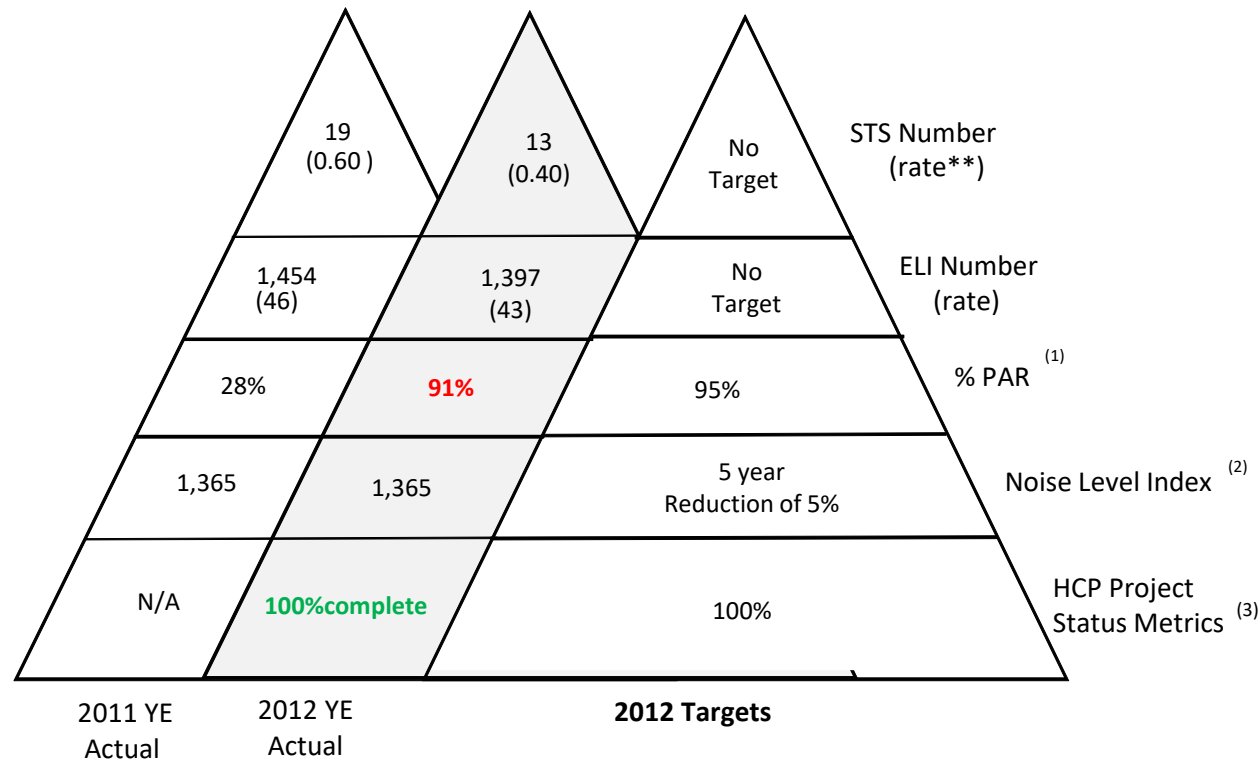
**STATUS of HLP PROJECTS:**  
Target 100% completion each year.

# Communicate, Communicate, Communicate

# Report Monthly: HLPP Scorecard

## Hearing Loss Prevention Pyramid

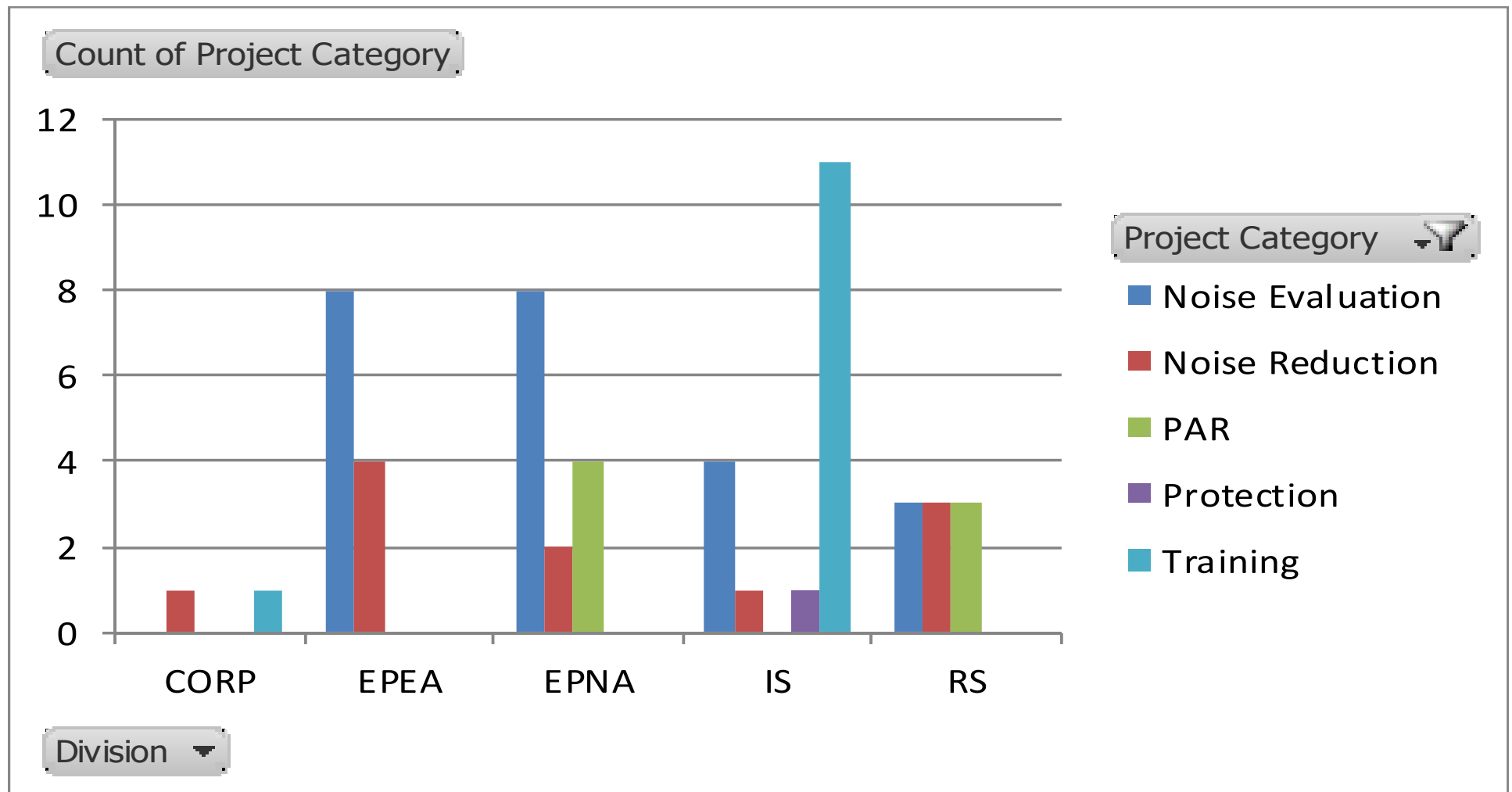
2012



- STS - Work related NIHL
- ELI - Early Loss Index - number of employees with early indication of NIHL
- PAR - Personal Attenuation Rate for Hearing Protection Devices (HPDs)
- NLI - Noise Level Index, a reflection of noise level and employees exposed
- Projects - HLPP improvements (process, protection, and noise control at source)
- NIHL - Noise Induced Hearing Loss

**Driving the Culture Shift**

# Report Monthly (cont'd): HLPP Scorecard



100% Completion of Hearing Loss Prevention  
Program Projects by Year End 2012



# Communication to Employees

## JMUPDATE

Johns Manville  
A DuPont Performance Company

February 2012

### IN THIS ISSUE

JM U.S. Employees Now Using myADP Systems

Page 1

JM Advances Hearing Conservation

Page 2

EPNA Partners with Plentec

Page 2

Year-End Goals Report

Insert

## JM U.S. Employees Now Using myADP Systems

After a year of preparation, JM U.S. employees began using the myADP system to manage their payroll and personal information in January. The myADP system has given employees an easy way to quickly access the information they need, maintain the accuracy of their own personal information and find resources relevant to their location and job.

"I am very pleased with the way the transition to myADP has gone so far. Like any complex system implementation, we've had some issues but we are confident we will fix them soon. I am most satisfied that from the start, with very few exceptions, employees' paychecks have been correct and we have not experienced any payroll issues."

information such as address, phone numbers, emergency contact, direct deposit, tax withholdings, etc. myADP Live: 1.866.661.6616 (toll-free, 24/7)

Speak with a customer service representative about payroll information, employment and safety notifications, support for myADP Online, eTime and Virtual Edge and access to ADP Leave Administration.

► **Time** for hourly and salaried employees: Track time and attendance as well as submit requests for schedule and vacation records.

ADP Leave Administration: Request a leave

## Safety

# JM Advances Hearing Conservation

## Hearing Conservation Pyramid 2012 Year One



The Hearing Conservation Pyramid will track JM's progress in hearing conservation efforts.

In 2012, JM will raise the bar on employee hearing protection with new criteria for the Hearing Conservation Program (HCP). The initiative will initially focus on North American facilities and will cover an EPNA lead position in engineering controls.

The program will meet JM hearing conservation beyond protective devices and annual hearing tests. Detailed criteria in an HCP-specific manual, including the creation of a Noise Control Index (NCI), will identify and track noise sources and health risks, and implement preventative efforts.

Senior Manager for Product Reliability and Industrial Hygiene Barbara Howard said, "In most facilities, there are some quick and simple noise mitigation opportunities, like noise control enclosures that require time and resources." She added that employees will receive a "No Test" – or Personal Assessment Rate (PAR) – to identify that individual's proper hearing protection device. "As we move forward with this fresh approach, JM will ensure that all employees are using the best hearing protection device for them," said Howard.

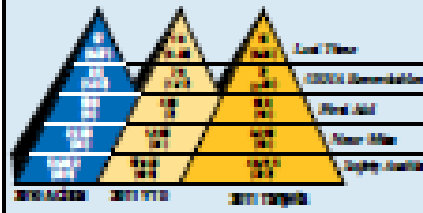
For guidance, JM has subscribed to an online training program from a world-renowned noise control expert to provide foundational access to workers on activities and practical noise control engineering. Training will be required for plant management, operations leaders, HSE leads and maintenance and engineering team members.

An HCP project plan book will provide practical steps for noise reduction, and facilities will generate a noise source inventory and priority rating. Noise consultation professionals will consult on complex challenges, and project progress will be tracked.

"This data-driven approach will help us better assess high-hearing protection for our employees," said Howard. "Over the next year, JM health and safety lead, we have been evaluating our current practices and results in the area of hearing conservation. These new elements will provide our operations teams with valuable tools to assess noise and progress in protecting employee hearing."

## JM SAFETY PERFORMANCE

### Safety Pyramid December YTD Actual



# More Meaningful Change

- Annual audiometry in first 6 months of year
- New noise dosimeters
- Expanded / clarified 'sufficient' dosimetry
- More protective exchange rate – 3dB vs. 5 dB
- Noise Control Engineering Training module – 3 year subscription

# More Meaningful Change

- Assessment / additional use of administrative controls
- Action Item reports from audiologist review and generated via audiometric software reports
  - PAR is not a one time event
  - One-on-One counseling and refit/retrain
- Opportunity for 3M™ E-A-RFit™ PAR use in any compliance inspections
- Buy Quiet Program
  - Piloted by two facilities, specific to compressed air nozzles
  - Expanded to all N. American purchasing in following year via corporate oversight

# Outcomes: Noise Reduction


## Example: Cross Cut Saw House Exit

Added sound curtains

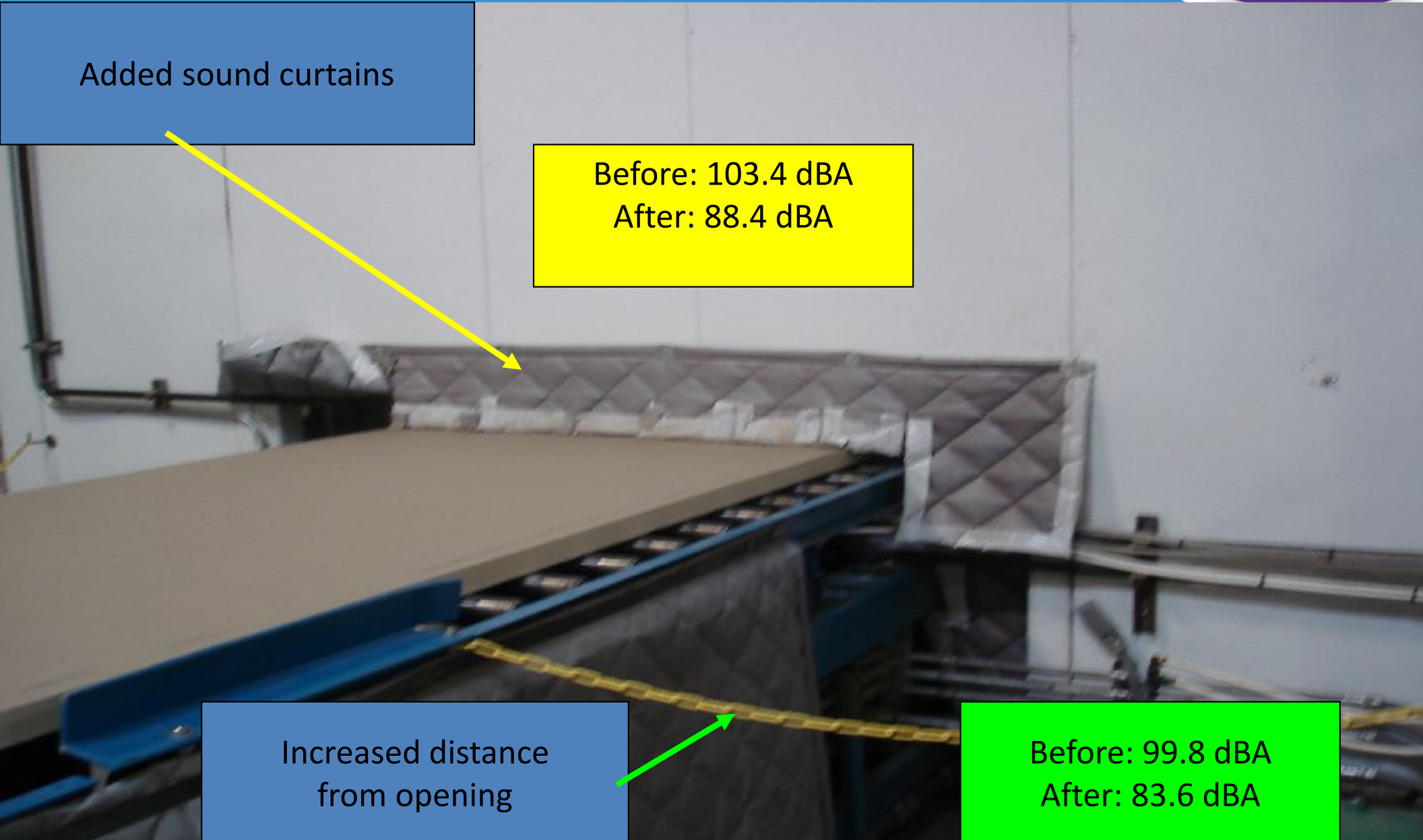


Before: 103.4 dBA  
After: 88.4 dBA

Increased distance  
from opening



Before: 99.8 dBA  
After: 83.6 dBA



# Employee Impacts

*(testimonials from one facility)*

- Noise reduction focus instead of STS ‘counting’ has resulted in:
  - Cost effective sound barriers between the air blowers and vacuum pumps on lines 5 and 9, blocking operator exposure to noise from these sources
  - Compressed air nozzles have been replaced with quiet nozzles
- Employees can feel confident knowing any issues found in their work environment will take top priority, ensuring protection from any noise near / above 90dBA, regardless of full shift exposure

# The Future of Meaningful Metrics

- We need to ‘solidify’ our new metrics
  - Annual targets for the appropriate metrics
  - Ongoing noise control engineering training targets
  - Ongoing HLPP action plans execution
- Our approach for tracking and driving progress in hearing conservation has been translated to other disciplines (i.e. environmental) with a focus on more meaningful metrics for the ‘bottom of the pyramid’.
- We can envision execution of HCP projects bringing more of our facilities out of the OSHA Hearing Conservation Program
- Our commitment to go beyond compliance will result in continuous improvement in employee engagement

# Lessons Learned

- True hearing loss *prevention* (vs. compliance focus) is a culture change
- Culture change takes time, but is worth the effort
- Culture change must come from the top, the bottom and the middle
- Create a multi-year roadmap to effect change in how your management team and employees think about hearing loss prevention
- Communicate in as many mediums as possible, as often as possible



# Significance of the Award

- The Safe-In-Sound award has re-invigorated our Hearing Loss Prevention Team! The application process alone reminded us how far we've come.
- For the broader JM team, receiving this award will reinforce the fact that we're on the right path.
- A broader awareness of the activities of prior Safe-In-Sound awardees will result in additional noise reduction ideas for our operations teams.