

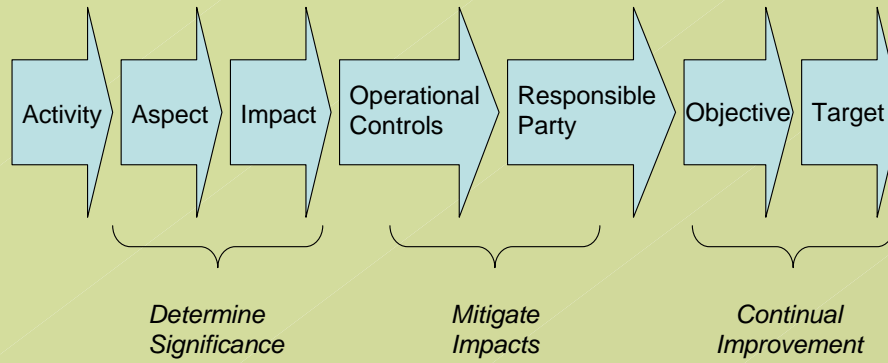
EMS Update

The pain and the gain

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The EMS Process



- May produce:
 - A reduction in environmental risk
 - An enhanced competitive position

Reducing Risk

- Environmental: public safety & stewardship
 - Risk: function of potential impacts
 - Various media/ targets
 - Suppliers & customers (up/down stream)

| SEVERITY | FREQUENCY | | | |
|--------------|---------------|-----------|-----------|----------|
| | Highly Likely | Likely | Possible | Unlikely |
| Catastrophic | IH (1A) | IL (1A) | IP (1A) | IU (2A) |
| Critical | IIH (1A) | IIL (1A) | IIP (2A) | IIU (2A) |
| Marginal | IIIH (1A) | IIIL (2A) | IIIP (2A) | IIIU * |
| Negligible | IVH (2A) | IVL (2A) | IVP * | IVU * |

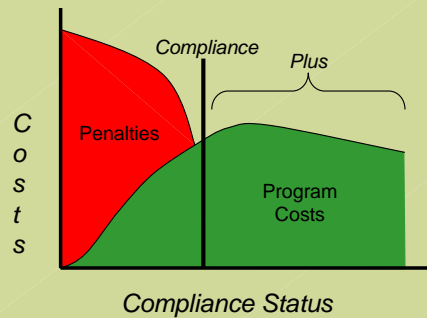
■ HIGH RISK HAZARDS ■ LOW RISK HAZARDS
■ MEDIUM RISK HAZARDS ■ VERY LOW RISK HAZARDS



- Compliance is a minimum standard!
 - The public expects more
 - *compliance+*
 - Corporate exposure demands it

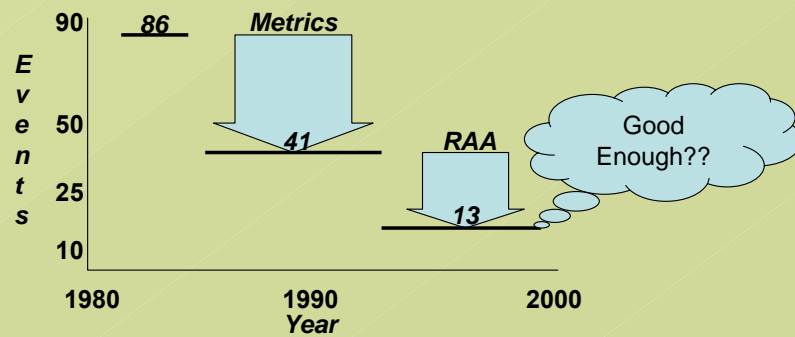
Seeking Competitive Advantage

- Customer expectations
 - A \$570,000,000 discriminator
- Image & Goodwill: *They have value!*
 - An intangible in the purchase decision
 - Positive image = well managed company
- Corporate Valuation
 - Affect operating costs



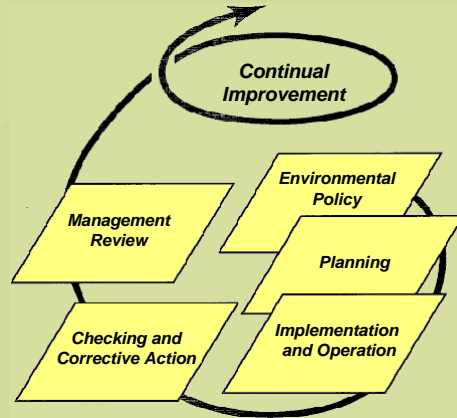
Strategic Decision

- Outstanding record of Environmental Performance
 - Was there value in further improvement?
 - Our customer said yes!



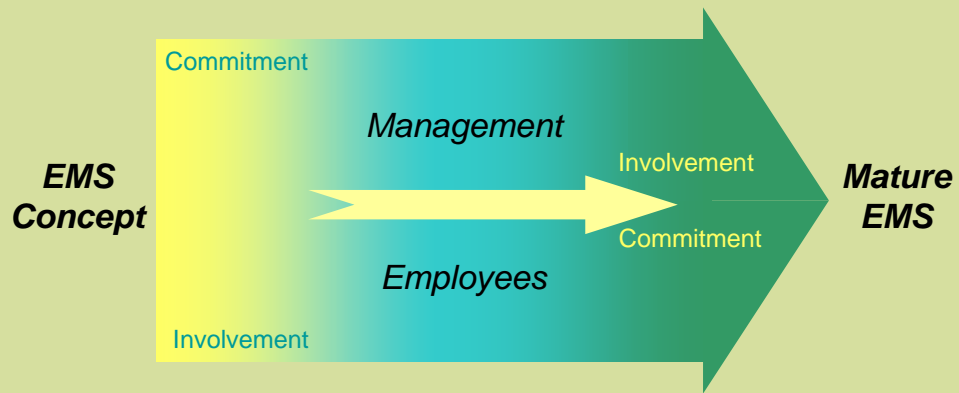
Strategic Solution

- Implement structured Environmental Management System
 - Use ISO 14001 model
 - Build rigor into system
 - A broadly recognized international standard



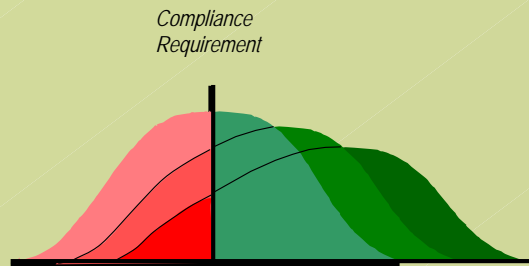
EMS Implementation

- It's a partnership
 - Commitment ↔ Involvement

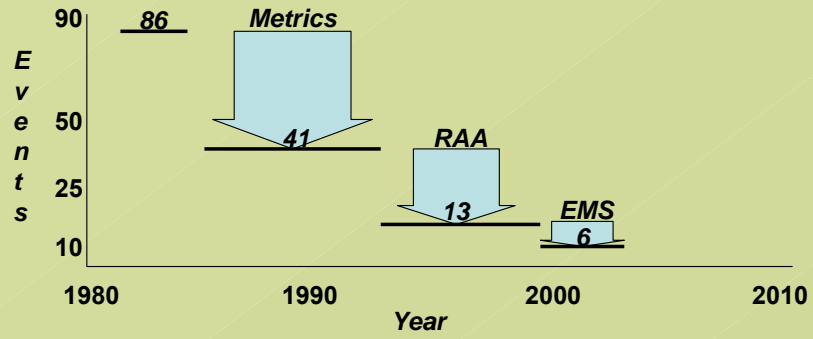


Collateral Opportunity

- Join performance based programs (EMS+)
 - EPA's Performance Track
 - TCEQ's Clean Texas Cleaner World
- What's it do?
 - Low cost step to shift the paradigm



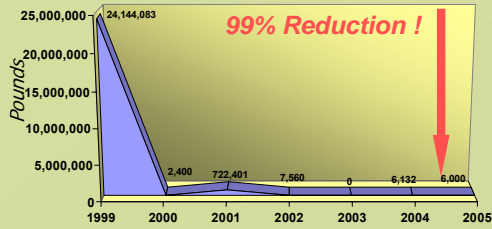
Strategic Outcome



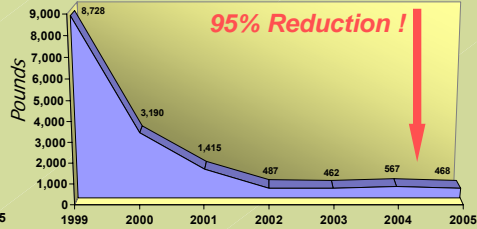
- Cut reportable events by another 54%!

Continual Improvement

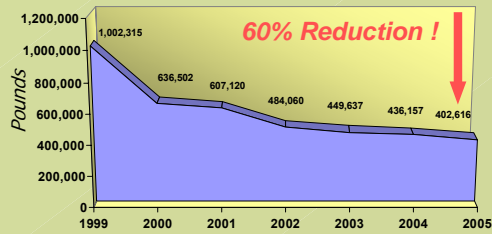
Exploration & Production Waste Disposed



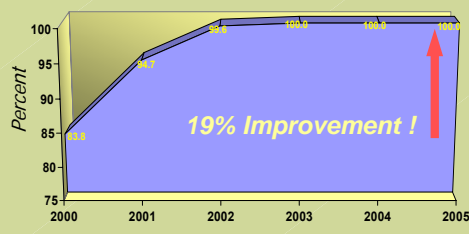
Hazardous Waste Disposed



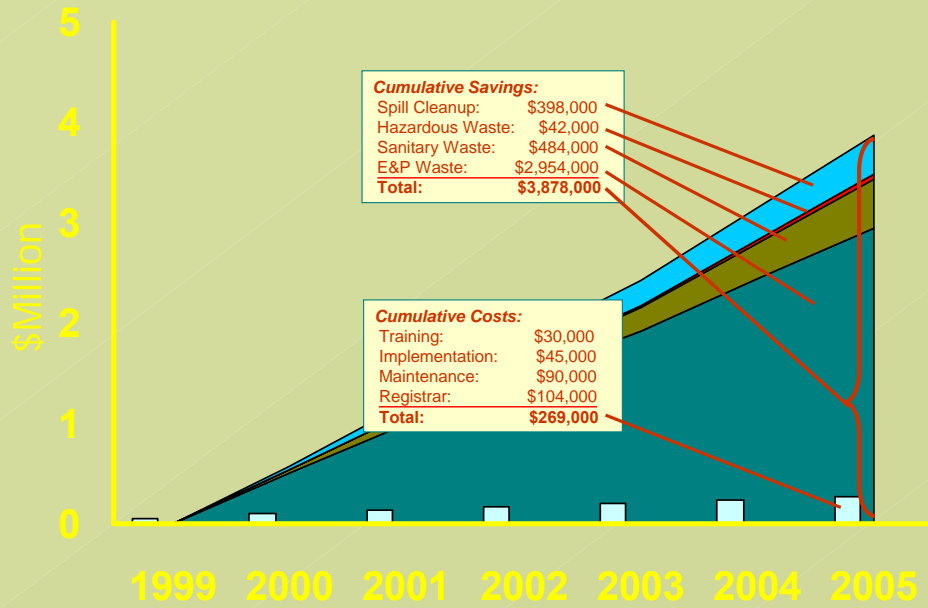
Sanitary Waste Disposed



Affirmative Procurement



Bottom Line



EMS Conclusion

- An EMS can benefit the public
 - A means of reducing risk
- An EMS provides stewardship



- Evolve from compliance to performance+ management

- An EMS can benefit the company
 - Positive Return on Investment
 - Enhance corporate valuation

What about ISO 14001?

What is an Environmental Objective?

- A Goal
- Formulated based on...
 - Preventing pollution
 - Compliance requirements
 - Significant aspects
 - Our capabilities (operational and money)
 - Business interests
 - Views of interested parties

Most of our objectives are WADs, E2/P2 goals set by Secretary of Energy, and three year commitments for improvement we made to EPA in the Performance Track program and to Clean Texas as National Leaders.

The characteristics used in formulating goals are from the ISO 14001 standard. Our Wads generally reflect all but business interests and views of interested parties. Our work with P-Track and Clean Texas has affected some of our objectives, like VOC reduction and promoting wildlife habitat. In this regard EPA and TCEQ are interested parties whose views we acknowledge. Top management sees these as business interests as well since they want to maintain membership with the two programs.

What is a Target?

- Level of achievement we set for an objective
 - Measurable
 - Realistic
 - Challenging
 - Bi-level in many instances...
 - **“minimum” level**
 - **“target” level**

Most of the targets related to those objectives tracked by Environmental have become more challenging from year to year. Those based on the Secretary of Energy's E2P2 Initiatives are excellent examples – they have been set years in advance.

Something somewhat unique to us is the bi-level target. A “minimum” target is a level of achievement that DOE believes an average company should achieve. We get no award fee for achieving this level. It takes a lot more effort for a company to achieve the “Target” target level. Award fee is granted when this level is achieved.

Success in Meeting Objectives in 2005

- 27 objectives chosen –
 - surpassed target level on 17 objectives
 - met target level on 8 objectives
 - Exceeded minimum target on one (#19)
 - Missed the target on one (#15)
 - No comparable data yet on one (#24)
 - Closed out one (#26)

Have the meeting members look at the hand-out titled;

“FY 05 OBJECTIVES AND TARGETS WITH PERFORMANCE”

Success of each of the objectives is described in column “Level of Achievement in FY 05”.

Overall DM did extremely well. We met or exceeded the “Target” level on 25 of the 27 objectives.

Performance Trends

- Many objectives tracked for past 3-5 years
- Consistent improvement in reducing sanitary waste
- Improvement in...
 - **reducing permit exceedance**
 - **reducing reportable releases**
 - **reducing hazardous waste (substantial)**
 - **reducing VOCs from degas**
 - **increasing recycling (substantial)**
 - **increasing use of the Qualified Products List (substantial)**

Continue looking at the hand-out titled;

“FY 05 OBJECTIVES AND TARGETS WITH PERFORMANCE”

Look at the two columns at the far right labeled “Performance Trend” and “Trend”.

Performance Trends (cont)

- Slight improvement in providing wildlife habitat
- Remain “steady” on 14 other objectives
 - Steady means consistently near or at target
 - “Maintenance” objectives
- Fluctuating on lead acquisition but still surpassing overall SPR target

Performance Trends (cont)

- Fluctuating slightly on affirmative procurement with a very slight decline in 2005
- Fluctuating on fire systems repairs with declining success in 2005
- No trend yet on two objectives (PREP drills and VOCs from Workovers)

Commitment Status in Performance Track Program

Five commitments and their status:

- ☺ **Reduce hazwaste fluorescent lamps – surpassed commitment**
- **Reduce VOC emissions from workover operations – moving forward but no data yet**
- ☺ **Reduce potential VOC emissions offsite from crude oil during drawdown (degas) – surpassed commitment and completed**
- **Reduce lead on site from electric vehicle batteries – needs more attention to reduce battery failure/replacement**
- ☺ **Enhance wildlife habitat on site – surpassed commitment**

Commitment Status in Clean Texas/Cleaner World

Five commitments and their status:

- ☺ Reduce hazwaste fluorescent lamps (BH&BM) – surpassed commitment
- Reduce VOC emissions from workover operations (BH&BM) – moving forward but no data yet
- ☺ Reduce potential VOC emissions offsite from crude oil during drawdown (degas - BH) – surpassed commitment and completed
- Reduce lead on site from electric vehicle batteries (BH&BM) – fluctuations in purchasing indicate more attention needed to reduce battery failure/replacement. BH surpassed their commitment ☺ but BM did not.
- ☺ Enhance wildlife habitat on site (BM) – commitment met

ISO 14001 Nonconformities

- Three total, all minor
 - FY 2005:
 - Communication of EMS changes to DM personnel
 - Documenting release of information about DM EMS
 - FY 2006:
 - Thoroughness of EMS Audit

Audit Findings

- 37 total
 - 5 from DOE
 - 30 from DM
 - 2 from ISO 14001 Registrar
- 24 compliance related
- 13 EMS related
- Trends: Following Requirements...
 - Failing to follow our established requirements
 - Failing to follow new requirements
 - Failing to follow complicated requirements
 - Following requirements at a new location
 - New personnel following requirements

A Look into the Future

- Updated Environmental Policy
- FY06 Objectives and Targets
 - New targets are bolded
 - 28 objectives chosen
 - 26 are repeats and 11 of these have updated targets
 - 1 totally new (#28 on training protective force)
 - 1 modified (#26 on VOC emissions from degassed oil)

A Look into the Future (cont)

EMS recommendations for improvement:

- Upgrade aspects/impacts analysis.
- Upgrade EMS Manual based on registrar gap analysis.
- Assure sufficient training to control significant aspects.
- Develop various means to assure adequate environmental training of DM subcontractors.
- Tighten up on managing findings and potential findings.

A Look into the Future (cont)

- Keep heat on workover operations VOC emissions reduction project.
- Work on improving battery longevity in electric vehicles.
- Work more closely with DM subcontractors where they must meet EMS requirements.
- More clearly define how DM handles release of EMS information outside the SPR.
- Review/revise environmental boilerplates for subcontracts.

A Look into the Future (cont)

- Review MRCs and ORCs in light of DM document control requirements and revise as needed.
- Thoroughly fill out environmental audit checklists.
- Review permits to confirm their requirements are being met.
- Work on communicating with community stakeholders.
- Auditors should take a cause analysis class.
- Use audit time more efficiently by using SMEs.
- Educate employees better on EMS issues.

For Discussion

- Other ISO benefits, progress and continuous improvements since certifications
- How to set new goals, determine significance, establish of clear, accurate measures
- Opportunities to maximize collateral benefits
 - CTCW – reduced air testing
 - Green Building initiative
- Implementation struggles with ISO 14001 2004 standard
 - “on behalf of”, evidence of continuous improvements, more site level involve
- No pain – No gain!