

Environmental Issues at a Multi-Facility
Headquarters Campus: A Case Study of
the S.C. Johnson Corporate headquarters
facility in Racine

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Key Words: compliance, environmental
management system, permits, remediation,
procedures

Environmental Issues at a
Multi-Facility Headquarters
Campus: A Case Study

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ACHMM Annual Conference
August 20, 2001
Chicago, IL

Intent/Purpose of Presentation

- Present, discuss environmental issues at non-manufacturing headquarters facilities
- Discuss issues in relation to Environmental Management Systems (EMS)
- An EMS can/may help non-manufacturing facilities address environmental issues
- Non-manufacturing headquarters facilities can have significant environmental issues

List of Topics

- S. C. Johnson & Son, Inc.
- Sigma Environmental Services, Inc.
- Compliance Requirements
- EMS
- Conclusions
- *Top 10 Environmental Misadventures*

S. C. Johnson & Son, Inc.

- Family company founded in 1886
- Products: home cleaning, home storage, insect control, personal care
- Employ ~9,500 in ~70 countries, sell in 100+ countries
- Fifth generation leadership by the Johnson family

S. C. Johnson & Son, Inc.

- Company brands include Drano®, Edge®, Glade®, OFF!®, Pledge®, Raid®, Shout®, Windex®, Ziploc®
- SC Johnson known for:
 - **Innovative products** - make life easier & homes cleaner, safer, healthier
 - **Cutting edge employment programs, policies that raised workplace standards for all employers**
 - **Environmental and community leadership**
 - **Frank Lloyd Wright Administration Building, Research Tower**

Corporate Facilities (CF) *a.k.a "EMS stakeholders"*

- HSC:Howe Street Campus:
 - HQ - Administration, Marketing, Finance, IS, RD&E, etc.
- RD&E: Research, Development & Engineering
- ERC: Entomology Research Center
- CFC: Corporate Flight Center
- JMBA: Johnson Mutual Benefit Association:
 - Armstrong Park, Aquatic Center, Child Care, etc.
 - Lighthouse Resort
- TCH: The Council House

Constraints/Issues *a.k.a.Obstacles/Opportunities*

- Large campus: numerous buildings, various ages
- Other sites/facilities under corporate responsibility - variety of operations: laboratories, recreation facilities, office, airport, etc.
- Limited historical information on main campus
- Limited infrastructure documentation
 - SC Johnson has been on-site since 1886
- RD&E labs with wide variety of chemicals, wastes
- Redevelopment of urban campus
- SC Johnson visible in community

Sigma Environmental Services, Inc. (Engineering Consulting Firm)

- Partnered with SC Johnson on >30 projects, e.g.:
- Environmental site assessments
 - Remediation of SC Johnson acquired properties
 - Water, wastewater investigations, upgrades
 - Permitting, regulatory compliance - water, AST/UST, etc.
 - Developing environmental procedures
 - Providing outsourced environmental services, e.g., sampling, permit applications, plan & spec preparation, etc.
 - Compliance-related inspections, etc.

CF Compliance Requirements

- Wastewater permitting, monitoring (City/industrial)
- Stormwater permitting, monitoring (NPDES) - CFC
- Non-contact cooling water discharge permitting, monitoring (NPDES) - HSC
- EPCRA reporting - HSC, TCH
- RCRA management, reporting, etc. - HSC, CFC, ERC, TCH
- RCRA Contingency Plan - HSC
- SPCC Plan - HSC

CF Compliance Requirements

- Spill prevention, response, reporting - HSC, CFC, ERC, TCH, JMBA, LHR
- AST/UST requirements - HSC, CFC, ERC, TCH, JMBA, LHR
- Contaminated subsurface/remedial activities - surrounding HSC
- Air permitting issues - HSC
- Training
- *For multiple facilities, same regulatory programs as for manufacturing*

Beyond Compliance

- SC Johnson Global/Worldwide Safety/Health/Environmental Management:
 - Policies
 - Standards
 - Guidelines
 - Audits
 - Training
 - Waste minimization goals
 - Involvement with environmental groups, e.g., Nature Conservancy, etc.
- EMS:
 - S/H/E policies, standards, guidelines, etc. part of EMS
 - S/H/E elements generally consistent with ISO 14000
 - SC Johnson has taken a cautious, measured approach toward ISO 14001

Beyond Compliance

CF Operational Activities

- Water quality testing: water supply wells to pool water
- Waste minimization: RD&E/maintenance chemicals, consumer products
- Recycling office waste (paper, plastic, glass), construction debris, computer components, etc.
- Responding to unusual problems: flooding, foaming, logjams, etc.
- Redevelopment of campus, nearby community
- Voluntary programs: van pooling, Ozone Action Day curtailments, etc.
- Green buildings: Recycling buildings & products (carpet, ceiling tile, metals, etc.) & Energy management and conservation (e.g., EPA Green Lights, Energy Star)

Environmental Management Systems (EMS)

Definition of Environmental Management Systems

- Organizational structure, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing, and maintaining environmental policy (ISO 14001)
- Reasons to implement EMS:
 - Document/formalize environmental program, management, compliance, etc.
 - Integrate environment into business
 - Helps maintain positive interaction with control agencies, etc.

ISO 14000 EMS standards: are most commonly used

EMS Key Elements

- EMS:
 - Management support necessary
 - Policy to provide broad guidance, set course, etc.
 - Set objectives, goals, strategies, measures, etc.
- Compliance:
 - Permits, regulatory
 - Reporting internal/external
 - Training
 - Contingency planning
 - Environmental site assessment/remediation
 - Audits/inspections
- Financial
- Operations: Implementation of an EMS

Management Oversight

- Need to integrate environmental compliance/management into business structure
- Management should be involved in setting policy, objectives, etc.
- Need to set objectives, goals, strategies, measures

If you can't measure, you don't understand it

- Need competent staff to:
 - Maintain compliance
 - Develop and implement an EMS
 - Attain objectives, goals, etc.

Compliance

- EMS provides a framework for:
 - Achieving, maintaining compliance
 - Responding to potential non-compliance situations
 - Responding to emergencies
 - Forecasting upcoming compliance activities
- *EMS provides a view of the forest without getting lost among the trees:*

Don't let the myriad of regulations let you forget that protecting the environment is important

Financial

- *Companies run on money so should environmental department*
- Budget -Capital & Expense (O&M)
- Forecasting
- Tracking
- Cost savings: *Waste minimization, beneficial re-use, product giveaways, etc. can be sold as a cost savings*
- Justification: *Regulatory compliance is non-negotiable*
- Contingency financial planning: *Contingency fund may be needed*
- User charges

Operations: Implementation of an EMS

Tools of implementation:

- Standard procedures to address compliance, operations, monitoring, reporting, record-keeping, inspections, etc.
- Calendar of environmental activities, reporting requirements
- Summary/matrix of permit, regulatory requirements, etc.
- Training program
- Tracking/forecasting environmental expenditures
- Spill/release history, corrective actions, etc.
- Internal documentation

Procedures

Why write a procedure:

- Document, explain operations, how things work
- Standardize tasks, jobs - *Consistency in how things done*
- Document/formalize tasks, jobs: *Survives staff changes, retirements, etc.*
- Easier to train
- Easier to ensure compliance
- Compare to other operations, companies - benchmark
- *When you write it down, you have to think about what you are doing and why you are doing it, thus you are more likely to do it & do it right*

Procedures

Examples:

- Permit compliance
- Training
- Reporting: Air, water, RCRA, EPCRA, etc.
- Waste, wastewater management
- Monitoring
- Spill prevention, response, clean-up, reporting
- Recycling: lamps, construction debris, etc.

Training

Why do we train?

- Compliance
- Ensure job, task done safely, properly
- Investment in people
- Trainer may learn from the trainee:
 - Learn about problems
 - Improve procedures
- Foster environmental awareness

Contingency Planning

Why do we make contingency plans?

- Required by law
- To save costs due to lost product, injury, regulatory enforcement, adverse media coverage, etc.
- *Failure to plan is planning to fail*
- *Spills only happen after hours, when you are not around, or preparing some government report*

Conclusions

- EMS may help address numerous environmental issues at multi-facility headquarters campus
Even non-manufacturing facilities can have complex environmental issues
- Environmental factors should be integrated into planning, design/construction, operations, etc.
- EMS may reduce complexity in responding to environmental needs of multiple stakeholders
- Compliance is baseline - EMS should help maintain, avoid problems

Conclusions

- EMS may help maintain positive interaction, relations with control agencies, media, public
- EMS may provide operating cost reduction opportunities
 - *Sometimes it is difficult to prevent environmental fires, they just need to be fought*
- Message: be organized and decide where you need to be - an EMS is a road/map to help get there.

EMS importance to SC Johnson

- Fosters SC Johnson philosophy to:
 - Be an environmental, community leader
 - Be a great place to work
 - Be a responsible family company
- Sets up a system that:
 - Works on a worldwide basis
 - Works for manufacturing, non-manufacturing
 - Survives staff changes, retirements, etc.

Environmental Issues at a Multi-Facility Headquarters Campus: A Case Study

- **Questions?**
- **Comments?**

Top 10 Environmental Misadventures

10. Spills only happen when the entire spill response team is off-site (at a baseball game)
9. Basement floods occur during long holiday weekends
8. Expensive environmental projects only occur after next year's budget has been approved
7. EPA shows up for a RCRA inspection just when you're completing your Tier II report
And you have been experiencing computer problems
6. Your new cell phone doesn't work when you're trying to call for help - *And the city and media are breathing down your neck*

Top 10 Environmental Misadventures

5. No good deed goes unpunished
Not sure what it means, but it sure does seem to make sense
4. The only logjam on the river is adjacent to your property
3. Your sewer excavating contractor has an uncanny knack for cutting every unmarked buried electrical cable, water line, etc.
2. The architect for your historical buildings didn't really care that much about plumbing drawings, HVAC, fire protection, etc.
And the roof leaks too
1. One problem leads to another
