Effectively Managing Project Environmental Reviews

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Overview

• Why develop and implement a project environmental review system

• Keys to successful implementation

• Issues to consider when developing or enhancing an existing system

• Summary of key takeaways
Why develop and implement?

• Critical to effectively managing changes (e.g. projects, process improvements, turnarounds)

• Facilitates planning for changes that require permitting or implementation of new regulatory requirements

• Assures comprehensive and consistent environmental assessment of all projects/changes

• Improves communication between project/process/environmental staff
Why develop and implement?

• Provides means for documenting environmental evaluation, tracking progress as design develops, and keeping environmental programs updated

• Key to maintaining compliance

• Minimizes time delays associated with permitting and/or compliance implementation
Review Process

• Series of questions prompting follow-up actions
  – To ensure consequences of change are identified
  – To document basis of environmental evaluation

• Comprehensively covers criteria to be reviewed
  – e.g. waste streams, pollution controls, new raw materials, source modifications, new chemicals, increases in energy & water use

• Typically organized by source type, media, issue, etc.
• Identifies responsible parties and timing
• Documents analyses (e.g. exemptions, NSR)
• Can implement with forms, spreadsheets, databases, or combination
Example Questions

- **Heaters/Boilers** – Will the project alter the design firing rate (heat duty) of a heater or boiler, or allow firing more? If yes, please provide a comparison of the current actual firing rate (in MMBtu/hr) to that after the proposed change.

- **Loading** – Will the project involve the installation of new hydrocarbon loading facilities, modifications to existing facilities, increased loading from existing facilities, or change in the products loaded at any existing facility?
Example Questions

• General Construction – Are pile supported foundations planned? If so, indicate type, number, and depth of piles.

• Air Modeling – Will the modification alter the physical location of a stack or release parameters?

• Water – Will the project add, delete, or modify any process sewers, sumps, catch basins, drains, junction boxes, sewer vents, or associated equipment?
Example Questions

• Solid Waste – Will the project increase the concentration of any of the toxic constituents of any waste routinely generated by the facility?

• Construction Waste - Will the project generate construction waste?

• DOT Pipeline – Will the project require the installation of a new pipeline, or modification to existing pipeline facilities?
Data Needs for Evaluation

- Project description (include permanent vs. temporary nature of the change and business justification/goals)
- New and physically modified units
- Other affected units
- Process changes
- Raw materials or products
- Fuel impacts
- Impact on production and throughput
- Impact on reliability and availability of units
- Anticipated pollutant impacts
- Project timeline
Issues for Consideration

• Relationship to management of change (MOC), turnaround, and capital project processes

• Replacement in kind (RIK)

• Consistent application of Routine Maintenance, Repair and Replacement (RMRR)

• Temporary changes

• Addressing related impacts (e.g. procedures, emergency response planning, reporting)
Air Permitting* – Often Critical Path

- Miscellaneous Permitting Actions (up to 8 weeks)
  - Case-by-Case Insignificant Activity (IA) Exemption
  - Exemption to Test
  - Variance
  - Letter of Response/Letter of No Objection (LONO)
  - Authorization to Construct and Operate (ATC)
  - Administrative Amendment (AA)
  - Change of Tank Service

- Part 70 General Permit (up to 3 months)

- Title V Minor Mod (up to 5 months)

- Title V/PSD/NNSR Major Mod (up to 18 months)

* in Louisiana
Keys to successful implementation

• Process needs to be dynamic

• Build into existing systems where possible
  – Example: Require environmental review before funding approval

• Supported by management

• Train all parties on
  – process
  – potential regulatory and permitting impacts of changes
  – potential pitfalls
Keys to successful implementation

• Engage all stakeholders through the entire process

• Shared responsibility between project/process/environmental staff, with clear expectations and actions (e.g. responsibility for updating when scope changes)

• Commitment to continual improvement
Key Takeaways

• Changes that do not require capital funding may have significant environmental consequence or trigger regulatory requirement

• Ensure proposed changes are reviewed, by the right people, and managed timely

• Ensure what changes need to be addressed are clearly identified

• Engage staff across organization to make integral part of day-to-day business operations

• Consistent review and documentation minimizes regulatory exposure

• It is too late after the change has occurred – could be a compliance issue
Questions?

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