

**ADDENDUM TO
COLORADO'S EMS PERMIT PILOT PROJECT FINAL PROJECT REPORT
DATED JUNE 1, 2007**

*Questions – U.S. Environmental Protection Agency, OPEI/ES
Answers – Colorado Department of Public Health and Environment, Sustainability Program*

1. We [the U.S. Environmental Protection Agency] would like to know more about how an “EMS permit” differs from a conventional permit.

a. Please include in the report a description of what an EMS permit consists of.

Answer: An EMS permit is different from a conventional permit in that it:

- Is a cross media and multi media permit;
- Allows an entity certain flexibility to implement non-traditional approaches to demonstrating compliance while making greater environmental improvements;
- Can include requirements not normally found in a permit (i.e., RCRA, universal waste, OSHA);
- Requires continual improvement;
- Requires a community involvement and communications plan;
- Requires the entity to measure its environmental footprint and benefits over time, beyond what is regulated;
- Enhances public involvement in the permit process; and
- Allows for a cross media assessment of compliance requirements to aim for the best result for the public health and environment.

b. How were the terms of the EMS permits different from the terms of the conventional permits that were issued as well?

- The report refers to certain regulatory flexibilities that were provided. Were these the only differences from conventional permits?

- Were there other terms that were included that would not have been in a conventional permit?

Answer: The permits included provisions that combined, for example, air and waste requirements, air and OSHA requirements, and state control regulations with federal permit requirements. There was no request for significant flexibility because the program was a pilot and given the dual permitting requirements, the EMS permit was not fully tested.

There were other terms not included in conventional permits, including: CICP, EMS elements, continual improvement, PPAGs (enhanced public involvement), regularly scheduled EMS and environmental audits.

c. Do the nontraditional terms build directly from the EMS, and if so in what way? The draft permits provided appear to reference the facilities' EMS in some sections (e.g. Ball's permit Section II.A. refers to: BATC's WI EHS.23.13.004), but there are other sections that also refer to EMS-related activities that don't have specific references.

Answer: Yes, many EMSs include community involvement such as CAPs, and all have continual improvement requirements. Many companies have standard operating procedures that are incorporated into the EMS, but SOPs are not necessarily an element of every section of an EMS.

It does not mean the company does not have it in the EMS, just that it does not warrant a separate document or SOP.

- d. What do you see as the value-added by an EMS Permit? What does it get you that conventional permits alone, or conventional permits and an EMS, do not get?

Answer: Conventional permits are stove-piped, single issue, without environmental or public health goals and with limited environmental outcomes (i.e., up to the point of compliance). Conventional permits are typically shells for regulatory conditions and do not drive environmental change or improvement. Such permits are a good road map for a company to understand its minimal regulatory requirements, but do not motivate a company to go beyond compliance.

In contrast, the EMS permit aids an Environmental Health and Safety manager in driving upper management to go beyond compliance, consider unintended consequences, community input, and measure outcomes within the permit framework. EH&S managers can use this to minimize the process related work and focus on efforts that result in benefits to the environment, community, and economics of the company. Similarly, an EMS permit can better drive compliance from the top down so that compliance, and environmental concerns, become everyone's responsibility, not just the EH&S manager.

2. There was clearly frustration that conventional federal permits still had to be issued in tandem with the EMS permit requirements. Does Colorado have any suggestions on how federal statutory requirements could be satisfied in a manner that is more compatible with its program?

Answer: US EPA could agree that it will work with Colorado to incorporate the EMS permit into each delegated and mandatory program within Colorado, where feasible. This includes programs that do not necessarily require permits (i.e., RCRA). Once it is incorporated, so long as the specific federal requirements are not violated there is much greater authority to approve regulatory and operational flexibility.

3. The report states (p. 6) that the pilot was developed “as a system that allows an EMS to act as an enforceable cross-media permit.” Shouldn't that have read “allows an EMS **Permit...**”? If not, it appears that this did not occur, since the EMSs themselves did not serve as permits but rather permits were issued. Is this an accurate understanding? Was the goal of allowing the EMS to serve as a permit achieved in your view, and if not, what were the barriers to doing so?

Answer: The initial goal was to have an EMS operate in lieu of a permit. The final program was implemented as an EMS permit.

4. It is not clear from the report (p.7, 3rd bullet) what is meant by “compliance-equivalent performance.” Also, in bullet #6, how does the community get involved in a facility's compliance history? I don't think that either of these is discussed later in the report or in the regulation.

Answer: Compliance equivalent performance requires a facility with an EMS permit to meet, at a minimum, all applicable environmental standards, even when seeking operational flexibility across or within environmental media. Thus, if the standards are set the bar for compliance, a facility would need to demonstrate that alternative practices or technologies (performance) may provide some type of environmental trade-off, but still meets the environmental standard. Ball Aerospace, for example, elected to use the OSHA health based standards as the performance

standard for compliance with air quality lead requirements because the OSHA requirements are more protective than air requirements and one level of monitoring, recordkeeping, etc. was eliminated.

In response to bullet #6, the community has an opportunity to review and discuss compliance issues and concerns with the EMS permitted company during Compliance Advisory Plan meetings held during development of the EMS permit.

5. P. 8, Section V.A, par. 4. The second sentence refers to an area where agreement was not reached. I thought that the stakeholder group did agree on EMS permit modification language and public comment requirements. If there wasn't agreement in the group, did the issue just get resolved in individual EMS permits?

Answer: The one area the stakeholder group did not agree was with the decision made by EPA to keep conventional permits in place. If other areas of disagreement did exist, then yes, decisions would be made between the project partner and the CDPHE, but the program is not aware of any outstanding issues or areas of disagreement specific to the EMS Permit Program Regulation.

6. The report states (p. 14) that each participant was required to commit to continual environmental improvement. However, it is not clear how these commitments were formalized. The draft permits refer to continual improvement goals that are to be established as part of the EMS aspects and impacts analysis. Are the continual improvement goals and projects tracked separately by CDPHE (e.g., were they monitored and reported on in the same way as enforceable permit terms, or handled in some other way?) Do you feel facilities set ambitious goals relating to priority concerns?

Answer: The continual improvement projects were required to be shared with the PPAG and a part of the permit, but failure to complete the project was not grounds for noncompliance. It was simply part of the review as to whether to reissue the EMS permit or request the company leave the program. The projects are tracked as a part of the Colorado Environmental Leadership Program. They set adequate goals considering the limited benefits they were getting from the project.

7. Please explain more about the EMS conformance audit. Against what standard is the audit done? The definitions section of the regulation refers to an "EMS as approved by the Department." What are the standards for that approval? Is there more detail on this elsewhere (e.g. in regulations or guidance establishing the leadership program)? It would be helpful to include that detail in the report.

Answer: EMS conformance audits can be completed using a variety of "standards." At a minimum, it had to meet the State of Colorado's requirements to enter the Gold Level of the Environmental Leadership Program, which is similar to ISO 14001. Detailed information is available in the guidance documents for the leadership program.

8. P. 16 – We would like to know more about the opportunities to combine regulatory requirements that overlap between media.

Answer: There are many opportunities between air, water and waste to combine regulatory requirements. For example, hazardous air pollutant and RCRA requirements particularly with storage, handling and disposal; wastewater treatment or handling where evaporation is the methodology used to meet water quality standards; where requirements for OSHA may meet

environmental requirements if a building is completely enclosed. In general, EPA could conduct an assessment of various facilities to determine where the regulatory requirements overlap or are inconsistent.

9. P. 18, 1st bullet – It is not clear what the Department’s recommendation is with respect to considering previous projects and reductions in identifying satisfactory continual improvement projects.

Answer: CDPHE would consider previous projects and reductions if the benefits were ongoing and not one time in the past. Continual improvement projects that continue to provide benefits are valid projects under the Colorado Environmental Leadership Program and EMS Permit Program.

10. P. 19 – Footnote #7 and p.21 #8. It is not clear what happened with the Magnum and Murphy Brown permits. Is it accurate to say that neither permit was public noticed or issued, but drafts were completed? Perhaps the footnotes should be combined, or even incorporated into the main text and clarified.

Answer: EMS permits for Magnum and Murphy Brown were draft versions and did not get public noticed due to the complexity of streamlining over 20 permits for Murphy Brown and a change to the federal CAFO rule that removed the “duty to apply” for a permit requirement from federal and state rules. At this time, neither Magnum nor Murphy Brown are in the Environmental Leadership Program, and would not qualify for the program for at least three years. Thus, work on the EMS permit has ceased.

11. P. 20 – Operational flexibility is generally seen as providing economic benefits. What are the environmental benefits that you see coming from operational flexibility? Of the operational flexibilities requested, which were actually granted? It would be interesting to understand why any were not granted.

Answer: Operational flexibility can result in environmental benefits, since the command and control regulations are single media focused. Some flexibility requested was granted, the real challenge was finding flexibility that was consistent with the existing permits and regulations. For example, Murphy Brown requested a change in recordkeeping and reporting from quarterly to an annual basis. Quarterly reporting, however, is a statutory requirement. Given the period of the project, a statutory change was not pursued and the flexibility denied. The benefit in the flexibility granted to the project partners was more administrative than environmental (i.e., streamlining lead monitoring requirements versus duplicative reporting; and approving sludge removal and land application sites that provided greater flexibility in on-site management of wastes (agronomic rate of application and soil sampling was still required). Without the ability to be flexible with the state regulations (i.e., quarterly recordkeeping requirement), there was not much true flexibility to offer. The participants kept that in mind as we moved through the project and they put together their requests.

12. P. 23 – To what do you attribute the improvement in environmental performance? Did the permits drive this in some way? Was it more the continual improvement aspects? The final tables in the individual facility assessment addendum include some detail about certain performance changes. It would be very helpful to include in the report itself the changes and outcomes that you believe resulted from the implementation of this program. (Are you able to note where any of the changes resulted from programs/efforts that were underway outside of the EMS Permit program?)

Answer: The continual improvements built into the permit plus the operational flexibility drove the improvement in environmental performance. The idea that EMSs drive continual cycles also drove environmental improvement.

13. P. 24 – Under “Authority of Cross Media Assessments – what made it difficult for the department to approve facilities’ proposals based upon cross media assessments?”

Answer: The lack of flexibility due to the failure of federal approval of flexibility and limited insight of true cross media opportunities (regulated in a single media world for decades).

Under “Logic Table” - Was it completing the logic model or using the evaluation modules that was time consuming?

Answer: Both.

14. What were the challenges in actually developing the EMS permit, e.g. in melding the two different tools of an EMS and permits?

Answer: Challenges included internal human resources given existing workload and priorities; getting permit writers to think across multiple medias to potential environmental outcomes involving cross media issues; thinking differently about how to draft an EMS permit and actually incorporating the permit into an EMS; time constraints on development of a new approach; lack of buy-in from middle managers and staff; serious focus on completing the EMS permit given conventional permits and concerns from facilities with meeting their regulatory requirements of the conventional permits; convincing a company to take a risk with an innovative program and implement real change within the facility; getting a company to make capital investments in continual improvement projects during a pilot phase of a project; and existing conventional permits.

15. Email attachments:

The permits attached were draft permits. For the facilities that had permits issued, please provide the final permits. – Lynette Myers sent to U.S. EPA (Beth Termini) via e-mail November 15, 2007. Final permits for Ball Aerospace and Aeroflex are the permits that were public noticed. No other “final” permits were found in the project file or were otherwise available directly from the project partners (i.e., project partners have the same version of the permit).

Please provide copies of all of the follow-up assessments (including data) that were done. Only the addendums were attached. Also, the baseline reports attached did not include any of the baseline data. - Lynette Myers sent to U.S. EPA (Beth Termini) via e-mail November 15, 2007

The link provided to Title 25, Article 6.6 does not properly link to the text of the article. Please provide an electronic copy of the final article. – An electronic copy of the statutory language is included with this electronic transmission.

Also, the website for the project hasn’t been working for several weeks. Has it changed? (I have - <http://www.cdphe.state.co.us/el/EMS/emspermit/index.html>) - The webpage was updated earlier in 2007 and should now be available. Lynette Myers sent to U.S. EPA (Beth Termini) via e-mail November 15, 2007.