Alternative Planning under TURA:
Resource Conservation and Environmental Management Systems

Background Document for discussion by the TURA Ad Hoc Committee, January 13, 2021

Introduction

The TURA Ad Hoc Committee has been convened in order to review and strengthen the effectiveness and value of TUR planning to Massachusetts businesses while ensuring ongoing progress in reducing the use of toxics in the Commonwealth and increasing the adoption of safer materials. The Ad Hoc Committee has been asked to address five focus areas. This background document provides information on one of these focus areas: alternative planning under TURA.

Overview

Under the 2006 amendments to TURA, TURA filers that have completed an initial plan and two updates have the option to do alternative resource conservation (RC) in alternate planning cycles. In addition, the 2006 amendments created an option for TURA filers to integrate TUR planning considerations into an Environmental Management System (EMS), rather than conducting TUR planning as a separate activity.

The alternative planning options are designed to encourage planners to apply the same source reduction tools and approaches they were using successfully for TUR planning to other environmental attributes. These options create alternatives for companies that may have been filing for several years and are interested in varying their approach.

Resource Conservation

There are four Resource Conservation asset areas:

- Asset 1: Energy use
- Asset 2: Water use
- Asset 3: Materials that contribute to solid waste, and
- Asset 4: Non-reportable chemical substances (e.g., used below threshold, exempt from reporting because not on the TURA list or still in design or R&D phase)

This option requires that the facility prepare a RC Plan no more than once every four years (with TUR Plan updates and implementation occurring at least every other TUR planning cycle). The RC Plan closely follows the TUR planning process with each step focused on the asset or assets being addressed. Both facility-wide and detailed plan elements must be included in the RC Plan. Facility-wide elements include employee notification, management policy, plan scope and expected changes in facility-wide use of the asset addressed. Detailed elements include process flow diagrams, accounting of asset use, goals for reduction, procedures used to identify options, screening for technically and economically feasible options, and implementation plans.

Instead of the regular TUR Plan Summary, a separate RC Plan Summary must be submitted for each asset addressed during the planning cycle. The RC Plan Summary includes information on the targeted asset selected by the facility in the past two years, the operations on which the facility chose to focus, baseline information on the asset use, options selected for

implementation, goals for reduction and the expected change in asset use upon implementation. This plan summary must be certified by the TUR Planner and the facility senior management, using certification statements that closely parallel the TUR Plan Summary certification statements.

Two years after the RC Plan Summary is submitted, the facility is required to submit a Resource Conservation Progress Report Form for each asset addressed in the RC Plan. The RC Progress Report requires information on the targeted asset, baseline information on asset use, information on the facility's progress towards meeting reduction goals established in the RC Plan, status of options implementation and TUR Planner and senior management certification.

TURA Environmental Management System

The TURA Environmental Management System (TURA EMS) allows facilities to incorporate toxics use reduction into their existing environmental management systems. Similar to the RC option, the facility must have completed its initial TUR planning effort plus two subsequent plan updates to be eligible for this option. In addition, the facility's existing EMS must have been in effect for at least one full Plan-Do-Check-Act cycle and must have undergone an independent audit.

A facility is not required to utilize any specific kind of EMS, but the EMS must include 14 defined elements that were developed to closely resemble the ISO 14001 EMS. Any toxic chemical reported on the most recent toxics use report (Form S) must be considered a significant aspect of the facility's activities, and all production units in the facility's most recent TUR Plan Summary are covered.

When using this alternative, an EMS Progress Report must be submitted every two years instead of the TUR Plan Summary. The Progress Report is designed to ensure that toxics use reduction is an integral component of the facility's EMS. The EMS Progress Report has three parts:

1. Section A focuses on the system's significant aspects that are covered (i.e., reportable) toxics. This section includes a list of the covered toxics, the objectives and targets established for this planning cycle and a brief description of progress made towards the objectives and targets associated with the previous planning cycle.
2. Section B focuses on how TUR planning has been integrated into the EMS. This is done in a series of yes/no questions prompting the planner to confirm that implementation of the TURA EMS includes checking for technically and economically feasible alternatives, soliciting employee ideas for TUR, promoting TUR in their day-to-day activities, monitoring byproducts and emissions and identifying all regulatory requirements triggered by the use of the toxic chemicals. It also prompts the planner to confirm that the EMS has been independently audited at least once in the previous two years and that the facility has solicited stakeholders for information on options for TUR. Space is provided to explain any "no" responses, and associated actions to achieve positive responses. Finally, this section offers space for the facility to provide additional information about their EMS activities.
3. Section C provides certification statements for both the Planner and the facility's senior management. These closely parallel the statements made in TUR Plan Summaries.

TUR Planner Eligibility to Certify each Alternative

In order to certify either alternative planning progress report a current TUR Planner must obtain additional training. Both options require initial two-day trainings that highlight the ways the alternative relates to TUR planning, and the specific requirements associated with the alternative planning. (Note: This does not apply to Asset 4; RC certification is not required in order to certify an Asset 4 RC plan.)

For RC plans only, the Planner must also maintain RC-specific continuing education (CE) credits. To be eligible to certify RC Plans, every four years the TUR Planner must obtain 3 CE credits each in energy conservation, water conservation and reduction of materials contributing to solid waste.

The TURA EMS option may be certified either by a TUR planner or by an EMS professional. In either case, the individual must have obtained the initial two-day training. However, no EMS professionals have taken advantage of this option to date.

In 2018, of the 239 certified TUR Planners:

- 18 were also certified Resource Conservation Planners
- 33 were also certified as EMS Planners
- 23 were also certified as both Resource Conservation and EMS Planners

Use of alternative planning options to date

Overall, for the planning years 2008 through 2018, a total of 69 facilities completed RC plans and a total of 15 facilities incorporated TUR into an EMS. In the 2016 planning cycle, a total of 18 filers took advantage of these options: 9 completed alternative RC plans and 12 chose to incorporate TUR into an EMS. In the 2018 planning cycle, a total of 20 filers took advantage of the options: 6 completed an RC plan and 14 incorporated TUR into an EMS.

The number of facilities maintaining a TURA EMS has been fairly consistent. However, the number of facilities conducting RC planning as an alternative to TUR planning has steadily decreased since the first year this was an option (2008). Table 1 shows the number of filers that completed a TURA EMS or an RC plan each year.

Table 1: Trends in number of filers, TURA EMS, and RC Plans

Planning Year	# TURA Filers: Total	# TURA Filers: TURA EMS	# TURA Filers: TURA RC Plans
2008	545	15	26
2010	511	14	11
2012	492	14	11
2014	493	13	6
2016	477	12	9
2018	468	14	6

Barriers to alternative planning: 2019 interview results

The alternative planning options were created to provide businesses with a range of choices, in order to ensure that the planning process continues to be useful. No filer is ever required to make use of an alternative planning option.

In 2019, TURA program staff members interviewed 19 limited practice planners to find out more about their planning process and their success and challenges. This included asking whether they had chosen to do alternative planning, and what factors influenced that choice.

Most of the planners had *not* chosen to use alternative planning. Staff members asked whether they had ever considered it; if they had considered it, why they had chosen not to use it; and whether they would consider it in the future.

Interviewees were not chosen based on whether they had ever used alternative planning. Of the sample of 19 planners interviewed, only one had chosen to do alternative planning. That planner stated that they preferred RC over traditional planning; and said that the RC option is a "godsend."

Responses indicated that many facilities that did not choose to do alternative planning found it was easier to continue doing a TUR plan update. Common themes included finding that alternative planning would be too much work; the facility did not have sufficient staff; or the facility was doing alternative planning anyway and did not want to systematize it. Others said they would lose momentum if they skipped some TUR planning cycles. Table 2 provides additional detail on responses from facilities about why they were not using alternative planning options.

Table 2: Interview Results: Responses from facilities *not* using alternative planning

Sector	Comments made in interviews
Coating, Engraving, Heat Treating, and Allied Activities	• Family-owned business; owner is not interested in changing systems that are already working. • Not aware of the options; has been at the company for only 1 year. Already tracking their energy and water use. • Have not seriously considered using RC option. Small company with very limited resources. Prefer to do the minimum to meet the requirements. RC planning would take additional investment of time. Outside the TURA planning process, the facility has replaced some lighting and adopted more efficient motors. • Lack of time and resources to implement RC-related updates to the facility. • Resource conservation has to be done anyway, but RC planning is an additional burden, not an advantage. Business is very affected by small changes in operating costs.
Pulp, Paper, and Paperboard Mills	• Considered, but decided it would be more work. Don't have a good system in place. • Would only consider it if TUR options became stale; concerned about losing TUR momentum.
Textile and Fabric Finishing and Fabric Coating Mills	• Have an ISO 140001 EMS, but do not want to include TUR in their existing EMS because it would become auditable and legal department advised

	against it.
Other sectors (Electronics, Wire Coating, Abrasive Products)	• Considering RC planning for the future cycle. Management is highly supportive of this as part of its over-all sustainability initiatives. • Focus is on scrap reduction. Have done several energy and water conservation projects in the past but did not do as part of TURA alternative planning. • Company has an ISO 9000 certification, but feels that the TURA EMS process, in particular the amount of self-auditing required, is not warranted. No customer demand for an EMS. Will reconsider once the ISO 9000 process is working well for them. • RC is just one more plan to maintain; they do as much RC as possible anyway. • Considered RC and EMS, but decided that EMS would not be helpful, in part because the facility does not have enough EH&S staff to keep such an initiative moving forward.

Potential areas for adjustment

For facilities that prefer to continue doing TUR planning every two years, no changes are needed in this area of the program. However, some facilities find they are no longer benefiting from TUR planning every two years but have not chosen to do alternative planning. In particular, some facilities are continuing to choose TUR planning simply because it is less work than alternative planning.

For those that would like to do TUR planning less often but have not yet tried an alternative planning option, several options are available to potentially increase the use of alternative planning options. Among others, these options include using desk audits to encourage all facilities to prepare quality plans; expansion of Asset 4 (non-reportable substances) within the RC planning structure; clarification and simplification of guidance; and examining the approach to reporting.

Inspections and Enforcement. Some TUR planners have noted that if facilities are putting only minimal effort into a plan update process, there is little incentive to invest in an alternative plan. A strong compliance and enforcement program, including detailed desk audits, could help to encourage more attention to TUR plans as well as identifying facilities that could benefit from alternative planning.

Expanded use of Asset 4: Non-Reportable Substances. Asset area 4 allows facilities to apply the TUR techniques and planning process to other substances for which they are not required to report and plan. This option does not require additional TUR Planner RC certification. This area allows companies to focus on substances that are of concern to their workers, customers or for other business reasons, even if they are not reportable under TURA.

Examples of options under Asset 4 include:

- Substances used below threshold;
- Non-listed substances;
- Substances in exempt uses, including those used in articles, laboratories, facility maintenance and those still in the research or design phase.

It may be useful to identify other tools that businesses are already using that could be linked to Asset 4 planning. For example, if there are other certification programs that include non-listed substances, it may be useful to make the link to these additional tools. Climate resiliency planning concepts could also be relevant for Asset 4 planning provided they fit the regulatory framework in 310 CMR 50.92(2).

Resource Conservation Guidance. In 2019, MassDEP convened a group of experienced planners to review the TUR planning guidance and recommend updates to ensure it continues to provide maximum value. A similar approach could be useful for RC planning; however, the planners who participated in the group generally did not think this was a necessary step.

Examining the approach to RC progress reporting. Currently the perception is that there is a doubling of effort associated with RC planning (e.g., do RC planning in 2020, then TUR Planning, and submit TUR Plan Summary PLUS RC Progress Report in 2022). (As noted above, facilities must complete one progress report for each asset focused on, including a comparison of achieved results versus baseline year.) Are there options for making this process more straightforward, or ways to increase value of the existing approach?

Questions for discussion

The Program has identified the following questions for discussion at the January 13 meeting:

Experience with Resource Conservation Planning

- Planners: Have you (or one of your clients) taken advantage of this alternative? What would encourage your facility/client to take advantage of this option?

Experience with TURA EMS

- Planners: Have you (or one of your clients) taken advantage of this alternative? What would encourage your facility/client to take advantage of this option?

Guidance and Training

- Planners: What has your experience with the guidance been? What can be done to improve the RC and/or EMS guidance? Is this a priority?
- What additional tools/resources would be helpful? For instance, are there organizations outside of the TURA program that have trainings or resources available that we should highlight?
- How can we improve on the trainings (both initial and continuing education)? Some Planners have indicated that they do not have enough opportunities to earn credit toward their RC certification. What are the options for addressing these challenges and improving the experience for Planners?

Additional Questions

- Taking account of the responses from the interviews with limited practice planners, should we encourage more facilities to use alternative planning? If so, what are the best ways to encourage facilities to do this?
- Are there health and environmental priorities your facility is focusing on that are not accounted for within the TUR planner, RC planning, or EMS planning options?
    - In 2006, the focus of RC planning was largely energy conservation. How have circumstances changed, and do the existing options provide sufficient flexibility to address these changes?
    - For instance, many facilities are now focused on climate preparedness and resiliency or the circular economy. Is this work well integrated into the alternative planning options, or is there room for additional integration?
    - Drought planning has been identified as one important aspect of climate resiliency planning in the Commonwealth. Would it be useful and appropriate to create planning-related resources specifically on this topic?
- Are there opportunities to keep TUR planning relevant by integrating it with other current planning/assessment programs? (e.g., EPA energy programs, emergency preparedness, climate change resiliency plans, ISO 14001) What would make this more feasible/attractive?
- Are there additional ways to streamline the reporting process (for example, integrating TUR and RC into one overall plan and plan update)?