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Implementing pollution prevention (P2) is done in four key steps: plan, do, check, act.

Step One: Plan

The planning stage is about knowing your facility and where your focus will be. You first need to identify the scope of what you are analyzing. Is it a specific activity, or is it your facility as a whole? Then, make a list of all the related inputs and outputs. **Inputs** are any materials, products, and/or resources, such as energy or water, that are entering the process. **Outputs** are products, byproducts, and/or waste the process generates.

For example, the following are considerations that might be made for brake cleaning:

- What safety protocols or equipment are required for the process?
- What spill-prevention techniques are utilized in this process?
- What administrative tasks are associated with the process?
- Is special training required to complete this process?
- Has the process been standardized?
- Are any inputs or outputs immediately harmful to staff or the environment?

With all of the information now readily available for your chosen process. It's time to brainstorm! Let's consider options for different approaches to P2:

Operational Changes:

Improve how the activities at your facility are being completed. This includes training and standardizing processes. Material Substitutions: Substitute materials to inherently safer alternatives or modifying materials to contain less harmful substances.

Product Modifications:

Modify products or services to be more environmentally friendly. This considers what customers are looking for and if it can be offered sustainably.

Process and Equipment Modifications:

Reduce your waste through more efficient equipment, changing the parameters of a process, or modifying the layout of a process. Parameters could include timing, temperatures, pressures, concentrations, etc.

Inventory and Material Management: Improve how inventory and materials are

tracked, purchased, stored, organized, accessed, and disposed.





Once you know your approach and what you are trying to reduce, your P2 goal is ready to be implemented.

Step Two: Do

Put your plan into action. Make sure to have clear due dates and track your progress. The due date will give you a timeline for implementation and a goal to achieve. You'll need to establish a starting point or baseline to track your progress. Establishing baselines and tracking can be done through spreadsheets, logs, waste shipment manifests, utility meters/bills, and/or purchase orders. By tracking your progress, you'll be able to see how effective your planning stage was and realize available reductions that you identified.



Step Three: Check

Analyze the progress of your P2 goal. The tracking from the previous step will set you up to do this. You can compare ongoing costs, waste generation, and/or material use to the previous process. If a P2 goal is not going according to plan or some issues have come up hindering progress, this is the time to identify the root causes of those issues.

Step Four: Act

This step is to improve your P2 goal continuously. If there was an issue identified in the check phase and a root cause was identified, this is where you act on it and implement the countermeasure to address it. P2 Goals often take time and effort to keep in place or get to a completed state. This ensures that the goal can adapt to unforeseen circumstances or identified improvements. If no issues were found in the check phase, then this step will just be to sustain the goal and keep moving forward!

Questions?

Contact our Pollution Prevention team at 602-771-8083 or P2@azdeq.gov.