ADEQ's Pollution Prevention (P2) Program

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Arizona Department of Environmental Quality

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Outline

General Information About P2

- Why P2?
- Waste Management Hierarchy
- What is P2 in Arizona?
- Who needs to file a P2 Plan
- P2 Filing Exemptions
- Plan Forms
- ADEQ's P2 Planning Program
- Progress Report

Why P2?

- Historically environmental protection programs in the U.S. have focused on ***controlling*** not ***preventing*** pollution.

- A better approach that focused on preventing pollution was needed.

Waste Management Hierarchy

In 1990, the Federal Pollution Prevention Act declared that: Pollution should be prevented or **reduced at the source whenever feasible**

What is P2 in Arizona?

Arizona legislature adopted a state P2 Policy in 1991

P2 means operational procedures and processes and improvements in housekeeping or management techniques that reduce potential or actual releases of pollutants to the overall environment including all air, water and land resources affected by those pollutants.

[Arizona Revised Statutes (A.R.S.) §49-961.7.]

What is P2 in Arizona?

Recycling

Reclamation

Reuse

Substitution

Activities that avoid, eliminate or reduce the generation of hazardous waste, the use of toxic substances, or the release of a pollutant or contaminant at the source

Business Changes

Conservation

Waste Minimization

Who needs to file a P2 Plan?

If during the previous calendar year your facility:

- Filed a Toxic Release Inventory (TRI) form
- Generated an average of 1 kilogram (kg) of acute hazardous waste or 1,000 kg of hazardous waste per month
- Used in excess of 10,000 pounds of a toxic substance

P2 Filing Exemptions

- Toxic substances used or produced with mining/ metallurgical
- Facility is located on tribal land
- Household hazardous waste collection facility
- The facility caused a one-time, unexpected, event that generates a hazardous waste or an acutely hazardous waste from an unused hazardous substance
- The facility is required to file solely due to the storage, supply, application or use of a pesticide
- Permitted facility primarily engaged in receiving waste from offsite
- The facility has been issued an agricultural general permit

ADEQ's P2 Planning Program

If you meet any of the thresholds and are not exempt you are required to file a Toxic Data Report **each year on July 1, which includes:**

- A **New Plan** if the facility is new to the program
- A **Plan Amendment** if the facility already in the program needs to:
  - ❑ make changes to an existing P2 Plan
  - ❑ extend the time frame of an existing Plan
  - ❑ add new goals or amend existing goals
- An **Annual Progress Report** on completion of the specific reduction goals which includes:
  - ❑ Completion status (on schedule; completed; delayed; dropped)
  - ❑ How much reduction was achieved
- An **Annual Toxic Release Inventory (TRI) Form A or Form R**
  - ❑ Filed electronically via TRI-ME and we receive a copy. Additional information on filing thresholds is available on our website http://www.azdeq.gov/environ/waste/p2/tri.html

Plan Forms

New Plans/Amendments

Editable word forms and Plan guidance manual available for download on ADEQ's website

http://www.azdeq.gov/function/forms/appswaste.html#p2

Progress Report Forms

Facility specific forms will be e-mailed each year in April/May before the July 1 deadline. Progress Report instructions and goal forms are also available for download on our website at the address listed above.

New Plan/Amendment forms

Pollution Prevention (P2) Analysis and Plan for

ABC Incorporated

(Company Name)

ADEQ P2 ID Number: 20*0999*

This document is an:

☒ Original Plan

☐ Amendment to the Original Plan

The Plan Time Frame (Section 5) is:

From: *June 1, 2013* (beginning date)

To: *July 1, 2015* (the last goal completion date)

Mail the completed P2 Plan to:

Arizona Department of Environmental Quality
Sustainability Programs Unit
Pollution Prevention Program
1110 West Washington Street
Phoenix, AZ 85007

Should be at least two years and correspond with Section 5 and last goal completion date in Section 7.

6 digit number assigned by ADEQ P2 Program. Note this is not your EPA ID #. If you are submitting an original plan contact P2 staff for a P2 ID Number.

Plan forms – Section 1 & Section 2

Note the person signing the form should be a senior official with management responsibility and an original signature should be included.

Section 1. General Information (A.R.S §49-963.J.1 and J.2)
Requirement: Provide the name and location of the principle business activities at the facility, and the name address and telephone number of the owner or operator of the facility and of the senior official with management responsibility at the facility

Name of Company: ABC Incorporated

Owner or Operator Name and Telephone Number: Rodney Senior, 602-555-1123

Mailing Address: P.O. Box 123, Phoenix, Arizona 88888

Description of what this business does (principle business activity): Manufactures cultured marble bathroom fixtures such as sink tops, bathtubs, and showers. Our state of the art production facility in Phoenix is able to offer a wide selection of color and design options.

P2 Technical Contact Information:

Contact Person: John Doe

Telephone Number: 602-555-1122 Fax Number: 602-555-1135

E-mail Address: john.doe@abcinc.com

*One P2 Plan may be submitted to cover more than one facility. Please ensure that Section 3 is completed for **each** facility covered by this Plan.*

How many facilities will be covered by this Plan? 1

Section 2. Certification (A.R.S. §49-963.J.2 and 3)

I certify that I have personally examined this Pollution Prevention Plan. I am familiar with its contents and all attachments. Based on my inquiry of the persons immediately responsible for obtaining the information contained in the Plan, I believe, to the best of my knowledge, the information presented in the Plan is true, accurate and complete.

Certifying Signature	Title	Date
	President & CEO	6/5/2013

For the person certifying the Plan: (This person must be a senior official with management responsibility at the facility.)

Print Name: Sid D. Senior

Print Title: President & CEO

Telephone Number: 602-555-1345 ***Fax Number:*** 602-555-1135

E-mail address: sid.senior@abcinc.com

Include as much relevant information to help ADEQ understand what occurs at the facility. Summary descriptions from facility websites could be useful.

Please note an umbrella plan can cover more than one facility. Section 3 information should be completed for each facility.

Plan forms – Section 3

This is the 6 digit North American Industry Classification System (NAICS) number. Visit the census bureau for more information http://www.census.gov/eos/www/naics/

Section 3. Facility Information (A.R.S. §49-963-J.1; §49-963-I)

Facility Name: ABC Incorporated

Physical Address: 1234 Main Street, Phoenix, AZ 88888

Primary NAICS Code (6 digits): 326199 **Other NAICS Codes** (optional): None

Permits: *Please list below any permits at this facility. Write "NONE" for any permits that do not apply.*

RCRA ID Number (also known as EPA ID Number): AZD111222333

NPDES Permits: ADEQ permit AZR00A212

Air Quality Permits: Maricopa County Permit A9600202

Water Quality Permits: None

Other: List any other environmental permits: None

Plan Requirement Threshold(s) Met
(Please check all Plan filing threshold(s) the facility met which requires this facility to file and maintain a P2 Plan.

- ☐ Generated or shipped offsite for purposes other than recycling an average of one thousand kilograms per month of hazardous waste in calendar year 20____. *The cumulative amount and streams of hazardous waste generated at the facility include all of the following waste streams:*____
- ☐ Generated or shipped offsite for purposes other than recycling an average of one kilogram per month of acutely hazardous waste in calendar year 20____. *The cumulative amount and streams of acutely hazardous waste generated at the facility include all of the following waste streams:*____
- ☒ Met the thresholds required to file a Toxic Release Inventory (TRI) form (form R or A) for the calendar year 2012. The TRI identification number assigned to this facility is *85993CBLSC7211N. The TRI chemicals that met the thresholds are:* Styrene
- ☒ Used in excess of 10,000 pounds of a toxic substance in calendar year 2012. The *toxic substances used above the 10,000-pound threshold* are: Styrene
- ☐ Facility wants to file a voluntary P2 Plan although it does not meet the P2 Plan filing thresholds.

Include descriptions of the specific wastes and waste codes if available e.g. chromium- D007

Plan forms – Section 4

Section 4. Management and Corporate Support (A.R.S. §49-963.J.5 and J.9)
Requirement: Provide a written policy setting forth management and corporate support for the pollution prevention plan and a commitment to implement the Plan to achieve the plan goals. The Plan shall include employee awareness and training programs to involve employees in pollution prevention planning and implementation to the maximum extent feasible.

P2 POLICY

Check box 1 or 2 below.

1. ☒ The senior official with management responsibility at the facility has signed, and we have posted in our facility, a copy of the P2 Policy contained in the ADEQ P2 guidance manual. A copy of the signed policy is provided on the next page of this Plan.

OR

2. ☐ The senior official with management responsibility at the facility, has signed, and we have posted in our facility, a copy of our own P2 Policy setting forth management and corporate support for the P2 Plan and a commitment to implement the Plan to achieve the Plan goals. A copy of the signed policy is provided on the next page of this Plan.

Check each box that applies and complete information below that applies.

3. ☒ The policy will be displayed in view of all employees and introduced to new employees

   The policy is posted at the following location(s): Employee Break Area

4. ☒ The policy will be available in languages other than English, as appropriate, and to the public and customers (as appropriate). Spanish

Plan forms – Section 4

Ensure this is an original signature of the senior management Official Listed in Section 2

Pollution Prevention (P2) Policy

Name: ABC Incorporated

Our company is committed to protecting the health and safety of the public, our employees and protecting the environment.

To the best of our ability we will:

- Develop a P2 Plan and implement the Plan to achieve the Plan goals.
- Provide employee awareness and training programs to involve employees in P2 planning and implementation to the maximum extent feasible.
- Incorporate the P2 Plan into management practices and procedures.
- Use P2 to reduce or eliminate the toxicity and the amount of toxic substances and hazardous wastes and minimize their undesirable effects on air, water and land resources, and to conserve resources, including energy and water.
- Comply with the relevant laws and regulations and implement programs and procedures to assure environmental compliance.

Our management and employees are committed to continual improvement and will continuously seek opportunities to improve the effectiveness of our environmental program.

	Vice President	June 6, 2013
Signature	Title	Date

Plan forms – Section 5

Section 5. Scope and Objectives (A.R.S. §49-963.K; A.R.S. §49-963.J.6)
Requirement: The time frame of the original Plan must span at least 2 years at a minimum. Provide a statement of the Plan's scope and objectives.

Plan Time Frame: The current time frame of this Plan or amendment will be:

FROM: 6/01/2013 **TO THE LAST GOAL COMPLETION DATE:** 7/01/2015
(month/day/year) (month/day/year)

Note: Plan time frame must be the same as the date defined on the cover page.

PLAN SCOPE

The Plan scope should contain, at a minimum, a list of all process areas to be analyzed in the Section 6 process review, and include toxic substances and hazardous wastes for which the facility must file this Plan. This scope should be as specific as possible, as an example, you may use a facility wide process area such as "Spill and Leak Prevention" or a process area such as a "Spray Booth Operations." Note each process area listed here must have a corresponding "Analysis and Opportunity Development" completed for Section 6.

Staff will look at the following process areas for this Plan:

1. Spray Booth Operations/Gel coating
2. Material Receiving Area
3. Spill and leak prevention
4. Finishing

ENVIRONMENTAL OBJECTIVES
The general scope objectives were developed and include the following *(Check all that apply)*:

- ☒ Improved operating practices to improve housekeeping, or spill and leak prevention.
- ☐ Improved management practices, such as purchase and inventory control.
- ☒ Process or equipment modifications to minimize the use of toxic substances.
- ☐ Process or equipment modifications to minimize the generation of hazardous waste.
- ☐ Process or equipment modifications to minimize the generation of hazardous air pollutants (HAPs) or volatile organic compounds (VOCs) or particulate emission reductions.
- ☒ Raw material modifications or substitutions to minimize the "use" of toxic substances.
- ☐ Resource conservation (water, energy, etc).
- ☐ Reuse or recycling of materials or wastes.
- ☐ Reduction in use or emissions of greenhouse gasses or ozone producing chemicals
- ☒ Other: Protecting employee safety and health

Note this date should be the same date listed on the cover page and the last goal completion date should match the latest goal in Section 7.

The same process area numbering should be used in Section 6.

Plan forms – Section 6

Section 6. Analysis and Opportunity Development (A.R.S. §49–963.J.7)
Requirement: Provide an analysis identifying pollution prevention opportunities to reduce or eliminate toxic substance releases and hazardous waste generation.

1. Process Area (# 1): Spray Booth Operations/Gel Coating Process

2. Process Information

a. ☒ Describe the process steps:

1) Completed cultured marble pieces (sinks, tubs and shower stalls) are moved on rolling tables to a filtered open front spray booth.
2) Gel coat is mixed inside the spray gun with 2% methyl ethyl ketone peroxide (MEKP) and gel coat resin containing about 49% (weight percent) styrene monomer resin.
3) Styrene gel coat resin and MEKP is applied in the spray booth with a high volume low pressure (HVLP) spray gun so that a layer of gel coat is applied onto the cultured marble piece.
4) The cultured marble piece is then placed into one of the two natural gas heated curing tunnels to dry. The curing tunnels. The curing tunnels have a series of thick plastic strips on one side so employees can reach in and move the sprayed pieces in and out of the tunnel. Exhaust from the tunnels is vented to the outside.

b. ☒ Discuss the toxic substances (inputs) used in the process and why they are used:

Methyl ethyl ketone peroxide (MEKP) and gel coat resin containing styrene monomer resin is used to provide a protective coating on the pieces. This MEKP catalyst assists in curing the resin coating.

c. ☒ Discuss the wastes and emissions (output) generated by the process. Include wastes and emissions due to spills, cleaning, maintenance, unused or expired raw materials, etc, and include waste codes.

Waste:
Waste includes used spray booth and personal respirator filters, used rags, chemical bottles, drums and totes.

Rags are used for general shop cleanup, which is necessary due to gel coat over spray. Used spray booth and respirator filters as well as used rags are placed in the trash as solid waste, which is hauled to the local landfill. Empty 55-gallon drums that were emptied of gel coat and acetone are returned to the supplier for reuse.

Gel coat over spray falls on the floor and polymerizes. The floor has a felt covering. This polymerized material and the floor felt covering, which is periodically removed, is sent to the landfill as solid waste.

Any leftover gel coat resin not used is polymerized on-site then sent to the landfill as solid waste.

Ensure the Process area # and descriptions match the ones provided in Section 5.

You can include process maps, flow diagrams, cause and effect diagrams, root cause analysis/five whys in order to complete this analysis

Plan forms – Section 6

Root cause analysis should result in an explanation stating why the waste generation, emission or toxic substance use occurs

Emissions:
Emissions are generated from spraying, curing and cleanup. Gel coat spraying and curing creates styrene emissions. Spraying emissions are due to styrene atomization. Curing emissions are from the large surface area of the pieces and volatile nature of styrene. emissions from over-spray on the floor. Some large catalyzed gel coat resin particles containing styrene miss landing on the piece end up on the shop floor or are captured in the spray booth filter, which while curing creates emissions. The MEKP catalyst in the spray becomes incorporated into the product so the MEKP emissions are small.

The spray booth exhaust fan pulls in air, styrene and small MEKP emissions from the gel coat mixture. These emissions are removed from the facility and exhausted directly to the outside by air handling equipment. Facility wide styrene emissions total 2,500 pounds per year. Spray gun equipment is cleaned at the end of each day by spraying a few ounces of acetone through the gun. Acetone is used because it dissolves the styrene resin, which will clog the guns, if it is allowed to cure in the gun. The acetone sprayed through the gun all evaporates as air emissions.

d. ☒ Describe what happens to each waste and emission. (Is it disposed, segregated recycled, treated, incinerated, released to air, etc?): *See answer provided above.*

e. ☒ Discuss whether raw material purchases produce packaging material that must be handled. (i.e. pallets, drums, bags, etc.) If so, describe what happens to this material.

Acetone drums are returned to the vendor for reuse. Gel coat resin totes are returned to the vendor for reuse. MEKP plastic bottles are reused on-site or cleaned and sent off-site as solid waste. There is no other packaging material. Therefore, raw material purchases do not produce much packaging waste.

f. ☒ Discuss the root cause of each waste generation, emission or toxic substance use:

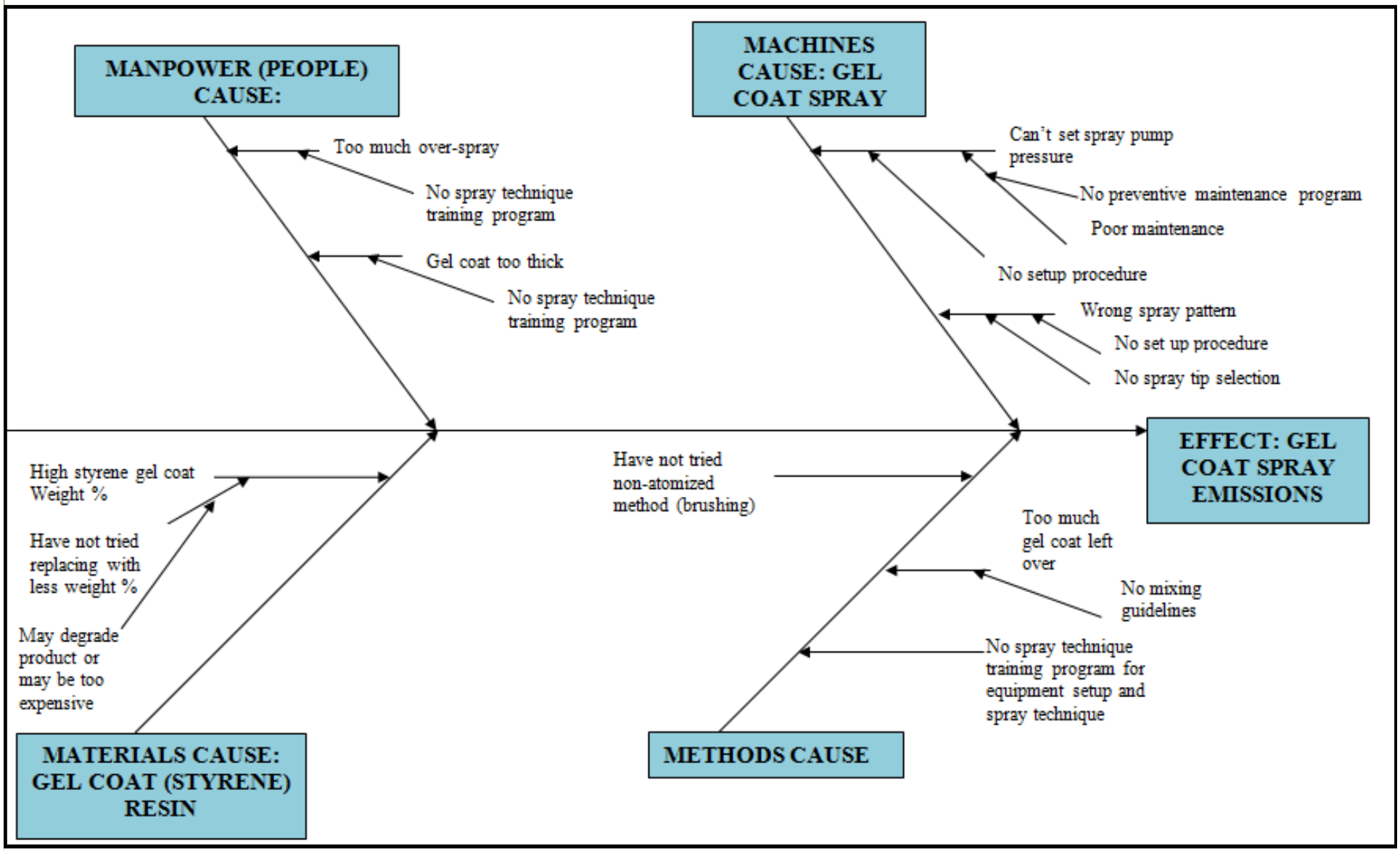
Root Cause
From our process mapping and cause and effect diagrams we know that the styrene emissions result from curing of the gel coat (evaporation) and from our choice of applying the gel coat by atomization (spraying).

Our root cause analysis and further research determined that the air emission amount is affected by: 1) the weight percent of styrene in the gel coat, 2) the application method, 3) the spray gun type, 4) the spray gun applicator's spraying skills (with affects the amount sprayed and the amount of over spray), and 5) the spray pump pressure, spay nozzle choice and equipment setup methods.

Currently there is no other non-styrene substitute that is less toxic or can perform the function for the gel coat resin. However, there are some gel coat resins containing different styrene amounts, and different spray gun types.

The acetone emissions result from choosing acetone as a cleaning solvent and spraying acetone through the spray gun to clean it.

Section 6 – Cause and Effect/Fishbone example



Plan forms – Section 6 example continued

Section 6. (Continued)-

3. Are there pollution prevention opportunities? *Your P2 analysis involves re-thinking how this process or function may be accomplished in other ways that might prove to be environmentally preferable, while still meeting cost and performance requirements. The waste management hierarchy and the different levels and kinds of pollution prevention techniques (alternatives) should be considered, such as using substitute products, technology changes, improved work practices, etc. Refer to the pollution prevention techniques table in the ADEQ plan guidance document for examples.*

Can the process "inputs" or method, etc. be eliminated or modified to reduce waste, emission(s) or toxic substance use?

☒ Yes ☐ No

Can any of the toxic or non-toxic substances be:

- ☐ Eliminated?
- ☒ Used less?
- ☐ Reformulated to reduce toxicity?
- ☐ Replaced with a less toxic substitute?
- ☐ Recycled or reused?
- ☐ None of these
- ☐ Other ____

4. Based on the results from item 3 above: Describe the pollution prevention opportunities to eliminate at the source, reduce at the source, reduce toxicity, reduce the volume, reuse or recycle each waste emission or use of a toxic substance.

Opportunity (A): Train operators in the best available spraying techniques and spray equipment set up techniques to reduce overspray and styrene emissions.

Will this opportunity be developed into a goal?
☒ YES, fill out a goal form in Section 7, **Goal number** 1.

☐ NO, give the reason here

Opportunity (B): Replace current gel coat with a low styrene gel coat. This will reduce styrene emissions.

Will this opportunity be developed into a goal?
☐ YES, fill out a goal form in Section 7, **Goal number** ___.

☒ NO, give the reason here.

Explanation: Opportunity (B) will not be implemented at this time because low styrene gel coat is too expensive. We will continue to search for a more affordable product.

Write each feasible opportunity onto a goal form found in Section 7. Use one goal form for each feasible opportunity.

Note this goal number should match Section 7 and goals are numbered consecutively

Plan Forms – Section 7

Most preferable goal statement format

If the results cannot be reported in pounds, gallons, Kwh or therms select the "no measure" option

Section 7. P2 Performance Goal (A.R.S. §49–963.J.4.)

Facility Name: **ABC Incorporated** **P2 ID #: 200999**

Complete one form for each goal

1. Goal Statement: *Enter a specific performance goal or individual production process goal that includes a statement of the expected result. The goal statement should address what can be accomplished by implementing one of the opportunities from Section 6. Goal statements should be in the form (Action Verb) + (Target chemical, emission, or waste stream) used for/in (Process X). Use action verbs such as Reduce or Eliminate. For example: Reduce methylene chloride used for parts degreasing by 80%. If a goal cannot be measured or will take a long period of time to complete, then include an action plan that outlines measurable milestones. See page 48 of the guidance manual for an example of an action plan. Submit these goal sheets with your new plan or amendment and the annual progress report.*	2. Scheduled Completion Date (Month/Day/Year)	3. Completion Status: OS=On Schedule DR= Dropped D = Delayed C=Completed	4. Name of Toxic Substance and Waste stream ***Include CAS #; and RCRA Waste Code #***	5. State Volatile Organic Chemical "VOC", Ozone Depleting Chemical "ODC", "Both" or "NA"
Goal (# 1): Process Area(s) (#3) Goal Statement: Reduce styrene emissions from gel coat spraying by 35%	07/01/2015	☐ C ☒ OS ☐ D ☐ DR	**Styrene** **CAS# 100-42-5**	☒ VOC ☐ ODC ☐ ODC & VOC ☐ NA

6. If this goal has been delayed or dropped (box 3), provide an explanation and include a new estimated completion date:_____

7. Actions Needed to Implement the Goal:	8. Baseline Quantity (Starting amount)	9. Baseline Year	10. How much was reduced or eliminated?	11. Month & Year Box #10 Was Measured	12. How much money (US $) was saved by this goal?	13. Reduction Quantity is Adjusted for Production?	14. Production Ratio (Optional Unless Box #13 is Marked Yes)
Actions we will take to implement this goal are: Train operators in the best available spraying techniques and spray equipment set up technologies to reduce overspray and styrene emissions.	2500 (Check units) ☒ Pounds ☐ Gallons ☐ KWH ☐ Therms ☐ No measure	2012	_____QTY. (Check units) ☒ Pounds ☐ Gallons ☐ KWH ☐ Therms ☐ No measure			☐ Yes ☐ No	

Plan Forms – Section 8

Section 8. Management Practices and Procedures (A.R.S. §49-963.J.10)
Requirement: Describe provisions to incorporate pollution prevention into management practices and procedures in order to ensure its institutionalization.

Management has developed the following provisions to incorporate the Pollution Prevention Plan into established programs, policies and procedures in order to ensure its institutionalization:

(Check all that apply)

- ☒ The Management P2 Policy (Section 4) has been posted.
- ☒ Programs, procedures or policies were revised to incorporate Plan goals.

Management informs employees of procedural changes due to the Pollution Prevention Plan goals through various methods including:

- ☒ At mandatory monthly operation and safety meetings
- ☐ Internal memos, directives and information circulars
- ☒ Amendments to the operations manual
- ☐ Impromptu meetings held to discuss any immediate procedural, operational or equipment changes having to do with pollution prevention
- ☐ Other: _____

- ☒ All production managers will be responsible for assuring Plan activities are incorporated in procedures (where applicable).
- ☐ Pollution prevention is included in employee and manager performance evaluations.
- ☒ Employees are recognized or rewarded for suggesting successful pollution prevention opportunities.
- ☐ Accounting practices allocate the costs of waste management and regulatory compliance practices to the operations that use toxic chemicals or produce wastes or emissions.
- ☐ Pollution prevention considerations are included in procurement and inventory procedures to minimize the unnecessary purchase and accumulation of toxic substances.
- ☐ Other: _____

Plan forms – Section 9

Section 9: Employee Awareness and Training Programs (A.R.S. §49-963.J.9)
Requirement: The Plan shall include employee awareness training programs to involve employees in P2 planning and implementation to the maximum extent feasible.

Check either box 1 or 2. If you check box 2, you may check box 3 if a training sample is needed.

Training is completed and training documents are enclosed:

1. ☐ Our facility's P2 training documents are enclosed. We have also included evidence (e.g. sign-in sheet) of how many employees were trained.

Training is not yet completed but a goal is established:

2. ☒ We will fill out the training goal sheet found on the following page, place it in the Plan and implement the goal to develop P2 training. We will send our P2 training documents to ADEQ after conducting training or in the next annual Toxic Data Report. We will also include evidence (such as sign-in sheet) of how many employees were trained.

3. ☒ ADEQ please send a copy of the example P2 training documents to assist in developing my training program.

(Check all that apply)
PURPOSE *(check at least the first box)*
☒ The purpose of the P2 employee training and awareness program is to teach employees about P2 so that they can participate in identifying opportunities and also assist in achieving the Plan goals.
☐ Additional Purpose: _____

OBJECTIVES *(check at least the first box)*
☒ The objectives of this program are to:
- Raise employee awareness of environmental related activities within the facility
- Train employees in their P2 responsibilities
- Recognize employees for their P2 efforts
- Encourage employee participation

☐ Additional Objectives: _____

SCOPE *(complete all questions)*
How frequently will training be held? Annually
What types of employees will attend? All employees
How will attendance be monitored? Sign in sheet

METHODS *(check at least one)*
The training methods will include:
☒ Class room training session(s) ☐ Video presentations
☐ Newsletters ☐ Posters ☐ Other: _____

TRAINING TOPICS *(check at least the first box)*
☒ The P2 training topics include the following subjects:
- Definitions related to P2
- Benefits of P2
- Waste management hierarchy
- Company pollution prevention plan
- How to submit P2 ideas

☐ Additional Topics: _____

Plan forms – Section 9

Please note that P2 training documents must, as a minimum include:

- ❑ A definition of pollution prevention
- ❑ A description of the waste management hierarchy
- ❑ The benefits of pollution prevention and
- ❑ Information on how the employees can become involved in pollution prevention planning and implementation

Sample P2 training available on our website for download in Spanish and English at http://www.azdeq.gov/environ/waste/p2/tools.html
If you need a Power Point version e-mail team member:
Jeanine Inman ji1@azdeq.gov
Farah Mohammadesmaeili fm4@azdeq.gov
Linneth Lopez lal@azdeq.gov

- ❑ ADEQ's boilerplate P2 training goal available in plan forms
- ❑ ADEQ's boilerplate "Continue P2 Training Goal" available after initial training completed

Plan forms – Initial Boilerplate Training Goal

Facility Name: ABC Incorporated **P2 ID #:** 200999

1. Goal Statement: (For the training goal, fill in dates and goal number in Box 1. Submit this goal sheet with your plan, or amendment or your annual progress report (until goal is closed). Also, submit the training documents to ADEQ-P2 when completed with your annual progress report.	2. Scheduled Completion Date (Month/Day/Year)	3. Completion Status:	4. Name of Toxic Substance and Waste stream **Include CAS #; and RCRA Waste Code #**	5. State Volatile Organic Chemical "VOC", Ozone Depleting Chemical "ODC", "Both" or "NA"
Goal (# 2): Process Area(s) (# N/A) Develop a pollution prevention specific employee training program by 10/03/2013 (date). Send training documents that include evidence (such as sign in sheet) of how many employees were trained to ADEQ-P2 by 11/03/2013 (date).	11/03/2013	☐ C ☒ OS ☐ D ☐ DR	N/A	☐ VOC ☐ ODC ☐ ODC & VOC ☒ NA

6. If this goal has been delayed or dropped (box 3), provide an explanation and include a new estimated completion date: _____

7. Actions Needed to Implement the Goal:	8. Baseline Quantity (Starting amount)	9. Baseline Year	10. How much was reduced or eliminated?	11. Month & Year Box #10 Was Measured	12. How much money (US $) was saved by this goal?	13. Reduction Quantity is Adjusted for Production?	14. Production Ratio (Optional Unless Box #13 is Marked Yes)
Actions we will take to implement the goal are: Training Program as discussed in Section 9 to include employee awareness and training programs to involve employees in pollution prevention planning and implementation to the maximum extent feasible.	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Plan forms – Boilerplate Training Goal (Continuous- updated yearly)

Pollution Prevention Training (A.R.S. §49-963.J.9.)

Facility Name: ABC Incorporated **P2 ID #: 200999**

Complete one form for each goal

1. Goal Statement: (For the continuing training goal, fill in date and goal number in Box 1. Submit this goal sheet with your Plan amendment, and your annual progress report.	2. Scheduled Completion Date (Month/Day/Year)	3. Completion Status: OS=On Schedule DR= Dropped D = Delayed C=Completed	4. Name of Toxic Substance and Waste stream **Include CAS #; and RCRA Waste Code #**	5. State Volatile Organic Chemical "VOC", Ozone Depleting Chemical "ODC", "Both" or "NA"
Goal (# 3): Process Area(s) (# N/A) Continue to train employees in pollution prevention awareness (A.R.S. §49-963.J.9.).	07/01/2014	☐ C ☒ OS ☐ D ☐ DR	N/A	☐ VOC ☐ ODC ☐ ODC & VOC ☒ NA

6. If this goal has been delayed or dropped (box 3), provide an explanation and include a new estimated completion date: _____

7. Actions Needed to Implement the Goal:	8. Baseline Quantity (Starting amount)	9. Baseline Year	10. How much was reduced or eliminated?	11. Month & Year Box #10 Was Measured	12. How much money (US $) was saved by this goal?	13. Reduction Quantity is Adjusted for Production?	14. Production Ratio (Optional Unless Box #13 is Marked Yes)
Actions we will take to implement this goal are: By July 1 each year (in the annual progress report), document training for current and new employees, by providing a statement of when the training occurred and how many were trained. P2 training includes employee awareness and training programs to involve employees in P2 planning and implementation to the maximum extent feasible. The number of people trained this year was: 25	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Plan forms – Section 10

Section 10. Existing Pollution Prevention Activities (A.R.S. §49-963.J.8)
Requirement: Provide an analysis of pollution prevention activities that all are already in place that are consistent with the Pollution Prevention Plan requirements.

Check ONE of the boxes below.

☐ We have not documented any previous P2 activities at our company.

OR

☒ We have documented P2 activities at our company and have described them below or attached addition pages with information about these projects with this Plan. (Include as much specific information as possible and any available quantitative data without disclosing any confidential business information.)

Describe or list the P2 activities that are already in place including amounts reduced (if available):

1). In 2012 this facility conducted a Green Lights electricity usage review. At that time all fluorescent light ballasts were replaced with electronic ballasts and more efficient light bulbs (Model T-8) have been used since. This has saved the facility about 15% on its electric bill.

_____

_____

_____

_____

_____

Plan Checklist

Example Plan Checklist

Instructions: Please include the completed checklist below with the Plan forms.

- ☒ Completed and submitted Section 1 for the primary facility.
- ☒ Completed and submitted Section 2 with official signature.
- ☒ Completed and submitted Section 3 for each facility included in this Plan.
- ☒ Completed and submitted Section 4, Pollution Prevention (P2) Policy, provided in the guidance manual, or developed your own policy with the required items: management and corporate support for the P2 Plan, and a commitment to implement the Plan to achieve the Plan goals.
- ☒ Completed and submitted Section 5 identifying the scope and objectives, with a Plan time frame of at least two years.
- ☒ Completed and submitted a Section 6 analysis for all process areas, each Toxic Release Inventory (TRI) toxic chemical that met the Plan filing thresholds and all hazardous or acutely hazardous wastes generated if the facility met the cumulative hazardous waste thresholds.
- ☒ Reviewed all process areas and waste streams described in Section 6 for possible pollution prevention opportunities.
- ☒ Completed and submitted Section 7 (Plan goals) for each feasible opportunity identified in Section 6.
- ☒ Completed and submitted Section 8 (Management Practices) describing how management will incorporate pollution prevention into activities and ensure it is institutionalization.
- ☒ Completed and submitted Section 9 (Employee Training) outlining the pollution prevention program to occur at your facility, and either completed a training goal or submitted a copy of the facility's pollution prevention training program documents. *Note: Pollution prevention training documents must, as a minimum, include a definition of pollution prevention, a description of the waste management hierarchy, the benefits of pollution prevention and information on how the employees can become involved in pollution prevention planning and implementation. Please also include* evidence (such as sign in sheet) of how many employees were trained in P2.
- ☒ Completed and submitted Section 10 (Existing Pollution Prevention Activities) documenting past pollution prevention activities (Not required for an amendment).

Complete this checklist when you have finished all Plan Sections.

Progress Report

The Annual Progress Report submittal consists of :

- ❑ Cover sheet to update any changes to the facility information or technical contact/management official
- ❑ Goal sheets to document the status of any open goals, measured reductions and cost savings associated with the reductions.

Note:

- Progress Report instructions and blank goal forms can be downloaded from ADEQ's website at: http://www.azdeq.gov/function/forms/appswaste.html#p2
- ADEQ P2 Staff will e-mail facility specific goal sheets in April/May.

Progress Report Cover Sheet Example

Annual Pollution Prevention Progress Report

Reporting Goal Completion / Progress Accomplished In Calendar Year

2013

Contact Information: Attn: Attn: John Doe - P2 ID #: 200999
ABC INCORPORATED
1234 Main Street,
Phoenix, AZ 88888

Facility Name or Mailing Address Corrections: _____

Technical Contact Corrections: _____

Telephone #: 602-555-1122 E-Mail: john.doe@abcinc.com

Fax #: 602-555-1135

My facility has implemented a P2 team: ☐ Yes ☐ No Previous for 2012 was: Yes

I certify that I have personally examined this Annual Progress Report, and that I am familiar with its content and attachments, and I believe the information presented in this report is true, accurate and complete.

Name (please print) or type: Sid Senior

Signature: _____ Title: President & CEO

Date: 06/23/2014 Telephone #: 602-555-1345 E-mail: sid.senior@abcinc.com

EPA ID: (RCRA ID #): AZD111222333 ADEQ P2 ID: **200999** EPA TRI ID: 85993CBLSC7211N

Send completed forms to: Jeanine Inman
Arizona Department of Environmental Quality
Sustainability Programs
Pollution Prevention, Mail Code 4415C-1
1110 W. Washington Street
Phoenix, AZ 85007

Progress Report Goal Sheet Example

Section 7. P2 Performance Goal (A.R.S. §49–963.J.4.)

Facility Name: **ABC Incorporated** **P2 ID #:** **200999**

Complete one form for each goal

1. Goal Statement: *Enter a specific performance goal or individual production process goal that includes a statement of the expected result. The goal statement should address what can be accomplished by implementing one of the opportunities from Section 6. Goal statements should be in the form (Action Verb) + (Target chemical, emission, or waste stream) used for/in (Process X). Use action verbs such as Reduce or Eliminate. For example: Reduce methylene chloride used for parts degreasing by 80%. If a goal cannot be measured or will take a long period of time to complete, then include an action plan that outlines measurable milestones. See page 48 of the guidance manual for an example of an action plan. Submit these goal sheets with your new plan or amendment and the annual progress report.*	2. Scheduled Completion Date (Month/Day/Year)	3. Completion Status: OS=On Schedule DR= Dropped D = Delayed C=Completed	4. Name of Toxic Substance and Waste stream ***Include CAS #; and RCRA Waste Code #***	5. State Volatile Organic Chemical "VOC", Ozone Depleting Chemical "ODC", "Both" or "NA"
Goal (# 1): Process Area(s) (#3) Goal Statement: Reduce styrene emissions from gel coat spraying by 35%	07/01/2015	☐ C ☒ OS ☐ D ☐ DR	**Styrene** **CAS# 100-42-5**	☒ VOC ☐ ODC ☐ ODC & VOC ☐ NA

6. If this goal has been delayed or dropped (box 3), provide an explanation and include a new estimated completion date:_____

7. Actions Needed to Implement the Goal:	8. Baseline Quantity (Starting amount)	9. Baseline Year	10. How much was reduced or eliminated?	11. Month & Year Box #10 Was Measured	12. How much money (US $) was saved by this goal?	13. Reduction Quantity is Adjusted for Production?	14. Production Ratio (Optional Unless Box #13 is Marked Yes)
Actions we will take to implement this goal are: Train operators in the best available spraying techniques and spray equipment set up technologies to reduce overspray and styrene emissions.	2500 (Check units) ☒ Pounds ☐ Gallons ☐ KWH ☐ Therms ☐ No measure	2012	500 (Check units) ☒ Pounds ☐ Gallons ☐ KWH ☐ Therms ☐ No measure	12/2013	$2,000	☐ Yes ☒ No	

Progress Report

During April/May before the July 1 deadline P2 staff e-mails the technical contacts/consultants the facility specific goals and the cover sheet due on July 1. Feel free to contact a P2 staff member to get the forms before that date.

- Jeanine Inman ji1@azdeq.gov or 602 771 2351
- Farah Mohammadesmaeili- fm4@azdeq.gov or 602 771 2350
- Linneth Lopez lal@azdeq.gov or 602 771 4739

ADEQ
Arizona Department of Environmental Quality

QUESTIONS?