

PART FOUR



Suggested Activities for
Community Outreach

Distribute *You Be The Chemist* (YBTC) Activity Guides – Schools

Objective: To promote the science of chemistry, the benefits of chemicals, and the importance of chemical safety awareness by bringing members of the chemical industry together with the schools and organizations in their local areas.

Materials: YBTC Activity Guides

Costs:

- YBTC Activity Guides (\$12 for each grade K-4 booklet, \$15 for each grade 5-8 booklet, or \$20 for each set)
- Employee time

Time: 2-3 hours

Background Whether approaching an entire school system or an individual teacher, your local schools are a great starting place for YBTC Activity Guide distribution. The Activity Guides are hands-on, student-centered learning tools that contain easy-to-use chemistry experiments, designed to be instructive, educational, and fun. There are two booklets – one for grades K-4 and another for grades 5-8. Check out Part Three: CEF Program Overview and Implementation for a detailed list of what is included in each booklet.

Procedure

- Contact your local school board, school principal, or a teacher you know in your community and introduce them to the Activity Guides. For more specific details on how to do this, see page 19 in CEF Program Overview and Implementation.
- After you've sold them on the benefits of the Activity Guides, agree on a time to drop them off.
- Use the media tips in Part Six to publicize your good deed!

Analysis Solicit feedback to evaluate your efforts. Questionnaires, information interviews, and post-distribution discussions involving educators and students can all provide valuable information about your program.

Goals

- To provide educators in your community with an easy-to-use, engaging tool to help them educate their students about chemistry
- To provide students with hands-on chemistry activities that will increase their knowledge of the subject as well as their appreciation for chemistry and chemicals
- To partner your company with schools and organizations in the local community
- To position your company as an involved community member

Extension In addition to distributing the YBTC Activity Guides, you may also wish to purchase enough materials for teachers to conduct one or two of the lessons. This is an easy and inexpensive way to ensure that the Activity Guides are being used in the classroom.

You and/or your coworkers could also volunteer to conduct an experiment in a classroom.

Distribute *You Be The Chemist* (YBTC) Activity Guides – After-School Programs

Objective: To promote the science of chemistry, the benefits of chemicals, and the importance of chemical safety awareness by bringing members of the chemical industry together with the schools and organizations in their local areas.

Materials: YBTC Activity Guides

Costs:

- YBTC Activity Guides (\$12 for each grade K-4 booklet, \$15 for each grade 5-8 booklet, or \$20 for each set)
- Employee time

Time: 2-3 hours

Background After-school programs are a great avenue for Activity Guide distribution! Groups such as the Boy and Girl Scouts, Boys and Girls Clubs, or faith-based organizations are always looking for inexpensive and exciting ways to help educate their participants. The YBTC Activity Guides are hands-on, student-centered learning tools that contain easy-to-use chemistry experiments, designed to be instructive, educational, and fun. There are two booklets – one for grades K-4 and another for grades 5-8. Check out Part Three: CEF Program Overview and Implementation for a detailed list of what is included in each booklet.

Procedure

- Contact leaders of such organizations and introduce them to the guides. For specific details on how to do this, see page 19 in CEF Program Overview and Implementation.
- After you've sold them on the benefits of the Activity Guides, agree on a time to drop them off.
- Use the media tips in Part Six to publicize your good deed!

Analysis Solicit feedback to evaluate your efforts. Questionnaires, information interviews, and post-distribution discussions involving organization leaders and program participants can all provide valuable information about your program.

Goals

- To provide after-school instructors in your community with an easy-to-use, engaging tool to help them educate participating youth about chemistry
- To provide youth with hands-on chemistry activities that will increase their knowledge of the subject as well as their appreciation for chemistry and chemicals
- To partner your company with organizations in the local community
- To position your company as an involved community member

Extension In addition to distributing the YBTC Activity Guides, you may also wish to purchase enough materials for organization leaders and instructors to conduct one or two of the lessons. This is an easy and inexpensive way to ensure that the guides are being used.

You and/or your coworkers could also volunteer to conduct an experiment with the after-school group. Look at the Organize Local Science Clubs and/or Conduct Experiments at Local Summer Camps activities for suggestions.

Distribute *You Be The Chemist* (YBTC) Activity Guides – Company Employees

Objective: To promote the science of chemistry, the benefits of chemicals, and the importance of chemical safety awareness by bringing members of the chemical industry together with the schools and organizations in their local areas.

Materials: YBTC Activity Guides

Costs:

- YBTC Activity Guides (\$12 for each grade K-4 booklet, \$15 for each grade 5-8 booklet, or \$20 for each set)
- Employee time

Time: 2-3 hours

Background The YBTC Activity Guides are hands-on, student-centered learning tools that contain easy-to-use chemistry experiments, designed to be instructive, educational, and fun. There are two booklets – one for grades K-4 and another for grades 5-8. Check out Part Three: CEF Program Overview and Implementation for a detailed list of what is included in each booklet.

Procedure

- Purchase the Activity Guides for each of your company employees.
- Hold an introduction session. Make it fun – provide lunch or snacks and introduce the Activity Guides. Share the suggestions in this guide to give employees ideas of ways in which the Activity Guide can be distributed.
- Challenge your employees to introduce the guides to the community. It may be through the schools of their children, at local fairs, through faith-based organizations, or by passing it on to an educator they know.

Analysis Schedule a day to follow up with your employees. Reward those who introduced the information to community members and discuss what they did, what worked, and what didn't.

Goals

- To utilize company employees as a means by which to introduce chemistry education tools to the community
- To provide your community's youth with hands-on chemistry activities that will increase their knowledge of the subject as well as their appreciation for chemistry and chemicals
- To partner your company with schools and organizations in the local community
- To position your company and its employees as involved community members

Extension In addition to distributing the YBTC Activity Guides, you may also wish to purchase materials to conduct an experiment from the guides. This will further engage your employees in chemistry, encouraging them to introduce the materials to their family and friends.

Offer to hold a *You Be The Chemist* day for the children of company employees (or for a classroom or after-school program of an employee child). Invite them to your site and set up employee-lead stations to conduct experiments. For more details on conducting this type of activity, take a look at the Organize a YBTC Day activity.

Organize a *You Be The Chemist* (YBTC) Challenge Site

Objective: To promote the science of chemistry, the benefits of chemicals, and the importance of chemical safety awareness by bringing members of the chemical industry together with the schools and organizations in their local areas.

Materials: YBTC Challenge study guide/question material (provided by CEF)

Costs:

- Vary depending on the size and makeup of the site that your company wants to create.
- For a list of costs to consider, check out the YBTC Challenge pages of Part 3: CEF Program Overview and Implementation.

Time: Varies; expect to put a minimum of 10 hours into your YBTC Challenge.

Background The YBTC Challenge is a national question-and-answer academic competition, similar in format to spelling bees and quiz bowls, that tests grade 5-8 students on important chemistry concepts, historical discoveries, and safety awareness tips. These competitions are held throughout the country, bringing members of the chemical industry together with the organizations, schools, educators, and students in their local area. The eventual culmination of a YBTC Challenge cycle (the length of a typical school year, September–June) is a national championship event sponsored by the Foundation.

Procedure

- For full details and suggestions on how to begin the process of creating a YBTC Challenge in your area, take a look at the YBTC Challenge details, starting on page 23.

Analysis Solicit feedback to evaluate your efforts. Questionnaires, information interviews, and post-event discussions among organizers, educators, parents, and students can all provide valuable information about your program.

Goals

- To provide educators in your community with an engaging tool to help them educate their students about chemistry
- To provide students with a fun, competitive event that will increase their knowledge of the subject as well as their appreciation of chemistry and chemicals
- To partner your company with schools and organizations in the local community
- To position your company as an involved community member

Extension Consider donating the 5-8 Activity Guide booklet to all schools/classrooms/teachers that participate in the YBTC Challenge. This offers educators a fun and informative resource to introduce students to some of the concepts they will encounter during the YBTC Challenge.

Participate in Science Activities Sponsored by Community Organizations

Objective: To promote the science of chemistry, the benefits of chemicals, and the importance of chemical safety awareness by participating in community activities.

Materials: *You Be The Chemist* (YBTC) Activity Guides; *Solutions* and Product Stewardship bulletins

Costs:

- YBTC Activity Guides (\$12 for each grade K-4 booklet, \$15 for each grade 5-8 booklet, or \$20 for each set)
- *Solutions* and Product Stewardship bulletins (contact CEF for pricing)
- Employee time

Time: Varies

Background A great way to engage people in chemistry education is to join forces with organizations that are already active in your community. Most likely, these organizations already have a target audience and communication channels in place to reach that audience. Groups, such as the Shriners of North America, neighborhood associations, faith-based organizations, the YMCA, and others, have a broad network of students, educators, parents, community leaders, and local government officials with whom they work.

Procedure

- Think about which organization you would like to approach. You may already know someone who works with one or more of these organizations. For a list of community organizations, check out the Web site for your local town or city.
- Once you've decided on an organization to approach, call them. Introduce yourself, your company, CEF, and the *You Be The Chemist* programs.
- Ask them if there is a meeting or event coming up where you could display information about CEF programs.

- Purchase the Activity Guides or CEF bulletins from CEF. For YBTC Challenge and Lesson Plan Competition promotional items, contact the CEF staff.

Analysis Solicit feedback to evaluate your efforts. Questionnaires, information interviews, and post-distribution discussions can all provide valuable information about your program.

Goals

- To introduce your community members to engaging, fun, and easy ways to provide chemistry education
- To partner your company with schools and community organizations in the local community
- To position your company as an involved community member

Extension Demonstrate one or two of the YBTC Activity Guide experiments with the organization's members to generate greater interest.

Conduct Chemistry Demonstrations at City, County, or State Fairs

Objective: To promote the science of chemistry, the benefits of chemicals, and the importance of chemical safety awareness to all community members – students, educators, local government officials, customers, etc.

Materials: *You Be The Chemist* (YBTC) Activity Guides; materials for demonstrations

- Costs:**
- YBTC Activity Guides (\$12 for each grade K-4 booklet, \$15 for each grade 5-8 booklet, or \$20 for each set)
 - Materials to conduct experiments (inexpensive; all materials can be found at all-purpose stores, such as Wal-mart or Target)
 - Promotional materials, signage, giveaways
 - Vendor fee (varies by city, county, and state)
 - Employee time

Time: 10-15 hours (may be longer depending on the duration of the fair)

Background A great way to engage people in chemistry education is to show them that it can be fun! A large number of students, educators, parents, community organization leaders, and local government officials attend fairs. Demonstrating experiments from the Activity Guides at city, county, or state fairs is an easy way to introduce the masses to a simple, fun, and engaging way to learn chemistry.

Procedure

- Check out the official Web site of your city, county, or state for fair information.
- Sign up as a vendor. (Tell them about the Foundation and what you are trying to accomplish – you may be able to work out a discounted vendor fee!)
- Ask company employees to volunteer. Schedule allotted times for each employee to manage your station.
- Purchase the materials necessary to conduct your experiments/demonstrations. (Goofy Putty, Fountain of Soda, The Great Ketchup Caper, and Puffed Rice Fleas are hands-on experiments that work well for all ages.)
- Practice the demonstrations beforehand. Make sure all of your volunteers are comfortable explaining the basic concepts behind each experiment.
- Create signs or promotional materials to identify your company, the *You Be The Chemist* program, and CEF.
- Purchase any giveaways you may wish to offer participating students/audience members.
- Let the fun begin!

Analysis Solicit feedback to evaluate your efforts. Questionnaires, information interviews, and post-event discussions can all provide valuable information about your program. You may wish to provide a short survey at your station for people to fill out after they have viewed your demonstration.

Goals

- To introduce your community members to an easy and engaging way to learn about chemistry
- To generate interest in chemistry education among community members
- To position your company as an involved community member

Extension Have other materials on hand to distribute to people passing by your station. These materials can be company giveaways and/or CEF materials (including information about CEF's YBTC Challenge and Lesson Plan Competition, CEF's *Solutions* and Product Stewardship bulletins, or personalized merchandise – water bottles, pencils, etc.).

Organize Local Science Clubs

Objective: To provide an atmosphere that engages students in learning about the science of chemistry, the benefits of chemicals, and the importance of chemical safety awareness.

Materials: *You Be The Chemist* (YBTC) Activity Guides; materials to conduct experiments

Costs:

- YBTC Activity Guides (\$12 for each grade K-4 booklet, \$15 for each grade 5-8 booklet, or \$20 for each set)
- Materials to conduct experiments (inexpensive; all materials can be found at all-purpose stores such as Wal-mart or Target)
- Employee time

Time: Varies depending on how many times the club meets; allot at least 45 minutes to one hour for each club meeting

Background Providing a structured learning environment for students can be made easy by creating a local science club. The clubs can be held after school, on the weekends, or even for a couple of weeks during the summer break. Organization of the club can be accomplished through the school, an after-school program (Boy Scouts, Girl Scouts, etc.), or faith-based organizations. There are many formats through which the club can take shape.

Procedure

- Introduce the idea to area educators or leaders of after-school/faith-based organizations.
- Select someone to serve as the organizer or science club instructor.
- Provide the instructor with the Activity Guides and the necessary materials to conduct various experiments (once experiments are selected).
- Determine the format of the science club (occurrence, how many hours, lessons, etc.).
- Provide a handout for educators and organization leaders to distribute to encourage participation.

Analysis Solicit feedback to evaluate your efforts. Questionnaires, information interviews, and post-activity discussions among instructors and students can all provide valuable information about your program.

Goals

- To provide your community's youth with an environment in which they can learn more about chemistry, increasing their knowledge of the subject as well as their appreciation for chemistry and chemicals
- To partner your company with schools and organizations in the local community
- To position your company as an involved community member

Extension Invite parents to attend one of the sessions. Have students conduct the experiments they have learned for their parents.

Ask for volunteers from your company to attend the science club session and help with activities. This will further connect industry members with the community.

Utilize the Create a YBTC "Champion" Position information on page 54 to get the science club off the ground.

Organize “Take Your Child to Work Day” Activities

Objective: To promote the science of chemistry, the benefits of chemicals, and the importance of chemical safety awareness by introducing local students to the business- and science-related aspects of the chemical industry.

Materials: Vary

Costs: Employee time

Time: One work day

Background Take Your Child to Work Day is held on the fourth Thursday of April each year. As a member of the chemical industry, you are able to provide a firsthand look into what is involved in both the business- and science-related aspects of the industry. There are various ways to participate in this day. You can plan activities throughout the entire day for visiting children, hold special facility tours, organize fun and educational demonstrations (including CEF’s *You Be The Chemist* (YBTC) Activity Guide experiments), or simply let the children assist their parents or an employee during the day.

Introduce your child, other employees’ children, or a local classroom to the everyday activities of your company, the chemistry behind the products you help make or distribute, and the end-products of the chemicals you make or distribute in your facility. This is a great way to show students that chemistry and chemicals are everywhere – even in many of the items they use daily (shampoo, soap, household cleaners, etc.).

For more information, check out the *Take Our Daughters and Sons to Work Day* Web site at <http://www.daughtersandsonstowork.org>.

Procedure

- Get employees involved and schedule a meeting to devise a plan for the day.
- Decide whom to invite (your child, all employees’ children, a local classroom).

- Decide on your preferred format for the day (the entire day, part of the day, plant tours, conducting experiments, etc.).
- Invite students to participate (create a flyer that outlines what they will be doing that day).

Analysis Solicit feedback to evaluate your efforts. Questionnaires, information interviews, and post-event discussions can all provide valuable information about your program.

Goals

- To use a nationally recognized “day” to introduce your child, other employees’ children, or a local classroom to the daily activities of a company in the chemical industry
- To impress upon students the importance of chemistry and chemicals by demonstrating that chemistry and chemicals are essential components of items they use in their everyday lives
- To partner your company with schools and organizations in the local community
- To position your company as an involved community member

Extension Conduct experiments from the YBTC Activity Guides at your facility. Hold a mock YBTC Challenge.

Celebrate Earth Day

Objective: To promote the science of chemistry, the benefits of chemicals, and the importance of chemical safety awareness by bringing members of the chemical industry together with the schools and organizations in their local areas.

Materials: CEF Earth Day bulletin

Costs:

- CEF Earth Day bulletin
- Employee time

Time: 2-10 hours

Background Celebrated in the United States on April 22 every year, Earth Day is the largest and most celebrated environmental event across the nation. Earth Day has played a significant role in putting environmental issues into the mainstream, and it continues to be a day to generate new ideas for progress. Earth Day also serves as a reminder that we should all renew our commitment to save the planet, while celebrating the gains that have already been made.

There are many ways to get involved in Earth Day – distribute CEF's Earth Day bulletin to employees, customers, and community members; plant trees or shrubs; organize a community-wide hazardous waste collection; collect donations to give to the environmental protection organization of your choice; or create a community garden.

Procedure

- Decide how you want to celebrate Earth Day in your community. (Use one of the activities in this guide!)
- Purchase CEF's Earth Day bulletin to distribute during your activity.
- Celebrate the environment!

Analysis: Solicit feedback to evaluate your efforts. Questionnaires, information interviews, and post-event discussions among organizers and participants can all provide valuable information about your program.

Goals

- To celebrate a nationally recognized day by encouraging students, educators, customers, and community members to do their part to improve the environment
- To partner your company with schools and organizations in the local community
- To position your company as an involved community member

Extension Distribute information about the National Association of Chemical Distributors' Responsible Distribution ProcessSM, American Chemistry Council's Responsible Care[®], or the Synthetic Organic Chemical Manufacturers Association's ChemStewards[®] program to show how the chemical industry is working to protect the environment.

Participate in Educator Conferences or Programs

Objective: To promote the science of chemistry, the benefits of chemicals, and the importance of chemical safety awareness among those who are educating our youth.

Materials: *You Be The Chemist* (YBTC) Activity Guides

Costs:

- Vary according to the basic cost of the conference or program and what activities you choose to do
- YBTC Activity Guides (\$12 for each grade K-4 booklet, \$15 for each grade 5-8 booklet, or \$20 for each set)
- Employee time

Time: Varies; some conferences last a couple of days, while others may just be an afternoon event.

Background Educators are largely responsible for the knowledge our youth possesses. By helping educators understand the value and benefits of chemistry, chemicals, and chemical safety awareness, you are taking steps to ensure that these messages are passed on to our youth.

Procedure

- Contact your local school system. Introduce them to your company and CEF.
- Explain that you would like to participate in a conference attended by local educators or a program held at a local elementary or middle school. The school system should have a list of these conferences and events and will be able to put you in touch with the correct person.
- Make contact with the event organizer. Offer to set up a table that introduces your company and CEF's programs. (For some events, there may be a small fee attached to the conference.)
- Contact CEF to purchase YBTC Activity Guides and *Solutions* and Product Stewardship bulletins. CEF will also send you promotional information about the YBTC Lesson Plan Competition and Challenge programs.

Analysis Solicit feedback to evaluate your efforts. Questionnaires, information interviews, and post-event discussions can all provide valuable information about your program.

Goals

- To introduce educators in your community to an easy, fun means by which to teach their students about chemistry and chemicals
- To partner your company with schools and organizations in the local community
- To position your company as an involved community member

Extension Offer to visit educators' classrooms to conduct an experiment from the Activity Guides.

Teachers love prizes! Hold a raffle and distribute YBTC Activity Guides to the winners.

Celebrate Chemistry All Year!

Objective: To promote the science of chemistry, the benefits of chemicals, and the importance of chemical safety awareness by bringing members of the chemical industry together with the schools and organizations in their local areas.

Materials: Vary

Costs: Vary

Time: Varies

Background Throughout the year, there are nationally recognized “holidays” that can be used as platforms for you to educate local students, employees, or community members about the importance of chemistry and chemicals.

For example, during National Home Safety Week (2nd week in April), you can visit a local school and educate students on chemical safety in their homes by using CEF’s *Solutions* bulletin, *Chemicals in the Home*. You could also distribute the bulletins to your company employees. Another example is National Chemistry Week. You can visit a local school or after-school program to conduct experiments from the *You Be The Chemist* (YBTC) Activity Guides with students.

Procedure

- Select a “holiday” that you would like your community to celebrate.
- Get company employees involved.
- Determine what activities you would like to organize and what audience you would like to target.
- Coordinate the event logistics and secure any necessary materials to conduct your event.

Analysis Solicit feedback to evaluate your efforts. Questionnaires, information interviews, and post-event discussions can all provide valuable information about your program.

Goals

- To use a nationally recognized “holiday” as a platform to celebrate chemistry, chemicals, and/or chemistry education with company employees, local educators, students, and the community as a whole
- To partner your company with schools and organizations in the local community
- To position your company as an involved community member

Extension Chemistry is everywhere, which means you can link a chemistry activity to any holiday – explain the chemistry behind fireworks and sparklers for the 4th of July; conduct an egg-dyeing activity in the spring (Egg-Dye Solutions, Lesson 9 in the grade 5-8 Activity Guide can help!) The possibilities are endless.

Nationally Recognized “Holidays”

January

9 – National Static Electricity Day

February

11 – National Inventor’s Day

3rd week – National Health Education Week

March

3rd week – Poison Prevention Week

20 – National Children’s Day

29 – Alchemy Day

April

7 – World Health Day

7 – National Teacher Appreciation Day

2nd week – National Home Safety Week

22 – Earth Day (U.S.)

23 – National Energy Education Day

4th week – Take Your Child to Work Day

May

5 – Space Day

9 – National Teacher’s Day

2nd week – Teacher Appreciation Week

20 – Weights and Measures Day

June

5 – World Environment Day

August

27 – Petroleum Day

October

5 – Universal Children’s Day

9 – Fire Prevention Day

2nd week – National Metric Week

23 – National Mole Day

3rd week – National Chemistry Week

4th Saturday – Make a Difference Day

November

15 – America Recycles Day

2nd week – American Education Week

December

10 – Nobel Prize Day

Conduct Experiments at Local Summer Camps

Objective: To promote the science of chemistry, the benefits of chemicals, and the importance of chemical safety awareness by bringing members of the chemical industry together with organizations in their local areas.

Materials: *You Be The Chemist* (YBTC) Activity Guides; materials to conduct experiments

Costs:

- YBTC Activity Guides (\$12 for each grade K-4 booklet, \$15 for each grade 5-8 booklet, or \$20 for each set)
- Materials to conduct experiments (inexpensive; all materials can be found at all-purpose stores, such as Wal-mart and Target)
- Employee time

Time: 5-6 hours

Background Many community organizations sponsor summer camps for students during their break from school. Using these already established events to introduce chemistry is an easy way to reach a large group of students at one time.

Procedure

- Select a group to contact. (Groups may include: local Boy and Girl Scout troops, Boys and Girls Clubs, camps established by your community's parks and recreation department, faith-based summer camps, etc.). You may already know someone involved in one of these groups.
- Introduce them to your company and CEF. Ask them if you can use a few hours on one of their camp days to introduce students to exciting, hands-on chemistry experiments.
- Purchase CEF's YBTC Activity Guides. Decide which experiment(s) you would like to perform.
- Find out how many students attend the camp to make sure you gather enough materials.
- Secure the necessary materials for each experiment. (Goofy Putty, Fountain of Soda, The Great Ketchup

Caper, and Puffed Rice Fleas are hands-on experiments that work well for all ages.)

- Ask company employees to help you.
- Have fun!

Analysis Solicit feedback to evaluate your efforts. Questionnaires, information interviews, and post-activity discussions among camp organizers and campers can all provide valuable information about your program.

Goals

- To provide your community's youth with hands-on chemistry activities that will increase their knowledge of the subject as well as their appreciation for chemistry and chemicals.
- To partner your company with schools and organizations in the local community
- To position your company as an involved community member

Extension Introduce the community organization to the YBTC Challenge.

Introduce Chemistry to Homeschooled Households or Organizations

Objective: To promote the science of chemistry, the benefits of chemicals, and the importance of chemical safety awareness by bringing members of the chemical industry together with the community members and organizations in their local areas.

Materials: *You Be The Chemist* (YBTC) Activity Guides

Costs:

- YBTC Activity Guides (\$12 for each grade K-4 booklet, \$15 for each grade 5-8 booklet, or \$20 for each set)
- Employee time

Time: 2-3 hours

Background Studies estimate that over one million children are currently homeschooled throughout the United States. This number is only expected to rise, and as it does, homeschool instructors will continue to search for inexpensive supplies and curriculum materials to use with their children. Providing homeschooled families and organizations with CEF's YBTC Activity Guides is an easy way to contribute. The Activity Guides are aligned with the National Science Education Standards, providing homeschool instructors with an educationally applicable tool that easily explains the concepts behind each experiment. It also provides homeschooled students with hands-on activities that engage them in the study of chemistry.

Homeschoolers often take advantage of community educational opportunities, such as after-school programs, museums, libraries, programs run by faith-based organizations, parks, community centers, and other community resources. Providing Activity Guides to these community resources could also potentially benefit homeschooled children.

Procedure

- Find out about homeschooled families or organizations in your area. Community Web sites or the local library may have lists of any local homeschool organizations. (Visit www.americanhome-schoolassociation.org.)

- Contact the group or family. Introduce them to your company and CEF.
- Offer to donate the Activity Guides to them.

Analysis Solicit feedback to evaluate your efforts. Questionnaires, information interviews, and post-distribution discussions among organizers and company employees can all provide valuable information about your program.

Goal

- To provide homeschooled families or organizations in your community with a chemistry curriculum tool to help them teach chemistry and educate their children
- To provide children with hands-on chemistry activities, increasing their knowledge in the subject as well as their appreciation for chemistry and chemicals
- To partner your company with community members and organizations in your area
- To position your company as an involved community member

Extension Invite homeschooled families or organization members to your facility for a tour. This will introduce students to the business- and science-related aspects of the chemical industry. In addition, you can offer to demonstrate some of the experiments from the Activity Guides with the students.

Hold a Facility Open House

- Objective:** To promote the science of chemistry, the benefits of chemicals, and the importance of chemical safety awareness by bringing members of the chemical industry together with the schools and organizations in their local areas.
- Costs:**
- Vary depending on the length of your open house and the extent of the tour/activities
 - Employee time
- Time:** Varies depending on the length of your open house; allotting a minimum of 4-5 hours is suggested

Background Enabling community members to see firsthand what goes on at your facility is an effective way to get them to realize the importance of your company and the chemical industry as a whole. Holding a facility open house will introduce your community members to the business- and science-related aspects of your company. In addition, a tour will allow company employees to establish a personal connection with community members, allowing your company to build even strong community relationships.

Procedure

- Form a company committee to organize the event.
- Decide on the format of the event. (Will it be held after work or on the weekend? Will you provide special presentations and tours? Will there be activities for children attendees? Will you provide refreshments, etc.?)
- Promote your event. Create flyers to distribute in neighborhoods near your facility. Invite local government officials, representatives from the fire and police departments, members of the school board, and community leaders. For more ideas on how to accomplish this, take a look at the Media Guide in Part Six of this booklet.
- Purchase any necessary materials for the event (name badges, refreshments, giveaways, etc.).
- Create a fact sheet about your company to distribute to attendees (highlight the regions you cover, the end-products of chemicals distributed or made by

your company, ways these end-products are used in everyday life, a list of employees and their titles, etc.).

- Assign company employees to manage different aspects of the event (someone to lead tours, to host a question-and-answer session, to take charge of refreshments, etc.).
- Enjoy getting to know your community members!

Analysis Solicit feedback to evaluate your efforts. Questionnaires, information interviews, and post-event discussions among organizers and attendees can all provide valuable information about your program.

Goals

- To give community members an inside look at how a chemical company operates, while promoting the importance of chemistry, chemicals, and chemical safety awareness and demonstrating how chemicals are used in everyday life
- To position your company as an involved community member

Extension Keep children entertained by demonstrating experiments from the YBTC Activity Guides. Give away prizes to those who participate.

Have other CEF informational material (copies of our *Solutions* and Product Stewardship bulletins, YBTC Lesson Plan Competition flyers, and Challenge promotional materials) on display. Contact the CEF staff for these materials.

Plan a Field Trip

Objective: To promote the science of chemistry, the benefits of chemicals, and the importance of chemical safety awareness by bringing members of the chemical industry together with the schools and organizations in their local areas.

Materials: *You Be The Chemist* (YBTC) Activity Guides; materials to conduct experiments; YBTC Challenge information

Costs:

- Vary
- Employee time

Time: Varies depending on the length of the field trip; minimum of 10-12 hours is suggested

Background Field trips are an important learning tool for for most students. Leaving the classroom and being able to see, firsthand, how things work in the “real” world can be an extremely beneficial learning experience. A great way for local students to develop a better understanding of chemistry, chemicals, and the chemical industry is to visit your facility. At your facility, students can learn how your company operates, what chemicals are distributed from or are made there, the end-products of those chemicals, and how those end-products are used in everyday life.

Procedure

- Introduce the idea to your company. Create a company committee to decide the format of the event. (Will it be an all day event? Will there be a tour? Will there be a question-and-answer session? Will you conduct chemistry experiments and/or provide giveaways to the students?)
- Contact a local school. Introduce them to your company and explain that you would like to invite a classroom or entire grade-level to your facility to teach students firsthand about the chemical industry.
- Decide on a mutually agreeable date to hold your event.
- Ask for company volunteers to manage different aspects of the event (a greeter, a tour leader, a question-and-answer session leader, etc.).

- Create or purchase any informative material (company fact sheets, CEF's *Solutions* and Product Stewardship Bulletins, etc.) or giveaways (water bottles, pens or pencils, company pins, etc.) that you would like to hand out to students.
- Use the Media Guide in this booklet to publicize your event.

Analysis Solicit feedback to evaluate your efforts. Questionnaires, information interviews, and post-event discussions among company employees, educators, and students can all provide valuable information about your program.

Goals

- To provide students with a firsthand look into the business- and science-related aspects of the chemical industry, while increasing their appreciation for chemistry and chemicals
- To partner your company with schools and organizations in the local community
- To position your company as an involved community member

Extension If hosting a classroom field trip to your facility is too time consuming, consider sponsoring a class or grade-level trip to a local science museum, donating YBTC Activity Guides, or going to the school to conduct experiments for a class.

Create a *You Be The Chemist* (YBTC) “Champion” Position

Objective: To find a community member who will help your company successfully introduce and implement CEF's YBTC programs, further promoting the CEF mission.

Materials: YBTC Activity Guides; YBTC Challenge study guide/question materials

Costs:

- Vary according to the focus of your “champion”
- YBTC Activity Guides (\$12 for each grade K-4 booklet, \$15 for each grade 5-8 booklet, or \$20 for each set)
- Materials to conduct experiments (inexpensive; all materials can be found at all-purpose stores, such as Wal-mart or Target)
- YBTC Challenge costs (see the YBTC Challenge section on page 20)
- Selected CEF "champions" may receive a grant by the sponsoring company based on the proposed program and budget submitted
- Employee time

Time: Varies; a minimum of 2 hours if the focus is on Activity Guide instruction and a minimum of 10 hours if the focus is on the YBTC Challenge.

Background There are often barriers to the successful teaching of science, especially in elementary education. To help remove these barriers, CEF encourages companies to seek YBTC "champions," volunteers to work with local schools and organizations on behalf of your company. This person should be a community member with advanced science knowledge and classroom experience that could assist in the successful implementation of CEF programs.

Procedure

- Introduce the idea to company employees. (It's possible a company employee already knows someone who is perfect for the position!)
- Contact local schools. Explain the program to them. They may be able to refer you to a retired or former educator who is looking to stay involved part-time within the school system.
- Once you have decided on your candidates, contact him or her regarding the opportunity.
- Discuss CEF's YBTC programs, your company, and their potential role in your community outreach efforts.
- Provide your candidate with CEF's contact information in case he or she has additional questions about the organization and its programs.
- Once you have selected your champion, he or she will work with local schools to organize specific times to help in the classroom or with an after-school program. Other company employees can participate in these activities as well. Activities can involve monthly chemistry demonstrations, the formation of chemistry clubs, a chemistry aid for a specific classroom or grade-level, etc. – the exact event should be a collaboration between your champion, your company, and the school.

Analysis Solicit feedback to evaluate your efforts. Questionnaires, information interviews, and post-activity discussions among your champion(s), the school, and company employees can all provide valuable information about your program. Track the activities organized by your champions and evaluate their success in implementing CEF's programs.

Goals

- To provide educators in your community with an individual who will help teach chemistry to local students
- To provide students with an involved adult who has a background in science and/or education to lead hands-on chemistry activities, thus increasing students' knowledge of the subject as well as their appreciation for chemistry and chemicals
- To partner your company with schools and organizations in the local community
- To position your company as an involved community member

Extension Your YBTC champions can apply a number of the suggested activities in this guide when organizing their efforts.

Organize a Household Hazardous Waste Disposal Day

Objective: To educate community members on the proper use, storage, and disposal of household chemical products.

Materials: Vary

Costs:

- Vary according to localities and the hazardous waste disposal practices already in place
- Employee time

Time: 4-5 hours

Background Local communities can organize collection programs in their area for household hazardous wastes. Items such as automotive wastes, cleaners, and paints all need to be disposed of in a proper manner to ensure the waste doesn't enter the environment and put humans and other living things at risk. A great way to dispose of products such as these is through a household hazardous waste disposal day. Through this type of program, citizens bring their waste to a designated collection point. A licensed hazardous waste transporter sorts and packages the waste and takes it to a hazardous waste facility where products are properly disposed.

Procedure

- Contact your local Waste Management Division and tell them that you would like to implement a household hazardous waste disposal event.
- Decide on the location of the collection point.
- Create promotional information about the day. Post the information on your Web site, in community centers, in libraries, in government buildings, and at local schools.
- Invite leaders of the community to join you and meet with community members who participate during the event.

Analysis Solicit feedback to evaluate your efforts. Questionnaires, information interviews, and post-event discussions can all provide valuable information about your program.

Goals

- To provide a collection point where community members can properly dispose of household hazardous waste
- To educate community members on the proper use, storage, and disposal of household chemical products
- To partner your company with schools and organizations in the local community
- To position your company as an involved community member

Extension Offer to hold a public information session before the collection day. This could serve as an education session for community members about proper purchase, usage, storage, and disposal of chemical products.

Distribute CEF's *Safe Handling and Disposal of Paint* bulletin to community members.

Create a Community Newsletter

- Objective:** To promote the science of chemistry, the benefits of chemicals, and the importance of chemical safety awareness by keeping customers, community organizations, and local government officials informed about your company's outreach activities and suggesting ways in which they can get involved in the community.
- Costs:**
- Designing, printing, and mailing the newsletter (CEF recommends electronic newsletters to reduce paper waste and eliminate printing and mailing costs.)
 - Employee time
- Time:** 10 hours (varies depending on the number of issues per year)

Background Keeping your customers and neighbors informed about the outreach initiatives of your company is a great way to build community relationships. Providing updates about your initiatives is likely to encourage your neighbors to get involved as well. These initiatives publicly position your company as being invested in the development of the community.

Procedure

- Ask for a company volunteer to manage the organization and implementation of the newsletter.
- Decide on distribution frequency, format (print or electronic), and what topics will be covered in the newsletter.
- Pull together the information. (Be sure to take lots of photos at your events!) Include information about the *You Be The Chemist* (YBTC) Activity Guides, Challenge, and Lesson Plan Competition.
- Gather a list of customers, community members, and government leaders who you would like to receive your newsletter.
- Contact the CEF staff or utilize ideas in this guide to determine ways to implement other activities in your community.

- Distribute the newsletter. Don't forget to put CEF on the mailing list. We want to know what's going on in your community too!

Analysis Solicit feedback to evaluate your efforts. Questionnaires, information interviews, and post-distribution discussions can all provide valuable information about your programs.

Goals

- To keep customers, community members, and government leaders up to date on your company's community outreach activities
- To encourage community members to get involved in chemistry education through their own outreach initiatives
- To position your company as an involved community member

Extension Invite your readers to tell you about the ways they are getting involved in the community. These stories are likely to inspire additional volunteerism, further advancing educational opportunities in your area.

Create a Community-Involvement Committee

Objective: To promote the science of chemistry, the benefits of chemicals, and the importance of chemical safety awareness by bringing members of the chemical industry together with the schools and organizations in their local areas.

Costs:

- Vary, based on selected activities
- Employee time

Time: 4-5 hours quarterly (more as needed)

Background An easy way to choose community outreach projects that work best for your company is to develop a community involvement committee. This group of company employees will serve as the eyes and ears of your company. They will look for and initiate community outreach projects that best serve the interest of your company and your community. These members will implement outreach efforts, encourage other employees to get involved, and serve as the contacts for schools and community organizations with which you partner.

Procedure

- Create your committee (ask for volunteers and approach those you know are already very active in the community).
- Set your budget (decide how much the company is willing to spend on outreach efforts for the year).
- Decide how often you will meet (once a month, four times a year, etc.)
- Create a list of potential outreach projects. You may already have an idea you would like to implement. You can contact organization leaders (after-school programs, faith-based organizations) to find out what sort of help they need; flip through the pages of this book to find an activity; or brainstorm other potential activities.

- Select a project. Use the checklist found in the Community Outreach Basics part of this booklet to develop a plan.
- Decide on a committee chair. This person will serve as the contact person between the organizations/schools you are helping and your company. He or she will also be the point of contact within your company.
- Take your idea to senior management. After you've sold them on the idea, begin to implement your project (ask for company volunteers, begin to contact school/organization officials, etc.).
- Use the Media Guide in Part Six to publicize your event.
- Once the project is complete, reconvene the committee to evaluate your project and begin working on a new one!

Analysis Solicit feedback to evaluate your efforts. Questionnaires, information interviews, and post-activity discussions among the committee, company members, and participants can all provide valuable information about your program.

Goals

- To provide your company a means by which to facilitate community outreach projects that increase participant knowledge and the appreciation of chemistry and chemicals
- To partner your company with schools and organizations in the local community
- To position your company as an involved community member

Extension Invite community organization leaders, school board members, or local government officials to join the committee. They may be able to recommend many different community activities that could be a perfect outreach avenue for your company. Working with other community members will increase company visibility, positioning your company as an involved community member.

Organize Teacher Workshops

Objective: To promote the science of chemistry, the benefits of chemicals, and the importance of chemical safety awareness by helping educators who may not have a background in chemistry feel more comfortable teaching the subject.

Materials: *You Be The Chemist* (YBTC) Activity Guides; materials to conduct experiments

- Costs:**
- YBTC Activity Guides (\$12 for each grade K-4 booklet, \$15 for each grade 5-8 booklet, or \$20 for each set)
 - Materials for experiments (inexpensive; all materials can be found at all-purpose stores, such as Wal-mart or Target)
 - Employee time

Time: One morning (or afternoon) and 2 hours of prep time

Background Most elementary and middle school educators don't have a background in chemistry. Therefore, the unfamiliar can sometimes seem daunting, leading them to focus less on teaching chemistry and more on the other sciences, such as biology and earth science. For many, all it takes is someone to show them the ease with which many basic experiments can be conducted and how much fun the process can be – for them and their students!

Procedure

- Contact your local school administrator. Introduce your company, CEF, and the YBTC Activity Guides.
- Volunteer to hold a YBTC workshop with educators. (Most likely, the administrator will know which grades the workshop is most appropriate for and the best time to hold the workshop.)
- Ask for volunteers from your company (employees with a chemistry background are ideal) to teach the workshops.
- Purchase the YBTC Activity Guides, decide which experiments you would like to cover with the

educators, and gather all of the necessary experiment materials. Depending on your time restraints, three to five experiments is probably adequate.

- Conduct the experiments with the educators. During the activity, they'll begin to see how much fun chemistry is for the kids and how easy it is to teach!

Analysis Solicit feedback to evaluate your efforts. Questionnaires, information interviews, and post-activity discussions can all provide valuable information about your program.

Goals

- To provide educators in your community with an individual to help them teach chemistry
- To equip educators with the knowledge to educate students using hands-on chemistry activities, increasing the students' understanding of the subject as well as their appreciation for chemistry and chemicals
- To partner your company with schools and organizations in the local community
- To position your company as an involved community member

Extension Some school systems might also offer professional development credits to those educators who participate. Ask the school administrator if this is an option for your workshop.

Create a kit that contains all of the necessary materials to conduct one, two, or even all of the experiments from the YBTC Activity Guides and

donate it to the school. Many elementary schools don't have some of the basic safety equipment, such as goggles, or experiment materials, such as beakers, test tubes, etc.

Invite leaders from other organizations, such as Boys and Girls Clubs to attend as well.

Organize a *You Be The Chemist* (YBTC) Day

Objective: To promote the science of chemistry, the benefits of chemicals, and the importance of chemical safety awareness by bringing members of the chemical industry together with the schools and organizations in their local areas.

Materials: YBTC Activity Guides; materials to conduct experiments; giveaways for participants; YBTC Challenge and Lesson Plan Competition promotional pieces

Costs: YBTC Activity Guides (\$12 for each grade K-4 booklet, \$15 for each grade 5-8 booklet, or \$20 for each set)

- Materials to conduct experiments (inexpensive; all materials can be found at all-purpose stores, such as Wal-mart or Target)
- Giveaways for students (optional)
- Refreshments (optional)
- Employee time

Time: One full day plus 10 hours of prep time

Background A fun way to get a lot of kids interested in science at one time is to hold a *You Be The Chemist* Day at a local elementary or middle school. Company volunteers can set up stations in the school gymnasium or cafeteria and conduct specific experiments.

Procedure

- Contact a local school. Introduce yourself, your company, and CEF. Explain that you would like to host a day of chemistry for the students of that school.
- Decide the number of students that will be participating. This could be the entire school or an individual grade-level.
- Ask company employees to volunteer. Organize five or six stations, each with two employees conducting a different experiment.
- Purchase the materials necessary to conduct your experiments/demonstrations. (Goofy Putty, Fountain of Soda, The Great Ketchup Caper, and Puffed Rice Fleas are hands-on experiments that work well for all ages.)
- Practice the demonstrations beforehand. Make sure all of your volunteers are comfortable explaining the basic concepts behind each experiment.
- Create signs or promotional materials to identify your company, the YBTC programs, and CEF.
- Purchase any giveaways you may wish to offer participating students/attendees.
- Invite local media and government leaders to attend (with the school's permission).
- Let the fun begin!

Analysis Solicit feedback to evaluate your efforts. Questionnaires, information interviews, and post-event discussions can all provide valuable information about your program.

Goals

- To demonstrate simple, hands-on chemistry activities that will increase students' knowledge and appreciation of chemistry and chemicals
- To partner your company with schools and organizations in the local community
- To position your company as an involved community member

Extension Consider conducting mock YBTC Challenges at one of the stations. Give students who participate small prizes, such as stickers or pencils. It's another fun way to learn chemistry!

Don't forget to have information about your company on hand. Hand out fact sheets or have items printed with your company's name or logo on them as giveaways.

Hold a Poster Competition

Objective: To promote the science of chemistry, the benefits of chemicals, and the importance of chemical safety awareness by bringing members of the chemical industry together with the schools and organizations in their local areas.

Materials: Prizes, promotional pieces

Costs:

- Vary
- Prizes for contest winners from simple certificates to gift cards
- Promotional pieces and printing costs

Time: 4-5 hours (varies depending on how you choose to promote and judge the program)

Background A poster competition is a creative way for students to show how chemicals benefit their home and community. Competitions can be held between the children of company employees, students in a local classroom (or school), or kids at an after-school program.

Procedure

- Create a theme for your poster contest. It could be general (their interpretation of chemistry) or specific (such as safety awareness, recycling, or elements).
- Decide the contest requirements (i.e., submittals must be on an 8 1/2 x 11 sheet and contain the text necessary, submission deadline, identification requirements, etc.).
- Determine how many winners you will have and select prizes. Prizes could be anything from tickets to a local science museum to a chemistry set or even monetary prizes.
- Create a promotional piece to market the contest. Include all of the important contest requirements, as well as your company's information.
- Decide to whom you will market the program. Participants could be the children of your company employees, a local school (or class), or participants in an after-school or faith-based organization.

- Select your judging criteria (creativity, message, aesthetics, etc.) and a judging panel. You can include members of your company and participating school and organization leaders.

Analysis Solicit feedback to evaluate your efforts. Questionnaires, information interviews, and post-activity discussions can all provide valuable information about your program.

Goals

- To provide students with a creative outlet for expressing their knowledge of the value and benefits of chemistry and the importance of chemical safety
- To partner your company with schools and organizations in the local community
- To position your company as an involved community member

Extension Post the submissions in your office lobby, break room, or at a local library.

Offer participating educators a copy of the grade-appropriate YBTC Activity Guide booklet.

Invite the winners to take a field trip to your company's facility to understand more about how the chemical industry works.