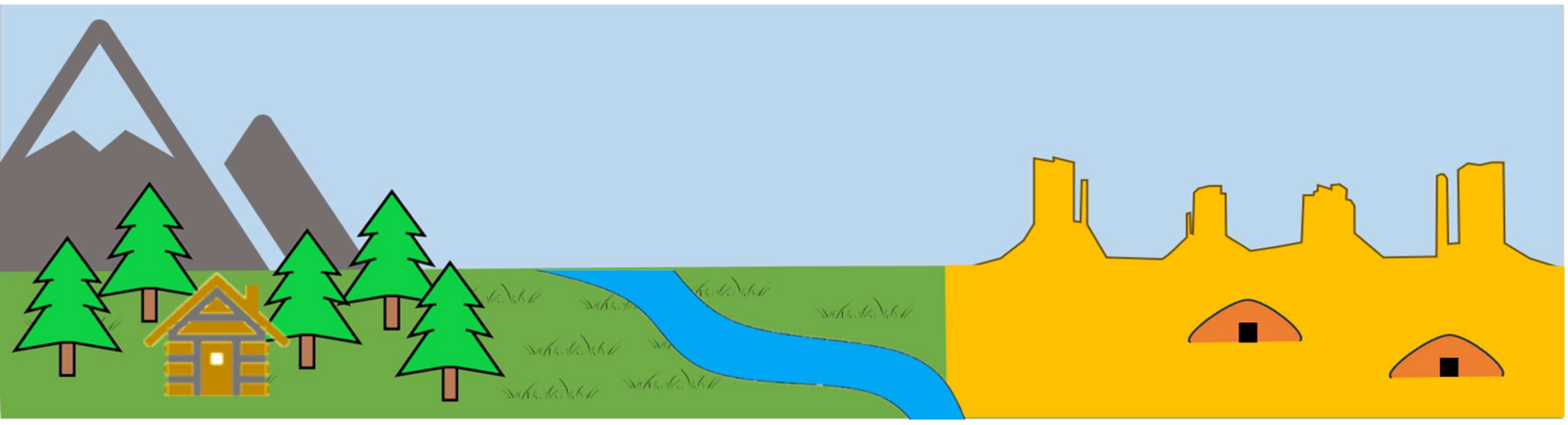
DETOX YOUR DOMICILE

Learning about household hazardous waste management and chemical risk reduction through an interactive workshop – adapted for Sovereign Nations



Adapted from the original “In the Air” Adult Education Module developed by the U.S. EPA and the Missouri Botanical Garden’s EarthWays Center.

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Section 1
Background

Introduction

Facilitator's Guide

Introduction

The “Detox your Domicile” workshop originated as an adult education module developed to help non-technical audiences learn more about airborne toxics through an interactive skit. The original education module was developed by Missouri Botanical Garden in collaboration with the United States Environmental Protection Agency and numerous reviewers and partners.

In order to increase the workshop’s relevance to audiences from Sovereign Nations and include topics on household hazardous waste and risk reduction, the original Detox your Domicile script and workshop materials were revised into this Tool Kit. The foundation for the module remains the same: to make learning about these concepts fun and engaging for non-technical audiences, and to emphasize the importance of our individual and collective impact on Mother Earth.

This Tool Kit includes the necessary information and basic materials to set up your own Detox your Domicile workshop in your community:

- A Facilitator’s Guide to explain objectives, background, materials, procedures, and extension ideas associated with this workshop.
- The participant scripts associated with the workshop.
- Supplemental poster and handout materials for printing or displaying during the workshop.
- A “compendium” of ideas for risk reduction and improved household hazardous waste management practices. This document was compiled based on feedback and discussion from an associated “Detox your Domicile” webinar series for Sovereign Nations in May 2023.
- Examples of workshop materials that were customized during in-person events, including an alternate script for communities that use wood burning stoves.

Aspects of the Tool Kit that were adapted for audiences from Sovereign Nations were incorporated primarily based on feedback and input from environmental professionals of Sovereign Nations and/or Tribal Elders. The workshop works best when the materials from this Tool Kit are used for in-person events, with audience participation components being important educational aspects. Groups of up to 30 participants are best for keeping each person engaged.

The key to the success of this learning activity is audience engagement and FUN! Yes - some elements seem silly, but such elements break down barriers and provide the human element of laughter, smiles, and fun. The facilitators and presenters need to be comfortable sharing the fun aspects of the script while acknowledging the serious nature of the material. And that does indeed include performing the Hokey-Pokey Compost Song.

For more information, or if you are looking for an organization to develop materials on related subjects, please contact glenda.abney@mobot.org from the Missouri Botanical Garden. For information or guidance on this learning activity, you may contact Rivas.Marcus@epa.gov from the United States Environmental Protection Agency.

Facilitator's Guide

Recommended Age Level:
Adult
Preparation:
Review the Procedures and Presentation Options and determine show presentation method. Gather all materials, obtain cast support, practice and present show.
Presentation Time:
1 hour Read-through time of the script is approximately forty minutes. You will need an additional twenty minutes to include the audience participation components and the commercials. This presentation works best within already established groups such as parent teacher organizations, church groups, community groups. It can also be used in a public forum setting. The use of attendance/ audience participation prizes is highly recommended. A list of suggestions is included.

Module Overview

Many of the household products we use everyday contain toxic chemicals that add to air and water pollution and can damage human health. Through a fictional home improvement show and home tour, participants will learn of pollution prevention techniques and safer substitutes for chemicals we use everyday. In this activity, the audience will test homemade cleaners, learn how to read hazard labels, and participate in commercials with environmentally friendly themes. A take-home inventory is printed in the take-home brochure so participants have a tool to help them eliminate potentially hazardous products they use within their homes.

Module Goal

- To provide an opportunity for adults to learn how purchasing choices and home decisions impact indoor air quality, the presence of household hazards, and their personal and environmental health.

Module Objectives

When this Activity is completed, the participants will be able to do the following:

- Identify at least one strategy for reducing their exposure to household chemicals in each of the seven main areas of a home (kitchen, living room, bedroom, bathroom, utility room, outdoors, and garage & workshop).
- Describe at least one safer alternative (homemade) cleaner to a commercially purchased cleaning product.

Procedures

Note: The following procedures are assuming that you already have a group to present this skit to. For marketing, you can check out example flyers in Section 4 of this Tool Kit. Holding the workshop as part of a regularly scheduled community event, such as a monthly bingo night or during an annual festival, can also help ensure an audience is present.

1. Read through the entire set of materials to determine if you will present the entire skit or selected sections.
2. Determine the materials and props you will need and arrange to obtain them.
3. Recruit your presenters and provide them with scripts ahead of time.
4. Obtain your performance space and set up for the skit.
5. Present the show.

The script contains the following sections (in order):

- Facilitator's introduction
- Baking soda commercial
- Kitchen with audience participation - baking pan cleaning activity, prizes for participants
- Living Room with audience participation - label reading activity, prizes for participants
- Bedroom with attendance prize awarded
- Bathroom
- Utility Room (*Alternate commercial: Worthier Wood Warmers commercial)
- Outdoors with audience participation - Compost Song, attendance prize awarded
- Garage & Workshop (*Default commercial: Green Car Garage commercial)
- Facilitator's closing

*Note that the "Default commercial" is included in the full script in Section 2 of this Tool Kit. The "Alternate commercial" is in the alternate commercial script excerpt presented in Section 4. Only one of these commercials will be presented - choose the default full script or the alternate script.

Presentation Options

These materials have two presentation options:

Option One: Requires the most time but is the most fun. Present Detox Your Domicile skit in its entirety. You will need time to make photocopies and read over the scripts. We recommend that you hold one brief rehearsal to familiarize your cast with the flow of the presentation and the use of the props. You will also want to obtain all your props and either purchase prizes or contact local businesses for donations.

Option Two: Requires less time than option one. Present portions of the Detox your Domicile skit. Edit and shorten the script to meet your needs (e.g., only present one or two relevant room sections, leave out certain audience participation components, etc.). You will need time to make photocopies and to assemble the room and props. Have your presenters read the script ahead of time.

Materials and Preparation

You will need the following people and materials for the workshop:

Personnel

- One person to facilitate the presentation, preferably someone from the organizing entity such as environmental office or Nation leadership (facilitator)
- Four people to present the script, preferably people from the organizing entity such as environmental office or Nation leadership (Host, Les, Nonnie, and Vanna)
- Four audience volunteers to present the commercials (2 for the baking soda commercial and 2 for the Green Car Garage or Worthier Wood Warmers commercial)

Printouts/Print Materials

- Nine copies of the script
- Posters based on the templates provided in this Tool Kit

- Copies of the brochure, one per each audience member
- Copies of the Compost Song lyrics for each audience member
- Signal word signs (four signal words and one smiley face)
- Other supplemental printouts provided in this Tool Kit, as needed

Equipment or Supplies

- Tables, chairs, and easel (or method for displaying posters)
- Props for audience participation portions of the script (Setup #1 and #2 listed below)
- Audience / Attendance prizes – one prize for Setup #1, five prizes for Setup #2, two prizes for Best Baking Soda commercial, two prizes for Green Car Garage commercial, and two random audience prizes (see list below for recommendations).
- Props and costumes such as a feather boa for Vanna would be a fun addition (optional)

Audience Participation #1: Baking pan cleaning

- Cookie sheet or baking pan with baked on grease stains
- Cream of tartar (maybe a couple of teaspoons)
- White vinegar (not much, all they are doing is making a paste)
- Scrubbing pad
- Towel

Tip: It is recommended that you test the stain and pan type prior to the workshop to ensure the cream of tartar and vinegar mixture is effective. This cleaning mixture is not effective on all stains and pans.

Audience Participation #2: Label reading

- Four signs copied on letter sized paper (mentioned in printouts section) WARNING, CAUTION, DANGER OR POISON, NON-TOXIC
- One copy on letter sized paper of the smiley face (mentioned in printouts section)
- Eyedropper
- Teaspoon
- Coffee scoop or medicine dosing cup (like the plastic ones that come with children's liquid pain reliever).
- Two label reading/signal word posters (mentioned in printouts section)
- Stopwatch or recording of the "Jeopardy Jingle" to track 15 seconds – note that the "Jeopardy Jingle" has a midpoint at 15 seconds that would be used here

Tip: Because the objects used in this participation component (i.e., teaspoon, eyedropper, etc.) are small, be sure to show them against a contrasting background or with an exaggerated gesture to ensure the audience sees them.

Best Baking Soda Commercial

- Two volunteers to read the script
- Two boxes of baking soda
- A rubber chicken (optional)
- Two copies of the commercial section of the script (highlighting the parts is helpful for the volunteers)

Green Car Garage Commercial (default) ...OR... Worthier Wood Warmers Commercial (alternate)

- Two volunteers to read the script
- Two copies of the commercial section of the script (highlighting the parts is helpful for the volunteers)

Notes on Materials

Poster-sized copies (one with the show title, one of each of the seven rooms, two audience cue cards, one label reading exercise, and one of the signal word definitions) are recommended to be used in larger formats, such as 18" x 24" posters or larger. The sheets in this Tool Kit can be copied onto overhead transparencies, downloaded for large-format printing, or downloaded and put into an electronic slide presentation. You will also need to make regular size copies (8.5" x 11") of the signal words and the smiley face for the label reading exercise as well as a copy of the EPA certification program logos. Keep the coloring for the posters or overheads to maintain their appeal. The master sheets for copies are found in Section 2 of this Tool Kit.

Attendance / Participation Prizes

Twelve or more attendance prizes are written into the script (six for audience participation, two for attendance, four for the people who perform in the commercials). However, you should modify the script to suit your own circumstances. Award attendance prizes by having participants answer simple questions about hazardous household products, randomly picking a number, sticker on the bottom of a chair, etc. Local businesses may be willing to donate prize items. Award prizes in the most appropriate places to emphasize the points being made in the script i.e., award the potpourri after discussing alternatives to air fresheners. We encourage the sponsoring organization, who is coordinating and managing the presentation, to focus on community and/or cultural needs. Prizes should be inexpensive and aligned with the goals of the workshop. Possible prizes include:

- Air cleaning houseplants, such as spider plant, philodendron, etc. **(mentioned in script as written)**
- Charcoal chimney **(mentioned in script as written)**
- Childproof cabinet lock
- Reusable micro fiber dust cloths
- LED bulbs (buy one with the Energy Star label on the package)
- Box of baking soda
- Bottle of white vinegar
- Assortment of empty spray bottles
- Container with a shaker top for baking soda (empty Parmesan cheese or spice containers work well).
- Commercially prepared safer cleaners
- Commercial cleaners with the "Safer Choice" logo
- Book on "green" housekeeping hints
- Isopropyl alcohol
- Enzyme drain cleaner

- Potpourri with natural scents as available
- Tire pressure gauge
- Low emission gas can
- Wool dryer balls
- Activated carbon/charcoal deodorizer bags

Setup Suggestions

- A table at the front of the room for the attendance prizes and other props is helpful. Props may be covered with a cloth or hidden from view until needed.
- Three chairs for Host, Les, and Nonnie
- An easel to display posters.
- Small table for Setup #1 and 2 (audience participation activities).

Tips For The Facilitator

Choose your presenters wisely. Who are the most animated people in your group? Do they read aloud well? Can they read with feeling and not rush the words? Do you have others who wish to be included? Can they assist in handing out the door prizes, changing the posters, or distributing the brochures?

It is strongly recommended that you get copies of the script to your main presenters (Facilitator, Les, Nonnie, Host, and Vanna) ahead of time and hold a rehearsal. Though this is not mandatory, if you rehearse, your program will flow more smoothly. You may also want to consider the room you will be using for your presentation and your audience size. Will it be easy for them to hear those who are reading? Can you arrange the room so that everyone can see your visual aids? If you will be using a microphone, be sure that your presenters are comfortable with it. Check all audiovisual equipment ahead of time. Be aware if anything requires a battery or an extension cord. Have a backup plan, how will you adapt if you have a technical glitch?

If you have solicited prizes and other support from local businesses, remember to invite them to your program. Add their name to the take-home brochure as a way of thanking them for their support. Verbally acknowledge their participation at the event as well.

Most importantly, have fun! Though reducing chemical risk in the home and environment is an important and serious topic, it needs to be presented in an approachable and friendly manner. People learn better and faster when they are having fun. It may be tempting to remove certain parts that seem silly, such as the Compost Song, but these parts are essential to the overall fun and success of the skit – DO NOT REMOVE THE COMPOST SONG!

"Customization" Tips

The format of the script and supplemental materials is provided as a starting point for conducting a workshop, but customization of the content is highly encouraged and recommended in order to make the information more relevant and engaging for the intended audience. For example, would audience members have a garage where they might park their

car? If not, maybe consider using the alternate script in Section 4 of the Tool Kit which includes information on wood burning stoves and removes garage information. Do audience members typically use large quantities of a certain cleaner, like bleach? Perhaps try emphasizing aspects of the script that mention bleach or add a few lines that address those concerns more directly.

In addition, the design of the posters and printouts can be altered to match the environment or cultural setting. The posters included in Section 2 of this Tool Kit were designed to be generic, but changing the background or items on the posters or handouts can fit in with a theme or make the materials more relatable to the audience. Be sure to keep the same words (either in English or another language) on each of the posters and printouts, though, so that they serve the same purpose.

Opening and closing speeches, or maybe an opening prayer, can help kick off and conclude the workshop in a powerful way. Tribal Elders can offer invaluable wisdom on these topics, such as Tribal Ecological Knowledge pertinent to households, plant-based remedies, or stories from the past. A spiritual leader guiding the audience in prayer, if deemed appropriate, can help ground the audience in the importance of the time and space being shared together. You can also share personal stories relevant to the workshop, such as a prior experience witnessing the dangers of household chemical products. With your opening, make it appropriate for your audience, captivating, and relevant to the topics being discussed in the workshop.

Incorporating cultural components is a great way to engage the audience and celebrate your shared culture as well. Language is one easy way to do this. Try translating aspects of the script or even the title, “Detox your Domicile”, into your Native language.

There are many ways to “customize” this Tool Kit to best fit your community, as discussed. Here are a few ideas to help get you thinking:

- Translate “Detox your Domicile” into your Native language, and use that as the title of the workshop.
- Change the design of the posters to display the typical environmental features in your area (i.e., incorporate images of native plants and wildlife).
- Change the names of “Omar” and “Olga” in the script to names that might be more common for your Sovereign Nation (please maintain the names Les and Nonnie, as noted below). You may also change Omar and Olga’s location – currently “just east of the Mitten Buttes” in the generic script – based on where you’re located.
- Offer prizes to participants that are more relevant to your culture or your area.

Examples of customizations are included in Section 4 of the Tool Kit – “Customizations”. Please also note the alternate commercial script included in Section 4 of the Tool Kit changes both the Utility Room and the Workshop sections of the script in addition to replacing the “Green Car Garage” commercial with a “Worthier Wood Warmers” commercial.

The authors do respectfully request that the character names Les and Non Toxic (Les and Nonnie) not be changed. Their names support the reduced toxicity concept, a key lesson in this educational effort.

Conclusion

At the end of this presentation, participants will have gathered several strategies to reduce their exposure to potentially harmful household chemicals. The take-home brochure will provide the tools to ensure that these ideas can be implemented.

Suggested Extensions

- At the conclusion of the script, have all materials needed for each audience member to make a bottle of all-purpose cleaner using the recipe in the brochure.

- Host a household product swap party. Invite everyone to round up household and craft products that are gathering dust and find out if someone else can use them. Make the party fun with prizes for the most unusual product, ugliest paint color, and so forth. While you are at it, take the opportunity to distribute recipes and information about safer alternatives for household needs. After the party is over, make arrangements for the proper disposal of products no one wanted.

- Does someone in your group use homemade alternatives to commercially prepared cleaners? Set up testing stations around the room where people can compare the effectiveness of prepared cleaners. Use your imagination. Green cleaning tips books and web sites are good sources for ideas.

Helpful Background Information

- While it is different than smoking tobacco products such as cigarettes, vaping can still have negative consequences due to the presence of nicotine and harmful chemicals in electronic cigarette aerosols. Certain chemicals can aggravate asthma, as mentioned in the Detox your Domicile script (when reading the letter from Omar and Olga).
    - Source: US Department of Health and Human Services. E-*cigarette use among youth and young adults: a report of the Surgeon General*. Atlanta, GA: US Department of Health and Human Services, CDC; 2016.

- Respiratory masks, as mentioned in the Detox your Domicile script (in the Kitchen portion), can be worn to filter out a variety of substances depending on the filter used. The more common N95 mask is used to filter out particulates and dust, but it is not effective for chemical vapors. Specific respirators with filter cartridges for chemicals such as organic vapors or ammonia should be worn when using these sorts of chemicals. Read the label on respiratory masks or filter cartridges to understand the appropriate use. Note that respiratory masks such as N95 masks do not supply oxygen, so do not enter areas where you suspect low oxygen levels.

- The term “compostable”, as used in the Detox your Domicile skit (in the Outdoors portion), is different than the frequently-used term “biodegradable”. According to the EPA website, “*Plastic that is compostable is biodegradable, but not every plastic that is biodegradable is compostable. Whereas biodegradable plastic may be engineered to biodegrade in soil or water, compostable plastic refers to biodegradation into soil conditioning material (i.e., compost) under a certain set of conditions. In order for a*

plastic to be labeled as commercially 'compostable' it must able to be broken down by biological treatment at a commercial or industrial composting facility."

  - Source: US EPA. *Trash-Free Waters: Frequently Asked Questions about Plastic Recycling and Composting.* Retrieved on January 1, 2024. https://www.epa.gov/trash-free-waters/frequently-asked-questions-about-plastic-recycling-and-composting

- Single-use products, as mentioned in the Detox your Domicile skit (in the Outdoors portion), refer to both paper and plastic products that are disposed without reuse. Examples of single-use products relevant to the skit might include plastic utensils, paper plates, plastic cups (the classic red Solo cup), plastic straws, aluminum foil, et cetera that are thrown in the garbage shortly after using. These single-use products require natural resources and energy to produce, not to mention fossil fuel resources used to produce plastic products, which can contribute to additional pollution in the environment or contribution to climate change. If we use a large number of single-use products or use them frequently and throw them away after one or two uses, we're not only depleting resources without much benefit, but we're also creating more trash and litter that needs to be managed or that gets released into the environment. It is better to use serving ware that is washable or intended to be reused, which might include silverware, washable cups or bottles, glassware, ceramic dishes, or reusable plastic containers.

- The statistic mentioned in the Detox your Domicile script (before the Baking Soda commercial) – "*According to data from the Centers for Disease Control and Prevention (or the CDC), over 10 percent of Native American or Alaskan Native peoples have been diagnosed with asthma, including over 60,000 children under the age of eighteen*" is based on data from the CDC spanning the years 2006 to 2018.
  - Source: *Asthma Surveillance — United States, 2006–2018* which was published by Centers for Disease Control and Prevention (U.S.) on September 17, 2021 as part of the MMWR Surveillance Summaries /70(5) series. The data can be found here: https://stacks.cdc.gov/view/cdc/109086

Section 2 Workshop Materials

Detox your Domicile Script

Posters for Workshop

Supplemental Printouts

Detox your Domicile

[Opening Speaker may take this opportunity to lead prayer or speak a few words of their choice]

FACILITATOR'S INTRODUCTION

[Be sure that brochures have been distributed at the beginning of the program.] Thank you for coming to our presentation. When most people think of pollution, they think of outdoor air. You may be surprised to learn indoor air is often more polluted than the air outside. A large contributor to indoor pollution is household hazardous waste and improper management of chemical products. Household hazardous wastes might include common household cleaning products, which increase the amount of pollutants in our homes. This waste poses health risks to both ourselves and Mother Earth. Luckily, there are many simple strategies to reduce the risks and hazards associated with harmful products. We will explore some alternatives to reduce our exposure to many of these toxic hazards, acknowledging Indigenous Cultures and Traditions. Our goal is to decrease the amount of household hazardous waste that you might produce in your home.

To stage our program, we have chosen a familiar format—the home improvement show. Our purpose is not to make light of a serious subject, but to lighten the learning atmosphere and give it relevance to our daily lives. The brochure summarizes the points you'll learn today and provides you with tips to use in your own home. We even have a place to inventory your household cleaners with a scoring system to help you determine products for which you may wish to find substitutes. Please also explore the other resources provided to you today, especially any based on Tribal Indigenous knowledge. Thank you for your interest. Now, let's get on with the presentation.

Ladies and Gentlemen, please welcome the host of Detox Your Domicile, the home improvement show that shows you how to put the "green in clean"!!!

THE HOME IMPROVEMENT SHOW

HOST:
Welcome to this week's installment of DETOX YOUR DOMICILE, a special feature of Pollution Prevention Network or PPN. Remember everyone: *[Vanna holds up baking soda cue sign and Host points to sign]* BAKING SODA CLEANS EVERYTHING!! Now let's meet our experts—those Gallant Guardians of Green who have helped dozens of families make their homes healthier and safer places to live. Heeeeeere's Les and Non Toxic. *[Vanna holds up APPLAUSE cue sign as Les and Nonnie enter.]*

LES and NONNIE:
Thank you, Thank you. *[They sit in chairs placed next to the easel.]*

HOST:
We have invited viewers to write to us about their pollution problems. Each week we choose one of those emails and go for an on-the-spot visit from our PPN team. Our experts, Les and Nonnie, tour the winners' home, advising them on ways to solve or lessen the harm to human health and Mother Earth through household hazardous waste management. In addition, we select members of our studio team to participate in games and demonstrations related to household hazardous waste. So, let's get started. *[Turns to Nonnie]* Nonnie, tell us the story behind today's program.

NONNIE:
Today you will see us visiting the home of Omar and Olga Occupant, just east of the Mitten Buttes. This young couple was having serious pollution-related air problems directly affecting Olga's health. Here is what Mr. Occupant wrote. *[Reads the email.]*

Dear Les and Non Toxic,
We need your help! My wife Olga and I have recently purchased an average home. Olga was just diagnosed with asthma. We have noticed that on days when we do chores around the house her breathing is worse. Our doctor gave us a list of changes we could make to help prevent an asthma attack. I even quit vaping.

LES:
Omar quit vaping. That is an important step. We know that certain chemicals can aggravate asthma, and some of them are found in e-cigarette smoke. Continue with the email Nonnie.

NONNIE: *[continues]*
Our doctor said that some of the ordinary products we use in our home might be aggravating Olga's breathing, and she mentioned your wonderful program, "Detox Your Domicile." Please come visit and show us what we can do to have cleaner air and reduce our exposure to toxics in and around our home.

Sincerely,
Omar and Olga Occupant

HOST:
You certainly have your work cut out for you. According to data from the Centers for Disease Control and Prevention (or the CDC), over 10 percent of Native American or Alaskan Native peoples have been diagnosed with asthma, including over 60,000 children under the age of eighteen.

LES:
Those are disturbing statistics, but the good news is those with respiratory ailments—as well as the rest of us—can have healthier lifestyles by reducing pollution. Many people don't know that the air outside our homes is often cleaner than the air inside our homes. Chemical products we use in our homes might be considered household hazardous waste when disposed, so by cutting down on these products, we can decrease risks caused by hazardous pollution.

NONNIE:
You're right, Les. In fact, most pollution is invisible, but though you can't see it, it's still there.

LES:
Before we take a look at what Nonnie and I found at the Occupants' home, let's pause for a word from our sponsor.

[Perform baking soda commercial]

Best Baking Soda Commercial

BEST BAKING SODA COMMERICAL

(Suggestion: Ask two people to read the commercial before the program begins. Give them copies so they can look over it before reading it on the program.)

FIRST SPEAKER:

Did you know that baking soda cleans everything? This small box is a powerhouse when it comes to cleaning. *[Holds up a box of baking soda.]*

SECOND SPEAKER: (Speak quickly, like a sales patter.)

Why it'll scrub your pots, tubs, teeth, and patio furniture.

FIRST SPEAKER:

And that's not all. Use it in your shoes, your sinks, your fridge, and your drains.

SECOND SPEAKER:

Baking Soda Cleans Everything. [*Hold up a box of baking soda.*]

FIRST SPEAKER:

Use it to wash your clothing and bedding as a bleach booster.

SECOND SPEAKER:

Use it on your children. It can soothe bee stings, chicken pox, and sunburns. As we said….

BOTH SPEAKERS TOGETHER:

Baking Soda Cleans Everything. [*Hold up a box of baking soda.*]

FIRST SPEAKER:

What do you pay for a product that does all that?

SECOND SPEAKER:

I bet you pay a lot more than you need to! For a bottle of all purpose cleaner, you can pay over three dollars.

FIRST SPEAKER:

But for a box of baking soda you only need pocket change

SECOND SPEAKER:

This product has more than 500 documented uses. But wait, there's more. It's friendly to Mother Earth and non-toxic, too. In fact, you can use it to brush your teeth and freshen your breath.

FIRST SPEAKER:

Use it to freshen your carpets, cat box, and trash bins. It's a great deodorizer. Using it is not the pits; in fact, it will freshen your pits.

SECOND SPEAKER:

Just in case you're not convinced, it will freshen your pillowcase, briefcase, suitcase, and the books in your bookcase. It will even help you pluck a chicken. [*Hold up rubber chicken prop, if available*]

FIRST SPEAKER:

So, for all your household chores remember—say it with me—

BOTH SPEAKERS TOGETHER:

Baking Soda Cleans Everything. [*Hold up a box of baking soda. Vanna holds up audience cue sign.*]

THE KITCHEN

LES:
Thank you, sponsors. You're doing a great job. And remember- *[Vanna holds up baking soda cue sign and the audience repeats "Baking Soda Cleans Everything!"]*

NONNIE:
That sure was a lot of uses for baking soda! I can't imagine any other product can do all of that.

LES:
Actually, there are many natural and alternative products that can be used around the home, but we can just stick with baking soda as the tagline for now. Now back to the Occupants' home. We'll start with the kitchen. *[The kitchen sketch is displayed on the easel. Audience members will also find a sketch of the house plan in the brochures handed out earlier.]* As in most American homes, the cabinet under the sink in Omar and Olga's kitchen is a major storage area for cleaning supplies. Even a quick glance revealed a hodgepodge of products designed to clean everything from dirty sneakers to fine china.

HOST:
But what could those innocent-looking cleaning products that we all know and love have to do with indoor health risks?

LES:
They may look innocent, but real dangers lurk in many of those bright cans and bottles. Many household cleaners contain toxic chemicals released into the air when used. These toxic chemicals are also extremely dangerous when ingested or swallowed.

HOST:
So, what did you advise the Occupants to do about their cleaning products?

NONNIE:
We sat down and read the labels on the cleaners they were using. First of all, we cautioned them never to mix two cleaners of different kinds together, especially if one contains ammonia and the other contains chlorine. This can produce a gas, and breathing its fumes could be fatal. Then, we discussed how to begin phasing out risky household products in favor of safer ones.

HOST:
We talk about doing that at home, but we never know where to start. And you can't throw dangerous stuff like that in the trash, can you?

LES:
Certainly not, but you can start deciding which ones to replace. First, take an inventory of the cleaning products to determine which products to purchase. Then, consider these four things: how toxic is the product, what is its use, how often you use it, and if there are suitable alternatives available. You can also use the Safer Choice logo when comparing similar products, for products that are in the Safer Choice program. *[Vanna shows Safer Choice logo sign].* I typically like to stick with natural herb and plant remedies to start, though.

HOST:
Give me an example.

NONNIE:
Suppose you buy a glass cleaner that is mildly toxic, and you buy a more toxic oven cleaner. Conventional wisdom would say, "Get rid of the most toxic one—the oven cleaner." But wait a minute. You use the glass cleaner several times a week for many different chores all over the house. On the other hand, you use the oven cleaner in one location for a specific job once every three or four months.

HOST:
Are you saying it might be wiser to find an alternative for the glass cleaner?

LES:
We're saying you need to consider how, when, and where you use the product as well as its level of toxicity. Wear respiratory masks when using toxic cleaners, and look for safer substitutes. And when I say respiratory mask, it's important to know that there are different types of masks out there – some are used for particulates and dust, and others are used for chemical vapors. Make sure you're using the right mask by reading the label.

NONNIE:
We compared top name brands of glass cleaners in the store. One carried a caution label, but the other did not because it posed less of a risk. And if you like saving money, you can make your own safer household cleaners as your great-grandparents and other Ancestors did.

HOST:
Come on, Nonnie. Do any of those homemade cleaners really work?

AUDIENCE PARTICIPATION

LES:
Since you're so skeptical—let's find out! First, I have a baking pan with baked-on stains that are almost impossible to remove. *[Shows it to the audience.]* Let's be honest, how many of you have pans like this at home? Raise your hands. *[Show of hands. Les selects an audience member to come up and participate. Vanna sets out audience participation props set-up #1.]* Before your eyes, we are going to remove these stains with a paste of vinegar and cream of tartar. *[Les has the audience member treat the stains and scrub the pan.]*

HOST:
Is this one of those things we shouldn't try at home?

LES:
On the contrary. You can try this at home. Vinegar and cream of tartar are non-toxic household products. The recipe is simple. Make a paste of cream of tartar and vinegar and scrub away. In self-cleaning ovens, you can use this on oven windows to remove the grease. Are we ready to see the results?

HOST:
[Displays the pan.] That's really great! Thank you for participating! *[Prize is awarded to participant.]* I've heard about other alternative cleaners as well, such as making a baking soda and vinegar paste to clean your oven.

LES:
Right, there are also plenty of options for all-purpose cleaners made of non-toxic, natural ingredients that you can make at home or buy from environmentally-conscious brands. You can also put a vinegar and salt solution in a spray bottle to use as an easy carpet and pet spot cleaner.

NONNIE:
Speaking of spot cleaning, how can the Occupants safely deter ants if they find any around the kitchen?

LES:
Great question, Nonnie! You can deter ants by spraying them with a dish soap solution of one part dish soap to four parts water. Be sure to check that your soap is safe for plants, if you are using it on plants.

HOST:
Wow, that's interesting! Now, back to Omar and Olga's home. Okay, Nonnie. Where do we go next?

LIVING ROOM

NONNIE:
We toured the Occupants' living room next. *[Vanna: The easel sign is changed to the living room. This is a good time to switch audience participation props to set-up #2.]* We were delighted to see that the Occupants were using LED light bulbs in their lamps and ceiling fixtures.

HOST:
I know LED bulbs save energy and last longer, Nonnie, but what do they have to do with pollution?

NONNIE:
Most of our nation's electricity is produced from fossil fuels, with coal-fired plants contributing around 20% of our energy. Burning coal produces pollution. It follows that anything we can do to save electricity reduces pollution. Using LED bulbs is a great step, and we encourage opening windows to let in sunlight.

HOST:
That makes sense. Since we're talking about electricity, I see a laptop. Anything we should keep in mind for that, Les?

LES:
Yes, laptops, wireless headphones, and other electronics contain lithium-ion batteries that can be harmful to Mother Earth and your health if you don't manage them properly.

NONNIE:
Right Les. If the electronics are still good and can be used by someone else, donate them to a reuse center so community members can use them. But if they are damaged or crushed, these batteries can be a fire hazard, and they must be managed safely.

HOST:
And what's the right way to manage them?

NONNIE:
Well, to start, don't throw them away in the garbage or a recycling bin… Take used batteries to certified battery electronics recyclers or household hazardous waste collection points. Sometimes, retailers will also be able to recycle them. Also, be sure to read and follow the proper use and safety guides for your electronics or batteries.

HOST:
Great, thanks Nonnie! Were there any problems in the living room?

LES:
The living room walls were discolored from smoking. Omar and Olga plan to repaint the living room walls and strip the painted woodwork down to the natural wood underneath.

NONNIE:
The first step, especially if you live in a home built before 1978, is to test the painted surfaces for lead. Certified personnel – such as Renovation, Repair, and Painting-certified contractors – can conduct lead tests in your home. If they find lead, seek expert advice on how to deal with it. We had certified inspectors test the woodwork and found no lead.

HOST:
Well, that's good. Aren't some paint strippers dangerous to use, too?

NONNIE:
Yes. You must read and follow the instructions on the container when working with paint strippers. You can also use the Safer Choice logo when deciding which paint stripper to use. [*Vanna waves Safer Choice logo poster.*]

HOST:
I always read the labels on products I bring into my home, but I'm still confused. Some labels say caution, some say danger. What's the difference?

NONNIE:
Let's see if any of our audience members can answer that question, but first, let me set the stage. Your task is to become familiar with four signal words that tell how toxic the product is. I need five volunteers from the audience. *[Vanna changes easel to the sign with the signal words printed in random order. Nonnie hands one placard each to four volunteers asking them up to face the audience, instructing them to hold the placard in front of them. Be sure they don't accidently line up in the correct order!]* Here are the signal words. Not in order, they are WARNING, NON-TOXIC, DANGER OR POISON, and CAUTION. *[Nonnie directs the fifth volunteer]*. What you must do is to arrange the four signal words from least to most toxic in 15 seconds. Least toxic is on your right, and most toxic is on your left. Are you ready? GO! *[All sing Jeopardy Jingle while the fifth volunteer moves the other people with the signs around until they are in the order believed to be correct. This Jingle can be found online by searching "Jeopardy Theme."]*

HOST:
[Times with stopwatch or second hand of wristwatch. Calls time in 15 seconds.] How did our intrepid volunteer do, Nonnie?

NONNIE:
Hmmm—let me see. *[Nonnie examines the results. If the sequence is not correct, Vanna rearranges them into the proper order.]*

HOST:
Let me get this straight. The correct sequence of product labels from least to most toxic is NON-TOXIC, CAUTION, WARNING, DANGER OR POISON. But what do those words really mean? For instance, if I accidentally swallowed some of one of them, would it kill me? And if so, how much of it would be lethal?

NONNIE:
That's a good question and the answer will scare you. *[Nonnie or Vanna distributes an eyedropper to the person holding the DANGER OR POISON sign, a teaspoon for WARNING, a medicine cup for CAUTION, and a smiley face cutout for NON-TOXIC.]* Nevertheless, consumers must realize how lethal some of their products can be. Here is how the U.S. Environmental Protection Agency answers your question. *[Vanna changes the poster. Nonnie reads through the definitions on the poster and names the props as the volunteers hold up their sign and props that demonstrate the amounts.]*

HOST:
Wow! I see what you mean about scary.

NONNIE:
Before we move on, this chart gives us one more important thing to remember.

HOST:
I'm almost afraid to ask, but what is it?

LES:
Swallowing a hazardous product is undoubtedly the most life-threatening danger, but serious problems may also arise from breathing the fumes or splashing the product in the eyes or on the skin. Quantifying those dangers is difficult.

HOST:
As always, Les, it comes down to reading the labels and following the directions. And keep hazardous products out of the reach of children and pets. Thanks, to the audience for helping us learn this important lesson. *[Participants may be awarded prizes at this time, return their props and take their seats.]* Let's get back to those paint strippers that got us started looking at labels. What's in some of them that make them so dangerous?

NONNIE:
Some commonly used chemicals in paint strippers and finishes may cause cancer in humans. Exposure to high levels of these chemicals over short periods can irritate the nose and lungs. They can cause dizziness, headaches, and lack of coordination.

HOST:
That sounds bad for all people, especially those with a respiratory problem. So, what did you tell the Occupants?

LES:
We took a trip to a hardware store to select a safer wall paint. While we were there, we discussed paint strippers and varnishes with the department manager. We looked for paint strippers with the Safer Choice logo. The department manager recommended one of the safer paint strippers now on the market.

HOST:
What did the Occupants decide to do?

LES:
In the end, they decided to paint the woodwork.

NONNIE:
That sounds like a wise course to take. And speaking of courses to take, we'll let Les steer us into the next room.

BEDROOM

LES:
The bedroom was next *[Vanna changes the poster on the easel to the bedroom.]* The Occupants have decided to buy new bedroom furniture.

NONNIE:
Their budget won't stretch to include new drapes and bed covers, so Olga planned to have the present ones cleaned and use them until they can afford new ones.

HOST:
That sounds like a good plan.

LES:
First, we read the content labels to make sure the fabrics were washable. Then we advised Olga to add vinegar for a fabric softener and to hang the fabrics outside or on a drying rack to save energy. Everything turned out fine. However, if you have allergies, asthma, or respiratory problems, be careful of drying fabrics outdoors as it could cause a bad reaction.

HOST:
Those are great suggestions. What should Olga do with the old bedding when they can afford new ones?

LES:
They can donate the old bedding to a neighbor or thrift store for re-use, or they could repurpose the bedding and other old clothes as cleaning cloths, rather than throwing them away.

NONNIE:
That's good advice! And here's another idea, which the Occupants were already doing. They didn't know they were doing it, however, until we pointed it out. Did you notice the houseplants in every room?

HOST:
Yes, but what can they do to help?

LES:
Many houseplants can help get rid of unwanted chemicals. They have the capability of helping remove certain kinds of toxics from the air. The scientific word for this process is phytoremediation [*pronounced: fie-toe-ree-meed-ee-ay-shun*].

HOST:
Phyto what?

LES:
Phytoremediation. Phyto refers to plants, and remediation means to fix or improve. Houseplants such as, philodendrons, peace lilies, english ivy, and spider plants can help reduce small amounts of some indoor air pollutants. To avoid mold problems, which can sometimes be an asthma trigger, be sure to maintain houseplants by watering them properly.

HOST:
Who knew? This is great because I love houseplants. Is this one of the pollution-gulping plants? *[Picks up the plant from the table.]*

LES:
Yes. This is a _____ plant, and we're going to give it as a prize. *[The plant is awarded, see the Facilitator's Guide for a list of suggestions on awarding prizes (e.g., could award a philodendron plant)]*

HOST:
Tell me more! How else can the Occupants cleanse their home?

NONNIE:
I'm glad you asked. They can purify the air by practicing sage smudging. Be aware that smudging can be difficult in small or closed spaces, so be sure to have plenty of space inside before doing so.

LES:
That's right. And they can also bring furniture outside to detoxify in the sunlight, or simply open their windows to let in fresh air!

BATHROOM

HOST:
Wow, lots of great options for air purification! Where should we go next in the Occupant's home?

NONNIE:
We took a peek into the bathroom next. *[Vanna changes poster to the bathroom.]* Like kitchen cabinets, bathroom cabinets are common places to store cleaners. We had discussed those, so we concentrated on a couple of other products found in most bathrooms: drain cleaners, air fresheners, and disinfectants.

HOST:
Don't tell me you banned those essentials from the Occupant's bathroom?

NONNIE:
Of course not. We never ban anything. We give people the facts about the products they are using and let them make their own decisions. For example, looking for products with Safer Choice logos and WaterSense labels can help improve indoor air quality while protecting Mother Earth and conserving water. We notice that the Occupants have a WaterSense labeled showerhead, so they are doing great. [*Vanna waves WaterSense label poster or paper with symbol.*]

HOST:
Fair enough. What if I have a clogged drain? What do you recommend?

NONNIE:
An old-fashioned plunger.

HOST:
That may take care of the immediate problem, but what about maintaining my drains.

NONNIE:
There are many home remedies such as pouring a mixture of baking soda, table salt, and white vinegar down the drain, letting it sit for 10-15 minutes, then pouring hot water down the drain. But if you want to use a commercial product, check out the enzyme-based ones. Enzyme cleaners are much safer for septic systems compared to harsh chemicals.

HOST:
Let's move on to our next item. What's the story on air fresheners?

NONNIE:
The important thing to know about air fresheners is how they work. Many air fresheners, whether liquids, aerosols, or solids, mask odors rather than neutralize them.

HOST:
Do you have any good news?
NONNIE:
Sure. Let fresh air into the house. And you can buy several natural alternatives.

HOST:
Such as?

NONNIE:
Use homemade potpourri scented with natural oils. Or even a small bowl of vinegar can be effective.

HOST:
You mentioned that the Occupants' bathroom cabinet contained disinfectants. What dangers do they pose?

NONNIE:
Disinfectants are toxic and kill fungi, molds, mildew, and bacteria.

HOST:
Like antibacterial hand soaps and germicides?

NONNIE:
Disinfectants are more like bleach and products to get rid of molds. Disinfectants are to be used on hard surfaces. They are classified as pesticides and regulated by the Environmental Protection Agency. Antibacterial soaps and other products for human use are classified as drugs and regulated by the Food and Drug Administration.

HOST:
Disinfectants are pesticides? I suppose we have no alternatives for killing germs.

NONNIE:
Not if you want to get rid of them. Cleaning the surface is probably the most important step. Less toxic products called sanitizers reduce the dangers from certain microorganisms but may not kill them. For example, you can spray isopropyl alcohol onto a clean surface, let it sit for the designated time listed on the bottle, and then wipe the surface. This process is effective and inexpensive. We learned that during the COVID pandemic.

HOST:
Well, what if I just spray more sanitizer onto the surface? Wouldn't that kill more germs?

NONNIE:
Actually, no it wouldn't in most cases. I'll spare you the biology of bacterial resistance, but using more product than directed could actually kill less germs. More is not always better! It's important to follow product instructions for both safety and product effectiveness. I repeat, more is not always better! Anything to add, Les?

LES:
Remember that both sanitizers and disinfectants are useless on a surface that is not clean. As we discussed with air fresheners, there are places and times in our homes when disinfectants are needed. Consider where and why you need to use a disinfectant. For the baths and kitchens, they may be essential, but for other areas of your home, milder cleaning agents or sanitizers may be sufficient. The bottom line as always is…

HOST, LES, AND NONNIE TOGETHER:
Read the labels carefully, use only as directed, and keep them out of the reach of children.

HOST:
Now, Les, tell us about the next room.

[Continue with the default script on the next page, or you can use the alternate script in place of the default script starting at this point.]

UTILITY ROOM

LES:
We toured the utility room next. *[Vanna changes poster to the utility room.]* The Occupants' utility room contains the heating/cooling system, water heater, washer, and dryer, and ironing equipment.

HOST:
What caught your attention in the utility room?

LES:
We were in for a pleasant surprise. The Occupants are really on the cutting edge when it comes to energy savings. They are keeping up with maintenance on their heating and cooling systems. They regularly clean the air filters on their window unit air conditioners and keep their furnace clean. Plus, their dryer had an Energy Star label. *[Vanna waves Energy Star label and Water Sense label poster.]*

HOST:
What does that mean?

LES:
An Energy Star label means the appliance meets a high standard of energy efficiency and will save you money on your energy bills.

HOST:
Be sure to look for this symbol when purchasing your next appliance. Were there any problems in the utility room?

LES:
Well, the Occupants use a lot of laundry products that contain potentially harmful substances.

HOST:
Such as?

LES:
Chlorine bleach, which is a pesticide, and laundry detergents that can irritate eyes and skin. In addition to health hazards, laundry products that are misused or disposed of improperly can contaminate water and soil. It's especially important here to read the label for how much laundry detergent you actually need to use, since it's less than most people think.

HOST:
Huh, I guess that's like disinfectants where using more is not always better.

LES:
Exactly! More is not always better! Using more laundry detergent than directed can leave residue on your clothing and might even cause your clothes to get dirtier. So again, make sure you read the label.

HOST:
That's good to know! Can we explore less toxic ways of doing laundry?

LES:
We certainly can. You can create laundry detergent at home by mashing up soap berries into a paste and combining with water. Also, many products have been on the market for a long time such as borax, baking soda, *[Vanna holds up Baking Soda sign]*, and non-detergent soaps. Other environmentally friendly laundry products are produced commercially as well.

NONNIE:
That's great news! I think it's time for a breath of fresh air now. Let's follow Les into the yard.
[Vanna changes the poster to outdoors. Nonnie passes out "Compost Song" lyrics sheets].

OUTDOORS

LES:
The Occupants' certainly enjoy outdoor living. Olga has a garden in the yard where she grows herbs and vegetables. She tends to the garden by manually weeding and watering the plants with a watering can. I was also thrilled to see a compost pile near the garden where she recycles some kitchen scraps, dead leaves, and lawn clippings.

HOST:
More people seem to be composting these days. Where can you find information about composting?

NONNIE:
The Internet is a great place to begin, but tribal environmental offices, state or local farm bureaus, conservation agencies, and botanical gardens will offer assistance. In fact, we can help you learn more about composting right now with a song.

LES:
That sounds like fun. OK. Everybody join in for the Compost Song.

NONNIE:
The tune is Hokey Pokey.

[Sung to the tune of "Hokey Pokey"]
[If you are not familiar with the tune, it can be easily found through a simple internet search. Stand up to perform the song if able; using hand gestures and body motions to go along with the song is highly encouraged (e.g., spin in a circle when you say "turn me once in awhile"). This song is essential to the fun of the skit – do not skip over it!]

Verse
Put in your celery tops and your apples skins, all fruit and vegetables come on in.
So, give me a little water and turn me once in awhile, rot's what it's all about.

Chorus
It's about De-composition!
It's about De-composition!
It's about De-composition!
And Rot's what it's all about!

Verse
Put your coffee grounds in, but keep your stinky meat out. I love your leaves and clippings so much I want to shout.
So, give me a little water and turn me once in awhile, rot's what it's all about.

Chorus
It's about De-composition!
It's about De-composition!
It's about De-composition!
And Rot's what it's all about!

LES:
That was great. The best part about composting is all of the free natural fertilizer to use on your lawns and gardens. How did everything look?

HOST:
The Occupants' backyard was inviting with its trimmed lawn, charcoal barbeque grill, picnic table, comfy lawn chairs, and a small chicken coop, a scene right out of a home magazine.

NONNIE:
Or maybe a horror flick. Five or six families are treating their lawns and gardens with fertilizers, herbicides, and pesticides.

LES:
Three or four others are mowing and trimming their lawns with gasoline powered tools. I even see some neighbors using burn piles and burn barrels to get rid of household wastes.

NONNIE:
Another family is using disposable serving ware, contributing to climate change by using single-use paper and plastic products. And to make matters worse, other families are cooking over charcoal fires started with lighter fluid.

HOST:
You have hit a nerve here, Nonnie. The lawn and garden can go to seed if they must, but I'll give up my hamburger turner when they pry it from my greasy, soot-covered hands!

NONNIE:
Cutting down on pollution doesn't mean giving up everything you love and enjoy. It means using safer, cleaner alternatives when available. We have substitutes for every one of the activities we mentioned.

HOST:
Let's start with the charcoal grill.

NONNIE:
You can get a gas grill.

HOST:
I don't want a gas grill. I love my charcoal grill. And how am I going to light the briquettes without lighter fluid?

NONNIE:
I'm glad you asked that. *[Vanna appears with charcoal chimney, or an image of one.]* Does anyone know what this is? A charcoal chimney is a simple way to light a charcoal fire without using volatile lighter fluids. They cost about $10 at large grocery, hardware, garden, and discount stores. Crumpled paper is placed in the bottom of the chimney with charcoal briquettes piled on top. The paper is lighted through slits at the bottom of the chimney. Holes in the chimney create a draft to ignite the charcoal.

LES:
We also know that many people may have expired gel alcohol sanitizer left over from the pandemic. These can be used as fire starter or accelerant!

HOST:
Okay—that's only one out of the five issues that you saw. What makes disposable serving ware so bad?

NONNIE:
Not only does it take a lot of resources to produce each utensil, napkin, straw, or plate that you use only once, but throwing away all those paper and plastic products results in a huge amount of unnecessary trash that needs to be managed. Unfortunately, people don't always dispose of it or manage it properly.

HOST:
I do get upset when I see plastic forks or cups that are littered on the ground around my community, so I see your point. I suppose offering washable and reusable serving ware is better, right?

LES:
Absolutely! Even if you're a guest at a party that's using disposable serving ware, I've seen some people carry around their own washable cutlery so that they can refrain from using the disposable stuff.

HOST:
Hmm, maybe I'll try that. But we still have three outdoor issues left to talk about. How about those power mowers—and if you tell me to get a reel mower, I'm going to tell you to GET REAL!

NONNIE:
Oh, that was awful! Okay, then how about a cordless electric mower.

HOST: *(Groans)*
Aren't they more expensive?

NONNIE:
A little bit—but they don't use gas or oil, and they don't make noise or spew smoke and fumes into the air. Small gasoline engines make much dirtier smoke than cars. If you aren't ready to make the switch to electric, then keeping the older machine engines tuned, or purchasing a newer machine will be an improvement. There have been improvements to the gas-powered mowers since 2011.

HOST:
I'll think about it. I suppose you had an issue with burn piles and burn barrels as well?

NONNIE:
Yes, it's better to leave the waste disposal to professional waste management services in your area. Burning household wastes such as plastics, treated wood, and cleaning products out in the open can release toxic chemicals into the air.

HOST:
Yikes, I wouldn't want to breathe that in! Now let's get to the last issue that you saw outdoors – what's your answer for the folks using herbicides and pesticides on their lawns and gardens?

NONNIE:
You can discourage weeds and garden pests with homemade or commercial products that don't harm Mother Earth or poison something you didn't mean to harm.

HOST:
Right! I've heard that you can put chili peppers in water and coat that water on corn and other crops to repel some pests.

NONNIE:
That seems useful! You can also use a soapy water spray to kill pests on plants.

HOST:
But what about other annoying bugs? I want to start my own garden, but I don't want to have to worry about mosquitos coming after me!

LES:
You can manage mosquitos and other vermin by eliminating desirable habitat conditions. For example, areas of standing water are ideal breeding spots for mosquitoes, so mitigating standing water around your garden may help keep pests away. Also, you can burn sage nearby to keep mosquitos under control.

NONNIE:
Keep in mind that whatever you use outdoors is likely to wind up in the air, water, and soil not only in your own yard, but in other yards as well. If it just stayed in our yards that would be bad enough, but the chemicals we use end up in our ground water and our sources of drinking water, too.

HOST:
You know, my neighbors down the road refuse to use anything on their property that might harm wildlife. They plant native species around their home because native plants have adapted to the local environment. They even use companion planting from what they tell me.

NONNIE:
Companion planting is a great idea – like the "Three Sisters" crops. So, what does their lawn and garden look like?

HOST:
Actually, it's nice—quite pleasant. They even give me some of their squash since they produce so much! I guess it's a matter of priorities. And speaking of priorities, it's time to award another Attendance Prize. What is it this time, Nonnie?

NONNIE:
[Displays and awards prize—perhaps a charcoal starter.] Before we move on to the next room of the house, we noticed the horse corral and sheep pen here. For personal animal husbandry operations, what are the important household hazardous waste considerations?

LES:
Well Nonnie, animal prescriptions and medications need to be properly managed during disposal. The EPA even has a ban on disposing of them down the drain. The most important thing is to read and follow all of the directions on prescriptions and vaccines for proper use and disposal. Also, pay attention to expiration dates!

NONNIE:
Thanks Les! Now it's time to move onto the next room.

GARAGE/WORKSHOP

HOST:
The only place we haven't examined is the garage or workshop. *[Vanna changes poster to the garage/workshop.]*

NONNIE:
The sponsor for this segment is the Green Car Garage. Let's listen to their commercial.

[Two previously selected volunteers perform Commercial for the Green Car Garage]

COMMERCIAL FOR THE GREEN CAR GARAGE

(Suggestion: Ask two people to read the commercial before the program begins. Give them copies so they can look over it before reading it on the program.)

FIRST SPEAKER:

Howdy Folks. Welcome to the Green Car Garage. We know cars and we love 'em. But we know that cars are tough on the air we breathe, the water we drink, and the soil we walk on.

SECOND SPEAKER:

That's why we started the Green Car Garage: to help you keep your car in tip-top shape without hurting Mother Earth.

FIRST SPEAKER:

How do we do that, you may ask? Try our Car Wash. When you wash your car in your own driveway, the runoff with all the soap and sediment runs into the storm drains and makes its way into streams and rivers.

SECOND SPEAKER:

And that's not good, folks. No, sir-eeee. Here at the Car Wash we use environmentally friendly products to get your car clean, we recycle our water, and our wastewater is sent to a treatment plant.

FIRST SPEAKER:

Do you change your oil at home? Well, I guess it's cheaper that way, but what do you do with your used oil? Did you know that a single pint of oil dumped into a waterway stretches into a one- acre oil slick?

SECOND SPEAKER:

And that's not good, folks. No, sir-eeee. We can dispose of your oil properly for you here at the Green Car Garage with a lot less hassle. And we do it right.

FIRST SPEAKER:

We do our part to make the air cleaner, too, by keeping your engine tuned up and your tires inflated to give your car greater efficiency and better gas mileage.

SECOND SPEAKER:

All of those little things we do add up to big things in the long run: cleaner air, cleaner water, and cleaner soil. So, bring your car to the Green Car Garage.

BOTH SPEAKERS TOGETHER:

When you give us a chance, you give Mother Earth a chance.

NONNIE:
[Volunteers are thanked for their participation and may be awarded prizes at this time. They take their seats.] Welcome back. The Occupants told us they were lucky to find a home in their neighborhood with an attached garage or any garage at all for that matter. Lots of people have to park their vehicles in their driveways. But that doesn't mean the garage isn't important if you are lucky enough to have one.

HOST:
Why is that?

NONNIE:
Because it's the "home" of the automobile, a major source of pollution in the United States—along with other vehicles that burn gasoline and diesel fuel. Les and I will walk you through the garage.

HOST:
I only see one vehicle, a pickup truck. Isn't that unusual these days?

LES:
For lots of families it is, but Omar and Olga wanted to avoid two payments on vehicles. They are deliberate about their work commutes to save money, especially when gas prices are high. Omar bikes to work, and Olga shares rides with three neighbors. That means she only has to drive the truck once or twice a week.

HOST:
So the Occupants were "home free" in the garage, huh?

NONNIE:
Not quite. They admit that the truck isn't maintained as well as it should be. They have noticed leaking fluids from the truck while it is parked, releasing toxic chemicals into the environment. That's why proper fluids management is so important. A well-maintained car, truck, ATV, or other engine can cut down the pollution it produces.

LES:
Even a small thing like keeping the tires inflated properly increases the number of miles you can drive on a gallon of gas or diesel. And that saves you money, too.

NONNIE:
One other thing to keep in mind is that many of the fluids used to maintain your vehicles are also toxic, so be careful to store them properly, avoid spills, and practice safe disposal when necessary – do not just dump the liquids out!

HOST:
Right, I try to avoid that issue by buying only the amount I need or sharing with my neighbors. Also... that truck sparkles, how do they clean it?

NONNIE:
They frequently rinse their truck with just water. It is cost effective and environmentally friendly, since it prevents toxic runoff from detergents and cleaners. They can also clean their truck battery terminals with baking soda *[Vanna holds up baking soda sign]*.

HOST:
How about the garage itself?

NONNIE:
A garage can easily become a "chamber of horrors." I was dumbfounded when Olga told me that she and Omar often warm up the truck engine on winter days in the attached garage.

HOST:
Now that's dangerous. Carbon monoxide is deadly, not to mention other nitrogen oxides and airborne particles. Besides, newer vehicles don't even need to warm up.

LES:
You're right. We made sure that all hazardous products in the garage were properly stored and locked in a cabinet. And that fuel, such as gasoline, was stored in the proper container. Gasoline is flammable and its fumes contain benzene, a toxic known to cause cancer.

HOST:
Yes, everything is stored properly and neatly. I also noticed they have a small workshop area in the garage. Some other people might have a separate shed or workshop. What are some considerations for that?

NONNIE:
Great question! Workshops tend to have pesticides, electrical tools, and if you are crafting with wood, like it looks like Omar and Olga are here, certain types of wood stains, paints, and sawdust. We already discussed pesticides, but for electrical tools, make sure that you are practicing electrical safety such as by using the proper charger ports for the tool's battery, and always follow the user manual.

LES:
Right, and oil-based wood stains may contain flammable materials like petroleum distillates and varnish. These can also make you dizzy, drowsy, and cause headaches and nausea. Oil-based paints may still be better for certain surfaces, like metal, but I'd go for latex paints when it makes sense for the surface you're looking to paint, since they're water-based.

NONNIE:
Another thing to look for is linseed oil in wood stains, since this oil releases heat when exposed to oxygen. It is important to take precautions when using rags for wood stain applications, as they can dry and catch fire. Don't keep these rags in piles or in direct sunlight. Keep them outside and away from all structures and heat sources. When they are dry, put them in a sealed metal container.

HOST:
Les and Nonnie, the old clock on the wall says it's almost time to go. Give us your closing thoughts on the "Big Picture".

LES:
Most of us seldom consider the cumulative effect of the choices we make. What does it matter if I use a pesticide on my lawn, hazardous cleaner inside my house, wash my car in the driveway, or drive to work alone? If I were the only person on earth, it probably wouldn't matter. But when millions or billions of people do the same, small problems quickly become enormous obstacles for our health, the health of our families, and the health of Mother Earth.

NONNIE:
So, the Big Picture is this: In the long run, the effort of making environmentally friendly choices is well worth it, for our health and safety and for the sake of Mother Earth.

HOST:
Thank you, Les, and Nonnie. Thanks to our viewers and studio audience and a special thanks to the Occupants for letting us come into their home. Until next week—

ALL TOGETHER:
Be safe, healthy, and environmentally responsible. And remember…
[Vanna holds up baking soda sign] Audience members say,
"BAKING SODA CLEANS EVERYTHING!"

FACILITATOR'S CLOSING

Facilitator: It has been a pleasure to share this time with you. We appreciate the tribal ecological knowledge and tribal indigenous knowledge that helped drive this presentation. While baking soda does not actually clean everything per se, we hope that the motto "baking soda cleans everything" will remind you that safer alternatives, especially those based on Tribal Indigenous Knowledge, exist for just about everything we do around our homes.

Thank you for your invaluable contributions and cooperation in our audience participation segments. Please take note of the inventory of the Household Chemicals Chart and the sources for additional information listed in the brochure provided before the presentation. We sincerely hope that the Big Picture ideas have given you food for thought about household hazardous waste, and that you will give safer household products a try.

Note

The CDC statistic in this script for # of asthma diagnoses was based on data from the following source...

Title: Asthma Surveillance — United States, 2006–2018

Corporate Authors(s): Centers for Disease Control and Prevention (U.S.)

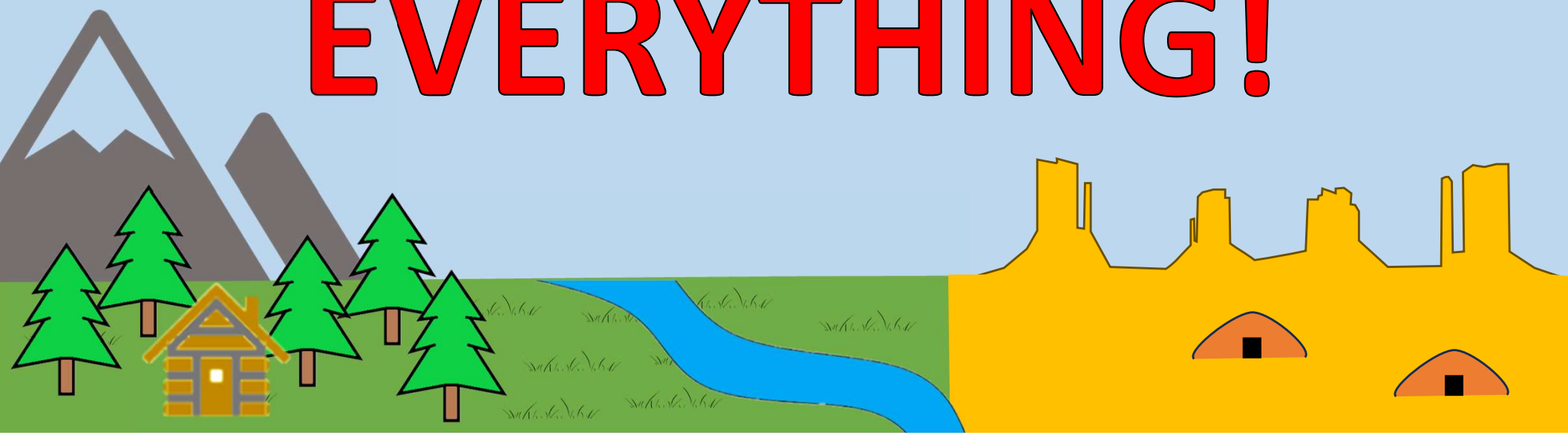
Published Date: 09/17/2021

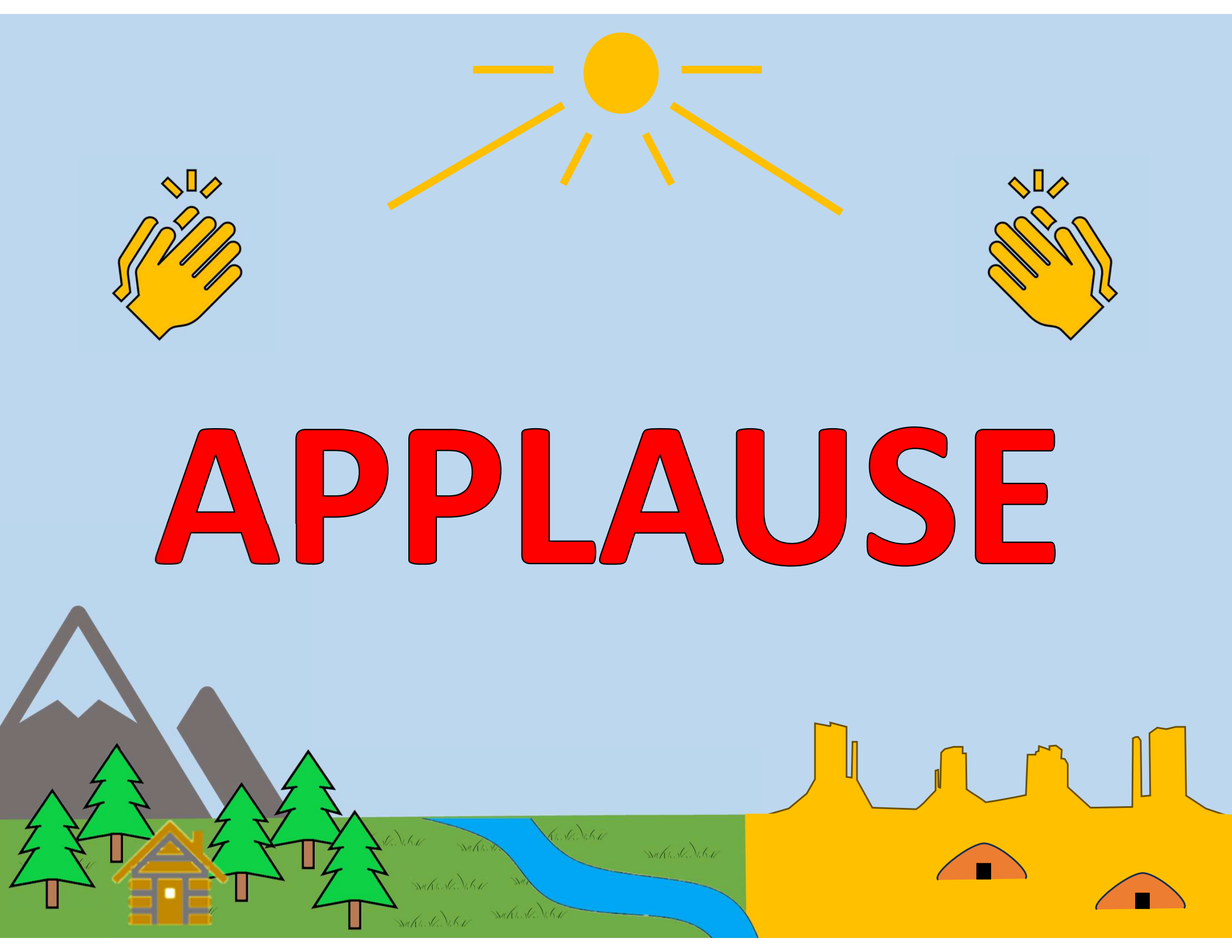
Series: MMWR Surveillance Summaries /70(5)

URL: https://stacks.cdc.gov/view/cdc/109086

DETOX YOUR DOMICILE

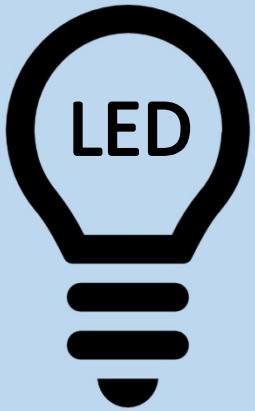
BAKING SODA CLEANS EVERYTHING!

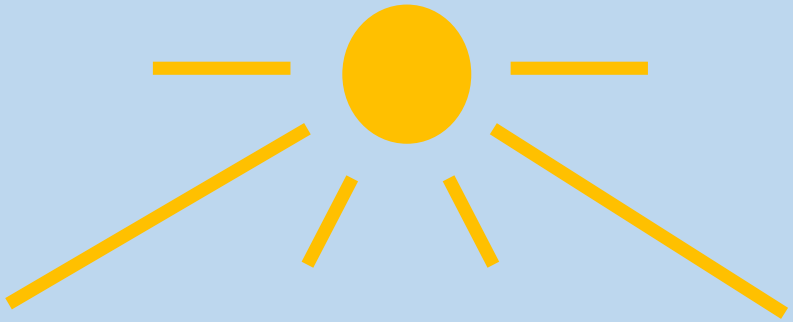


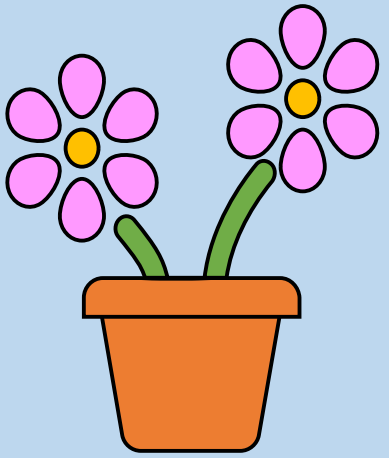

APPLAUSE

SAFER CHOICE
Meets U.S. EPA Safer Product Standards™
epa.gov/saferchoice

KITCHEN







LIVING ROOM

Making your Way Through the Hazardous Label Maze

Signal Words on Labels
(not in order)

Warning	Non-Toxic
Danger or Poison	Caution

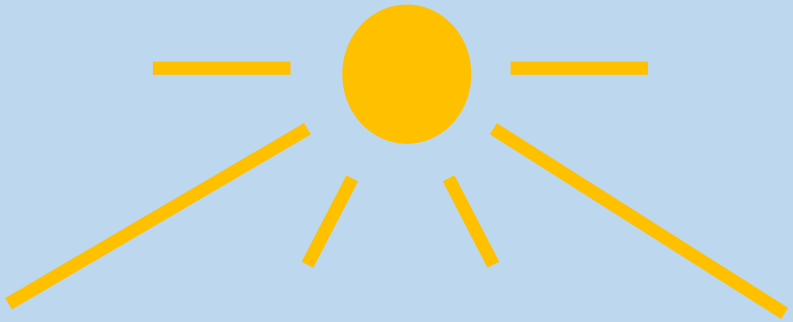
Signal Words Defined By The U.S. Environmental Protection Agency

DANGER OR POISON:	**A taste to a teaspoon taken by mouth could kill an averaged-sized adult.**
WARNING:	**A teaspoon to an ounce by mouth could kill an averaged-sized adult.**
CAUTION:	**An ounce to over a pint taken by mouth could kill an average-sized adult.**
NON-TOXIC:	**No label needed.**

BEDROOM

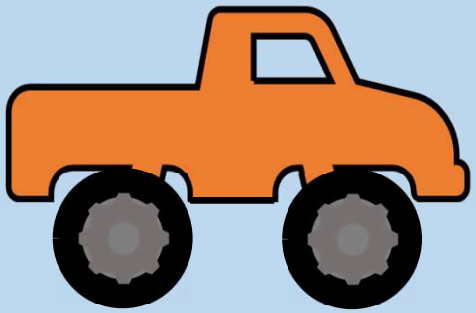
EPA WaterSense

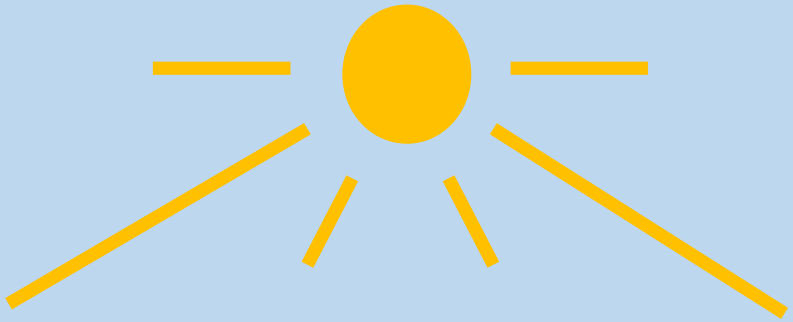
BATHROOM

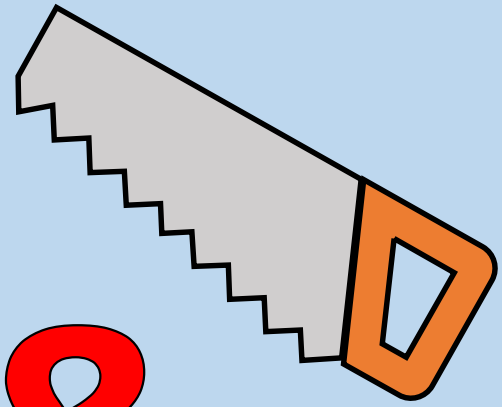


UTILITY ROOM

OUTDOORS







GARAGE & WORKSHOP

Overview of Supplemental Printouts

("Pages" referenced in the text below refer to the following eighteen pages in this Tool Kit, with this page serving as page zero)

Pages 1-5 correspond to the signal words and smiley face for the Setup #2 Label reading activity.

Pages 6-9 are the EPA certification program logos, which can be printed out to show during the skit at the various times that they are mentioned in the script.

Pages 10-13 include the standalone scripts for the Best Baking Soda Commercial, the Green Car Garage Commercial, and the Worthier Wood Warmers Commercial.

Page 14 is a printable copy of the Compost Song lyrics, which can be handed out to audience members. The page is formatted such that it can be printed and cut in half to provide two half-sheet copies of the lyrics.

Pages 15-18 are the brochure handout for audience members. The brochure in this toolkit is formatted such that, when printed, the four pages can be laid on top of each other in order and then folded in half to create a booklet with 8 pages (numbered in order).

CAUTION

WARNING

DANGER / POISON

Non-Toxic

Energy Star Certification Logo

WaterSense Certification Logo

Safer Choice Certification Logo

Burn Wise Certification Logo

Script for "Best Baking Soda Commercial"

BEST BAKING SODA COMMERCIAL

(Suggestion: Ask two people to read the commercial before the program begins. Give them copies so they can look over it before reading it on the program.)

FIRST SPEAKER:
Did you know that baking soda cleans everything? This small box is a powerhouse when it comes to cleaning. (Holds up a box of baking soda.)

SECOND SPEAKER:
(Speak quickly, like a sales patter.)
Why it'll scrub your pots, tubs, teeth, and patio furniture.

FIRST SPEAKER:
And that's not all. Use it in your shoes, your sinks, your fridge, and your drains.

SECOND SPEAKER:
Baking Soda Cleans Everything. *(Hold up a box of baking soda.)*

FIRST SPEAKER:
Use it to wash your clothing and bedding as a bleach booster.

SECOND SPEAKER:
Use it on your children. It can soothe bee stings, chicken pox, and sunburns.
As we said….

BOTH SPEAKERS TOGETHER:
Baking Soda Cleans Everything. (Hold up a box of baking soda.)

FIRST SPEAKER:
What do you pay for a product that does all that?

SECOND SPEAKER:
I bet you pay a lot more than you need to! For a bottle of all purpose cleaner, you can pay over three dollars.

FIRST SPEAKER:
But for a box of baking soda you only need pocket change.

(CONTINUED ON NEXT PAGE)

SECOND SPEAKER:
This product has more than 500 documented uses.
But wait, there's more. It's friendly to the environment and non-toxic, too. In fact, you can use it to brush your teeth and freshen your breath.

FIRST SPEAKER:
Use it to freshen your carpets, cat box, and trash bins. It's a great deodorizer.
Using it is not the pits; in fact, it will freshen your pits.

SECOND SPEAKER:
Just in case you're not convinced, it will freshen your pillowcase, briefcase, suitcase, and the books in your bookcase. It will even help you pluck a chicken.

FIRST SPEAKER:
So, for all your household chores remember—say it with me—

BOTH SPEAKERS TOGETHER:
Baking Soda Cleans Everything. (Hold up a box of baking soda. Vanna holds up audience cue sign.)

Script for "The Green Car Garage Commercial"

COMMERCIAL FOR THE GREEN CAR GARAGE

(Suggestion: Ask two people to read the commercial before the program begins. Give them copies so they can look over it before reading it on the program.)

FIRST SPEAKER:
Howdy Folks. Welcome to the Green Car Garage. We know cars and we love 'em. But we know that cars are tough on the air we breathe, the water we drink, and the soil we walk on.

SECOND SPEAKER:
That's why we started the Green Car Garage: to help you keep your car in tip-top shape without destroying the environment.

FIRST SPEAKER:
How do we do that, you may ask? Try our Car Wash. When you wash your car in your own driveway, the runoff with all the soap and sediment runs into the storm drains and makes its way into streams and rivers.

SECOND SPEAKER:
And that's not good, folks. No, sir-eeee. Here at the Car Wash we use environmentally friendly products to get your car clean, we recycle our water, and our wastewater is sent to a treatment plant.

FIRST SPEAKER:
Do you change your oil at home? Well, I guess it's cheaper that way, but what do you do with your used oil? Did you know that a single pint of oil dumped into a waterway stretches into a one-acre oil slick?

SECOND SPEAKER:
And that's not good, folks. No, sir-eeee. We can dispose of your oil properly for you here at the Green Car Garage with a lot less hassle. And we do it right.

FIRST SPEAKER:
We do our part to make the air cleaner, too, by keeping your engine tuned up and your tires inflated to give your car greater efficiency and better gas mileage.

SECOND SPEAKER:
All of those little things we do add up to big things in the long run: cleaner air, cleaner water, and cleaner soil. So, bring your car to the Green Car Garage.

BOTH SPEAKERS TOGETHER:
When you give us a chance, you give the environment a chance.

Script for "Worthier Wood Warmers Commercial"

COMMERCIAL FOR WORTHIER WOOD WARMERS

(Suggestion: Ask two people to read the commercial before the program begins. Give them copies so they can look over it before reading it on the program.)

FIRST SPEAKER:

Howdy Folks! Welcome to Worthier Wood Warmers! We know wood stoves and we love 'em. But we know that wood stoves can be tough on the air we breathe.

SECOND SPEAKER:

That's why we started Worthier Wood Warmers: we install and maintain your wood stoves to keep them in tip-top shape without harming Mother Earth.

FIRST SPEAKER:

How do we do that, you may ask? We point you towards only dry, seasoned wood for burning. This burns hotter and provides less smoke. If you burn fresh, or green wood, it can produce much more smoke.

SECOND SPEAKER:

And that's not good, folks. No sir-eeee! That smoke from green wood can make breathing difficult. It also leaves a dusty, oily, and sticky residue on all surfaces.

FIRST SPEAKER:

Do you have an older stove, made before 1990? Those stoves are very inefficient, requiring one-third more wood for the same amount of heat.

SECOND SPEAKER:

And that's not good, folks. No sir-eeee. Those older stoves burn more wood than is necessary, and a lot of heat goes up the chimney rather than to your home. Speaking of the chimney – older stoves have more creosote buildup that can lead to chimney fires. Not to mention many of those stoves have solid metal doors, which can be a household safety issue with skin burns.

FIRST SPEAKER:

We do our part to make the air cleaner, too, by helping you find EPA Burn Wise certified stoves that burn more efficiently, provide better heat, and keep your air safer to breathe. Burn Wise certified stoves can reduce harmful smoke particles in your home by 70 percent.

SECOND SPEAKER:

Yes sir-eee! All of those little things we do add up to big things in the long run: cleaner air, cleaner water, and cleaner soil. We are taking better care of Mother Earth. So, bring your heating questions and needs to the Worthier Wood Warmers.

BOTH SPEAKERS TOGETHER:

When you give us a chance, you give Mother Earth a chance.

Compost Song [Sung to the tune of "Hokey Pokey"]

Verse

"Put in your celery tops and your apples skins, all fruit and vegetables come on in.
So, give me a little water and turn me once in a while, rot's what it's all about.

Chorus

It's about Decomposition, It's about Decomposition, It's about Decomposition, and Rot's what it's all about.

Verse

Put your coffee grounds in, but keep your stinky meat out. I love your leaves and clippings so much I want to shout.
So, give me a little water and turn me once in a while, rot's what it's all about.

Chorus

It's about Decomposition, It's about Decomposition, It's about Decomposition, rot's what it's all about."

- CUT HERE -

Compost Song [Sung to the tune of "Hokey Pokey"]

Verse

"Put in your celery tops and your apples skins, all fruit and vegetables come on in.
So, give me a little water and turn me once in a while, rot's what it's all about.

Chorus

It's about Decomposition, It's about Decomposition, It's about Decomposition, and Rot's what it's all about.

Verse

Put your coffee grounds in, but keep your stinky meat out. I love your leaves and clippings so much I want to shout.
So, give me a little water and turn me once in a while, rot's what it's all about.

Chorus

It's about Decomposition, It's about Decomposition, It's about Decomposition, rot's what it's all about."

Conclusion

While all of the grim facts about HHW and pollution may be unsettling, most people are only exposed to minute levels of hazardous chemicals. Furthermore, knowledge is power and the more you know, the better you can protect yourself. You can obtain many publications about health risks from airborne toxics from the U.S. Environmental Protection Agency and other sources, most of them at no charge.

For more information

Learn more about Household Hazardous Waste:
www.epa.gov/hw/household-hazardous-waste-hhw
Learn more about EPA's Safer Choice Program:
www.epa.gov/saferchoice
Learn how to be energy smart, save money, and prevent pollution:
www.energystar.gov
Learn more about EPA's WaterSense program:
www.epa.gov/watersense
Learn what your car contributes to air pollution:
www.epa.gov/greenvehicles/
Learn more about environmental topics such as indoor air quality:
www.epa.gov/environmental-topics
Why read labels?:
www.epa.gov/system/files/documents/2022-09/why_read_labels.pdf
Learn more about safe disposal of unwanted, unused, or expired medications:
www.dea.gov/takebackday
Learn about how and where to recycle:
www.earth911.com
Learn more about composting and vermicomposting:
www.epa.gov/recycle/composting-home

The national number for poison control is
1-800-222-1222.
Keep this number in your phone.

This brochure was adapted from one created by the Missouri Botanical Garden as part of their In The Air program.

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EPA

MISSOURI BOTANICAL GARDEN

Detox Your Domicile

Adapted from the original “In the Air” Adult Education Module developed by the U.S. EPA and Missouri Botanical Garden’s EarthWays Center.

What is Household Hazardous Waste?

Household hazardous waste (HHW) includes leftover household products that contain corrosive, toxic, ignitable, or reactive ingredients, such as expired cleaning products, "empty" containers, used batteries and electronics, and many more. Having these wastes around your house or managing them improperly can pose serious health risks for people, animals, and plants. They also can damage the environment.

Luckily, there are many simple strategies to reduce the risks and hazards associated with HHW. Reducing exposure to dangerous chemicals reduces the overall risks that they present, and the most effective way to do this is by using less hazardous products.

This program will explore a variety of safer alternatives to common household supplies and discuss best practices to manage toxic materials and HHW. These strategies can make your home safer and even cut down on pollution.

A lot of people may not be aware that the everyday items we use at home can contribute quite a bit to air and water pollution. Sometimes, the main distinction between the harmful chemicals used in industries and those we use in our homes is simply how much and how strong the products are. While larger entities like the EPA can keep tabs on those big-time polluters, it's really on us, as homeowners, families, and communities, to be aware of the potential health and environmental issues linked to using chemical products in and around our personal spaces.

A Word About Risk

Determining your health risk from pollution or HHW involves several factors:

- What chemical have you been exposed to and how toxic is it?
- What was the amount you were exposed to?
- What length of time were you exposed?

Some people may be more sensitive to toxic pollutants, such as infants and toddlers, the elderly, and those with medical conditions. For example, while fumes from drying paint or varnish are bad for everyone they may aggravate conditions such as asthma or emphysema.

You should know how and where to get information about the properties of commonly used chemicals. How might someone become exposed to them? What dangers to human health and the environment do they pose?

Even though home products that contain toxic chemicals are considered to be safe if used according to label directions, they remain toxic and contribute to air and water pollution.

What is Composting?

Composting converts organic materials into a nutrient-rich soil enhancer or mulch through natural decomposition. You can compost at home using food scraps from your kitchen and dry leaves and woody material from your yard. Composting can reduce the amount of materials that might otherwise be disposed of in landfills or incinerators, reduce your use of fertilizer or pesticides, and help build healthier soil.

Strategies for Reducing Your Exposure to Household Chemicals

Look at your inventory of the chemicals in your household. You can reduce your exposure to some of these chemicals in several ways.

Consider the following:

Reduce your highest totals first by substituting a safer product or by cutting down on how often you use it.

Eliminate chemicals that have a warning statement of Poison or Danger. These chemicals may pose the highest degree of potential risk.

If you use a product once a year or less often, can you eliminate it altogether?

If you have decided to replace or dispose of a chemical product, follow the instructions on the label. If in doubt, contact your environmental agencies for more information.

Notes on possible substitutions and other ideas:

_____
_____
_____
_____
_____
_____

Special Thanks To:
The Missouri Botanical Garden, for use of their education module materials.

Inventory of Household Chemicals

Product name. What is it used for?	X Hazard level? (from chart below)	Y How often is it used? (from chart below)	X + Y= Total Score	Is a Substitute Available?

As you look around your home for the chemicals you use, think about storage issues as well. Do you have safer places to store these products?

Hazard Level: read the label and rate accordingly

Poison or Danger	3
Warning	2
Caution	1

Non-toxic products do not require a warning label and do not need to be scored.

Estimate How Often You Use this Product?

More than once a week	5
Weekly	4
Monthly	3
A couple times per year	2
Once a year or less	1

Signal Words Defined By The U.S. Environmental Protection Agency

DANGER OR POISON:	A taste to a teaspoon taken by mouth could kill an averaged-sized adult.
WARNING:	A teaspoon to an ounce by mouth could kill an averaged-sized adult.
CAUTION:	An ounce to over a pint taken by mouth could kill an average-sized adult.
NON-TOXIC:	No label needed.

I Am Just One Person. Can I Really Make a Difference?

The good news is yes. While it would take the efforts of many to make a measurable dent in overall pollution levels, you can reduce your personal exposure by changing what you do in your own home. By finding safer substitutes for products you use in your home, you can save money and reduce your exposure to toxic chemicals. Many other ways exist to reduce pollution by changing habits and attitudes.

Clean Air All-Purpose Cleaner

2 tablespoons vinegar
2 teaspoons of borax
16 oz. of very hot water
1 tablespoon liquid soap (like castile or dishsoap)
Essential fragrance oil (optional)l

Mix vinegar and borax in a clean empty spray bottle with hot water. Shake until borax dissolves, then add liquid soap. You may add several drops of essentialloil for a pleasing scent. Spray on appliances, walls, countertops, tile, shower, toilet, etc. and wipe clean.

Who Knows What Lurks Beneath the Kitchen Sink?
Many of our common cleaning products can be a source of HHW as well as air and water pollution. Read labels and follow instructions carefully even if you use the product frequently. Look for safer alternatives. Many can be made at home at a fraction of the cost of commercially prepared cleaning products. "Green Cleaners" are available in stores, but read the ingredients. Green can mean just about anything. Look for products with the EPA Safer Choice Logo.

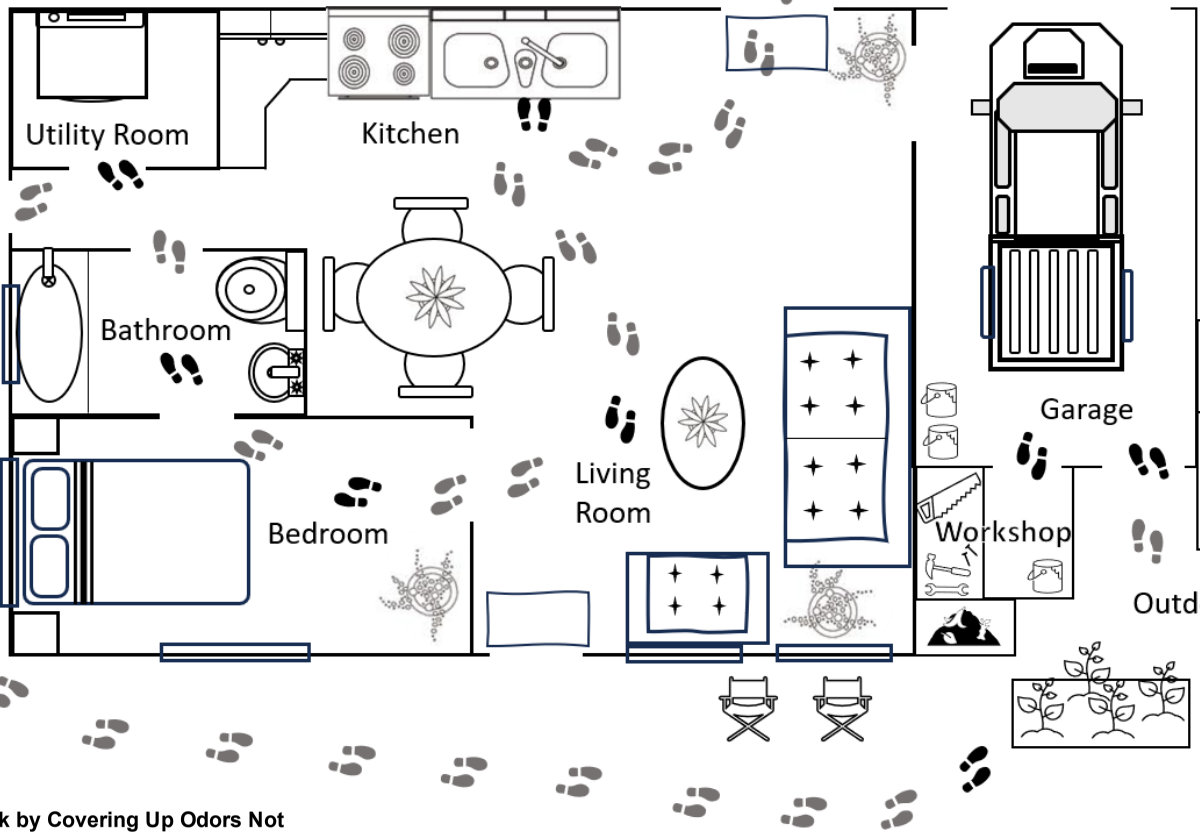
How Can We Reduce Mobile Source Pollution?

- Good automobile maintenance and proper tire pressure saves money and prevents pollution.
- Try biking to work or school if you can. Share a ride or carpool. Carpooling can dramatically reduce the number of cars on the road and total miles driven. It can save you money, too. If it is available near you, take mass transit.
- Combine errands into one trip.
- In the summer, refuel vehicles during the cooler parts of the day to lessen the impact of gas fumes.

Save Electricity
Most of the electricity in the United States is made from burning fossil fuels. Less electricity used means less pollution entering the atmosphere and lower electricity bills. Look for appliances that have EPA's Energy Star Logo.

Dispose of Household Chemicals and Their Containers Properly
Improper disposal of chemicals and their containers threatens our air and water quality. Use all of the product as intended. Follow all package instructions.

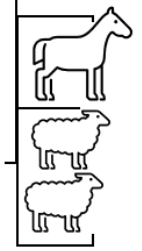
Benzene Blues
Keep exposure to benzene at a minimum. Benzene is known to cause cancer and it is a component of gasoline. It is found in tobacco smoke, stored fuels, paint supplies, and auto emissions. Use only approved containers for gasoline and other fuels.



Avoid Exposure to Methylene Chloride
Methylene chloride is found in paint strippers, adhesive removers, and in some aerosol spray paints. It has been known to cause cancer. Methylene chloride is converted to carbon monoxide in the body and can cause symptoms similar to carbon monoxide poisoning. Look for safer substitutes such as No VOC (volatile organic compounds) or Low VOC formulas.

Save Water
Reducing water usage can save money and conserve this finite resource for future generations. Choosing products with WaterSense labels can save water and protect the environment.

Keeping Animals
Always read and follow the directions for proper use and disposal of animal prescriptions and vaccines. Pay attention to expiration dates and remember that the EPA prohibits disposing of hazardous waste pharmaceuticals down any drain.



Did You Know That Many Bathroom Cleaners Contain Pesticides?
A low-impact sanitizer is isopropyl alcohol. Wipe it on clean surfaces and let them dry.

Some Air Fresheners Work by Covering Up Odors Not by Cleaning the Air
Substitute potpourri scented with a natural oil.

Be careful when choosing scented candles. They can produce pollutants when burned and some wicks may contain lead.

Some Good News
Many houseplants help clean the air by removing small amounts of toxics such as formaldehyde and carbon monoxide. Some plants to look for: philodendron, spider plant, peace lily, and aloe vera.

Compost Happens
Compost your leaves, grass clippings, and even food scraps from your kitchen. If you live in an apartment or do not have room for an outdoor compost pile, consider vermicomposting.

Go Native
To reduce water usage and prevent pollution from fertilizers and pesticides, landscape with native plants.

BBQ
Use a gas grill, or, if using charcoal, start your fire using a charcoal chimney instead of lighter fluid.

Yard Work
Minimize the use of gas-powered engines for jobs that can be done by hand.

Quit Smoking and Vaping
Tobacco smoke contains many hazardous air pollutants. Children are at higher risk for respiratory problems and ear infections if they live in a household with a smoker. Consider smoking and vaping outside to reduce exposures to second-hand smoke.

Section 3 Training Resources

Household Hazardous Waste Training Compendium

wewene aťtēśagťtēwebnēmėn naśanēk wigēto

Household Hazardous Waste Training

Potawatomi translation provided by Jan Hubbard, Cindy LeClere, and colleagues

Thank you for attending our Household Hazardous Waste Training, Detox Your Domicile. "Baking soda cleans everything!!!" This compendium, based on comments and feedback from webinar sessions in May 2023, includes recipes, alternatives, tips, tricks, and other ideas to help you detox your domicile! Thank you sincerely to everyone who shared their tribal indigenous knowledge and tribal ecological knowledge; this compendium would not be possible without these invaluable contributions.

Tips & Tricks

In this section, we've compiled tips and tricks that a webinar audience suggested during a similar Detox Your Domicile training. Sharing these comments in this compendium does not imply U.S. EPA endorsement of any specific products, alternatives, or methods listed. ***Keep in mind, you should research a suggestion prior to using it to ensure that you are aware of any risks, that you use the proper amounts or concentrations, and that it is safe and appropriate for your own circumstances.*** *The graphics to the right of each idea indicate if these comments can accomplish or relate to climate change and/or environmental justice efforts.*

	Accomplishes **climate change** efforts
	Accomplishes **environmental justice** efforts

Transition away from single-use plastics and use more glass		
Consider different types of people (i.e., body types, ages) when evaluating health risks		
Consider dangers to pets in the home when evaluating health risks		
Wear respiratory masks when using hazardous chemical products		
When evaluating health risks, know how to address results of adverse reactions between chemical products		
Consider pre-existing medical conditions when evaluating health risks		
Consider where and how you wash work clothes, especially in work areas where dust or particulates are present, as you could bring unwanted chemicals into your home and community		
Consider allergies when evaluating health risks		
Hang clothes outside instead of using a dryer (Note: be aware that this may not be a good option for allergy sufferers)		
Use companion planting techniques to manage garden pests		

Repurpose old clothes to use as cleaning cloths		
Put items such as furniture, clothing, or other fabric materials out in the sun to freshen and clean them		
Open windows to let in fresh air and sunlight		
Houseplants may help to reduce pollution in the air of the home, and they also help to improve mood and productivity (examples could include snake plants and monstera plants)		
Use baking soda to deodorize fridges, shoes, and carpets		
Clean car battery terminals using baking soda		
Use rubbing alcohol for cleaning certain surfaces around your house		
Lead can be present in dishware that is older or imported from other countries		
Composting is possible in a small space using strategies like vermicomposting		
Composting information is available online and in a variety of books - *The Rodale Book of Composting* was recommended as a good overview book for composting		
Certain older dishware may contain trace amounts of uranium[1]		
Getting into nature can be beneficial for your personal health and can save electricity and money as an alternative to other activities		
Dust your house from top to bottom, remove the dust, and wipe down surfaces with a towel		
Sage smudging can be difficult in small or closed spaces		
Plant trees near rivers to mitigate pollution		

[1] EPA has made a statement that these antique materials are "usually not a health risk if they are in good condition." For more information, visit https://www.epa.gov/radtown/radioactivity-antiques

Using soap berries in moderation to maintain their vitality is an Indigenous tradition		
Learn and share knowledge through storytelling, as well as through song and dance		
Consider waste management as an environmental justice issue		
Promote small, local businesses that sell alternative cleaning products		
Show others how easy it is to make and use alternative cleaning and home products		
Take inventory of your current household products to avoid buying more		
Change out or clean air filters regularly to keep air clean in your home		
Keep up with HVAC maintenance to save energy		
Donate unused chemical products to a reuse center so community members can use them		
Always review ingredient lists since companies may "greenwash" products		
Practice reading product labels in native languages with youth		

Alternatives

In this section, we've compiled some alternatives to chemical products that a webinar audience suggested during a similar Detox Your Domicile training. Sharing these comments in this compendium does not imply U.S. EPA endorsement of any specific products, alternatives, or methods listed. ***Keep in mind, you should research a suggestion prior to using it to ensure that you are aware of any risks, that you use the proper amounts or concentrations, and that it is safe and appropriate for your own circumstances.*** *The graphics to the right of each idea indicate if these comments can accomplish or relate to climate change and/or environmental justice efforts.*

	Accomplishes **climate change** efforts
	Accomplishes **environmental justice** efforts

If you are trying to get rid of an ant hill, try pouring wood ash over it instead of using insecticides		
Use a plumbing snake as an alternative to drain cleaner		
Essential oils may be an alternative to artificial fragrances		
Toothpaste may be used to clean silver – be sure to use non-abrasive toothpaste, and do not use on valuables with sentimental value		
Spray a dish soap and water solution on ants to deter them (Note: be cautious when using on plants, since high soap concentrations may kill the plant; dried spray will leave a soapy residue)		
Throw dried herbs around the yard to keep snakes and mice away		
Tobacco juice or a tobacco water solution can be used as a garden or household insecticide		
Lemon juice may help clean butcher blocks and grout		
Burn sage as a mosquito repellant		
Chili oil can help deter rodents and snakes		
Peppermint essential oil can help deter rodents and insects		

Use cedar wood or shavings to repel insects		
Use soaproot or yucca root for soap		
Use newspaper or cloth instead of paper towels		
Use apple cider vinegar instead of insecticide		
Use crushed pine or spruce needles as a scent/home freshener		
Use locks of hair to clean spilled oil		
Use wool dryer balls to reduce waste from single-use dryer sheets		
Use water only to rinse cars and other vehicles more frequently, rather than detergents and cleaners		
Use compost instead of chemical fertilizer		
Use physical rodent or insect traps instead of pesticides and insecticide		
Use filters in drains to prevent clogs, and use hot water to help clear drains		
Use hydrogen peroxide to remove rust		
Use baking soda as a toilet or drain cleaner		
Use vinegar as a fabric softener		
Use lemon as an alternative to bleach		
Use alternative cleaning kits, which may include baking soda, vinegar, peroxide, and microfiber rags		
Use neem oil on plants or diatomaceous earth around the home as an alternative to insecticides		

Medical/Pharmaceutical Recommendations

These recommendation are provided from a webinar audience during a similar Detox Your Domicile training. Legally, we need to note that ***medical/pharmaceutical products are carefully regulated by other federal agencies, and thus EPA does not have the authority to endorse or recommend specific medical/pharmaceutical suggestions.*** *We have included all pertinent suggestions here, but encourage readers to exercise caution and* ***seek appropriate professional advice when considering any form of medical or pharmaceutical treatment****.*

	Accomplishes **climate change** efforts
	Accomplishes **environmental justice** efforts

Burning sage, cedar, sweetgrass, and natural tobacco leaves has cleansing properties	
Use dish soap to remove fleas from pet fur	
Make a charcoal-based toothpaste	
Alleviating earache pain with tobacco smoke blown into the ear (Note: this does not treat ear infections)	
Apply milkweed sap to warts	
Drink sage tea or burn sage to alleviate sinus pains from inflammation	
Crush sumac berries into a paste for sunscreen	
Use baking soda as dry shampoo	
Spruce sap can be used like toothpaste	
Coconut oil may be used in alternative beauty products	

Recipes

The recipes provided here were suggested by webinar participants during a similar Detox Your Domicile training. Sharing these comments in this compendium does not imply U.S. EPA endorsement of any specific products, alternatives, or methods listed. Exact quantities may vary and may be supplemented with additional resources. Many of these can be found easily online or in the resources associated with this webinar series.

Fabric Softener

Mix:

- 1 cup vinegar
- 1 cup water
- 10-15 drops of essential oils

All-Purpose Cleaner

Mix:

- ½ cup baking soda
- 1 cup vinegar

Cleaning Spray

Mix the following in a spray bottle:

- 1 tsp baking soda
- 2 tsp vinegar
- 5-10 drops of essential oils
- ¼ tsp dishwashing soap
- 2 cups water

Laundry Detergent

Mix:

- Lye soap
- Boiling water

Apply to dirty clothes

Oven/Grout Cleaner

Mix the following into a paste:

- 1 tsp baking soda
- 2 tsp vinegar

Use the paste to scrub dirty parts of the oven or to clean grout

Carpet Stain Cleaner

Mix the following in a spray bottle:

- ½ cup vinegar
- 1 tsp salt
- 1 tbsp baking soda (optional)

Apply to carpet stains

Deodorizer

Combine:

- Baking soda
- Cat litter

Grout & Oil Stain Cleaner

Combine:

- Lemon juice
- Baking soda

Soap Berry Detergent

- Mash soap berries into a paste
- Combine soap berry paste with water

Uses

- Soap, shampoo, or laundry detergent

Mosquito/Gnat Repellant

Mix:

- Crushed mint leaves or extract
- Water

Orange Peel Cleaners

Soak orange peel in:

- Water to clean surfaces
- Oil to clean wood

For more recipes with more specific directions, ingredients, and uses, one participant recommended *Green Cleaning Recipes* by the Riverside County Department of Waste Resources: https://rcwaste.org/sites/g/files/aldnop376/files/migrated/LinkClick.aspx-fileticket-LcpFiVvSsDk-3d-tabid-607-portalid-0.pdf

The Missouri Botanical Garden also has a list of recipes for safe alternatives to hazardous products: https://www.missouribotanicalgarden.org/Portals/0/Sustainability/PDFs/Non-Toxic-Cleaning-Alternatives.pdf

Keep in mind that mixing baking soda and vinegar causes an acid/base neutralization reaction, which you can observe when the mixture bubbles and fizzes. The cleaning benefits of this mixture are mostly observed during this reaction. After the reaction completes and the fizzing stops, cleaning is less effective.

Additional Resources

Explore our curated list of additional resources relevant to this training.

Safe disposal of unwanted, unused, or expired medications:

- https://takebackday.dea.gov/, drug take back day occurs twice a year on select Saturdays from 10a to 2p local time – near Earth Day in April and in mid-October
- https://missouripsc.org/medications/, a great collection of public service materials, originally developed for Missouri but adaptable for other communities.

EPA resources:

- "Safer Choice", https://www.epa.gov/saferchoice
- "Water Sense", https://www.epa.gov/watersense
- "Burn Wise", https://www.epa.gov/burnwise
- "Energy Star", https://www.energystar.gov/
- "Why Choose Safer Cleaning Products," Simeon Matthews, Industrial Hygenist, Shakopee Mdewakanton Sioux Community partnering with EPA Region 5. This video describes how you can protect your family and the environment by looking for cleaning products with safer ingredients – such as products with the Safer Choice label, https://www.youtube.com/watch?v=XfHgOXfmszo
- "Why Read Labels", https://www.epa.gov/system/files/documents/2022-09/why_read_labels.pdf
- "Household Hazardous Waste (HHW)", https://www.epa.gov/hw/household-hazardous-waste-hhw

Missouri Botanical Garden – In the Air:

- "Adult Education Module", http://www.lungsatwork.org/intheair/adult.html
- "Information and Facilitator's Guide", http://www.lungsatwork.org/intheair/modules/Adult-FacilitatorsGuide.pdf
- "'Detox Your Domicile' Home Improvement Skit", http://www.lungsatwork.org/intheair/modules/Script-Brochure.pdf
- "Background and Evaluation Form", http://www.lungsatwork.org/intheair/modules/Adult-Background.pdf

Other resources:

- *The Safe Shopper's Bible – A Consumer's Guide to Nontoxic Household Products, Cosmetics, and Food*, David Steinman & Samuel S. Epstein, MD, ISBN 0-02-082085-2
- *Guide to Hazardous Products Around the Home, Household Hazardous Waste Project*, Sondra Goodman
- '"Forever Chemicals' Called PFAS Show Up in Your Food, Clothes, and Home," Natural Resources Defense Council, 07 January 2020
- *Pest Management at the Crossroads*, Charles M. Benbrook, Consumers Union, ISBN 0-89043-900-1
- Earth 911, a large recycling database that will point you in the right direction of how and where to recycle, https://earth911.com/
- FDA's Cosmetic Ingredients facts, https://www.fda.gov/cosmetics/cosmetic-products-ingredients/cosmetic-ingredients
- "Do You Have Hazardous Waste in Your House?," Trey Granger, 09 Aug 2021, https://earth911.com/business-policy/do-you-have-household-hazardous-waste/

Community-based social marketing:

- Tribal Community-Based Social Marketing Strategies Training Guide (Promote Sustainable Behaviors), developed by the Fond du Lac Band of Lake Superior Chippewa In Collaboration with the U.S. Environmental Protection Agency – Region 5, July 2016
- Tribal Community-Based Social Marketing (CBSM) Recycling Toolkit, developed by the Fond du Lac Band of Lake Superior Chippewa In Collaboration with the U.S. Environmental Protection Agency – Region 5, July 2016
- Effective Practices for Implementing Local Climate and Energy Programs: Community-Based Social Marketing, developed by EPA, April 2015 (EPA-430-F-15-004)
- EPA Region 10's 2020 tribal social marketing webinar, is available at: https://www.youtube.com/watch?v=Lvwng0VgmFA&feature=youtu.be (slide deck listed as PDF below)
- Video – Sustainability and Beyond: The Fond du Lac Story: https://www.youtube.com/watch?v=sd-ajqYhrd4
- Presentation - General Outreach Tips and Tricks for Environmental Programs – Heidi Brow and Alexis Wallick, Pala Band of Mission Indians, 2020 Tribal Lands and Environment Forum: https://mediaspace.nau.edu/media/0_4k8vhr2c (this web link seems to be a bit unstable)
- Community-Based Social Marketing website: https://www.cbsm.com , featuring Resources, Forums to reach others around the world working on CBSM projects, and a link to the digital file to the book "Fostering Sustainable Behavior" by Dr. Doug McKenzie-Mohr.

Disclaimer of Endorsement

Mention of or referral to commercial products or services, and/or links to non-EPA sites does not imply official EPA endorsement of or responsibility for the opinions, ideas, data, or products presented at those locations, or guarantee the validity of the information provided. Mention of commercial products/services on non-EPA websites is provided solely as a pointer to information on topics related to environmental protection that may be useful to EPA staff and the public.

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Section 4
Customizations

Examples of Customized Flyers

Examples of Customized Posters

Example of Customized Script

Alternate Commercial Script

Customized Advertisement Flyers

Three examples of customized advertisement flyers are provided with identifying information (e.g., emails, names, locations, etc.) removed. Flyers can be designed and distributed to help attract an audience for the workshop.

Saint Regis Mohawk Tribe & US EPA present

DETOX YOUR DOMICILE

HH:MM on MM/DD/YYYY at XXXXXXXXXXXXX

The Saint Regis Mohawk Tribe is working with US EPA to sponsor an interactive household hazardous waste presentation: *Detox Your Domicile*!

Learn simple strategies that make your home safer for you and your family!

- Participate in an interactive skit
- Learn strategies to reduce health risk and environmental impacts in your home
- Familiarize yourself with safer (and cheaper) alternatives to chemical products
- Discover ways these strategies can complement Tribal Knowledge
- Receive supplemental resources...and prizes!

When: XXXXXXX XXXXXXXXXXX

Where: XXXXXXXXX XXXXXXXXXXX

This presentation is **FREE!**

Target Audience

Anyone in Saint Regis Mohawk Tribe interested in using safer alternatives to chemical products.

For questions or if interested, contact

XXXXXXXXX

NAVAJO NATION & US EPA PRESENT

Hooghan Hozhógóó Haz'ą

Detox Your Domicile

HH:MM on MM/DD/YYYY at XXXXXXXXXXX

The Navajo Nation EPA RCRP is working with US EPA to sponsor an interactive household hazardous waste presentation: *Hooghan Hozhógóó Haz'ą (Detox Your Domicile)*!

Learn simple strategies that make your home safer for you and your family!

During the training, you will:

- Participate in an interactive skit
- Learn strategies to reduce health and environmental risks in your home
- Familiarize yourself with safer (and cheaper) alternatives to chemical products
- Discover ways these strategies can complement Tribal Knowledge
- Receive supplemental resources…and prizes!

When:
XXXXXXX
XXXXXXXXX

Where: XXXXXXX
XXXXXXXXX

Please register through this link: XXX

This presentation is **FREE!**

For questions or if interested, contact:

XXXXXXXXX

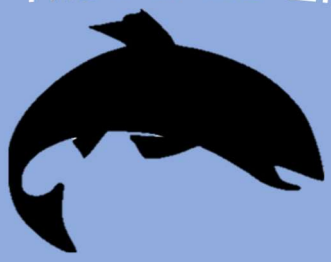
Target Audience

Anyone on the Navajo Nation interested in using safer alternatives to chemical products.

Future Trainings

We are hoping to have more performances in other areas across the Navajo Nation.

Newhalen Tribe & US EPA present



DETOX YOUR DOMICILE

The Newhalen Tribe is working with US EPA to sponsor an interactive household hazardous waste presentation: *Detox Your Domicile*!

Learn simple effective strategies that make your home safer for you and your family!

- Participate in an interactive skit.
- Learn innovative strategies to reduce health risk and environmental impacts in your home.
- Familiarize yourself with safer (and cheaper) alternatives to chemical products.
- Discover ways these strategies can complement Tribal Knowledge.
- Receive supplemental resources...and prizes!

When: XXXXX XXXXXXXXXX

Where: XXXXXXXXX XXXXXXXXX

This presentation is **FREE!**

Target Audience

Newhalen Tribal Members interested in using safer alternatives to chemical products.

Four volunteers needed for acting in the skit! Just show up 1 hour early and contact the email below to sign up:

XXXXXXXXXXXXXX

Newhalen Tribal Council
Tribal Government for Newhalen, Alaska

Customized Poster Designs

Selected poster designs from two different in-person workshops are included.

(“Pages” referenced in text below refer to the following nine pages in this Tool Kit, with this page serving as page zero)

Pages 1-4 were developed for the Navajo Nation

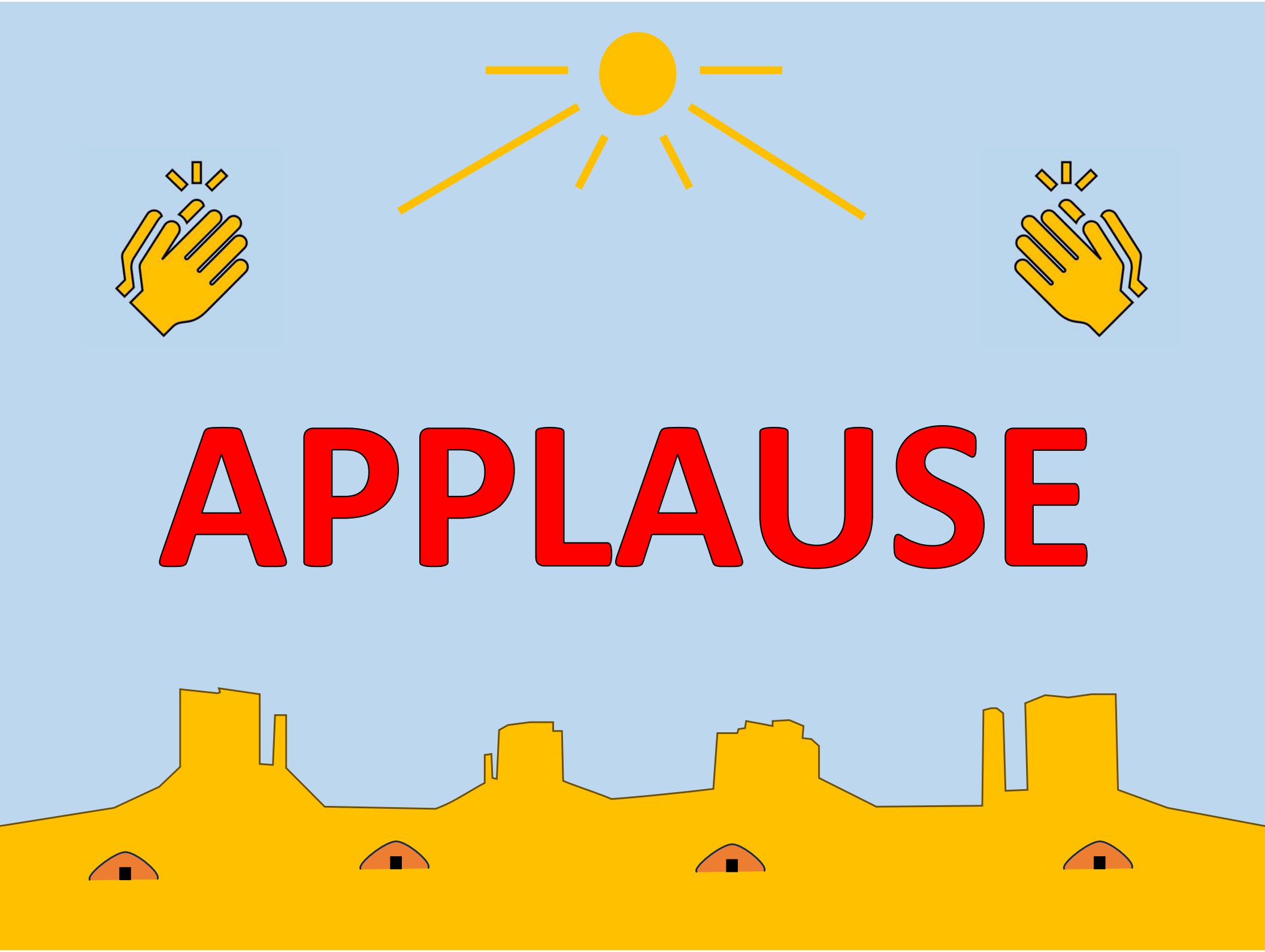
Pages 5-9 were developed for the Newhalen Tribe

The posters include customized features such as typical environmental scenery, a version of “Detox your Domicile” in Native Navajo language, and also the Newhalen Tribal Government seal.

HOOGHAN HOZHÓGÓÓ HAZ'Ą

DETOX YOUR DOMICILE

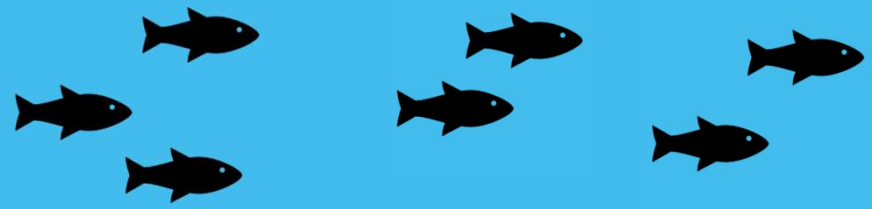
BAKING SODA
CLEANS
EVERYTHING!

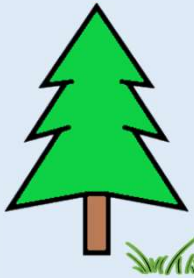

APPLAUSE

UTILITY ROOM

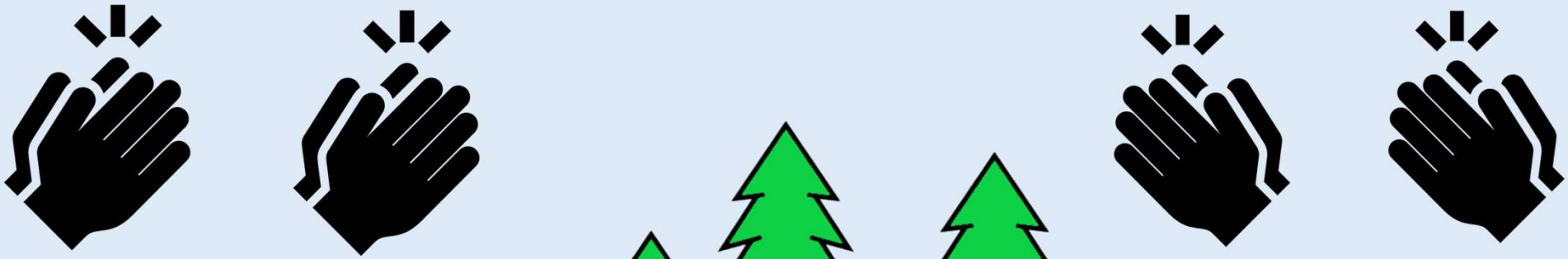
DETOX YOUR DOMICILE

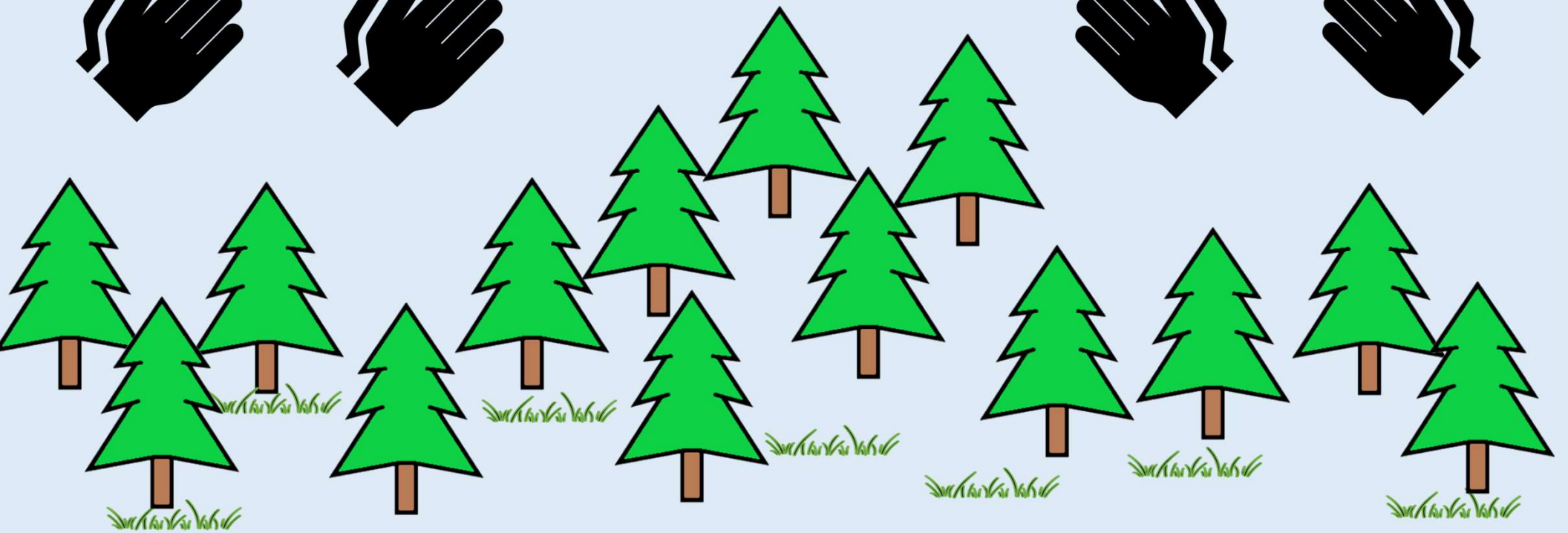
BAKING SODA CLEANS EVERYTHING!





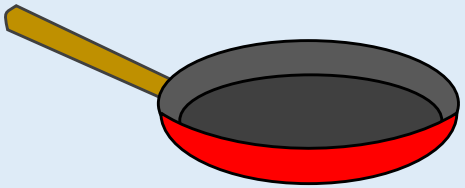
APPLAUSE

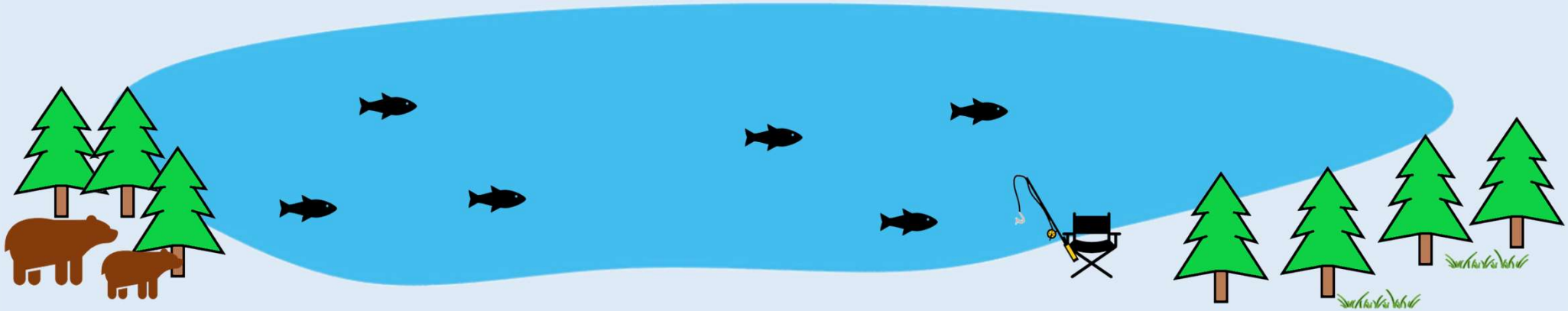


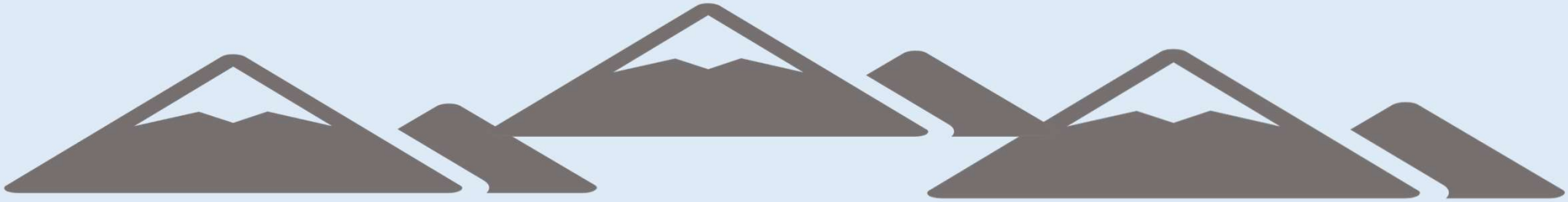


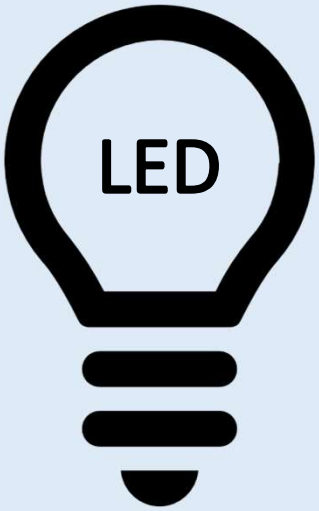
KITCHEN

SAFER CHOICE
Meets U.S. EPA Safer Product Standards™
epa.gov/saferchoice

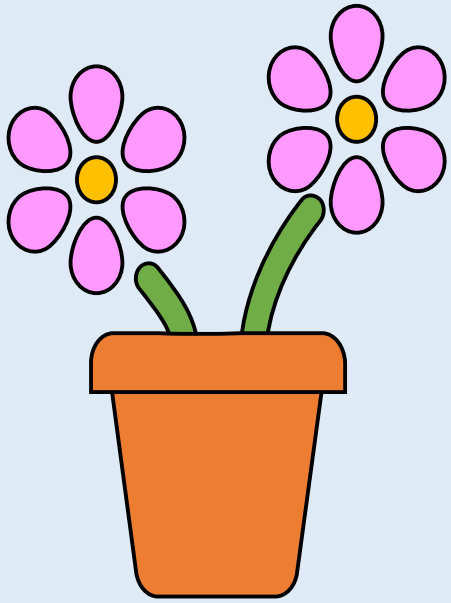


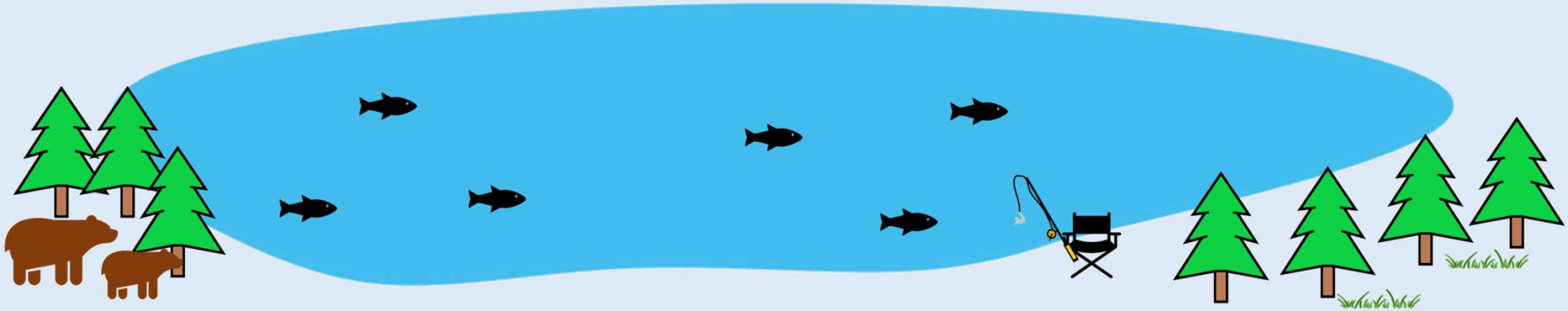






LIVING ROOM





Excerpt of Customized Script for the Workshop

The first two pages of the “Detox your Domicile” script are provided, with selected portions highlighted that show customized text. The motto from the St. Regis Mohawk Tribe environmental department is included in the Native language on the first page. The names of “Omar” and “Olga” from the script were also altered to “Kwis” and “Tiio” to reflect the names of two characters that the environmental department created for other public communication materials. Additionally, “Niá:wen” means “thank you” in the St. Regis Mohawk Tribe Native language.

Detox your Domicile

Adapted for the **Saint Regis Mohawk Tribe**

[Opening Speaker may take this opportunity to lead prayer or speak a few words of their choice]

FACILITATOR'S INTRODUCTION

[Be sure that brochures have been distributed at the beginning of the program.] Thank you for coming to our presentation. When most people think of pollution, they think of outdoor air. You may be surprised to learn indoor air is often more polluted than the air outside. A large contributor to indoor pollution is household hazardous waste and improper management of chemical products. Household hazardous wastes might include common household cleaning products, which increases the amount of pollutants in our homes. This waste poses health risks to both ourselves and the environment. Luckily, there are many simple strategies to reduce the risks and hazards associated with harmful products. We will explore some alternatives, including natural alternatives, to reduce our exposure to many of these toxic hazards, acknowledging Indigenous Cultures and Traditions. Remember... tase'seròn:nenht ... shé:kon sá:sa'ts ... ó:ia' sasón:nia't ... serihwakwé:niénhst. Or, Reduce... reuse... recycle... respect. Today, we'll be focusing on tase'seròn:nenht – or how to reduce the amount of household hazardous waste you produce in your home, especially by reducing the amount of household chemicals we buy, typically from large brand-name corporations.

To stage our program, we have chosen a familiar format—the home improvement show. Our purpose is not to make light of a serious subject, but to lighten the learning atmosphere and give it relevance to our daily lives. The brochure summarizes the points you'll learn today and provides you with tips to use in your own home. We even have a place to inventory your household cleaners with a scoring system to help you determine products for which you may wish to find substitutes. Please also explore the other resources provided to you today, especially any based on Tribal Indigenous knowledge. Thank you for your interest. Now, let's get on with the presentation.

Ladies and Gentlemen, please welcome the host of Detox Your Domicile, the home improvement show that shows you how to put the "green in clean"!

THE HOME IMPROVEMENT SHOW

HOST:
Welcome to this week's installment of DETOX YOUR DOMICILE, a special feature of Pollution Prevention Network, or PPN. Remember everyone: *[Vanna holds up baking soda cue sign and Host points to sign]* BAKING SODA CLEANS EVERYTHING!! Now let's meet our experts—those Gallant Guardians of Green who have helped dozens of people make their homes healthier and safer places to live. Heeeeeere's Les and Non Toxic. *[Applause as Les and Nonnie enter.]*

LES and NONNIE:
Thank you, Thank you. *[They sit in chairs placed next to the easel.]*

HOST:
We have invited viewers to write to us about their pollution problems. Each week we choose one of those emails and go for an on-the-spot visit from our PPN team. Our experts, Les and Nonnie, tour the winners' home, advising them on ways to solve or lessen the harm to human health and the environment through household hazardous waste management. In addition, we select members of our studio team to participate in games and demonstrations related to household hazardous waste. So, let's get started. *[Turns to Nonnie]* Nonnie, tell us the story behind today's program.

NONNIE:
Today you will see us visiting the home of Kwis and Tiio, roommates and long-time friends. These guys were having serious pollution-related air problems directly affecting Tiio's health. Here is what Kwis wrote. *[Reads the email.]*

Dear Les and Non Toxic,
We need your help! My friend Tiio and I have recently moved into an average home. Tiio was just diagnosed with asthma. We have noticed that on days when we do chores around the house his breathing is worse. His doctor gave us a list of changes we could make to help prevent an asthma attack. I even quit vaping.

LES:
Kwis quit vaping. That is an important step. We know that certain chemicals can aggravate asthma and many are found in cigarette smoke and e-cigarette vapors. Continue with the email Nonnie.

NONNIE: *[continues]*
His doctor said that some of the ordinary products we use in our home might be aggravating Tiio's breathing, and she mentioned your wonderful program, "Detox Your Domicile." Please come visit and show us what we can do to have cleaner air and reduce our exposure to toxics in and around our home.

Niá:wen,
Kwis and Tiio

HOST:
You certainly have your work cut out for you. According to the Centers for Disease Control and Prevention (or the CDC), over 10 percent of Native American or Alaskan Native peoples have been diagnosed with asthma, including over 60,000 Native American children under the age of eighteen.

LES:
Those are disturbing statistics, but the good news is those with respiratory ailments—as well as the rest of us—can have healthier lifestyles by reducing pollution. Many people don't know that the air outside our homes is often cleaner than the air inside our homes. The products people use in their homes can be considered household hazardous waste when disposed, so by cutting down on pollution producing products, we decrease household hazardous waste disposal as well.

Alternate Commercial Script for the Workshop

The following excerpt of script includes alternative UTILITY ROOM and WORKSHOP sections for the Detox your Domicile script, including a “Worthier Wood Warmers” commercial for volunteers to perform in the UTILITY ROOM section. The following alternate script can be used **in place of** the UTILITY ROOM and GARAGE/WORKSHOP sections (these included the “Green Car Garage” commercial) provided in the default/generic script in Section 2 of this Tool Kit.

This alternate script was initially developed for the Newhalen Tribe and is intended to be used for communities where wood burning stoves are prevalent and/or where garages are not common. A standalone version of the “Worthier Wood Warmers” script is also included as a Supplemental Printout in Section 2 of this Tool Kit.

To use this alternate script, keep the first 14 pages from the default/generic script in Section 2 of this Tool Kit, and replace the remaining pages with the following script (starts at Page 15 of the script).

In addition, the alternate generic poster designs for the UTILITY ROOM and WORKSHOP sections are included following the alternate script. The alternate generic poster designs include the logo for the Burn Wise certification program on the UTILITY ROOM poster and removal of the “garage” from the WORKSHOP poster. If using this alternate script, these poster designs can replace the UTILITY ROOM and the GARAGE/WORKSHOP posters included in Section 2.

Detox your Domicile

Adapted for the **Newhalen Tribe**

UTILITY ROOM

LES:
We toured the utility room next. *[Vanna changes poster to the utility room.]* The Occupants' utility room contains the heating system including a wood burning stove, water heater, washer, dryer, and ironing equipment.

HOST: Wow, that's a nice new wood burning stove! That must keep them really warm in the winter months.

NONNIE: It sure does – it's a Burn Wise certified stove. [*Vanna waves Burn Wise label poster.*] The Occupants also do a great job burning wood safely to keep their home healthy, which is so important because even small exposures to wood smoke can cause health risks to the lungs and heart, such as triggering asthma attacks or even heart attacks in people with heart disease. Speaking of wood stoves, let's listen in on a word from our sponsors.

[Perform "Worthier Wood Warmers" commercial]

Commercial for the Worthier Wood Warmers

(Suggestion: Ask two people to read the commercial before the program begins. Give them copies so they can look over it before reading it on the program.)

FIRST SPEAKER:

Howdy Folks! Welcome to Worthier Wood Warmers! We know wood stoves and we love 'em. But we know that wood stoves can be tough on the air we breathe.

SECOND SPEAKER:

That's why we started Worthier Wood Warmers: we install and maintain your wood stoves to keep them in tip-top shape without harming Mother Earth.

FIRST SPEAKER:

How do we do that, you may ask? We point you towards only dry, seasoned wood for burning. This burns hotter and provides less smoke. If you burn fresh, or green wood, it can produce much more smoke.

SECOND SPEAKER:

And that's not good, folks. No sir-eeee! That smoke from green wood can make breathing difficult. It also leaves a dusty, oily, and sticky residue on all surfaces.

FIRST SPEAKER:

Do you have an older stove, made before 1990? Those stoves are very inefficient, requiring one-third more wood for the same amount of heat.

SECOND SPEAKER:

And that's not good, folks. No sir-eeee. Those older stoves burn more wood than is necessary, and a lot of heat goes up the chimney rather than to your home. Speaking of the chimney – older stoves have more creosote buildup that can lead to chimney fires. Not to mention many of those stoves have solid metal doors, which can be a household safety issue with skin burns.

FIRST SPEAKER:

We do our part to make the air cleaner, too, by helping you find EPA Burn Wise certified stoves that burn more efficiently, provide better heat, and keep your air safer to breathe. Burn Wise certified stoves can reduce harmful smoke particles in your home by 70 percent.

SECOND SPEAKER:

Yes sir-eee! All of those little things we do add up to big things in the long run: cleaner air, cleaner water, and cleaner soil. We are taking better care of Mother Earth. So, bring your heating questions and needs to the Worthier Wood Warmers.

BOTH SPEAKERS TOGETHER:

When you give us a chance, you give Mother Earth a chance.

HOST:
Fantastic! Thank you to our sponsors. What else caught your attention in the utility room?

LES:
We were in for a pleasant surprise. The Occupants really prioritize maintenance on their heating system. They regularly clean and replace the air filters in their home and keep their wood stove clean. Plus, their dryer had an Energy Star label. [*Vanna waves Energy Star label poster.*]

HOST:
What does that mean?

LES:
An Energy Star label means the appliance meets a high standard of energy efficiency and will save you money on your energy bills.

HOST:
Be sure to look for this symbol when purchasing your next appliance. Were there any problems in the utility room?

LES:
Well, the Occupants use a lot of laundry products that contain potentially harmful substances.

HOST:
Such as?

LES:
Chlorine bleach, which is a pesticide, and laundry detergents that can irritate eyes and skin. In addition to health hazards, laundry products that are misused or disposed of improperly can contaminate water and soil. It's especially important here to read the label for how much laundry detergent you actually need to use, since it's less than most people think.

HOST:
Huh, I guess that's like disinfectants where using more is not always better.

LES:
Exactly! More is not always better! Using more laundry detergent than directed can leave residue on your clothing and might even cause your clothes to get dirtier. So again, make sure you read the label.

HOST:
That's good to know! Can we explore less toxic ways of doing laundry?

LES:
We certainly can. You can create laundry detergent at home by mashing up soap berries into a paste and combining with water. Also, many products have been on the market for a long time such as borax, baking soda, *[Vanna holds up Baking Soda sign]*, and non-detergent soaps. Other environmentally friendly laundry products are produced commercially as well.

NONNIE:
That's great news! I think it's time for a breath of fresh air now. Let's follow Les into the outdoors.
[Vanna changes the poster to outdoors. Nonnie passes out "Compost Song" lyrics sheets].

OUTDOORS

LES:
The Occupants' certainly enjoy outdoor living. Olga has a garden in the yard where she grows herbs and vegetables. She tends to the garden by manually weeding and watering the plants with a watering can. I was also thrilled to see a compost pile near the garden where she recycles some kitchen scraps, dead leaves, and lawn clippings.

HOST:
More people seem to be composting these days. Where can you find information about composting?

NONNIE:
The Internet is a great place to begin, but tribal environmental offices, state or local farm bureaus, conservation agencies, and botanical gardens will offer assistance. In fact, we can help you learn more about composting right now with a song.

LES:
That sounds like fun. OK. Everybody join in for the Compost Song.

NONNIE:
The tune is Hokey Pokey.

[Lyrics provided on the following page.]

[Sung to the tune of "Hokey Pokey"]
[If you are not familiar with the tune, it can be easily found through a simple internet search. Stand up to perform the song if able; using hand gestures and body motions to go along with the song is highly encouraged (e.g., spin in a circle when you say "turn me once in awhile"). This song is essential to the fun of the skit – do not skip over it!]

Verse
Put in your celery tops and your apples skins, all fruit and vegetables come on in.
So, give me a little water and turn me once in awhile, rot's what it's all about.

Chorus
It's about De-composition!
It's about De-composition!
It's about De-composition!
And Rot's what it's all about!

Verse
Put your coffee grounds in, but keep your stinky meat out. I love your leaves and clippings so much I want to shout.
So, give me a little water and turn me once in awhile, rot's what it's all about.

Chorus
It's about De-composition!
It's about De-composition!
It's about De-composition!
And Rot's what it's all about!

LES:
That was great. The best part about composting is all of the free natural fertilizer to use on your lawns and gardens. How did everything look?

HOST:
The Occupants' backyard was inviting with its trimmed lawn, charcoal barbeque grill, picnic table, comfy lawn chairs, and a small chicken coop, a scene right out of a home magazine.

NONNIE:
Or maybe a horror flick. Five or six families are treating their lawns and gardens with fertilizers, herbicides, and pesticides.

LES:
Three or four others are mowing and trimming their lawns with gasoline powered tools. I even see some neighbors using burn piles and burn barrels to get rid of household wastes.

NONNIE:
Another family is using disposable serving ware, contributing to climate change by using single-use paper and plastic products. And to make matters worse, other families are cooking over charcoal fires started with lighter fluid.

HOST:
You have hit a nerve here, Nonnie. The lawn and garden can go to seed if they must, but I'll give up my hamburger turner when they pry it from my greasy, soot-covered hands!

NONNIE:
Cutting down on pollution doesn't mean giving up everything you love and enjoy. It means using safer, cleaner alternatives when available. We have substitutes for every one of the activities we mentioned.

HOST:
Let's start with the charcoal grill.

NONNIE:
You can get a gas grill.

HOST:
I don't want a gas grill. I love my charcoal grill. And how am I going to light the briquettes without lighter fluid?

NONNIE:
I'm glad you asked that. *[Vanna appears with charcoal chimney, or an image of one.]* Does anyone know what this is? A charcoal chimney is a simple way to light a charcoal fire without using volatile lighter fluids. They cost about $10 at large grocery, hardware, garden, and discount stores. Crumpled paper is placed in the bottom of the chimney with charcoal briquettes piled on top. The paper is lighted through slits at the bottom of the chimney. Holes in the chimney create a draft to ignite the charcoal.

LES:
We also know that many people may have expired gel alcohol sanitizer left over from the pandemic. These can be used as fire starter or accelerant!

HOST:
Okay—that's only one out of the five issues that you saw. What makes disposable serving ware so bad?

NONNIE:
Not only does it take a lot of resources to produce each utensil, napkin, straw, or plate that you use only once, but throwing away all those paper and plastic products results in a huge amount of unnecessary trash that needs to be managed. Unfortunately, people don't always dispose of it or manage it properly.

HOST:
I do get upset when I see plastic forks or cups that are littered on the ground around my community, so I see your point. I suppose offering washable and reusable serving ware is better, right?

LES:
Absolutely! Even if you're a guest at a party that's using disposable serving ware, I've seen some people carry around their own washable cutlery so that they can refrain from using the disposable stuff.

HOST:
Hmm, maybe I'll try that. But we still have three outdoor issues left to talk about. How about those power mowers—and if you tell me to get a reel mower, I'm going to tell you to GET REAL!

NONNIE:
Oh, that was awful! Okay, then how about a cordless electric mower.

HOST: *(Groans)*
Aren't they more expensive?

NONNIE:
A little bit—but they don't use gas or oil, and they don't make noise or spew smoke and fumes into the air. Small gasoline engines make much dirtier smoke than cars. If you aren't ready to make the switch to electric, then keeping the older machine engines tuned, or purchasing a newer machine will be an improvement. There have been improvements to the gas-powered mowers since 2011.

HOST:
I'll think about it. I suppose you had an issue with burn piles and burn barrels as well?

NONNIE:
Yes, it's better to leave the waste disposal to professional waste management services in your area. Burning household wastes such as plastics, treated wood, and cleaning products out in the open can release toxic chemicals into the air.

HOST:
Yikes, I wouldn't want to breathe that in! Now let's get to the last issue that you saw outdoors – what's your answer for the folks using herbicides and pesticides on their lawns and gardens?

NONNIE:
You can discourage weeds and garden pests with homemade or commercial products that don't harm Mother Earth or poison something you didn't mean to harm.

HOST:
Right! I've heard that you can put chili peppers in water and coat that water on corn and other crops to repel some pests.

NONNIE:
That seems useful! You can also use a soapy water spray to kill pests on plants.

HOST:
But what about other annoying bugs? I want to start my own garden, but I don't want to have to worry about mosquitos coming after me!

LES:
You can manage mosquitos and other vermin by eliminating desirable habitat conditions. For example, areas of standing water are ideal breeding spots for mosquitoes, so mitigating standing water around your garden may help keep pests away. Also, you can burn sage nearby to keep mosquitos under control.

NONNIE:
Keep in mind that whatever you use outdoors is likely to wind up in the air, water, and soil not only in your own yard, but in other yards as well. If it just stayed in our yards that would be bad enough, but the chemicals we use end up in our ground water and our sources of drinking water, too.

HOST:
You know, my neighbors down the road refuse to use anything on their property that might harm wildlife. They plant native species around their home because native plants have adapted to the local environment. They even use companion planting from what they tell me.

NONNIE:
Companion planting is a great idea – like the "Three Sisters" crops. So, what does their lawn and garden look like?

HOST:
Actually, it's nice—quite pleasant. They even give me some of their squash since they produce so much! I guess it's a matter of priorities. And speaking of priorities, it's time to award another Attendance Prize. What is it this time, Nonnie?

NONNIE:
[Displays and awards prize—perhaps a charcoal starter.] Before we move on to the next room of the house, we noticed the horse corral and sheep pen here. For personal animal husbandry operations, what are the important household hazardous waste considerations?

LES:
Well Nonnie, animal prescriptions and medications need to be properly managed during disposal. The EPA even has a ban on disposing of them down the drain. The most important thing is to read and follow all of the directions on prescriptions and vaccines for proper use and disposal. Also, pay attention to expiration dates!

NONNIE:
Thanks Les! Now it's time to move onto the next room.

WORKSHOP

HOST:
The only place we haven't examined is the workshop. *[Vanna changes poster to the workshop.]*

NONNIE:
Les and I will walk you through the Occupants' workshop. We first noticed that the Occupants have vehicles near their workshop.

HOST:
I see three vehicles, a pickup truck, a snowmobile, and 4-wheeler. How bad can they be?

LES:
Well, owning less vehicles certainly produces less pollution overall, but proper vehicle maintenance will also help. A well-maintained truck, 4-wheeler, or snowmobile can cut down on the pollution it produces.

NONNIE:
That's right. Omar admits that they don't maintain their vehicles as well as they should. Even a small thing like keeping the tires properly inflated increases the number of miles you can drive on a gallon of gas or diesel. And that saves you money, too.

LES:
We also noticed leaking fluids from their truck while it was parked, releasing toxic chemicals that eventually get into the waterways. Proper fluids management is important because of the toxicity hazard of many of these chemicals. Make sure to avoid spills and practice safe disposal when necessary – do not just dump the liquids out!

HOST:
That's always a good reminder, but what about the hazardous products they need for their vehicles?

LES:
We made sure that all hazardous vehicle products in the workshop were properly stored and locked in a cabinet. And that fuel, such as gasoline, was stored in the proper container. Gasoline is flammable and its fumes contain benzene, a toxic known to cause cancer.

HOST:
Right, I also try to avoid buying more maintenance fluids than I need, and I share with my neighbors when I happen to have extra.

NONNIE:
That's a great idea! One other thing to keep in mind is that if you're burning maintenance-related oils, you should not add solvents or other engine fluids. Remember, many of these solvents and engine fluids used to maintain your vehicles are toxic, so burning them can release fumes that harm your health.

HOST:
That's good to know. Also... that truck sparkles, how do they clean it?

NONNIE:
They frequently rinse their truck with just water and gently wipe it down with rags. It is cost effective and environmentally friendly, since it prevents toxic runoff from detergents and cleaners. They can also clean their car battery terminals with baking soda *[Vanna holds up baking soda sign]*.

HOST:
Alright, so what about the workshop itself? What are some considerations for that?

NONNIE:
Great question! Workshops might have pesticides, electrical tools, and if you are crafting with wood, like it looks like Omar and Olga are here, certain types of wood stains, paints, and sawdust. Inhalation of sawdust and particulate matter from sawmills and other tools can cause health risks. Make sure to always wear a mask for respiratory protection. We already discussed pesticides, but for electrical tools, make sure that you are practicing electrical safety such as by using the proper charger ports for the tool's battery, and always follow the user manual.

LES:
Right, and oil-based wood stains may contain flammable materials like petroleum distillates and varnish. These can also make you dizzy, drowsy, and cause headaches and nausea. Oil-based paints may still be better for certain surfaces, like metal, but I'd go for latex paints when it makes sense for the surface you're looking to paint, since they're water-based.

NONNIE:
Another thing to look for is linseed oil in wood stains, since this oil releases heat when exposed to oxygen. It is important to take precautions when using rags for wood stain applications, as they can dry and catch fire. Don't keep these rags in piles or in direct sunlight. Keep them outside and away from all structures and heat sources. When they are dry, put them in a sealed metal container.

HOST:
Les and Nonnie, the old clock on the wall says it's almost time to go. Give us your closing thoughts on the "Big Picture".

LES
Most of us seldom consider the cumulative effect of the choices we make. What does it matter if I use a pesticide on my lawn, a hazardous cleaner like bleach inside my house, or burn my plastic waste? If I were the only person on earth and did it once in a while, it probably wouldn't matter. But when millions or billions of people do the same every day, small problems quickly become enormous obstacles for our health, the health of our families, and the health of Mother Earth.

NONNIE:
So, the Big Picture is this: In the long run, the effort of making environmentally friendly choices is well worth it, for our health and safety and for the sake of Mother Earth.

HOST:
Thank you, Les, and Nonnie. Thanks to our viewers and studio audience and a special thanks to the Occupants for letting us come into their home. Until next week—

ALL TOGETHER:
Be safe, healthy, and environmentally responsible. And remember…
[Vanna holds up baking soda sign] Audience members say,
"BAKING SODA CLEANS EVERYTHING!"

FACILITATOR'S CLOSING

Facilitator: It has been a pleasure to share this time with you. We appreciate the tribal ecological knowledge and tribal indigenous knowledge that helped drive this presentation. While baking soda does not actually clean everything per se, we hope that the motto "baking soda cleans everything" will remind you that safer alternatives, especially those based on Tribal Indigenous Knowledge, exist for just about everything we do around our homes.

Thank you for your invaluable contributions and cooperation in our audience participation segments. Please take note of the inventory of the Household Chemicals Chart and the sources for additional information listed in the brochure provided before the presentation. We sincerely hope that the Big Picture ideas have given you food for thought about household hazardous waste, and that you will give safer household products a try.

Note

The CDC statistic in this script for # of asthma diagnoses was based on data from the following source...

Title: Asthma Surveillance — United States, 2006–2018

Corporate Authors(s): Centers for Disease Control and Prevention (U.S.)

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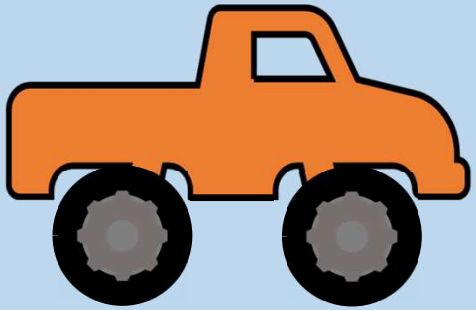
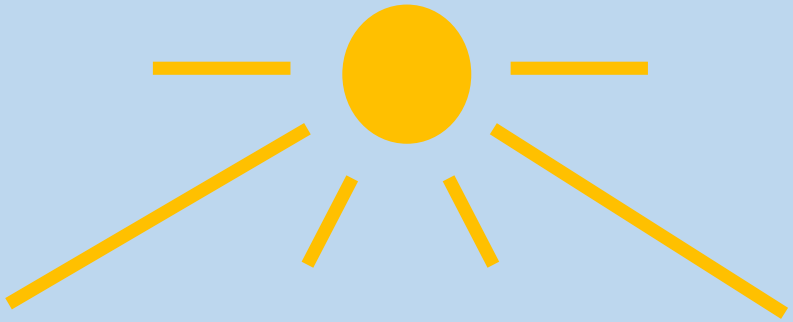
URL: https://stacks.cdc.gov/view/cdc/109086

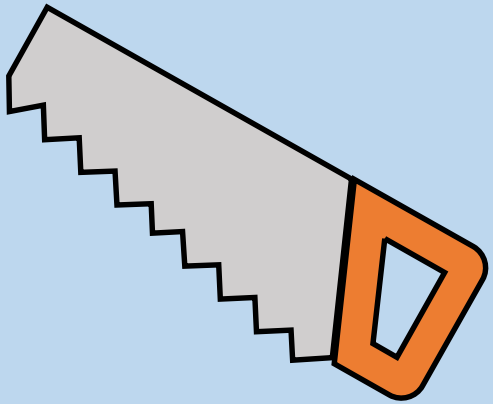
Burn Wise
Program of U.S. EPA

ENERGY STAR

UTILITY ROOM







WORKSHOP