

Now that you have completed **Step 1: Build a Green Team**, you are ready to proceed in your process of becoming a Washington Green School.

Objective

Step 2: Assess. This Toxics Reduction & Indoor Air Quality Assessment guide provides tips on how to complete the Toxics Reduction & Indoor Air Quality Assessment, and some recommended resources. The goal of completing the Assessment is for your Green Team and other school members to get a good overview of what chemicals are being used in your school, how, where, and why they are used, and how they are stored. In addition, you'll learn ways to reduce the amount of toxic chemicals in your school, as well as how daily school operations and the use of chemicals may impact indoor air quality.

Once your Assessment is complete, you will be able to use the answers and information to identify a Lasting Change (for Step 3) that you can implement for an ongoing significant impact to reduce the use of toxic chemicals or improve indoor air quality at your school.

Things to Consider for a Successful Process

1. Careful planning is the key to successfully completing the Assessment.

First, meet with your Green Team and decide who will complete the Assessment:

- The whole Green Team?
- Or a combination of Green Team members, classrooms, staff or grade levels?

2. Who do you need to call or meet with to answer the Assessment Questions related to Toxics Reduction & Indoor Air Quality?

You may wish to include:

- Teachers who specialize in this topic or teach a subject where they use chemicals (i.e. physics lab)
- School district staff (Resource Conservation Manager)
- Facilities staff
- Groundskeeper
- Purchasing Manager (Who buys supplies for your school? This may occur at the District Level)
- Cleaning Staff
- School Nurse

3. How will you save the information you've collected for future reference?

- To certify as a Washington Green School, you must enter 10 key findings from your Assessment in the Online Form for Step 2. You may also want to save the information you gather onsite at your school, so that students who repeat this Assessment in the future can learn from what you did, and compare results. This could show how the actions you completed helped reduce toxics use and improve indoor air quality. Find a central location that's easily accessible to store all your Assessment findings and other Washington Green Schools materials. Make sure to inform future key school staff and future Green Team members where to find it.
- Remember, in order to certify, you must also scan, (or take a picture of) your hand-written assessment findings, and upload them with your other Washington Green School records in your school account at www.wagreenschools.org.

Support Information for Assessment Questions

| Question | Hint | Why It's Important | Related Action Items |
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| 1. Does your school have an indoor air quality plan? | Your school's administrative staff may be a good resource for this information. | Indoor air quality plans are instrumental in maintaining healthy indoor environments. They provide purchasing policies for chemicals used in the school, cleaning frequency and practices, a list of both preferred and banned chemicals, how to clean up spills, what materials to use for renovations, and other operational practices that help reduce the amount of toxins released into the indoor environment. | <ul style="list-style-type: none"> • Establish a policy for a fragrance free school. • Establish an indoor air quality committee as well as a tracking method to encourage and solve air quality complaints. • Establish a policy for school closure during nearby agricultural spraying or when dust or fumes from such spraying is present. |
| 2. Does your school provide staff development for dealing with asthma/allergies? | Contact your principal/ school administration to find out. | It is important for staff to be trained in how to deal with individuals with asthma/ allergies because of how life threatening asthma attacks may be, and how to reduce the possibility of exposure to irritants for individuals with chemical sensitivities. | <ul style="list-style-type: none"> • Provide asthma training for the entire school. |
| 3. Does your school use HEPA filters in the ventilation system? | Ask your school facilities manager. | HEPA filters, depending on proper placement and installation, help reduce the amount of particulate matter that is in the air. Note, the higher the filtration level, the more fan power is needed to "pull" air through the filter, so consider what filtration effectiveness means in terms of energy use. | <ul style="list-style-type: none"> • Upgrade vacuums to HEPA or one micron filters, if not already in use. • Make sure all air vents are unblocked and free from clutter to maintain healthy indoor air quality. Come up with a plan and educate students, teachers and staff for clutter-free vents. |
| 4. Does your school follow a regular cleaning schedule? | Ask the school janitor and other custodial staff about schedules. | Cleaning the school regularly and frequently reduces dust. The amount of toxins present in indoor air increases when dust is stirred up and becomes airborne. | <ul style="list-style-type: none"> • Provide basic green cleaning training for all staff (products, use and maintenance). • Provide an indoor air quality training for custodial and maintenance staff. |
| 5. Does your school implement a green cleaning program? (non-toxic, non-antibacterial cleaning products?) | Contact your facilities manager. | Traditional cleaning products can contain harmful chemicals. Limiting exposure of staff and students by implementing a green cleaning program can help improve indoor air quality conditions. | <ul style="list-style-type: none"> • Research environmentally preferred purchasing policies for cleaning products. Draft a policy recommendation for your district. • Research environmentally preferred cleaning products. Present information to your school community and make a proposal for the school to purchase specific environmentally preferred cleaning products. |

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| 6. Do all entrances have clean "walk-off" mats to collect shoe dust and dirt? | Take a look at each school entrance. An effective walk-off mat at major entrances should be about 20 foot long. | A majority of pollutants that enter schools are brought in from the outside on shoes. Providing walk-off mats helps to contain these pollutants by trapping debris in the mat for proper disposal. | <ul style="list-style-type: none"> • Check to make sure that all outdoor entrances have walk-off mats placed immediately inside the door. If not, find out how your school can provide them and make a proposal to your school administration. |
| 7. Does your school have a program to encourage frequent hand washing? | Ask your principal/ school administration. | Frequent hand washing can reduce the amount of transmittable microorganisms between individuals in the school. | <ul style="list-style-type: none"> • Provide hand washing training with dye for the entire school. • Establish hand-washing procedure when coming indoors from outside. |
| 8. Does your school have time built into the schedule for washing hands prior to breakfast, lunch or snack times? | | Hand washing prior to breakfast, lunch and snack times can reduce illness rates by reducing the amount of microorganisms ingested when eating. | <ul style="list-style-type: none"> • Appoint an environmental Health Officer for the School. • Research the benefits of proper hand-washing and the risks associated with using antibacterial soaps and hand sanitizers. Start a "no anti-bacterial hand sanitizers with Triclosans" campaign at your school and encourage proper hand washing instead. |
| 9. Does your school maintain adequate supplies for hand washing? | Visit all school bathrooms and sinks to check on soap supplies. | Maintaining supplies for hand washing can make a hand-washing program more successful since students and staff will know that hand washing supplies are always available. | <ul style="list-style-type: none"> • Research environmentally preferred green cleaning products being used at your school. Present information to your school community, and make a proposal that the school purchase specific environmentally preferred cleaning products. |
| 10. Does your school use soaps that comply with Green Seal standards for Institutional Hand Cleaners? | Work with your school or district purchasing manager to determine what labels are on your cleaning materials and soaps. Do you see any seals or certification from third party organizations certifying that the product is non or low-toxic, biodegradable, and/or fragrance free? | Green Seal is an independent non-profit organization that promotes the manufacture and sale of environmentally responsible consumer products. Using products that comply with Green Seal standards ensures that the products are safe and minimize harm to the environment. | |

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| <p>11. Have areas containing asbestos been identified and properly removed or contained?</p> | <p>Ask your facility manager about the history of school construction and renovations, and whether at any time, these activities included asbestos installation and/or removal. Your facility manager should be able to tell you which materials could potentially contain asbestos, and what the school has done to remove it in the past.</p> | <p>Asbestos is a known cancer-causing carcinogen. It releases particles that can damage lung tissue if inhaled. If known to be present, asbestos must be properly and carefully contained. A professional asbestos removal specialist should be used to remove and dispose of the asbestos properly.</p> | |
| <p>12. Have areas containing lead paint been identified and properly removed or contained?</p> | <p>Ask your facility manager about the history of school construction and renovations, and whether at any time, the paint used may have contained lead. Your facility manager should be able to tell you what paints were used and when, and what the school did to remove or contain lead paint.</p> <p>Talk with your school's Art instructor to determine whether any art paint supplies could contain lead.</p> <p>Address with staff the possible presence of any toys that could contain lead.</p> | <p>Lead has long been recognized as a harmful pollutant. Prolonged exposure can lead to serious health problems. Old paints and some art supplies may contain lead. Careful precautions should be taken when refinishing walls (stripping or sanding the old paint releases lead into the air) and when purchasing art supplies.</p> | <ul style="list-style-type: none"> • Be sure all hazardous chemicals are stored safely (under cover, away from drains, vents and food, in a locked with sound storage cabinets space, clearly marked and not degraded, and away from incompatible compounds). Have a plan in place to continue safe storage • Remove leaded glazes, powdered heavy metal glazes and leaded solder. Purchase and use non-toxic alternatives. • Remove toys known to have unsafe levels of lead, phthalates or other hazardous chemicals in them. • Do not purchase toys on recall lists or those known to have unsafe levels of lead, phthalates or other hazardous chemicals in them. • Purchase non-lead tire weights for all vehicles. • Establish a "no-donation" policy for these chemicals. |

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| 13. Does your school purchase low- or non-VOC and urea-formaldehyde free paints and furnishings? | <p>VOC = volatile organic compound</p> <p>Ask your principal/ school administration to determine whether an environmentally preferred purchasing policy is in place.</p> <p>If there is a policy, check to see if it specifies non-VOC and urea-formaldehyde free products.</p> <p>If no policy is in place, find out whether the products being used in your school contain VOCs and/or urea-formaldehyde</p> | <p>When VOCs (volatile organic compounds) vaporize at room temperatures they exude harmful chemicals that negatively affect indoor air quality and human health. Urea-formaldehyde emits formaldehyde at room temperature. Prolonged exposure to this chemical can negatively affect health.</p> | <ul style="list-style-type: none"> • Research environmentally preferred purchasing policies and draft a policy recommendation for your district. • Establish a “no-donation” policy for these chemicals. |
| 14. Does your school have a policy to encourage natural pest control that is being read and followed? | <p>Contact your facilities or school grounds manager to find out what pest management procedures are in place.</p> | <p>Natural pest control minimizes the use of harmful pest control chemicals. Pest control chemicals in use can transfer to people’s clothing and skin and have negative health effects.</p> | <ul style="list-style-type: none"> • Provide Integrated Pest Management training for grounds and maintenance staff using the DVD “Road to Healthy Public Space.” • Find out if your school closes its school grounds after pesticide/herbicide spraying and whether signs are posted to warn people of the health risk. If not, write a letter or make a presentation to your school board, reminding them that this is the law and important. |
| 15. How often is an inventory of your school’s chemicals conducted? | <p>Contact your purchasing manager to find out.</p> | <p>Conducting inventories of your school’s chemicals can identify what hazardous chemicals are present in the school.</p> | |
| 16. Are unneeded and waste chemicals collected and marked as hazardous waste? | <p>Contact your facilities manager to find out what the procedures are used for collecting and marking hazardous waste chemicals.</p> | <p>Collecting and labeling hazardous chemicals is crucial for proper handling and for student and staff safety. Proper collection and disposal at hazardous waste facilities prevents harmful chemicals and toxics from entering the environment.</p> | <ul style="list-style-type: none"> • Properly dispose of the most hazardous and unnecessary chemicals identified in the Toxics Reduction and Indoor Air Quality Assessment using the School Chemicals Database at http://www.lhwmp.org/HWApp/staff/projects/schools/SchoolChemList.aspx. |

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| 17. Are hazardous chemicals disposed of properly? | | Proper disposal of hazardous chemicals can keep dangerous chemicals from contaminating landfills or harming environmental and human health. | <ul style="list-style-type: none"> Properly dispose of the most hazardous and unnecessary chemicals identified in the Toxics Reduction and Indoor Air Quality Assessment using the School Chemicals Database at http://www.lhwmp.org/HWApp/staff/projects/schools/SchoolChemList.aspx |
| 18. Does your school have a clearly defined procedure for disposal of hazardous chemicals? | Ask your facilities manager. | A clearly defined procedure for disposal of hazardous waste chemicals can minimize confusion and accidents. | |
| 19. Is chemical safety/handling, indoor air quality or asthma prevention included in the curriculum? | Ask your principal/ school administration. | | <ul style="list-style-type: none"> Provide asthma training to the entire school. Organize a class session on toxics and personal care products (middle or high school). Incorporate an age-appropriate Household Hazardous Waste and Toxic Waste curriculum for one or more grade levels (i.e., REACH, cosmetics, Mr. Yuck and WA State Dept. of Ecology's Hazards on the Homefront). When chemical-resistant gloves are needed, purchase latex-free gloves for staff and students (not cotton). |
| 20. Do your science laboratories have their required written chemical hygiene plans? | Ask the science instructors. | Lab-specific Chemical Hygiene Plans (CHP) provide policies and standard operating procedures that ensure faculty and student protection from harm due to chemical use. The plan is legally required. | |
| 21. Do students and staff wear the proper personal protection in the labs? | Visit the labs and observe what people are wearing. Is everyone wearing protective clothing as specified in the chemical hygiene plan? What about eye glasses? | Wearing proper personal protection in labs should be standard operating procedure to ensure students and staff are protected from chemicals and potentially harmful equipment. | |

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| 22. Are there any mercury-containing thermostats in your school? | | Mercury is a heavy metal that can harm human health with exposure. Mercury thermostats contain a glass bulb with mercury inside that can be broken, leading to mercury exposure. | <ul style="list-style-type: none"> Train all staff on the procedure for handling broken compact fluorescent bulbs and for avoiding future breakage. |
| 23. How does your school handle "burned out" fluorescent bulbs? | Ask your facilities manager. | Fluorescent bulbs, even when burned out, contain small amounts of mercury. Proper disposal keeps hazardous materials from entering the landfill or a Waste-to-Energy facility. | <ul style="list-style-type: none"> Properly dispose of the most hazardous and unnecessary chemicals identified in the Toxics Reduction and Indoor Air Quality Assessment using the School Chemicals Database at http://www.lhwmp.org/HWApp/staff/projects/schools/SchoolChemList.aspx. |
| 24. Has staff been trained on the dangers of mercury and how to handle spills? | Interview staff to determine whether they are trained in mercury safety handling and spill clean-up practices. Find out what materials in your school may contain mercury | Mercury is a potent toxin and direct contact with even minimal amounts can lead to negative health effects. Mercury spills require special cleanup procedures to prevent mercury from spreading or becoming airborne. Mercury can be found in CFL light bulbs, thermostats, barometers, and school labs. | <ul style="list-style-type: none"> Replace mercury-containing devices -- switches in vehicles, thermostats, thermometers. |
| 25. Does your school currently use, or has it ever used, the EPA's Tools for Schools Indoor Air Quality program or any other type of school environmental audit? | Interview staff to determine if the school has used this program in the past, or whether it was referenced to inform current policies and plans related to indoor air quality. Similarly, ask admin staff whether your school has ever hired an outside company to complete an audit of the school's environmental practices and indoor air quality. | EPA's Tools for Schools has resources related to the indoor environment as part of their Indoor Air Quality program. It can be a helpful guide for future actions, or to determine where your school could improve its practices and operations to reduce use of harmful chemicals as well as introduce more fresh air into the school. Similarly, an environmental audit could both identify your school's environmental impact and solutions for reducing them. | <ul style="list-style-type: none"> Calculate the schools "ecological or global footprint" using one of the many online calculators, and present information, findings and recommendations to school community or other appropriate audience. |
| 26. Has your school ever participated in the "Rehab the Lab" or other school chemical cleanout program? | Interview school staff to determine whether the school has used this program or similar programs in the past, and/or whether they were referenced to inform current policies and plans related to lab practices and policies. | School chemical cleanout programs can aid in identifying what chemicals are hazardous, how to remove and safely dispose of, and what alternative environmentally preferred chemicals may be available. | |
| 27. Does your school have | Ask the art teachers and classroom | Some traditional art supplies may contain | <ul style="list-style-type: none"> Purchase art supplies with the AP |

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| any art supplies that have warning labels about their toxicity? | teachers. | harmful chemicals. Limiting exposure of staff and students by purchasing and using non toxic supplies can help improve art room indoor air quality and exposure conditions. | Seal and the words "non toxic" (The AP Seal is certified by the Art & Craft Materials Institute). |
| 28. Does your school offer organically grown foods in the cafeteria? | Ask the school chef and kitchen staff, as well as district staff who are in charge of making food purchase decisions. | Organic foods will reduce student and staff exposure to chemicals (herbicides, pesticides, etc.) used for agricultural purposes. | <ul style="list-style-type: none"> • Provide pesticide-free food choices in the cafeteria to the school population. |
| 29. Do you have toxics reduction and indoor air quality educators in your community? | Research community organizations, non-profits, government agencies and businesses to learn whether you may have expert educators on this subject living within your own community. | Toxics reduction and indoor air quality educators can help you with the challenging questions in this assessment, and provide tips on actions to take to improve indoor air quality and reduce use of chemicals and toxics. They may be willing to provide a presentation to your school community, or help you with related actions that you complete for certification. | <ul style="list-style-type: none"> • Create a school wide recognition program for students who participate in toxics reduction activities outside of the classroom and/or have students partner with a community groups, non-profits, businesses, etc. on toxic reduction related projects. |
| 30. Do you have technical assistance in your community for toxics reduction and indoor air quality issues at your school? | | | <ul style="list-style-type: none"> • Create a school wide recognition program for students who participate in toxics reduction activities inside and outside of the classroom and/or have students partner with community groups, non-profits, businesses, etc. on toxic reduction related projects. |