

Training Guidance on Implementing EPA's Indoor Air Quality Tools for Schools Kit

(10/2012)

Practical Guidelines on Developing the Indoor Air Quality Management Plan

(Based on experiences and suggestions from schools currently implementing the program.)

The Indoor Air Quality (IAQ) Management Plan of EPA's IAQ Tools for Schools (TfS) Program involves implementing the following steps at least once a year. Based on experiences from schools currently utilizing the TfS Kit, implementation of TfS proceeds best by having a team carry out the work.

The most successful teams have consisted of 5 to 6 persons: school principal, school nurse, a teacher, head of custodial staff, a concerned parent, and possibly a school business official or town health official. **High school teams should include one or two students.** One or two of the team members serve as the team coordinator(s).

In some schools, the principal may appoint the team; in others, the principal asks for volunteers to be on the team. Ideally, the team should meet a few times a year, especially the first year. Once a team has been assembled, the first action item is to schedule the two part training program to learn about TfS. This training is conducted by members of the CT School Indoor Environment Resource Team.

After you have received instruction on TfS, you may begin the IAQ Management Plan that will serve as your road map in assisting you to prevent and solve IAQ problems in your school for this year and for years to come. (Refer to the TfS Kit – Coordinator's Guide, p. 19)

Below is a schedule of meetings showing what items of the IAQ Management Plan need to be covered at each meeting for optimal implementation of TfS.

Meeting 1 (After the First TfS Training – School IAQ & Implementation Steps)

1. Start the Checklists Log

The **IAQ Coordinator's** Forms section contains forms that are used to keep track of all the work the team will do in implementing TfS. Use the forms at each meeting to keep good records of all the items listed. Begin by listing all the people who are on the team (include separate sheets as necessary) and all the people who will receive an Action Packet. Please note that the forms are flexible and that you can modify and/or add your own tailored forms as needed. The **Checklists Log**, for example, will serve as a way of keeping track of all the information that the team has gathered from the checklists survey and will assist you when you continue the implementation of TfS year after year.

The other two forms: *Activating the IAQ Management Plan* and *IAQ Coordinator's Checklist* should be filled out during the course of implementation as information on radon, IPM, and lead is gathered, but most likely you will have to greatly expand on and modify these pages since there is little space for most of the big items such as the Walkthrough Inspection and Upgrade Priorities sections.

This is a good time to review and begin the planning to implement the district IAQ Management Plan. Refer to p.19 in the coordinator guide for a model plan. **NOW IS THE TIME TO CHECK INTO AN ALTERNATIVE TO MANUALLY DISTRIBUTING, COLLECTING AND SUMMARIZING THE TEACHERS' CHECKLISTS. SOME DISTRICTS HAVE OPTED TO USE A WEB-BASED SYSTEM SUCH AS SURVEY MONKEY.**

The team should begin filling in (as much as possible) the *Checklists Log*, *Activating the IAQ Management Plan* and *IAQ Coordinator's Checklist* at the end of the first meeting following the training session and continue to add information at subsequent meetings as information listed on the forms is collected. As an assignment, each team member should have a chance to read the *IAQ Coordinator's Guide* as well as this implementation guide before the second meeting, and any questions should be forwarded to your trainer.

2. Assemble the Action Packets

Assemble Action Packets for each staff person in the school and distribute them. The action packet consists of an explanatory memo (*Coordinator's Forms* section), background information (*IAQ Backgrounder*), and the appropriate checklist for that staff person, e.g. the nurse receives the health officer checklist, the teachers receive the teacher's checklist, etc. Consider using a web-based system to administer checklists. Survey Monkey is one example. This will simplify the process.

It is important from the beginning to inform staff that their opinions are valuable and that we're all working together to make improvements in our school environment - everyone is part of the solution! Encourage staff to submit additional comments on a separate paper together with their checklist since the checklists might not be sufficiently adequate as a communication tool for some people.

The checklists are comprehensive in order to instruct staff about items in their work areas that they might not normally think of as being potential problems. Some areas/items covered on the checklists may not be applicable in all instances. Checklists may be modified to fit each school's needs. If more than one person occupies a room, only one checklist needs to be submitted, however, each person in the room should have input. It is important that all areas have a checklist completed. This includes common areas such as conference rooms, stairwells, etc.

3. Communicate TfS Activities

The team should develop a communication plan. Refer to the Communication Guide in the Coordinator's packet distributed during the training. For parents, the team may want to consider holding a meeting at the school to inform them about TfS and also educate them about IAQ issues in the home environment.

Inform parents and community about TfS initiative, and discuss how the information will be organized once collected.

Some EPA regional offices have developed residential IAQ checklists to evaluate the home indoor environment for school children. Contact your trainer for ideas on how to run such a meeting and find out who in your town can assist with asthma and environmental education.

The team should inform the local health department, local media, PTA, school board, and school advisory board about its plans to implement TfS. There are sample memos in the TfS kit that you can tailor to your needs.

Meeting 2: Present the TfS Program at a Faculty/Staff Meeting.

4. Distribute Action Packets

Before distribution of the Action Packets, it is important to inform and educate the school staff about IAQ and the TfS process of gathering information on the current status of IAQ in the school. Many teams distribute the action packets at a faculty/staff meeting after showing the "Taking Action" video; others use the mailbox system. If you are using a web-based system, distribution will differ. Regardless of the system used, we strongly recommend that the team present the TfS program at a faculty/staff meeting so that everyone understands the program and their role. A memo should indicate when the checklists are to be returned, normally after 1 or 2 weeks. A reminder might be issued to the staff that have not responded by the deadline.

Reminder: Schedule the next TfS meeting for shortly after the deadline for the return of the checklists.

Meeting 3

5. Review and Summarize the IAQ Checklist Data, Organize the Data

This meeting should be devoted to reviewing the checklist data and deciding how best to summarize all the information. Keep in mind that the information from these checklists will form the basis for the IAQ walk-through investigation of the school, so it is important that the information be organized in a manner that highlights the irregularities pointed out in each staff person's work area. Use the Microsoft Word template file on the CD, an Access or Excel spreadsheet, or a survey tool such as Survey Monkey to summarize the checklists.

Some schools have made lists of each staff person's work area with the items of most concern summarized, whereas other schools have used floor plans (or copies of blueprints) to map where the staff has indicated IAQ problems. It is strongly recommended that the teams map out the results of the checklists. These maps make the walkthrough investigation much easier and efficient since you can concentrate on the identified problems first. You may develop your own system to represent the findings from the checklists. Since the job of reviewing all the checklists may be cumbersome, particularly in large schools, the team may want to seek the assistance of other available parents during this meeting. Contact your trainer for advice if you are having difficulty.

Most schools have found that the process of summarizing and organizing the checklist information takes some time and effort, more than enough for the meeting. Most teams are often surprised at how much information they have collected and how honest staff are about IAQ in their work areas. It is important that the team stay focused on IAQ during this process and that all comments from the staff be weighed in accordance with finding potential pollutant sources in their work areas.

6. Organize the Checklist Summary

It is suggested that the fourth meeting be used to finish organizing the checklist summary data and to discuss the results in general.

7. Develop a plan for the walkthrough investigation of the school.

While discussing how the walk-through investigation will be conducted, keep the guidelines in the *IAQ Coordinator's Guide* in mind. The intention of TfS at this phase of implementation is for the team to get to know and understand how their school building works as a system, particularly how the ventilation systems operate, who is responsible for maintenance of each part of the system, when filters changed and by whom, what are the potential pollutant sources in the building, what outdoor factors can affect IAQ indoors, etc.

Many of these items can be done by the team, especially if the head custodian leads the walk-through of the ventilation system. However, many schools have decided that perhaps it is a good idea to hire (or receive pro bono) the services of a professional ventilation contractor to assist with the walk-through. Your trainer may also have information on free professional assistance, either a state or municipal industrial hygienist or ventilation professional, which can assist with your walk-through. You should contact your local health department to request that a sanitarian attend your walkthrough.

As a team, you need to decide how the walk-through will be conducted for optimum results. If the team does go outside of the school for assistance, the team should send a copy of the checklists summary and a copy of each blank checklist for review before the walkthrough to that person. Also, the team should lend a copy of the *Ventilation Basics* Video to that person after the team has watched it so that the walkthrough proceeds according to guidelines in TfS.

Prior to Second Training:

- Finish reading the *IAQ Coordinator's Guide* in it's entirety, watch the *Ventilation Basics* video, summarize and finalize checklist results, and update *Coordinator's Forms*.
- Select in advance which rooms and ventilation units can be used as part of training.
- Have the summary data (spreadsheets &/or maps) available to show the trainer. Be prepared to discuss the findings.

Meeting 4: Walkthrough Investigation (After the Second TfS Training)

8. Perform a Walkthrough Investigation

Note: Before performing the walkthrough, the TfS committee should: 1. View the **Walkthrough Investigation** videotape; 2. Contact the local health director to invite their participation; 3) if your school has a central HVAC system, and is on a timer, make sure the system is on during the time you are conducting the walkthrough and checking air flow.

This meeting will be in the form of a walkthrough investigation of your school, both inside and outside of the building. The entire IAQ team and anyone else invited (head custodian, local health department sanitarian, ventilation expert, etc.) should participate in this key event. One person should be designated by the IAQ Coordinator to lead the investigation and another to write down notes of all findings.

Items needed include: Copies of the walkthrough checklist for each classroom, summary of checklists including either a floor-plan or list of all work areas and classrooms listing occupant reported IAQ irregularities, tools for opening parts of the ventilation system, a flashlight, a notebook to record findings, and, if available, carbon dioxide/carbon monoxide and temperature/relative humidity measurement instruments (thermometer, hydrometer) for spot checks of each classroom and work area when occupied during school hours. A yardstick with tissue taped to the top is useful to check ventilation.

The team should have already been trained about the utility and shortfalls associated with the use of IAQ measurement devices. Remember that all safety precautions should be heeded because parts of ventilation systems (fans, fan belts, motors, oil on the floor, overhead obstacles, exposed electrical wiring, etc.) can pose serious threats.

The walkthrough investigation is a comprehensive evaluation of the school building based on the summary of the checklists, what you have learned about IAQ, what you are able to learn by using your senses of sight, smell, feeling and hearing, and also what your measurement instruments may indicate. There are many ways to go about conducting the walkthrough investigation, but these steps are the ones that many schools have used with success.

- Plan to spend about 3 minutes per classroom or office, 5 or more minutes for any area that is considered “problematic.” If the roof is easily accessible, plan about half an hour or more to check the rooftop parts of the ventilation system, areas of poor rainwater drainage, sewer gas pipe locations, and other items on the ventilation checklist. Also plan to spend about half an hour walking outside of the school building to evaluate locations of intake air vents for each classroom and for the main air handlers, sources of potential outdoor pollution that can enter the building, and outdoor entrance mats and their effectiveness. The whole process can take from 2 to 5 hours depending on the size of your school, but do not take shortcuts since all the important decisions that the team will make concerning IAQ will be ultimately based on findings from this walkthrough investigation.
- Assemble the team and invited participants at a time when school is in session and preferably at a time of the year considered the heating season (October – March). This scenario should provide the team with a good perspective of IAQ on a day when it is occupied and the school is dependent upon the mechanical ventilation system of the school. Generally, it is said that IAQ is worse during the winter months, so think of your investigation as evaluating the “worse case scenario”, even though this may not be the case.

Also keep in mind that the day you do your walkthrough may not be representative of what a typical day is like, so realize that your walkthrough results may need to be amended as new information comes forward. Before embarking on the investigation, be sure that someone is taking exhaustive notes of any problems as well as positive things that are mentioned. These notes will be written up and discussed later.

- Using the checklists summary (each team member should have a copy), proceed in an organized fashion making sure to evaluate every classroom, office, hallway, work area, closet, air handling room, storage room, supply room, lounge, etc. in your school. As a guide for each area, have a copy of the checklists for each area with you because it is possible that a teacher or office worker, for example, may have missed something on their checklist.

Your main goal as investigators, however, is to evaluate the items on the summary pointed out by occupant of that area since the occupant knows his or her area better than anyone else and is most cognizant of what might be a problem. For the ventilation system aspects of the investigation, it is best to allow the person with the most expertise to take over at this point and allow him or her to evaluate the system using the ventilation checklist. The expert will not only determine if there are any problems, but should also explain to the team what the function of each part of the system is. Naturally, the system should be turned off prior to removing any panels and safety should be stressed at all times while inspecting these units.

- While conducting the investigation, be generous in re-explaining to teachers and students what you are doing: “Our school’s indoor air quality team is conducting a walk-

through investigation of every room in the school to make sure the air you are breathing is the best it can be.” Even remind the children to tell their parents what they saw at school today: “Tell your parents when you get home that there were some experts at our school today who were making sure the air we breathe is clean.” Parents should already know that the investigation is happening that day, but it is always a good idea to remind them.

- If the team has acquired the use of IAQ measurement devices, use them cautiously since the results cannot be definitively relied on. Carbon dioxide levels, temperature and relative humidity (RH) change during the course of the day depending upon the level of occupation in a room, the timing of the ventilation system, time of day, etc. However, if at any time a level of carbon dioxide exceeds 1000 ppm, you can suspect a ventilation problem in that area and that further testing may be needed. Any level of carbon monoxide (CO) above 0 ppm is considered a problem. Your trainer should have instructed you about this.

9. Summary of Findings

By the end of your investigation, you will have learned many new things about your school and will have a nice stack of notes of all your observations, both positive and negative items. These notes need to be written up in a report form for eventual distribution since school staff, parents, the media, the town health department, and even the children will be interested in the results.

In addition to these results, it would also be advised to prepare a summary of the fire department’s report of the school as well as any asbestos, lead, radon, pesticides, UFFI, chemical hazard storage, drinking water quality, underground storage tank, wetland impact, etc. reports on the school for the school community’s and town’s information. Have these prepared by the sixth meeting.

Meeting 5: Review Walkthrough Investigation Results, Develop Priorities for Repairs and Upgrades

10. Discussion of the Walkthrough Investigation Results,

This meeting is an opportunity for the team to review all the information that was collected during the walkthrough investigation, review the results of any reports that could affect IAQ in school, share experiences about the investigation, and begin the process of addressing the problem areas by prioritizing the problems and developing solutions for improvement.

The product resulting from this meeting will be a written report containing a cover memo re-explaining the purpose of TfS, the steps the team has already taken to address IAQ in their school, a summary of findings (positive and negative) from the walkthrough investigation, other pertinent environmental reports, and an indication of what steps will be taken to address the problem areas. The CD in the Coordinator’s packet contains a template for a report.

11. Review other reports – (The District Facilities Manager should have these).

- Assess Radon Status
What are the results of the radon tests? Any action required?
- Assess Pest Control Program
Are pesticides used in our school? For what and when? What is the status of the Integrated Pest Management Program?
- Assess Lead Status
Is there lead paint in our school? Is there lead in our drinking water? What is the level of lead in our playground? Any action required?
- Assess Asbestos status
Is there an asbestos management plan?
Who is the designated planner?

12. Identify Recent Changes that Affect IAQ

Is there anything discovered during the walkthrough investigation that can be explained by changes in and outside the buildings. Has flooding occurred? Is the school used at odd hours such that the operation of the ventilation system does not coincide with those times? Has there been any recent renovation or repair work? Are there outdoor activities that can compromise air quality indoors?

13. Categorizing Results

At this point in the TfS process, team members should have a good idea about what needs to be done. It is possible that there may be disagreement about what needs to be done first. It will be helpful to categorize the identified IAQ needs and related recommended interventions.

To help in further defining the identified needs, a chart of the IAQ issues may help. The following definitions may be of assistance:

1. Consideration of ease of implementation and/or cost.

- **Category A:** IAQ issues in this category are those that can be done immediately or within a short time frame by the school occupants and/or team without too many hurdles, at little or no cost.

For example: The staff refrigerator has some mold growing and stagnant water in the drip pan. The plan would be to have the staff who use the refrigerator organize a sign up sheet for cleaning the interior and drip pan of the refrigerator on a monthly basis.

- **Category B:** IAQ issues in this category are those that might take up to a year, that the facilities staff or contractor can complete, and of a cost that can be borne in the current budget.

For example: Changing from the existing vacuum cleaners to HEPA vacuum cleaners.

- **Category C:** IAQ issues in this category are those that may take several years to be completed, may require professional assistance, and that need longer term capital budgeting or require a bid process.

For example: An upgrade of the ventilation system.

2. Consideration of the severity of associated health effects and/or the number of people affected (which may or may not correlate with the number of complaints received).

- **High** – A significant source of pollution that affects all or a large portion of the building.
For example: Central air handler vents drawing in diesel fumes from a generator when monthly testing is done.
- **Medium** – A pollutant affecting a smaller, defined group of people.
For example: Fumes from the autobody shop are being drawn into the art classroom.
- **Low** – Mainly comfort issues from a small number of people from different areas of the building.
For example: The teachers in the kindergarten wing complain of it being too cold in the morning.

An example could look something like this:

IAQ Problem	Priority	Action	Completed By?	Responsible party	Cost
Bus fumes from parking area	High, Cat. A	Relocate Bus area	Start in March	Bus Drivers	\$0
Moldy carpeting in Room 202.	High, Cat. C	Replace w/ Floor tiles	End of Summer	School Main. Dept., Contractor	\$2000
High VOC floor stripper	Medium, Cat. B	Replace w/alternative	Start using in new school yr	School custodian/purchasing office	\$200

Using the above examples, the team should be able to organize the IAQ problems discovered during the walkthrough, brainstorm possible solutions, make tentative agreements about how the major IAQ problems should best be addressed, write up a communication piece, and distribute this report following the meeting to your stakeholder mailing list (school staff, parents, media, town officials, etc.)

It is also a good idea to keep your Facilities Director and LHD apprized of your work at every step of the way by including them in your communication strategy. If the news is generally

good, that is, the school's IAQ is in good shape and that there are no major problems, then let everyone know.

If, however, the team has determined that there are significant problems, it is still important to let all concerned know about the problems and what the proposed solutions are. Such a report may be hard for parents, school officials and town officials to accept at first, but it is a far better strategy to be candid than attempting to sweep any problem under the rug.

Schools that have had problems with IAQ and are using TfS position themselves to avoid liability problems by focusing on solving IAQ problems and making improvements in the health of school staff and children. IAQ problems that are not addressed and IAQ complaints that are ignored, given the existence of TfS and the available resources, could lead to larger problems.

14. Develop Priorities for Repairs and Upgrades

Once the findings and recommendations have been categorized, the team should establish priorities for taking action on the recommendations. Use the chart that was developed to come to a consensus about the order of priorities. Keep in mind that the objective should be to reduce the risk to pollutants. You must weigh all considerations: health, cost, ease of implementation, and number of people affected. This can be challenging.

Questions that should be asked during the discussion of priorities include:

- ❖ Which repairs and upgrades, if any, need to be done?
- ❖ What is the time frame?
- ❖ Who will do the work?
- ❖ What specifications will be followed?
- ❖ How the work will be funded?
- ❖ What is the magnitude of the problem?
- ❖ How many people are affected?
- ❖ How serious are the health implications (is it a comfort issues vs. illness)?
- ❖ How simple or complicated is it to fix the problem?
- ❖ Can the fix be made with in-house staff or does someone need to be hired?

Determining how to prioritize IAQ problems can involve hours of discussion. There may be disagreement about whether the reported health effects from a certain situation are real or perceived, or if the IAQ problem is best handled internally or if outside assistance should be called upon. The following illustrates some of the considerations:

- Carbon Monoxide. Elevated levels of carbon monoxide can cause severe health problems, even death, if not addressed. Therefore, all problems associated with this pollutant should be dealt with immediately by professionals.
- Asthma Triggers. Pollutants that are classified as “asthma triggers” may not cause any respiratory problems in some individuals, but for asthmatics, exposure to significant levels of dust mite and cockroach particles, animal dander, mold spores, environmental

- tobacco smoke (ETS), and certain VOCs could cause very serious respiratory problems.
- Comfort Issues. These are things such as temperature control, inadequate lighting, lack of air movement, certain odors, low humidity, etc. Some of these may be temporary conditions that need to be addressed as the situation arises such as “the odor from the farm next door is back”; others may be long-term conditions such as “it’s too warm everyday in this section”. These should be taken seriously.

Treat all complaints with respect worthy of investigation. Perceived problems with comfort issues when they are widespread may indicate a larger overall problem. In some cases, outside professional assistance may be necessary in determining whether perceived illnesses, long standing complaints about IEQ, or long absences from work are the results of true exposure to an environmental source in the school or home environments, a medical or psychological condition, or job dissatisfaction.

15. Gain Consensus and Approvals

Ideally, there should be consensus and approval for each action the team suggests, particularly if it involves changes to staff’s performance description, costs beyond normal expenditures, and negotiating services. These are important discussions at this juncture because of the potential costs associated with repairs and upgrades to the building.

16. Distribute Status Report, Begin Final Report

After the list of IAQ problems and action items for each problem has been finalized, this list or chart should be communicated to everyone in the TfS communication network. You may wish to release status reports more frequently during the process as part of your communication plan.

By now, the school community and parents should have all received the explanatory memo announcing the schools’ adoption of TfS, a summary report of the checklist evaluations, and a summary report of the walkthrough investigation including information of other environmental reports [see **suggested outline for report on CSIERT CD under “TfS Report”**]. Following the status report of action taken on IAQ problems, the final report for the school year should be a summary of what has been achieved and what still needs to be done. You should begin writing this summary report. Refer to the report examples in the coordinator guide or the report template in the TfS CD.

17. Schedule Repairs and Upgrades

Most of the action items identified by the team, if the team has good delegation authority, could be carried out by other members of the school community, city employees and state employees, contractors, and others. Because the team has gone through the consensus and approval process and has been in contact with those responsible for taking action on specific IAQ problems, it should be a matter of contractual or verbal agreement that all or most of the items be completed according to the timetable set forth by the team.

This is the ideal world and chances are, there will be some shortcomings. Either there is no money available to install a new segment of duct work to provide more air to a classroom or there is no consensus where to relocate a copying machine that has been emitting particles and VOCs or a teacher refuses to get rid of small mammals (dander is an asthma trigger) in his or her classroom because of their educational benefit, etc. It is normal to face such obstacles in carrying out the action items.

In most cases, educating the key players about IAQ and the health effects associated with indoor air pollutants can motivate most individuals to see why it is in the interest of everyone to abide by the new IAQ policies.

Meeting 6

18. Wrap Up

The final TfS meeting of the school year affords a time for the IAQ team to consider all that has been learned and accomplished since adopting TfS and its standard of environmental care for the school. By this meeting, the team should have had a first hand look at the ongoing action taken to address any identified IAQ problems in the school, whether it be a plumbing repair and the replacement of molding ceiling tiles, the use of a new policy preventing the purchase of any new furniture containing formaldehyde, or the vacuuming out and repair of all unit ventilators. Some of the items that can be addressed during this meeting include:

- Conduct Follow-up Inspections
Determine if the repairs and upgrades listed on the IAQ problem/Action Item chart have been performed or are being performed according to the specifications set forth by the team. For action items that involve substantial expenditure and/or time, ensure that these items remain on the front burner during the budgeting process for the school.
- Develop a Schedule of IAQ Activities
Since the team may have learned that activities such as improperly contained repair or renovation work during school hours can affect IAQ in dramatic ways, the team may want to develop a schedule of activities to keep school personnel and students aware of situations that could affect IAQ. The schedule may also contain dates of IAQ team meetings, dates set aside for school staff and parent IAQ training, dates and times that the school ventilation system needs to run longer because of occupancy at those times, and dates during the summer if the school is closed up in order to check on mold growth and pest problems.
- Assess Problem-Solving Performance
The team should be monitoring how well the action items assigned to each IAQ problem are coming along. Concise written reports from those responsible for solving each problem might be a good idea since the problem may recur at some point and the team will have information on what worked and what didn't work.

- Establish and Update IAQ Policies/IAQ Management Plan
The Coordinator's Guide contains a number of sample IAQ policies, but these will only serve a good purpose if they are circulated to staff, especially newly hired staff, posted on an information bulletin board, and revisited yearly by the IAQ team. Examples of policies not mentioned in TfS, but could be useful are: cleaning products purchasing guide, furniture and supplies purchasing guide, pesticides use policy, filter replacement policy, policy on what products are disallowed from school (strong perfumes, favorite pesticides, certain brands of markers, etc.), policy on maintaining the school's ventilation system, etc.

19. Distribute Summary Report

This is the team's year-end report to school staff, parents, the media, town health office, school board, EPA, and whoever else has been previously informed of the school's TfS activities. Besides the information listed in the Coordinator's Guide, most recipients of the report probably want to know one thing: "What has been the benefit of implementing TfS?"

Hopefully the work of the team has paid off in terms of reducing absenteeism, preventing asthma attacks at school, providing noticeably cleaner and fresher air, reducing the amount of pesticides used, switching a carcinogen-containing cleaner for one that is safer and equally effective, keeping bus and truck exhaust from entering the building, installing a radon mitigation system, developing an emergency response policy, getting rid of outdated chemical reagents from the lab, testing for airborne mercury, repairing a plumbing problem, and installing a carbon monoxide detector in the boiler room, to name a few examples.

You also want to mention what the team plans to do next year. Continue implementing TfS, resurvey the school staff about IAQ, conduct another walkthrough investigation, secure funding to replace the leaking roof which is already 25 years old, replace all the old and smelly carpeting with new and safe flooring material, host a training workshop for other school in your area who are interested in implementing TfS, etc.

20. Check Contact Lists

The "Local IAQ Service Providers List" in your Coordinator's Form should be kept updated. Be sure to include your regional EPA contact, your TfS trainer, and a copy of your mailing list that you used when distributing your TfS reports.

21. File Checklists, Reports, and Notes

It is recommended that the IAQ Coordinator, as well as the local health department, each have a copy of these files, and that these files be used when the next implementation cycle of TfS commences in the new school year. The team certainly wants to build on the successes from the previous year and maintain the progress that has been made so far in institutionalizing TfS in their school.

At the end of the school year, EPA and its TfS partners wish to acknowledge schools that have been successful in implementing TfS. Your trainer should have informed you at some point about EPA's award program for schools, so be sure to keep your trainer and EPA informed of your progress throughout the year.

Final Step

Present report(s) at district Board of Education meeting. It is highly suggested that the team coordinators present the TfS program and report to the district board of education – at least once a year.

Next Steps

- **Establish the TfS process as an annual assessment. Consider incorporating it into an existing group such as a health & safety or wellness committee. Outline plans for the next year. Continue implementing TfS, resurveying the staff about IAQ, conducting another walkthrough investigation, and discussing problem-solving plans with facility management.**
- **Develop a District-wide IAQ Management Plan. See Section 3, page 19 in the EPA TfS Coordinators Guide in the TfS kit.**
- Track outcomes such as absenteeism, health complaints, and comfort complaints. Also track accomplishments such as noticeably cleaner and fresher air, use of “greener” cleaning chemicals, less vehicle exhaust entering the building, etc.
- Encourage the district to set up an Indoor Environmental Quality or School Environment page on the district website (along with the Green Cleaning Products Plan). This would be part of the overall communication plan. The page should contain background information on IAQ, lists of the TfS team members, reports, and lists of accomplishments.

* Written originally by Eugene Benoit, Environmental Engineer, Indoor Environments Program, US EPA Region 1, Boston, MA, Tel. 617-918-1639, email: benoit.eugene@epa.gov.

* Updated by CT School Indoor Environment Resource Team, 10/14/2004; 8/2007; 7/2008, 2/2011, 10/2012