

INDOOR AIR QUALITY MANUAL

For
Staff, Students, Parents,
&
Residents



BALDWIN UNION FREE SCHOOL DISTRICT



BALDWIN UNION FREE SCHOOL DISTRICT

980 HASTINGS STREET BALDWIN, NY 11510-4798

(516) 377-9271 FAX: (516) 377-9421

Dr. Kathy Weiss
Superintendent of Schools

January 8, 2001

Mr. Robert Lavery
New York State Education Department
Office of Facilities, Plans
Room 1060
Education Building Annex
Albany, NY 12234

NYS EDUCATION DEPARTMENT
JAN 11 2001
OFFICE OF FACILITIES PLANS

Dear Mr. Lavery:

On behalf of the Baldwin School District, I am pleased that the New York State Education Department has recognized the hard work of our Indoor Air Quality (IAQ) Committee in developing our Indoor Air Quality Manual.

It is our pleasure to grant permission to the State Education Department to put our Manual on its website as an example for other districts. We do require, however, that proper attribution be given to the Baldwin Union Free School District and the IAQ Committee Co-Chairpersons, Mr. Michael Sheehan and Mr. John McGrath, by the State Education Department and/or any school district using the Manual or any portion thereof.

Should you have any questions or need additional information, please do not hesitate to call me.

Sincerely,

Dr. Kathy Weiss
Superintendent

This booklet was developed by the District's Indoor Air Quality Committee. The district will review and update the I.A.Q. practices on a yearly basis. The committee encourages your input and involvement.

Please direct all inquiries by telephone to Michael Sheehan, Director of School Facilities, Operations, Safety and Transportation at 516-377-9312 or John McGrath, Chemical Hygiene Officer at 516-377-9223 and in writing to:

Baldwin Union Free School District
Office of Facilities, Operations, Safety and Transportation
960 Hastings Street
Baldwin, New York 11510-4798

Thank you.

I.A.Q. Committee Members

Michael Sheehan, Director Facilities, Safety and Transportation - co-chair
John McGrath, Chemical Hygiene Officer - co-chair
Dr. Cheryl Sulsky, Psychologist, Baldwin UFSD
Karen Nasti, RN, St. Christopher's School
Mary Hiller, Teacher Assistant, Baldwin UFSD
Mary Clark, PTA Council, Baldwin UFSD

The committee members would like to extend their appreciation to:

Dr. Kathy Weiss, Superintendent of Schools
Dr. Lee Chapman, Deputy Superintendent for Administration
Peter LaDuca, Nassau County BOCES
Jean Feola, EPA
Baldwin UFSD Health and Safety Committee Members

INTRODUCTION

This booklet has been developed to encourage and assist the staff, students, parents and residents of our community in reviewing and improving the District's indoor air quality practices. It identifies ways to improve our school's air quality and discusses alternative methods for managing this all-important issue. This booklet was developed in conjunction with:

- The Environmental Protection Agency Tools for Schools Program,
- The Consumer Product Safety Commission booklet, A Guide to Indoor Air Quality,
- The SMACNA booklet, IAQ Guidelines for Occupied Buildings Under Construction,
- The Environmental Protection Agency Guide, Building Air Quality Program
- The New York State Association of School Superintendents of Buildings and Grounds Manual, Maintenance Procedures Manual

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Overview

The goal of this program is to provide clear and easily applied guidance that will help prevent indoor air quality problems and resolve such problems if they do arise. It recommends practical actions that can be carried out by the school staff.

IAQ Coordinator

The district will appoint two IAQ coordinators who shall be responsible for implementing this program. The district's current IAQ coordinators are Michael Sheehan and John McGrath.

The Importance of IAQ

A healthy indoor environment is one in which the surroundings contribute to productivity, comfort, and a sense of health, and well being. The indoor air should be free from significant levels of odors, dust, and contaminants and circulated to prevent stuffiness without creating drafts. Temperature and humidity are appropriate to the season and to the clothing and activity of the building occupants. There should be enough light to illuminate work surfaces without creating glare and noise levels, which interfere with activities. Sanitation, drinking water, fire protection, and other factors affecting health and safety are well planned and properly managed.

Good air quality is an important component of a healthy indoor environment. For the purpose of this document, the definition of good indoor air quality includes:

- introduction and distribution of adequate air
- control of airborne contaminants
- maintenance of acceptable temperature

It is important to remember that while occupant complaints may be related to the time at work, they may not necessarily be due to the quality of the air. Other factors such as noise, lighting, ergonomics, and job related psychosocial stressors could individually and in combination contribute to complaints.

Commitment

Provisions of good indoor air quality require a conscientious effort by all parties that occupy the building. The district will make the following commitments:

- establish a process that encourages an active exchange of information
- address all maintenance concerns affecting air quality
- respond to every concern in a timely fashion

Synopsis of the IAQ Manual

Indoor air pollution is a major public health problem that threatens virtually everyone in New York State school buildings. Contaminated indoor air occurs when toxic substances combine with inadequate building ventilation, causing health problems.

In school buildings, poor air quality can be traced to many sources, including office equipment, classroom supplies, and construction materials. In addition, schools are often designed or renovated without attention to ventilation, resulting in sealed windows, blocked vents, and a general lack of fresh air.

The Baldwin School District is committed to providing the best possible environment for the students and staff in our schools. In order to accomplish this we must assure staff, children and parents that our buildings are healthy and safe. Once again Baldwin has stepped forward to deal with IAQ. This manual will deal with issues that help in creating a healthy environment for all that use our buildings.

In the last several years, it has been found that air in buildings can be more contaminated than outdoor air. Our children deserve the best possible learning environment we can give them. A committee of administrators, teachers, nurses, and parents has worked on this manual for the past twelve months. Attention was paid to: cleaning, construction, staff education, possible sources of pollution and how to prevent them, and regulations/standards dealing with Sick Building Syndrome. This was achieved by addressing such areas as the daily and long-term maintenance of buildings, the use of environmentally safe cleaning products, reviewing materials used during construction, and developing a reporting method when problems arise.

Some health effects from indoor air pollutants may be experienced soon after a single exposure or after repeated exposures. An immediate effect that may be experienced is irritation of the eyes, nose and throat, headaches, dizziness or fatigue. These are usually short term and treatable. In some instances it may involve leaving the area and getting fresh air. Many times these symptoms may be similar to a cold or other viral infections, making it difficult to distinguish if you have an IAQ problem. Therefore, it is important to pay close attention to when and where these symptoms occur. If the problem fades or goes away when you are away from the area and returns when you come back, it should be appropriately recorded. This will assist in determining if it is a building-related problem.

With diligence and common sense, on the part of each one of us, we can provide a safe and healthy school for all. You cannot expect this goal to be reached without everyone's involvement. This is not just the maintenance department's problem. Each school should designate a person with whom to discuss and report concerns. Concerns will take time to investigate as will time to find acceptable solutions. The district will look into each concern raised and investigate when necessary. The corrective action may be a simple solution such as changing a filter, or it may be a more involved response such as replacing a large Heating and Ventilation unit. We ask that you have patience and remember many problems are caused by our own actions, so a little thinking before acting goes a long way.

Please help us help you in providing a healthy and safe environment.

I. A. Q.: SOURCES AND PREVENTION

From Outside the Structure:

<u>SOURCE</u>	<u>PREVENTION</u>
Contaminated dirt comes into school on children's shoes	Barrier matting (dirt collecting door mats) inside each door to collect outside dirt before it gets tracked into school halls
Animal droppings around school grounds get on children's shoes and brought into school	Same prevention as above
Heating oil spills – toxic odor	Immediate cleanup and close windows in affected area
Dirt & dust coming through open windows when lawns being cut	Teachers should keep windows closed at this time
Mice, rats or roaches in school	Keep all food in airtight containers – dispose of food garbage in closed plastic bags. Follow I.P.M. procedures

From Inside the Structure:

Mold spores in air from dirty air system	Keep all parts; air intakes, air distribution dampers, air filters, drain pans, heating & cooling coils, interior walls, fan motor & belts and air distribution pathways clean
Black mold in areas that get wet (from rain or interior leaks) like walls, ceiling tiles & cellulose surfaces	Leaks must be repaired – mold infested area cleaned, dried and refinished
Sewage back flows – severity of health threat depends on content of sewage and amount of area exposed	Monitor restrooms – clean and sanitize spills immediately monitor check valves & traps – have proper plumbing
Growth of mites, fungus & molds on walls and furniture due to improper moisture levels in school – associated with allergic & non-allergic respiratory disease	Humidity – air moisture levels must be monitored & areas of contamination must be cleaned and disinfected and thoroughly dried

I. A. O.: SOURCES AND PREVENTION

<u>SOURCE</u>	<u>PREVENTION</u>
Copy room – other office machines – odor from chemicals used in machine	Chemicals to be replaced must be handled carefully and done by a person who has been trained to do it properly. Keep room ventilated, as recommended
Dust mites – found in upholstered furniture & carpeting	Vacuum frequently using HEPA vacuum or remove from school
Cracks in hard surfaces – store germs and mold growth	Keep floors sealed and polished, this seals cracks and prevents areas of germ growth
Odor from painting	Attempt to schedule during evening hours
Getting rid of rodents	Capture & dispose of rather than spreading chemicals which cause rodents to die and decay within the walls

From Cleaning Process:

Dry mopping floors causes dust to fly more	Dampened lint-less cloths put on dry mops to hold dust and collect it
Vacuuming exhaust causes dust to fly everywhere	Use high efficiency HEPA vacuums and clean filters often
Cleaning fluids have volatile odors	Use more natural cleaners with less volatile compounds
Strong smells from custodial closets	Stored equipment should be clean and all chemicals should be tightly sealed. Area should be ventilated
Bathroom odors	Clean daily with disinfectants and ventilate
Aerosol cans & fine mist sprayers of solutions place excessive amounts of product in the air	Use “straight shot” trigger containers or put liquid cleaner on cloth and wipe
Odors associated with copier machines	Properly ventilate machine or copy room
Mold, fungus & germs in wastepaper baskets and garbage cans	Empty often and line containers with plastic bags so cans stay clean

I. A. Q.: SOURCES AND PREVENTION

From Occupants:

<u>SOURCE</u>	<u>PREVENTION</u>
Germ & viruses spread by sneezing, coughing and contact with infected equipment; i.e., telephones, pencils, papers, etc.	Remind people to wash hands, use tissues, cover their mouths and have proper air ventilation to exhaust infected air
Sick person vomits – many germs exposed	Clean up properly, disinfect and ventilate area
Porous materials such as upholstered chairs & couches and rugs harbor germs, dust mites, viruses & dirt	If not vacuumed and cleaned often they should be removed
Books and papers that are wet will fester mold spores	Thoroughly dry – if mold develops, discard
Potted plants on window sills bring and attract insects, and harbor germs	Should be strictly limited
Lost & found area – clothes & lunch boxes thrown together in a corner – Who knows what could be growing there??	Must not be allowed to “pile up.” Lunch boxes should be emptied and cleaned before being put in pile
Decaying foods in refrigerator or freezer – supporting the growth of mold	Foods should be checked and thrown out – refrigerators and freezers should be empty during summer
Cigarette smoking – tar and ash major pollutant	Eliminate smoking
Chalk dust and dust in reservoir and on erasers	Should be cleaned or vacuumed often
Odors from chemicals used for science experiments	Classroom should be well vented when using chemicals. Tightly seal containers when not being used. Follow Chemical Hygiene Plan
Odors from paints and materials used in art classes & technology classes	Same as above

I. A. Q.: SOURCES AND PREVENTION

SOURCE

PREVENTION

Body odor – especially from older students after gym

Go over good cleanliness habits

Food mold & microorganisms from rotting food

All foods should be kept in air-tight containers and discarded before going bad

Perfume – too much

Encourage staff/students to limit amount of perfume/cologne

Volatile odor of some colored markers

Only use unscented markers

I. A. Q.: SOURCES AND PREVENTION

Training

Training of staff is an integral part of an effective Indoor Air Quality Program because the level of technical background that a staff member may possess and the degree of hazard to which he or she might be exposed vary dramatically. Generally, those involved with students in a classroom setting, teachers, teaching assistants, administrators, and others, constitute one large training segment. Those involved in the school from different perspectives, housekeeping and maintenance staff, cafeteria workers, and clerical or office staff, are a second large group.

All training will be part of the "Employee Right-To-Know" instruction. For Indoor Air Quality or Hazard Communication training, employees will be apprised of applicable laws; given an explanation of the information contained in Material Safety Data Sheets; made aware of the methods of detection of contaminants in the workplace; told the physical and health hazards of chemicals known to be in the work area; and notified as to the protective measures in place regarding any hazardous substances. Documentation of the content included in the training session(s) will be included in the written Hazard Communication binder. Training for administrators will include dealing with concerns raised by students, staff, and residents of the District

I. A. Q.: SOURCES AND PREVENTION

Personal Items in Use by Staff

Today schools are faced with new and mounting regulations. Compliance with these regulations issued by federal, state and local governmental agencies requires cooperation between employee groups and the administration. An example is the District's Integrated Pest Management Program. It forbids the application of any pesticide/insecticide by anyone other than a NYS licensed applicator, yet on occasion we have come across a can of insecticide an employee has brought in from home. Should this person actually use the product on school grounds they are committing a crime. This same person may appropriately use the identical product at home. While this may be an extreme example, it is important for all staff to understand the basic fundamentals of Indoor Air Quality when applied to bringing in materials, equipment, and furniture from home. Some areas of concern are as follows:

- **Food:** If any food is kept in a classroom, it should be in a sealed plastic or metal container and should be limited to immediate needs only. Food consumption in classrooms is not a desirable practice, but when permitted, necessary precautions should be taken to reduce long-term problems. These problems include the nutritional support of microbial, insect, and rodent populations, and the subsequent concern over unpleasant odors and diseases.
- **Heaters, fans, beverage makers, etc.:** Staff members are discouraged from bringing in any electrical equipment from home. Each employee must realize that all equipment used in our schools must meet federal and state requirements and be UL approved. It is the responsibility of the District to meet these requirements and when employees bring in items from home it is impossible to monitor compliance. In addition, some electrical devices may emit odors (e.g. the "hot plastic smell") that are unpleasant or irritating to building occupants. Malfunctioning devices may produce additional air contaminants that are potentially toxic or allergenic.
- **Furniture, rugs:** Staff members are discouraged from bringing in any furniture or carpets to be used in classrooms. Beside the potential health concerns, under no circumstances should the employee expect the District to clean, maintain, repair or replace any personal items.
- **Chemicals:** Staff must not bring in any type of cleaner, disinfectant, pesticide, insecticide, paint, (etc.) for use in school. These are highly regulated materials and any use of these chemicals may unknowingly jeopardize the health and safety of staff, students and residents. It should also be understood that disposal of these products is strictly regulated by federal, state, and local laws.

It is the recommendation of the IAQ Committee that:

- I. staff members be informed of the problems associated with bringing in personal items for use in school.
- II. consumption of food in classrooms, when permitted, be regulated and monitored by a building administrator.

BALDWIN UFSD

Renovation and Repair

When planning and conducting renovations in schools, it is important to remember the four potential causes of indoor air problems during the construction:

- Demolition that may release toxic materials
- Construction dust and fumes
- Designs that interfere with ventilation
- Off-gassing from building materials and new products

You can minimize these problems by making good indoor air quality a top priority during project planning.

General Activities

Do not disturb asbestos during renovation. All workers are to be informed of any asbestos that may be in areas they are working and also advised that they are not to disturb this material. All contractors shall review the district's asbestos management plan which is available in every building.

Avoid exposure to fungi and bacteria. If renovation is likely to produce or expose large areas of microbial growth such as mold and mildew, the safety officer of the district should be consulted to determine how to minimize these conditions.

Plan to isolate students and staff from any dust or fumes generated during construction work. Use the appropriate plastic sheeting, portable fans, and a mechanical ventilation system to prevent dust and fumes from reaching school occupants through hallways, doors, windows and the ventilation systems. Consider conducting renovation work during off-hours when the school is not occupied by students. **All work shall be reviewed with building administration before and during the project. Job meetings shall be held as necessary with building level involvement.**

Consider the effect of the renovation on ventilation systems in the building and beware of reducing or cutting off a room from its outdoor air supply.

Minimize the potential for off-gassing from new products. New products often contain volatile constituents, such as resins, solvents and binders, which off-gas volatile organic

compounds for a period of time. Whenever new products with the potential for off-gassing are installed, allow adequate time for this off-gassing before reoccupying the area. Also increase ventilation with outdoor air until off-gassing odors and irritation occur no longer. Examples of products which may off-gas are:

- Wall paneling
- Draperies
- Composite wood furniture and cabinets
- Cubicle dividers
- Carpet and vinyl flooring
- Paints and finishes

Contractors

- **The contractor shall be required to supply MSDS for each and every product used. In turn, the MSDS shall be filed in the school MSDS binder. The contractor shall advise all of his employees that under no circumstances shall any product be used unless a MSDS is on file with the School District.**
- **All contractors shall be required to wear District I.D. badges while on school property.**
- **The contractor shall insure all products left on school property are properly stored and contained.**
- **The contractor shall leave no vehicle running for more than two minutes.**
- **The contractor shall use no gas, propane or natural gas powered equipment in the building.**
- **The contractor shall be responsible to provide adequate ventilation for all jobs. This shall include the proper exhaust of all dust, fumes and odors.**
- **The contractor shall be required to sign in and out on a daily basis and review the districts asbestos management plan before any work begins.**

Painting Procedure

The school plant is an important factor in the functioning of the total educational program. Proper maintenance of school buildings is necessary to provide a healthy and pleasant atmosphere. Based on past experience, certain steps must be taken by all concerned prior to the beginning of work to ensure minimum disruption occurs to the teaching process and maximum information is communicated between all involved parties. To this end the following procedures shall be followed:

- Use water low VOC latex-based paints as much as practical
- When it is necessary to use oil-based paints, use only on the evening before a weekend or holiday when school will not be occupied the next day
- Painting, when practical, shall take place during the evening hours or when school is not in session
- Never use lead or mercury-based paints
- A 48-hour notice shall be given to staff that painting will take place in a building via the building principal
- A copy of the Material Safety Data Sheet shall be kept on file in the MSDS binder for the school building

All staff members are to be advised that any and all concerns with painting should be directed to the building principal as soon as possible.

Animals in the Classroom

Certain individuals, in particular those with asthma, may be sensitive to animal fur, dander, body fluids, feces and may experience reactions to these allergens. Furthermore, individuals can become sensitized (made allergic) by repeated exposure to allergens. Therefore the following is recommended before animals are kept in a school:

- Use alternatives to animals when possible
- Prior to having animals, consult the school nurse about student allergies or sensitivities
- Ask parents about potential allergies, prior to animal arriving
- Locate sensitive students away from animals and habitats
- Have teacher clean cages a minimum of once a week
- Locate cages away from ventilation system
- Use gloves when cleaning cage and immediately remove waste from the classroom
- Store animal food in tightly sealed containers
- Do not let animals roam freely
- Discourage visiting animals
- Secure permission from building administrator for animal to be in your room

Barrier Matting

The proper application of floor matting at building entrances and other key building areas is the first step in creating a good Indoor Air Quality Program. An effective matting program can catch, trap, hold and hide dirt and moisture. The end result will be a cleaner and healthier school environment.

A survey was completed by the District's Director of School Facilities and the building Head Custodians in October of 1997. Recommendations were based on the type and amount of usage at each entrance. Matting purchased is a scrape and dry type as manufactured by Encore Inc. Entrance mats have been purchased and installed at every school as per the survey recommendations.

The following maintenance program will be implemented to assist in our Indoor Air Quality program:

- Daily vacuuming, sweeping and shaking clean
- Monthly cleaning with an approved cleaner
- Twice yearly deep clean using a carpet extractor

10/97

Vacuum Cleaners

A recent study conducted by Phil Lawless, Senior Research Physicist for the Research Triangle Institute located in North Carolina found that the penetration of particles through the vacuum cleaner bag and leaks from vacuum cleaner housings were found to be the major source of particles released from vacuuming. Using measured amounts of dust on bare floors and on carpets, the vacuum cleaner was monitored for particle release. Clean and dirty bags were used in these tests. The main finding was that the initial emission of particles is much larger than steady emissions from a vacuum cleaner. The peak emission rate is roughly proportional to the amount of dust on the floor. Although the initial emissions are of a short duration, the amount of dust is equivalent to running the vacuum cleaner for 1 to 2 hours.

Recommendation: use vacuum cleaners that are equipped with a hospital filter or a HEPA (high efficiency particulate air) filter. The study found that the startup emissions are less likely to be a problem when using the HEPA filter.

It is the recommendation of the IAQ committee that the district purchase only HEPA filter vacuum cleaners for use in all school buildings. The estimated cost is approximately 4% more to equip a vacuum cleaner with this improved type of filter.

Integrated Pest Management

Integrated Pest Management (IPM) is a coordinated approach to pest control to prevent unacceptable levels of pests, while causing the least possible hazard to people, property, and the environment and using the most cost-effective means. An effective IPM program will integrate pest management with preventative maintenance, housekeeping practices, landscaping, occupant education, and staff training.

The Baldwin UFSD has a comprehensive IPM program and this program is to be followed by all staff.

Chemical Hygiene Program

The Baldwin UFSD's Laboratory Chemical Hygiene Plan has been developed through extensive use of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.14500) which addresses occupational exposure to hazardous chemicals in laboratories. This standard in turn extracted much information from Prudent Practices for Handling Hazardous Chemicals in Laboratories, published by the National Research Council which is a well respected publication within the laboratory science community. The School District has developed a written Chemical Hygiene Plan in an attempt to afford protection from health hazards associated with chemicals in the laboratory and to keep exposure below specified limits.

Right to Know

The Right-to-Know Law will help workers learn of any job related health risks for themselves or their families and assist the employer in protecting their workers.

The Baldwin UFSD provides yearly right to know training to appropriate staff and to all new employees upon hire. Material Safety Data sheets are kept in the main office of each school and may be reviewed upon request.

BALDWIN UNION FREE SCHOOL DISTRICT

I. A. Q.

UNIVENTS

Univents:

The vast majority of classrooms have a univent. This is a system that has a heating coil, much like a car radiator, with blowers (fans) mounted underneath the coil. The blowers blow air through the coils to heat the room and to provide fresh air. Each univent has a damper that controls the amount of fresh air that comes into the room. The heat is controlled by the thermostat typically located by the classroom door.

The top of the univent should never be blocked or covered. Students' and teachers' desks should not be in the immediate area of the univent as return grilles at the bottom of the univent create a constant flow of air which should not be impeded.

Thermostats:

The amount of heat and fresh air is regulated by the thermostat. The thermostat, typically set at 68° - 70°, determines when the univent coil becomes hot. It is a pneumatic system that opens and closes a valve at the univent to allow the steam or hot water into the coil. Example: A room is set at 62° night stat. and at 68° day stat. At 6:00 a.m. the system goes on days -- now the univent is pumping heat to warm an empty room from 62° to 68°. At 9:00 a.m. the empty room, which is now 68°, becomes occupied by 25 people. The room now satisfies at 70° and begins the cooling process (fresh air and return air). The coil cools down, as the valve regulated by the thermostat either completely or partially closes to stop the steam/ hot water to the coil. The coil will not heat up until the thermostat reads approximately 67° at which time the valve will open and allow steam/ hot water back into the coil. The cool air is a mixture of fresh air and return air being blown into the room. This process helps in preventing a build up of gasses, germs, etc.

Univent Service:

Twice a year, all univent filters are changed using a synthetic filter. They have an American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) rating of 30% efficiency and contain no fiberglass. These filters remove pollutants down to 5 microns. Along with filter replacement, the coils are cleaned and disinfected. The unit is completely vacuumed, the motors are lubricated, and an inspection is made for any problems. Steam traps are replaced once every six years.

Any and all problems with this system should be reported immediately to the building administrator. Please remember cool air blowing from the univent is part of the fresh-air process.

School Personnel to be Contacted

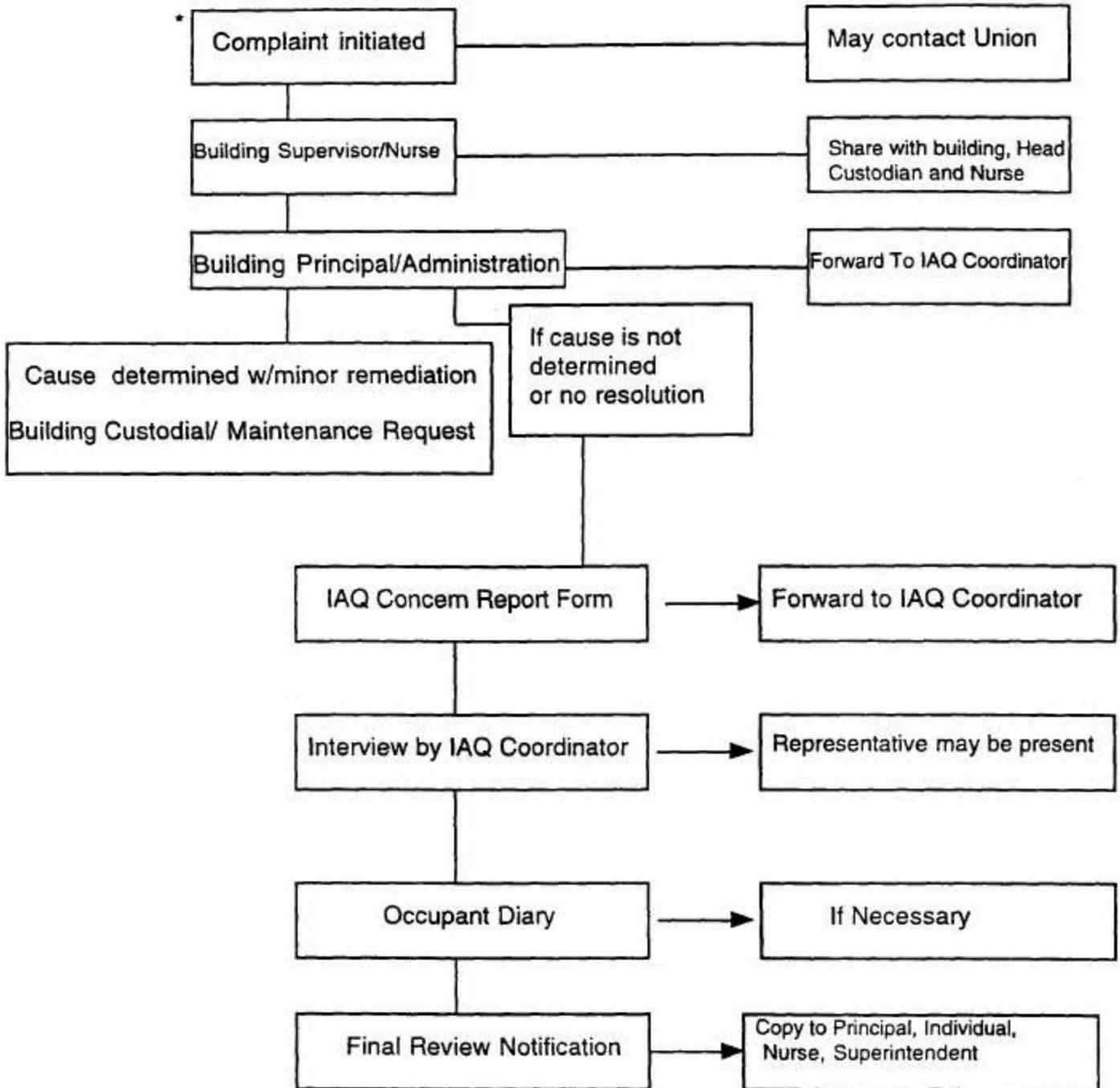
In the event of an IAQ concern, any student or staff member should immediately inform the person who directly supervises them. In the event that the cause of the IAQ concern cannot be determined or corrected at this level, the procedure progresses in one of two directions.

If the cause of the concern is determined, but a solution can not be reached, a maintenance request submitted through the building principal is the most probable course of action. If the cause cannot be determined the affected person should prepare an IAQ concern report form. Once this form is received, an interview will be arranged to gather further information. If additional data is needed, the individual may be asked to keep an "Occupant Diary" to aide in the investigation.

Once the investigation of the IAQ concern begins, the building principal and nurse will be informed as other staff and students may be experiencing similar effects. The IAQ coordinator or his designee will conduct the initial interview. The individual making the report is encouraged to advise their union officials who may be present during the interview. Upon resolution of their concern, the Deputy Superintendent for Administration will be informed so as to determine if the findings should become part of employee's personnel file. As an example, TSCA requires records be kept of alleged chemical exposures and/or alleged allergic reactions to exposure to chemicals.

BALDWIN UNION FREE SCHOOL DISTRICT

IAQ FLOW CHART



*Student to teacher
*Resident to Principal

INDOOR AIR QUALITY

The Board of Education recognizes the importance of providing safe and well maintained facilities for use by students, staff, and residents.

The district shall implement an Indoor Air Quality program to ensure a healthy work place for students and staff as recommended by the Environmental Protection Agency (EPA) in the *Tools for Schools* guidelines. The district shall educate students and staff on the Indoor Air Quality program.

Other policies adopted by the Board of Education which relate to safe and well maintained facilities include Policy 4132 (Smoking) which prohibits smoking of any kind in school and on school grounds and Policy 2330 (Integrated Pest Management) which provides regulations limiting the use of pesticides and insecticides.

The superintendent of schools shall establish administrative procedures to implement the Indoor Air Quality program.

Reference:

Environmental Protection Agency *Tools for Schools* guidelines

Policy 2330 – Smoking

Policy 4132 – Integrated Pest Management

Adopted

Board of Education

November 10, 1999

INDOOR AIR QUALITY

The superintendent of schools shall ensure that the Indoor Air Quality (IAQ) program is implemented utilizing the following methods:

1. Authorizing the creation of an Indoor Air Quality Committee that will annually review procedures and make recommendations;
2. Creating a handbook to be used as a resource guide by students, staff, and residents;
3. Providing training in IAQ as recommended by the Environmental Protection Agency (EPA) in the *Tools for Schools* guidelines;
4. Establishing air quality control procedure for use during renovation and remodeling projects;
5. Exploring alternative products and procedures to be used in the cleaning process and maintenance activities;
6. Seeking alternative materials for use in art instruction, technology instruction, science instruction, and office use;
7. Establishing a written maintenance program for the building heating, ventilation, and air conditioning (HVAC) systems which shall be proactive and preventative in scope;
8. Developing a reporting protocol for registering concerns of staff, students, and the community.

Procedures shall be consistent with the district's Chemical Hygiene Program, Right-to-Know Program, Integrated Pest Management Program, Personal Protection Program, and all other pertinent Board of Education policies.

Reference:

Environmental Protection Agency *Tools for Schools* guidelines
November 10, 1999

Baldwin UFSD

Indoor Air Quality Concern Report Form

To report an Indoor Air Quality concern, please complete this form in its entirety. Upon completion it should be turned in to your building administrator. Upon his/her review, follow up action will be taken. You should retain one copy for your records.

Name: _____ Title: _____

Building involved: _____ Exact location of concern: _____

Date of this report: _____

Describe in detail the nature of your concern: _____

List any and all causes you might suspect: _____

What action would you recommend be taken: _____

List names of any other staff members that may be affected: _____

By completion of this form you should be aware that you may be interviewed by a school administrator to assess your concern so a response plan can be developed to correct this concern. An interview summary form will be used during this investigation.

Concern registered by: _____ day phone # _____
Signature

FOR OFFICE USE ONLY THIS LOWER SECTION TO BE COMPLETED BY SUPERVISOR

Date received: _____ by whom: _____

Recommended action: resolved at building level _____ no further action recommended: _____

Forward to IAQ coordinator _____

**BALDWIN U.F.S.D.
INDOOR AIR QUALITY
INTERVIEW SUMMARY FORM
Page 1 of 2**

Building Name: _____ File Number: _____

Address: _____

Occupant Name: _____ Work Location: _____

Completed by: _____ Title: _____ Date: _____

SYMPTOM PATTERNS

What kind of symptoms or discomfort are you experiencing? _____

Are you aware of other people with similar symptoms or concerns? Yes _____ No _____

Please provide their names: _____

Do any of the following conditions make you particularly susceptible to environmental problems?

- | | | |
|-----------------------------------------|---------------------------------------------------------|------------------------------------------------------------------------------|
| <input type="checkbox"/> contact lenses | <input type="checkbox"/> chronic cardiovascular disease | <input type="checkbox"/> undergoing chemotherapy or radiation therapy |
| <input type="checkbox"/> allergies | <input type="checkbox"/> chronic respiratory disease | <input type="checkbox"/> immune system suppressed by disease or other causes |
| | <input type="checkbox"/> chronic neurological problems | |

TIMING PATTERNS

When did your symptoms start? _____

When are they generally worst? _____

Do they go away? If so, when? _____

Have you noticed any other events (such as weather events, temperature or humidity changes, or activities in the building) that tend to occur around the same time as your symptoms? _____
