

# BULLETIN

## INDOOR AIR QUALITY

Nova Scotia Department of Education

June 1994

At the request of the Deputy Minister of Education, an Indoor Air Quality Committee has been established to make recommendations concerning how the government can establish an effective and co-ordinated approach to dealing with concerns about air quality in schools. The work of this committee is on-going; however, the experience and knowledge gained to date has prompted the committee to issue this interim bulletin.

As the majority of indoor air quality problems within schools are associated with inadequate and/or lack of maintenance, we would recommend the following:

1(a) In buildings with mechanical ventilation, it is essential to ensure that the systems are functioning and are being properly maintained. Common problems which have been found are lack of or inadequate changing/cleaning of filters; broken fan belts; burned out motors; blocked duct work, inoperative dampers and/or linkages; controls being by-passed, out of calibration, missing, etc.

1(b) In buildings without mechanical ventilation, it is important to establish a protocol to ensure outdoor air is being supplied by the use of windows, doors, etc.

2(a) Where water infiltration is discovered, it must be dealt with immediately. Clean up any standing water, control further water leaks and take remedial action to prevent future water entry. Water damaged materials such as ceiling tiles should be replaced. Special attention is required when dealing with carpets. Prompt drying of carpets is extremely important. Those carpets which have been subjected to prolonged or repeated water damage must be removed. Failure to deal with such problems promptly and effectively may lead to mould and fungal problems.

2(b) Ensure that the daily cleaning procedures within your schools have a provision to report any mould/fungus encountered and that the appropriate cleanup protocol is carried out.

2(c) Emphasize the importance of keeping

desks and lockers free of any left-over food or other materials which could affect air quality.

2(d) Ensure carpets are cleaned regularly and appropriately. The recommended method is steam cleaning and quick drying. School boards are cautioned to consult with their local Nova Scotia Environmental Health Inspector prior to the use of anti-fungal and/or anti-microbial projects.

3. Become aware of the chemicals being used in the school by teachers and janitors, and how they are being used. The use of deodorizers is discouraged.

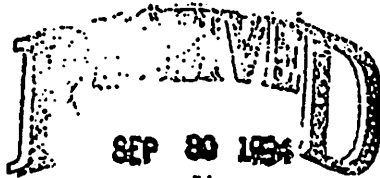
4. Restrict school maintenance activities which are known to generate contaminants within the schools (i.e. asbestos removal, painting, finishing of gym floors) to times when staff and students are not present. Adequate controls should be implemented to not only protect the employees conducting the work but to prevent contamination of the school and to prevent staff and students from being exposed to such contaminants when they enter the school.

It is recognized that a properly developed and executed maintenance program costs money. However, the lack of maintenance has resulted in substantial costs to school boards for remedial action and such costs have tended to be far in excess of any "savings" realized by not performing proper maintenance.

The main lessons learned in managing indoor air quality problems have been that those who work and study in schools must be involved and fully informed. This interim report is intended to assist in that process.

Complaints about indoor air quality should be addressed promptly and with empathy. Have an Occupational Health and Safety Committee which is knowledgeable about its role and authority. Staff, students and parents must be kept informed about the investigations and discussions. A protocol responding to indoor air quality complaints is enclosed for the use of such a committee.

All school boards are to forward this protocol to each principal within their school system.



Department of  
Education

Epidemiology  
Public Health Services Div.

PO Box 2086, Station M  
Halifax, Nova Scotia  
B3J 3B7

SEP 29 1994

Our file no:

Superintendents of Schools  
District School Boards  
Province of Nova Scotia

Dear Superintendent:

We are pleased to submit to you an *Indoor Air Quality Bulletin*, dated June 1994, which contains a protocol for school boards to follow when addressing indoor air quality problems.

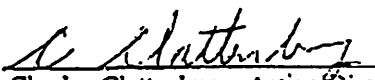
The Interdepartmental Indoor Air Quality Committee, chaired by the Acting Director, Facilities Planning & Equipment, has prepared the enclosed bulletin on indoor air quality for consideration and use by school boards. The bulletin provides several recommendations, a protocol to be followed by school boards, and a Building Environment Checklist to guide school boards in the prevention, identification and correction of indoor air quality problems.

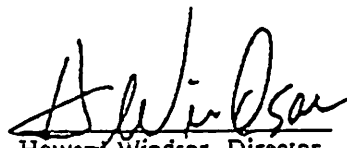
The emphasis should be placed on prevention. We believe that, if the recommendations are followed, expensive remedial work and undue anxiety experienced by students, staff and parents can be minimized.

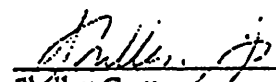
This bulletin has been reviewed by a committee of Deputy Ministers and senior officials from the departments of Health, Labour, Supply & Services, Environment and Education, and they have lent their support to this initiative.

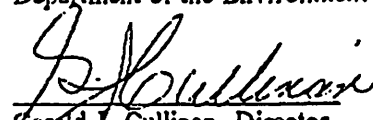
If you have any questions concerning this matter, please contact Mr. Charles Clattenburg, Acting Director, Facilities Planning & Equipment, and he will be pleased to assist you.

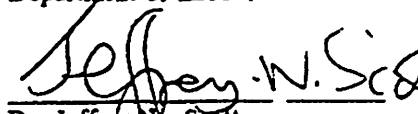
Yours truly,

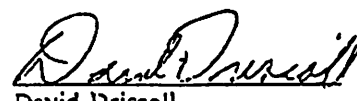
  
Charles Clattenburg, Acting Director  
Facilities Planning & Equipment  
Department of Education

  
Howard Windsor, Director  
Regional Offices Division  
Department of the Environment

  
Shelley Gray,  
Occupational Hygienist  
Department of Labour

  
Gerald J. Cullinan, Director  
Design Services  
Department of Supply & Services

  
Dr. Jeffrey W. Scott  
Provincial Medical Officer of Health  
Department of Health

  
David Driscoll  
Treasurer  
Nova Scotia School Boards Association

Encl.  
cc Chairman of the School Board  
Regional Inspector of Schools

