State of Alaska
Department of Labor
Division of Labor Standards and Safety

DOSH Program Directive 91-1

Date: January 7, 1991

To: All OSH Staff

From: Richard Arab, Deputy Director

Subject: Indoor Air Quality

A. Purpose. This Program Directive (PD) establishes compliance policy for dealing with complaints regarding indoor air quality problems and transmits guidelines to be used in the evaluation of indoor air quality conditions.

B. Background.

1. Modern office buildings are generally considered safe and healthful working environments. However, energy conservation measures instituted during the early 1970's have minimized the infiltration of outside air and contributed to the build-up of indoor air contaminants. Employee complaints usually include items such as cigarette smoke, odors, poor air circulation, thermal gradients, humidity, lighting, work station design, and/or noise, although investigations of indoor air quality (IAQ) often fail to identify any harmful levels of specific toxic substances.

2. Complaints of indoor air quality problems usually involve one or two employees; however, entire facilities can be affected. Complaints are often of a subjective, non-specific nature and are associated with periods of occupancy. Symptoms often disappear when the employees leave the workplace. Symptoms typically reported include headache, dizziness, nausea, tiredness, lack of concentration, and eye, nose, and throat irritation.

3. In approximately 500 indoor air quality investigations in the last decade, the National Institute for Occupational Safety and Health (NIOSH) found that the primary sources of indoor air quality problems are:

° Inadequate ventilation.	52%
° Contamination from inside the building	16%
° Contamination from outside the building	10%

° Microbial contamination.	5%
° Contamination from building	4%
° Unknown sources.	13%

C. Enforcement Procedures. Current information indicates that employee complaints concerning some indoor air quality elements, such as thermal gradients, lighting, odors and the like, could accurately be described as perceptions of discomfort. While there is a potential for hazards to exist in such setting, Alaska OSH's experience is that actual existence of hazards appears to be infrequent. Complaints involving secondary tobacco smoke may raise serious health issues, however, the absence of recognized exposure limits complicates enforcement.

1. Inspection Policy.

   a. Because of OSH's policy to target its limited resources to the most hazardous industries and jobs, there will not be programmed or programmed-related inspections based on indoor air quality hazards or allegation of such hazards.

   b. Experience indicates that a majority of the complaints received by the agency will deal with perceptions of discomfort and do not present situations which threaten serious physical harm. In many cases, IAQ complaints fail to set forth with reasonable particularity the grounds upon which they are based. Accordingly, complaints concerning indoor air quality issues have been and will normally continue to be classified as nonformal.

   c. All complaints shall be carefully evaluated. Evaluators must exercise professional judgment in deciding whether or not there are reasonable grounds to believe that a serious hazard may exist. There may be instances where IAQ complaints stem from the presence of serious conditions/hazards and these cases should be addressed in the appropriate manner.

2. Inspection Guidelines. In those instances where the Chief decides to conduct an inspection resulting from a complaint involving indoor air quality issues, the compliance officer should consult the evaluation procedures outlined in Chapter 6 of the Technical Manual.

3. Citation Policy. The provisions of the Compliance Manual shall be followed in issuing citations, including general duty clause, AS 18.60.075(a)(4), citations. Few regulatory standards can be applied to the issues which comprise most complaints involving indoor air quality. When addressing complaints of poor ventilation, inadequate lighting, tobacco smoke, odors and other such issues, the compliance officer is reminded of the following:

a. The American society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE), and the Illuminating Engineering Society of North American (IES) and other such organizations publish advisory standards and codes which are voluntary consensus standards. These standards are usually based on the combined consideration of "comfort" and avoidance of adverse health effects.

b. Secondary tobacco smoke is a recognized health hazard which federal OSHA is considering for separate regulatory action; however, at present, there is no mandatory threshold for exposure to secondary tobacco smoke in the workplace. In addition, there are no formal occupational exposure guidelines for secondary tobacco smoke. Secondary tobacco smoke contains over 4,000 chemicals; chemical analyses would be required to support any violations for specific substances.

c. Consequently, the requirements for citation of an IAQ hazard under AS 18.60.075(a)(4) will rarely, if ever, be met.

d. The issuance of warning letters for hazards not covered by a standard and not meeting Section issuance criteria shall be considered in those cases where actual on-site evaluation occurs. (See the Compliance Manual Chapter IV, page 21, A.2.f.(2)(a).)

D. Review and Coordination. Because of the controversial nature of indoor air quality issues and the amount of media attention given such reports, the Chief, Compliance shall have any proposed citations carefully reviewed by the Assistant Chief with training and experience in industrial hygiene and will inform the Director and/or Deputy Director before such citations are issued.

E. Providing Information to Federal OSHA. If the State issues a General Duty Clause under AS 18.60.075(a) for an IAQ hazard or evaluates an unusual or severe IAQ hazard, the Deputy Director will send copies of the General Duty Clause citation and/or investigative report to the OSHA's Region X Regional Administrator.

F. Recording in the IMIS.

1. When an inspection is made to evaluate an Indoor Air Quality problem, enter the codes corresponding to the condition evaluated in Item 42, Optional Information, on the OSHA-1.

CONDITION:	TYPE	ID	VALUE
Passive Smoke	N	5	IAQSMOKE
Ventilation	N	5	IAQVENT
Overexposure to PEL	N	5	IAQPEL

Other Condition	N	5	IAQOTHER

2. When an Indoor Air Quality complaint is received enter the codes as listed below in Item 46, Optional Information on the OSHA-7.

ALLEGATION:	TYPE	ID	VALUE
Passive Smoke	N	5	IAQSMOKE
Ventilation	N	5	IAQVENT
Overexposure to PEL	N	5	IAQPEL
Non-specific	N	5	IAQOTHER