**Using this Template**

The following template can be used to help your organization develop a written Indoor Air Quality Management Plan. This template cannot be used as is – you must customize the template to meet the needs of your organization. We have made this template easy for you to customize by adding visual prompts that identify where your input is needed. These are identified by yellow highlighted, red text in the template. You may also change any of the text in the template to meet your organization’s needs– for example, department names, job titles and listed responsibilities and procedures.

*Example:*

<Company Name>

Indoor Air Quality Management Plan

becomes

XYZ Company

Indoor Air Quality Management Plan

To remove the colored highlighting from your text, left click and drag your mouse over the yellow text and click on the highlighter button from the font menu. To change the font color to black, select the text and click on the font color button.



To aid you in understanding the need to customize your program, several “Check Your Understanding” text boxes are also included throughout the template. After reading the information in the text box and adding the required information into the template, you may simply right click on the cross arrow box and select “cut.”

|  |
| --- |
| ***Disclaimer.*** *This sample safety program template cannot be used as is. You must customize the template to meet the needs of your organization. EMC does not guarantee that this template is or can be relied on for compliance with any law or regulation, assurance against preventable losses, or freedom from legal liability. We make no representations or warranties of any kind whatsoever, either express or implied, in connection with the use of this template. EMC will not be liable for your use of the template as customized by you. All safety programs and policies, including this template and the information you supply to complete it, should be reviewed by your legal counsel and/or risk management staff.* |

**<Company Name>**

**Indoor Air Quality Management Plan**

|  |
| --- |
| ***Check Your Understanding.*** Do you need an Indoor Air Quality (IAQ) Management Plan? Most organizations are aware that outdoor air pollution can affect employee health, but many do not know that indoor air pollution can also have a significant effect. Environmental Protection Agency (EPA) studies have indicated that indoor concentrations of air pollutants can be significantly greater than concentrations observed outdoors. Indoor air pollutant concentrations are of particular concern because it is estimated that most people spend approximately 90 percent of their time indoors. Comparative risk studies performed by the EPA and the Science Advisory Board have consistently ranked indoor air pollution among the top five environmental health risks.  Over the past several decades, exposure to indoor air pollutants has increased due to a variety of factors. Including but not limited to: the construction of more tightly-sealed buildings, reduced ventilation rates to save energy, the use of synthetic building materials and furnishings, and the use of chemically-formulated personal care products, pesticides and housekeeping supplies. |

**Revision History**

<Revision XX – April XX, 20XX>

**Purpose**

<Company Name> strives to provide all building occupants with an environment that maintains acceptable indoor air quality. The Indoor Air Quality (IAQ) Management Plan is designed to protect the health and safety of building occupants and decrease exposure to indoor air contaminants.

All employees are required to follow the procedures outlined in this plan. Any deviations from this plan must be immediately brought to the attention of the Program Administrator.

**Scope**

This plan applies to all buildings (owned and leased) regularly occupied by <Company Name> employees. The plan outlines <Company Name's> response to IAQ reports, building maintenance standards and employee communications.

**Plan Responsibilities**

**Management.** <Company Name> is responsible for providing the tools and resources necessary to implement this program, and for ensuring that the provisions in this program are being followed by the Program Administrator.

**Program Administrator.** The Program Administrator is responsible for the following:

* Addressing IAQ concerns and issues from building occupants, management and the public
* Conducting annual building walk-through assessments
* Reviewing new construction and renovation projects for IAQ concerns
* Ensuring the Maintenance, Housekeeping and Safety and Security departments have a copy of the plan
* Scheduling employee training and ensuring new hires receive reporting instructions
* Periodically reviewing the plan and updating as needed

**Maintenance/Housekeeping. All** <Company Name> Maintenance and Housekeeping employees will:

* **Attend IAQ Management Plan training**
* **Follow all IAQ Management Plan requirements**
* **Perform preventative maintenance as per the plan**

**Occupants. All** <Company Name> employees will:

* Not smoke on company property
* Read all IAQ Management Plan materials
* Report IAQ concerns to their supervisor, management or Program Administrator
* Not use pesticides, air fresheners, scented candles, scented personal care products or other scented materials (sensitized individuals should alert their supervisor or the Program Administrator to situations that trigger symptoms)
* Report spills immediately
* Not bring animals (except service animals) into the building
* Not eat or drink outside the break room
* Discard all waste in the appropriate containers
* Not use portable air-cleaning or ozone-generating devices
* Not bring plants or flowers into the workplace

**Annual Assessment**

|  |
| --- |
| ***Check Your Understanding.*** The federal government does not regulate ventilation in non-industrial settings. However, many state and local governments do have ventilation building codes. Additionally, professional associations, such as the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) and the National Fire Protection Association (NFPA), develop recommendations for appropriate building and equipment design and installation (e.g., ASHRAE Standard 62-20XX, "Ventilation for Acceptable Indoor Air Quality"). Contact your local code enforcement official or a consulting engineer to learn about the code requirements that apply to your organization’s building and facilities. |

An annual IAQ assessment of all buildings occupied by <Company Name> employees will be performed by the Program Administrator. The walk-through assessment will include evaluations of:

* Building exterior
* Indoor spaces
* Air-handling units
* Air distribution
* HVAC component systems

Results of the annual assessments will be recorded in the form located in **Appendix A**.

**IAQ Reporting**

All employees, should report IAQ concerns to their supervisor, manager or the Program Administrator. The individual receiving the IAQ concern will document it using the IAQ Report Form in **Appendix B**. The Program Administrator will interview the person reporting an IAQ concern to gather as much information as possible. All personal information will remain confidential. All documents related to IAQ concerns will be retained on file with the Program Administrator. Confidentiality concerns should be reported to the Program Administrator or to a Human Resources manager.

**IAQ Investigations**

All IAQ concerns will be investigated by the Program Administrator. The Program Administrator will use the Occupant Interview Form (**Appendix C**) to describe:

* The nature of the concern
* When the issue occurs
* The building occupant’s symptoms and health effects
* Conditions at the time of symptoms such as odors, weather or what they were doing
* Location of the problem

Once the information is gathered from the building occupant(s), an investigation will be conducted to identify the potential source(s) of the issue. If the Program Administrator determines there is a need for testing based on the interview and visual inspection, it will be performed by <Outside Testing Vendor, Address, Phone Number>.

The extent of the investigation will be based on the information previously collected. Data collection and testing will be performed by <Outside Testing Vendor>, and results will be evaluated and compared to recognized acceptable guidelines and standards. If a source is determined, a remediation plan will be created. All parties involved will be notified of the progress and if/when the issue has been remediated.

For **all** IAQ issues, the HVAC system will be inspected to ensure that acceptable outside air is being incorporated and that the condition of air supplies, returns and exhausts promotes efficient air distribution to all occupants and isolates or dilutes contaminants. The airflow patterns and air velocity in occupied zones will be assessed and possible exterior contamination sources such as vehicle exhausts, maintenance and construction operations will be investigated. The Program Administrator will use the checklists at <http://www.epa.gov/iaq/largebldgs/i-beam/forms.html> to guide each of these assessments.

**IAQ Emergencies**

***Check Your Understanding.*** Unforeseen circumstance such as a hazardous material spill, complaints of severe headaches, sudden nausea/dizziness, strong combustion odors, sewer spill, gas leak, multiple reports of breathing difficulties or respiratory irritation and legionnaires or TB diseases diagnosis will require immediate emergency action. These types of incidents should be taken into considerations when developing your Emergency Action Plan.

If an emergency IAQ situation occurs and local or building-wide evacuation is necessary to protect employees and visitors, we will follow <Company Name’s> Emergency Action Plan.

**Building Maintenance**

***Check Your Understanding.*** The following list serves as the basis for creating a preventive maintenance schedule. A customized checklist should be created for your specific buildings, functional areas and systems. You will also need to establish how frequently maintenance will be performed.

Preventive maintenance plays a major role in maintaining the quality of air by ensuring that the building systems are operating effectively and efficiently. <Company Name> maintenance personnel will perform the following inspections and maintenance in an effort to prevent IAQ issues. Maintenance staff will use the checklists on <http://www.epa.gov/iaq/largebldgs/i-beam/forms.html> to guide each of the inspections and maintenance activities.

**Monthly Inspections**

* Air handling equipment
* Boilers
* Condensing equipment

**Quarterly Inspections**

* Filter replacements (at least a MERV 8)
* Coil cleaning
* Fans and motors
* Diffusers and grilles
* Chiller
* CAV/VAV boxes
* Controls calibration

**Semi-annual Inspections**

* Humidifier cleaning
* Condensing equipment maintenance

**Annual**

* Bearing maintenance
* Boiler cleaning
* Chiller maintenance

Any issues identified during inspections or maintenance will be prioritized. All remedial actions will be recorded.

**Housekeeping**

Housekeeping is an important element of an effective IAQ Management Plan. <Company Name> uses <Outside Firm> to perform housekeeping. <Outside Firm> is responsible for ensuring the following:

* Outside entrance areas will be cleaned twice a day.
* Entrance mats will be vacuumed daily and water will be extracted. Mats will be replaced as needed.
* Carpeted areas will be vacuumed daily using a vacuum with a beater bar and steam cleaned annually.
* Hard-floor areas will be damp mopped daily.
* Lint-free dust cloths will be used.
* Aerosol products will be used only on an as-needed basis.
* Cleaning products will be pH neutral if possible.
* All trash will be removed from the building daily.
* Restroom fixtures will be sanitized daily.

**New Construction/Renovations**

The Program Administrator will be part of the design team on all new construction or renovation projects including:

* Project planning and documentation
* Site planning and design
* Building and HVAC design
* Materials evaluation and selection
* Monitoring construction
* Renovation activities
* Oversight of HVAC commissioning

The Program Administrator will ensure that the indoor air is not polluted during construction or renovation activities. During all renovations, restoration or repair activities, the building occupants will be protected from airborne contaminants that may be disturbed, generated or released (ex. toxic substances such as asbestos, lead, pesticides, heavy metals, mold, cement dust, paint vapors, and roof tarring vapors).

**IAQ Plan Communication**

<Company Name> has created a procedure for communicating with building occupants regarding IAQ issues in a prompt and consistent manner.

**General Information.** Information on the IAQ Management Plan, how to report IAQ concerns and the Program Administrator’s contact information will be communicated annually to building occupants. All new employees will also be provided with this information within the first week of employment.

**Scheduled Building Activity.** Information on building maintenance activities will be communicated by e-mail to all affected building occupants and posted in common areas. The notification should be posted at least <2> days prior to any activity that may affect the air quality within the building (i.e., pesticide use, painting, dust-producing activities).

**IAQ Plan Training**

**The Program Administrator will perform annual and periodic training sessions as part of the IAQ Management Plan. Maintenance, Housekeeping, Safety and Security personnel will conduct training on their aspects of the plan. Training will consist of the following:**

* **Annual assessments**
* **Reporting of IAQ issues**
* **IAQ investigation participation**
* **IAQ emergencies**
* **Building maintenance expectations**
* **IAQ communications**

All training will be recorded in the Employee Training Record located in **Appendix D**.

**Periodic Plan Review**

The IAQ Management Plan will be reviewed annually by the Program Administrator. This review will address:

* Changes to the building
* Changes in operations
* Maintenance procedures
* Changes in occupants
* Plan priorities

The annual review will be submitted to senior management using the form in **Appendix E**.

**Record Retention**

<Company Name> will maintain IAQ Maintenance Plan training records for <3> years. All program records will be kept by the Program Administrator.

**Appendix A – Annual IAQ Assessment Checklist**

Building \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Location \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Prepared by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Condition** | |  |
| **Outdoor**  (Air or water infiltration potential) | **OK** | **Needs**  **Attention** | **Notes** |
| **Roofs** | |  |  |  |
| **Walls** | |  |  |  |
| **Doors** | |  |  |  |
| **Windows** | |  |  |  |
| **Air Intakes:** | |  |  |  |
| Bird screen | |  |  |  |
| Obstructed | |  |  |  |
| Pollutant sources | |  |  |  |
| **Indoor** | |  |  |  |
| **Comfort:** | |  |  |  |
| Temperature | |  |  |  |
| Humidity | |  |  |  |
| Air Movement | |  |  |  |
| **Odors/Stuffiness** | |  |  |  |
| **Supply Air** | |  |  |  |
| **Return Air** | |  |  |  |
| **Lighting** | |  |  |  |
| **Acoustics** | |  |  |  |
| **Housekeeping** | |  |  |  |
| **Moisture Damage** | |  |  |  |
| **Mold** | |  |  |  |
| **Pressurization** | |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Condition** | |  |
| **Air Handling** | **OK** | **Needs**  **Attention** | **Notes** |
| **Plenum** | |  |  |  |
| **Controls** | |  |  |  |
| **Coils/Condensate:** | |  |  |  |
| Corrosion | |  |  |  |
| Odors | |  |  |  |
| Microbial growth | |  |  |  |
| Pans/traps | |  |  |  |
| **Humidifiers:** | |  |  |  |
| Standing water | |  |  |  |
| Microbial growth | |  |  |  |
| Mineral deposits | |  |  |  |
| **Fans:** | |  |  |  |
| Clean | |  |  |  |
| Noise/vibration | |  |  |  |
| Belts | |  |  |  |
| Leakage | |  |  |  |
| Pressurization | |  |  |  |
| **Filters:** | |  |  |  |
| Clean | |  |  |  |
| Installed properly | |  |  |  |
| Odors/visual pollution | |  |  |  |
| **Air Distribution** | |  |  |  |
| **Ducts:** | |  |  |  |
| Clean | |  |  |  |
| Obstructions | |  |  |  |
| Odors | |  |  |  |
| Air leaks | |  |  |  |
| **Diffusers/Grills/Registers:** | |  |  |  |
| Clean | |  |  |  |
| Blocked | |  |  |  |
| Noise | |  |  |  |
| **Terminal Boxes/Induction Units:** | |  |  |  |
| Clean | |  |  |  |
| Filters | |  |  |  |
| Noise/vibration | |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Condition** | |  |
| **HVAC Components** | **OK** | **Needs**  **Attention** | **Notes** |
| **Mechanical Room:** | |  |  |  |
| Clean | |  |  |  |
| Noise/vibration | |  |  |  |
| Moisture | |  |  |  |
| Odors | |  |  |  |
| Equipment operation | |  |  |  |
| **Boiler Room:** | |  |  |  |
| Clean | |  |  |  |
| Noise/vibration | |  |  |  |
| Leaks | |  |  |  |
| Odors | |  |  |  |
| Equipment operation | |  |  |  |
| **Chiller:** | |  |  |  |
| Refrigerant leaks | |  |  |  |
| Condensation problems | |  |  |  |
| Equipment operation | |  |  |  |
| Chemical storage | |  |  |  |
| **Condensing Equipment:** | |  |  |  |
| Slime/algae | |  |  |  |
| Overflows | |  |  |  |
| Noise/vibration | |  |  |  |
| Equipment operation | |  |  |  |

**Appendix B – IAQ Reporting Form**

**IAQ Reporting Form**

Employee Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Building Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Address \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Room Number/Location \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Phone \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Completed by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Title \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Phone \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is the nature of the problem?

Where is the problem experienced (in one or more locations)?

When was the problem first experienced?

When does it occur or when is it the worst (time of day, day of week, related to certain activities/events)?

Other comments:

**Appendix C – IAQ Interview Form**

**IAQ Interview Form**

Building Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Address \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Employee Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Phone \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Room Number/Location \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Interviewed By \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 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\_\_\_\_\_. If yes, what are their names and locations?

Do you have any health conditions that may make you particularly susceptible to environmental problems? (Check all that apply)

|  |  |
| --- | --- |
|  contact lenses  € allergies  chronic cardiovascular disease  chronic respiratory disease | chronic neurological problems  undergoing chemotherapy or radiation therapy  immune system suppressed by disease or other causes |

**Location Patterns**

Where are you when you experience symptoms or discomfort? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Where do you spend most of your time in the building? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Where else in the building do you frequent? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Timing Patterns**

When did the symptoms/problems start? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

When are symptoms/problems generally worse?

|  |  |  |
| --- | --- | --- |
| Beginning of week  End of week  Particular days of week (list)  Particular months (list) | Morning Afternoon  Particular times of day | Spring Summer  Fall Winter |

Other pattern or no pattern (explain) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

When do symptoms/problems go away?

After you leave the building? \_\_\_\_yes \_\_\_\_no: If yes, how long does it take to go away? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

After you leave the space? \_\_\_\_\_yes \_\_\_\_no: If yes, how long does it take to go away? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Have you noticed any particular events/activities, weather conditions, temperature or humidity conditions, odors or other things that tend to occur around the same time or right before your symptoms?

**Additional Information**

Do you have any observations about the building conditions *(e.g., temperature, humidity, drafts, stagnant air, odors*) that might need attention or might help explain your symptoms?

Have you sought medical attention for your symptoms? \_\_\_\_yes \_\_\_\_no

Do you have any other comments?

**Appendix D – Employee Training Record**

This is to certify that the undersigned received training on <Company Name> IAQ Management Plan.

|  |  |
| --- | --- |
| **Print Name** | **Sign Name** |
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|  |  |
| --- | --- |
| Print Instructor’s Name |  |
| Instructor’s Signature |  |
| Instructor’s Title |  |
| Date of Training |  |

**Appendix E – Annual Evaluation Report**

|  |  |
| --- | --- |
| Date of Evaluation: | Evaluated By (list all present): |
| Written Program Reviewed: Yes No | |
| Comments on Written Program: | |
| The following specific procedures have been reviewed: | |
| The following specific procedures were modified: | |
| The following specific procedures were added: | |
| A review of the log of occupational injuries and illnesses (OSHA Form 300 or equivalent) and the associated accident reports and injury and illness reports were made: Yes No | |
| The following injuries resulted from failure to use correct IAQ procedures: | |
| If injuries are listed above, indicate procedure number for applicable equipment, process or machinery: | |
| Comments: | |