## **ENVIRONMENTAL PROTECTION**

## **COMPLIANCE AND ENFORCEMENT**

## AIR POLLUTION INVESTIGATION GUIDELINES

**TAKE NOTICE** that the Department of Environmental Protection (Department), pursuant to N.J.S.A 13:1D-9, particularly N.J.S.A. 13:1D-9d and e, and N.J.S.A 26:2C-et seq, particularly N.J.S.A. 26:2C-14 and 19g, has established revised guidelines for the investigation of air pollution (hereinafter, "Guidelines"). These Guidelines have been revised, and are published in this notice in accordance with the provisions of N.J.S.A. 26:2C-19g.

# BACKGROUND AND PURPOSE

The purpose of the Guidelines is to ensure consistency and that investigations objectively ascertain relevant facts and discern whether a violation has been committed. These Guidelines are for use by Department personnel performing air pollution investigations, and local health agency personnel performing investigations under the authority delegated by the Department pursuant to the County Environmental Health Act, N.J.S.A. 26:3A2-21 et seq., and any local government entity performing an investigation pursuant to a valid air pollution control ordinance.

The Air Pollution Control Act (APCA) prohibits "the presence in the outdoor atmosphere of one or more air contaminants in such quantities and duration as tend to be injurious to human health or welfare, animal or plant life or property, or would unreasonably interfere with the enjoyment of life or property throughout the State and in such territories of the State as shall be affected thereby and excludes all aspects of employer-employee relationships as to health and safety standards." N.J.S.A 26:2C-2. This standard is also codified at N.J.A.C. 7:27-5.2(a). Amendments to the APCA require the Department, in determining whether an odor unreasonably interferes with the enjoyment of life or property in violation of the APCA, to consider "all of the relevant facts and circumstances, including but not limited to, the character, severity, frequency, and duration of the odor, and the number of persons affected thereby,"

An odor caused by the release of an air contaminant is considered air pollution and a violation of the APCA if the Department determines that the odor has unreasonably interfered with the enjoyment of life or property. Many citizen complaints of air pollution involve the presence of objectionable odors.

The Guidelines were originally developed and distributed to Department staff in 1988 for use in investigation complaints regarding air pollution, such as odors and particulates.

The Department has revised the Guidelines to reflect current compliance and enforcement policies and its experience operating under the Guidelines since 1988.

The revised Guidelines discuss application of the factors identified in the APCA, application of the Grace Period Law, and reflect changes to the business practices of the Department as a result of the implementation of the Department's NJEMS data system. This revision also corrects typographical errors.

## REVISED AIR POLLUTION COMPLAINT INVESTIGION GUIDELINES

#### Introduction

The Air Pollution Control Act (APCA) prohibits the emission into the outdoor atmosphere of air contaminants in quantities that result in air pollution. Air Pollution is defined as "the presence in the outdoor atmosphere of one or more air contaminants in such quantities and duration as tend to be injurious to human health or welfare, animal or plant life or property, or would unreasonably interfere with the enjoyment of life or property throughout the State and in such territories of the State as shall be affected thereby and excludes all aspects of employer-employee relationships as to health and safety standards." N.J.S.A 26:2C-2. This standard is also codified in the New Jersey Administrative Code at N.J.A.C. 7:27-5.2(a).

An odor caused by the release of an air contaminant is considered air pollution and a violation of the APCA if the Department determines that the odor has unreasonably interfered with the enjoyment of life or property. Such violations are sometimes referred to as "Subchapter 5" violations. The majority of complaints received by the Department alleging air pollution are for alleged odor situations. Guidelines were originally developed and distributed to enforcement field staff in 1988 for use in investigating air pollution complaints.

The APCA requires the Department, in determining whether an odor unreasonably interferes with the enjoyment of life or property in violation of the Act to consider, "all of the relevant facts and circumstances, including but not limited to, the character, severity, frequency, and duration of the odor, and the number of persons affected thereby N.J.S.A. 26:2C-19g. These revised Guidelines discuss the application of these factors.

The Department initiates an investigation for an alleged Subchapter 5 violation usually in response to complaints received from one or more citizens who claim to be affected by the presence of air pollution, usually causing an objectionable odor. To cite a Subchapter 5 violation, the Department must be able to verify and prove that a person (as defined in the regulation) has caused or allowed the release to the outdoor atmosphere air contaminants which in the investigator's independent judgement exceeded the statutory standards. To ensure consistency and that investigations objectively ascertain relevant facts and discern whether a violation has been committed, the general guidelines below have been developed. It should be understood that deviations from these guidelines will be necessary in some cases, and such deviations will not automatically invalidate the investigation.

It is important to note that complaints should be assigned to investigators and investigations conducted as expeditiously as possible. In most cases, the success or failure of our investigation will depend on our timeliness.

- 1. All complaints received, whether by telephone, letter or through the Department's environmental data management system, also known as NJEMS (from Trenton Dispatch), must be immediately forwarded to the Regional Manager or his designee. The Manager will assign the complaint to the appropriate investigator using the NJEMS data system Incident Report. If the complaint is being assigned to a certified local health agency that has been delegated authority by the Department to perform complaint investigations pursuant to the County Environmental Health Act, the initial assignment will be made via telephone with the assignment being confirmed in writing using the NJEMS data system Incident Report, usually via fax.
- 2. The investigator should immediately call the complainant to obtain and verify pertinent information. Information to be obtained from the complainant regarding the problem should include: whether the problem is currently occurring; suspected source; other persons affected; and physical effects. (Note: whenever serious acute physical effects are described, the Regional Emergency Response personnel or the DEP Action Hot Line must be contacted immediately.)
- 3. If the complainant identifies a specific facility or source, the investigator should quickly review and become generally familiar with the alleged violator's file. The investigator should then proceed as directly as possible to the complainant's location. The time of arrival should be recorded. As soon as the nature of the complaint is

understood, the investigator should attempt to verify the presence of the air contaminant at the complaint's location. Once the complaint has been verified in the presence of the complainant, the complainant should then be asked to complete the "Statement of Complaint" form (EFO-002). The complainant must be told that he or she may be needed to testify in court if a violation is cited. Without the complainant's testimony, Subchapter 5 violations may be open to substantial challenge during the administrative hearing process. Explain to the complainant that their identity will be anonymous until disclosure is required for an administrative hearing or other proceeding.

At this point, having verified the air contaminant in the complainants presence, the investigator may elect to leave the Statement of Complaint with the complainant and return later, in order to rapidly undertake the upwind survey. The sooner the upwind survey (discussed below) is begun, the higher the probability of tracing the air contaminant to its source.

The investigator should be careful not to provide leading or suggestive information to the complainant while he or she is completing the form. This information must be expressed in the complainant's own words. The complainant should be advised to be as complete as possible in completing the Statement of Complaint form. With the Statement of Complaint completed, the investigator is in the position of being able to review the information provided by the complainant for elaboration and clarification.

4. The statutory standard being violated in odor cases is "unreasonably interfere with the enjoyment of life or property" of the complainant. The complainant attests to this

interference by filing a Statement of Complaint. Although this is the primary basis for the violation, the Department, and hence the individual investigator acting as an agent of the Department, must verify that the standard was exceeded. Thus, in order to cite a violation, the investigator must independently concur with the complainant that the air contaminant, in this case a verified odor, unreasonably interfered with the complainant's enjoyment of life or property.

If the odor is detected by the investigator, the character, severity and duration of the odor during the investigation must be described and recorded. Also, the wind direction and speed and weather conditions must also be described and recorded. For example; "strong (#4) solvent-type odor detected on the complainant's front porch at 3:42 p.m. The wind was from the west at 5-10 mph, the sky was cloudy and temperature in the low 60's." Also, record a description of any physical effect the air contaminant causing the odor may have on the investigator, as well as obtaining any relevant statements by the complainant.

Any visual evidence pertinent to the investigation should be noted by the investigator, including, but not limited to, visible effects of the air contaminant upon the complainant and the complainant's property, any visible emissions from nearby property, visible indications of wind speed and direction.

The following odor intensity scale may be used to describe the intensity of the odor:

SCALE/DESCRIPTION	ODOR INTENSITY DESCRIPTION
0 – Not Detectable	Odor not detectable by the sense of smell
1 – Very Light	An odor present in the outdoor air which activates the sense
	of smell, but the chacteristics may not be distinguishable.
2 – Light	An odor present in the outdoor air, which activates the sense
	of smell and is distinguishable and definite. This may not
	necessarily be objectionable in short durations, but may be
	objectionable in longer durations.
3 – Moderate	An odor present in the outdoor air which easily activates the
	sense of smell, is very distinct and clearly distinguishable
	and may tend to be objectionable and/or irritating.
4 – Strong	An odor present in the outdoor air, which would be
	objectionable and cause a person to attempt to avoid it
	completely, and may cause physiological effects during
	prolonged exposure.
5 – Very Strong	An odor present in the outdoor air, which is so strong, it is
	overpowering and intolerable for any length of time and
	causes physiological effects.

The odor intensity chart is for use by the investigator and describes their evaluation of the odor and any effect on the investigator. This evaluation may be correlated with the

complainant's evaluation of the odor and effects on the complainant. The zero to five scale is not in and of itself the sole basis to determine whether a violation exists.

In addition to the intensity of the odor, other relevant information to be considered include the character of the odor (i.e. smells like coffee, rotten eggs, strawberries, manure); the duration of the odor (i.e. it was present for two minutes, it lasted for two hours); frequency of the odor (i.e. it was/is present continuously, it is present once every week); the nature of the contaminant released and causing the odor; and the number of persons affected by the odor. Information relevant to these factors obtained from the complainant should be carefully recorded.

Note, the simple presence of an odor beyond the property line of an alleged violator does not necessarily constitute a violation, and is therefore not adequate grounds for a citation. The odor must be shown to have resulted in unreasonable interference. In making a determination as to whether or not an odor "unreasonably interferes with the enjoyment of life or property," an investigator must take into consideration all relevant factors. The complainant does not have the burden of providing overwhelming proof of such interference; however the investigator does have the responsibility of being able to explain in an adjudicatory hearing or other proceeding the precise basis for the determination of unreasonable interference. Therefore, it is critical that the investigator make note of all the information that formed the basis of his or her judgement of unreasonable interference and not rely solely upon the assertions of the complainant. In those cases where an investigator is uncertain of then proper action, investigators are

encourage to assemble all facts and present them to the Regional Manager or his designated supervisor for further review.

The investigator should carefully record all information, including the time of day in which the matters described have occurred, because these descriptions and timeframes will be important later in any potential enforcement action. As an example, an equipment upset at a suspected source may have occurred at 2:30 p.m. and an odor caused by a release of an air contaminant at 2:40 p.m. A strong and objectionable odor may be alleged by a complainant to have been present at 2:40 p.m., but may only be faintly present (#1) and verified by the investigator at 4:00 p.m. The correlation of the information supplied by the complainant of the alleged stronger odor immediately following the 2:30 p.m. upset at the suspected source may be critical to establishing a violation and explain the difference in the investigator's description of the intensity of the odor.

Most odor complaints involve the release of an air contaminant that causes "unreasonably interference with the enjoyment of life or property" in violation of the statute. However, some complaints may involve the release of an air contaminant that is determined to be "injurious to human health or welfare, animal or plant life or property," in violation of the statute. In such cases, the investigator must specify that the latter standard was violated. Details should be provided in the investigator's report specifying the exact nature of the damage, its extent and the causal relationship, if known, between

the air pollution and the damage. Proofs may be assembled later, including medical recordings/samples.

For complaints involving particulates, there may be damage to property, such as cleaning costs, due to particulate deposition. Any such damages should be documented.

5. If the complainant is not present when the investigator arrives on site, all observations relative to the complaint should be documented by the investigator and a business card left with the date and time of the investigator's arrival. The complainant should be contacted by telephone later to notify the individual of the attempt to investigate their complaint. Questions to the complainant should include: verification of the nature of the problem; where the complainant thinks the problem exists and why, how long it has occurred; previous similar occurrences; elaboration of any alleged health effects; and a description of how the complainant's ability to enjoy life and property have been interfered with.

The complainant may be asked to keep a log recording the pattern of the problem.

The log may be helpful in future investigations. This conversation should be briefly documented and included in the complaint file maintained on the named facility.

However, without verification on-site, no violation can be cited. The investigator should briefly describe the verification procedure that must be employed to verify a violation.

- 6. If the complaint is verified, the investigator should proceed upwind and attempt to verify the air contaminant source. The investigator should try to determine as much of the air contaminant plume as possible. This may mean progressively traversing streets upwind until the source is identified. The route traveled as well as the times and observations should be recorded (a hand drawn sketch is satisfactory). The investigator must be vigilant in looking for non-traditional sources that cause or contribute to air pollution, especially odors, such as sewer lines, manholes, swamps or waste dumpsters.
- 7. In all cases before entering the suspected facility, the investigator should proceed upwind and preferably around the entire perimeter of the facility. It must be determined that the air contaminant is not being emitted by another source upwind of the suspected source. Carefully observe visually both inside and outside of the facility during the perimeter investigation for the purpose of identifying and/or eliminating from consideration of a potential source. Record these observations and prepare a concise diagram of your activities.
- 8. The investigator should then proceed to the suspected facility to inspect for the potential source. The time of entry should be recorded. As in all facility inspections, the investigator should present proper identification and have in possession appropriate safety equipment. If entry is denied, follow the procedure delineated for this occurrence. If a violation is suspected, entry should be gained as soon as possible. Facility personnel should be informed of the alleged problem and questioned concerning the emission point(s) of the air contaminant being released. The investigator should then perform an

inspection with the representative of the facility in an attempt to identify the specific source of the air contaminant. Questions related to the operating conditions of the facility, time and cause of any incident or deviation from normal practice, the action taken to abate an emission including those taken prior to the investigator's arrival, and during the investigator's visit, the composition and amount of air contaminant released and any other related information are to be documented. If the specific source cannot be identified because of the presence of on-site interfering air contaminant sources, a Subchapter 5 violation may be cited; however, every effort should be made to identify the process or area of the facility causing the violation. This information will be relevant to the Department's review of the facilities action(s) to mitigate the effect of a violation and to prevent future violations.

During the investigation or shortly thereafter, ask for and wherever possible obtain copies of written records or reports the facility may have, which substantiate/refute that a violation occurred, or which document the applicability of the mitigating factors as set out in the penalty regulations.

Compliance with other applicable air pollution regulations may be ascertained during the investigation. Areas to be routinely checked would include opacity, permits/certificates, air release notification requirements, etc. If there is inadequate time to establish the above and the investigator observed anything that may potentially be violative, note the situation and recommend that a follow up routine inspection be assigned at a later date. All relevant activity in the facility is to be reasonably

documented. This may include process information and MSDS sheets to document the presence of any chemicals that may have been involved in a release. Any statement made by the facility representative which would tend to sustain the alleged violation or which would exonerate the facility or which bear upon the applicability of mitigating factors should be especially noted.

The investigator should carefully review these statements with the official to make sure there is no misunderstanding as to what was stated and that the person making the statement was in a position of responsibility and knowledgeable about the situation that was being discussed. This reiteration and clarification is useful so as to withstand possible legal challenge at a future administrative hearing held on a violation, if one is determined.

If the facility cannot be inspected immediately, such as for unstaffed facilities, the owner or operator should be contacted as soon as possible and arrangements made to inspect the facility.

9. Conduct an exit interview and inform the facility representative of the preliminary results of the investigation, including any violations verified, any follow up action the facility must take, and any enforcement action that may be taken. When questioned regarding a possible penalty for a violation, provide the representative with the most recent penalty regulations as set forth in N.J.A.C. 7:27A-3.10.

- 10. Odor violations are designated as non-minor violations pursuant to the penalty schedule cited in N.J.A.C 7:27A-3.10. If a violation is cited, follow the requirements set forth in the penalty schedule for non-minor violations. Therefore, if a violation is cited, an Administrative Order and Notice of Civil Administrative Penalty Assessment (AONOCAPA) will be cited. The facility contact should be informed of the violation and completion of the AONOCAPA will be referred to the appropriate field office. An inspection report which includes a violation should not be prepared without properly notifying the facility of the results of the investigation. The complainant should be notified after the investigation of the results of the investigation. If the facility was not accessible or the information available at the time of the investigation was not sufficient to complete the AONOCAPA, the facility should be notified of the violation the next business day.
- 11. Upon returning to the office, a full report delineating the investigation should be completed and entered into the Department's environmental data management system, also known as NJEMS. The investigator must document wind speed and direction at the time of the investigation. Certain industrial facilities often have on site meteorological stations. If present, these stations may provide immediately available and a highly accurate record of the meteorological conditions existing at the time of the violation. The investigator should also record in the written report the following information, to the extent known: the number of complainants, description of any property damage, identity and quantity of the air contaminants, remedial measures taken by the facility and a

description of the area effected, including the estimated distance from the facility to the complainant's location. No whiteout is allowed.

- 12 Within 10 working days of the assignment, a full report documenting the investigation should be submitted through NJEMS to the Regional Manager or his designated supervisor. Documentation should include the following:
  - 1. Communication Center Notification Report;
  - 2. Statement of Complaint(s) (if relevant to specific Subchapter 5 violation);
  - 3. Full report delineating the investigation, entered into the NJEMS data system;
  - 4. Maps, sketches or aerial photo showing complainants location, source, streets, wind direction, verification route, etc;
  - 5. Odor Investigation Field Data Sheet including documentation of wind speed and direction(s);
  - 6. Photographs; and
  - 7. Other documentation supporting the violations.