



COMPLIANCE ASSISTANCE PROGRAM

Fugitive Dust and Odors Caused by Agricultural Operations

Compliance determinations of dust and odor sources are difficult since there are no scientifically measurable standards established by law. Terms like "unreasonable", "substantial" and "good practices" involve a personal interpretation as opposed to a scientific observation or a mechanical measurement. However, assessing criteria like intensity, transport, frequency, duration and impact can add some objectivity, some means of measurement, and some sense of degree of nuisance to a particular dust or odor event. YRCAA compliance officers use a rating system to assess the intensity of a particular odor and which also considers other criteria to determine if the odor poses an unreasonable interference with someone's right to use or enjoy their property. There is no such rating system for fugitive dust. However, the same criteria used for odor evaluation are also used when evaluating dust for unreasonableness.

RCW 70.94 is the statute that provides the basis for odor and dust rules. RCW 70.94.030 lists "dust and odorous substances" in the definition of air contaminants and defines "air pollution" as "the presence in the outdoor atmosphere of any air contaminant in sufficient quantity to be injurious to health or to interfere unreasonably with enjoyment of life or property". RCW 70.94.040 states that "causing or permitting air pollution is unlawful".

However, RCW 70.94.640 exempts dust and odors caused by agricultural activities from RCW 70.94.040 under certain conditions - specifically if:

1. The activity is consistent with good agricultural practices; and
2. The dust or odor has no substantial effect on public health.

Here's where the troubles start for a compliance officer.

Number One: "Good agricultural practices" are defined in RCW 70.94.640 as "economically feasible practices which are customary among or appropriate to farms and ranches of a similar nature in the local area".

It makes sense that when dust or odor is offensive enough, some people would assume that it must be a violation of some law. The practices causing the dust or odor may not appear to be very "good" practices at all, especially to those who are offended. However, according to law, if most of the other similar types of local agricultural operations are using similar practices, those "similar" practices do meet the definition of "good practices". As previously noted, as relates to agricultural operations, a "good practice" effectively removes (exempts) the practice (and the dust or odor) from the law.

Some operations are doing different things that could be considered "best management practices" which are more effective than "good practices" and dust or odors are minimized to more reasonable levels. Unfortunately, this Agency can only require an operation to do what the majority of operations are doing, whether the "good practices" are producing odors that seem unreasonable or not. Therefore, a compliance officer's ability to effectively address nuisance dust and odor at agricultural operations is difficult.



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Number Two: Proving that dust or odor has a “substantial adverse effect on public health” is extremely difficult. First, it must be proven that a substantial adverse effect on public health exists. The health effect must be a threat to “public health” – not simply to an individual or a single household. It must be proven to affect the public in general. A determination by a medical professional or public health official would be necessary to confirm adverse public health effect.

Second, it must be proven that the dust or odor is indeed the cause of the substantial adverse effect on public health. To prove this, some method of recognized, accepted and approved scientific measurement must be taken under controlled conditions by a certified professional. Analysis must identify and demonstrate that the dust or the source of the odor is the cause of the substantial adverse effect on public health. Air sampling and meteorological equipment sited and operated according to quality control procedures, for a reasonable timeframe would be necessary to measure dust concentrations at particular size fractions in order to confirm potential adverse public health risks. No such equipment or procedures have been established to do this for odors.

Making a case to satisfy current law that dust or an odor (or its source) is either not a “good practice”, or that it is the cause of a threat to public health is rarely successful and requires tools and funds which your local clean air agency does not have at its disposal.

On a positive note, we have had much success working with agricultural operators to resolve dust and odor problems without the use of enforcement action.

YRCAA Odor Rating Scale

In an effort to assess and describe the intensity or strength of a particular odor, YRCAA staff use the following scale. It attaches a numeric value to the odor, which most closely corresponds, in the opinion of the compliance officer, to the description:

- 0 - No detectable odor;
- 1 - Odor barely detectable;
- 2 - Odor distinct and definite, unpleasant characteristics recognizable;
- 3 - Odor strong enough to cause attempts at avoidance;
- 4 - Odor overpowering, intolerable for any appreciable amount of time.

The intensity of an odor is one of the criteria YRCAA compliance officers use to determine if an odor constitutes a violation. The other criteria are:



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- Transport - if the intense odor extends beyond the property of the source;
- Duration - how long the intense odor persists beyond the property of the source;
- Frequency - how often the intense odor is present beyond the property of the source; and
- Impact - if the intense odor unreasonably interferes with another person's use or enjoyment of property beyond the property of the source.

Intense odors (a value of 3 or greater), if persistent or repetitive, are generally considered unreasonable, and thus, a violation if transport beyond the property of the source causes an unreasonable interference with another person's use or enjoyment of their property.

Best practices of several "observations" from upwind, downwind and side locations at several different times are typically used, at property boundaries or near sites of complaints. All observations are noted by location, date, time, weather conditions, intensity, duration (if known), type of odor observed, and whether the odor has transported and impacted another person.

NOTE: Each YRCAA compliance officer receives extensive training on compliance evaluations and consequence of error. Officers assigned dust or odor evaluations go through focused training and field orientation, the purpose of which is to provide consistency among staff in evaluating odors.