



State of Ohio Environmental Protection Agency

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January 6, 2009

Michael Darnell
Division Manager
Countywide Recycling & Disposal Facility
3619 Gracemont Street SW
East Sparta, Ohio 44626

Re: "Community Ambient Air Quality Sampling-Frequency Reduction Request"

Dear Mr. Darnell,

This letter is in response to your request to decrease the frequency of community ambient air quality sampling from the current one in six-day schedule to a monthly schedule (every 30th day). As outlined in the March 28th 2007 and September 30th 2009 Ohio EPA Director's Final Findings & Orders [DFF&O's], your facility may request a reduction in the frequency of ambient air quality monitoring for each parameter class if for four consecutive six-day sampling events, for all the measured values for each parameter class, at all sampling sites: a) the measured values demonstrate no acute or chronic risk to human health, safety or the environment and b) the Director of Ohio EPA concurs with that demonstration.

Ohio EPA Legal staff also added additional specifications to the Orders (letter from Bryan Zima to Jason Perdion, March 28th, 2007) specifying specifically what monitoring and laboratory methods are to be used for the ambient air sampling, as well as additionally specifying the conditions under which any request for a decrease in the frequency or type of the ambient air sampling could be considered. These requirements were based upon the frequency and occurrence of air toxic compounds detected and upon written confirmation of approval from the Director. As discussed below, Ohio EPA approves of your request to reduce the ambient air sampling frequency.

Background

Countywide began the weekly sampling schedule on May 21st 2007. Sampling is performed for Volatile Organic Compounds (VOCs) (with a collocated sample at one site), aldehyde / ketones, carbonyl compounds, sulfur compounds, as well as hydrogen fluoride and hydrogen chloride inorganic acids. Thirty-one monthly data reports have been submitted to Ohio EPA (including the most recent report - Countywide Recycling & Disposal Facility Ambient Air Monitoring Monthly Report #31, dated December 20th, 2009).

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

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Conclusions

We have reviewed all of the information presented to us, in conjunction with the review provided by your contractor. We concur with the conclusion that the ambient air pollutants detected at and around the facility are not present in concentrations significantly different from background concentrations in the area.

Specifically addressing the monitoring sites prescribed by Ohio EPA, none of the pollutants measured to date pose an immediate threat to human health and the environment. The data also indicates there is no correlation between pollutants detected in the ambient air and the wind direction(s) measured at the facility during the time of sampling. Since the beginning of the Ohio EPA air monitoring requirements, plus the additional requirements for air monitoring on site specified by U.S. EPA, including two real-time ambient air special studies, the measured concentrations of ambient air pollutants at or surrounding the Countywide facility exhibits the potential for no risk for persons exposed to the measured levels of pollutants.

Ohio EPA relied on U.S. EPA health benchmarks documented in the IRIS database to provide a reasonable estimation of potential human health risk, using the information available for many of the measured compounds. Your letter characterizes the compounds benzene and carbon tetrachloride as the only consistently present VOCs measured near concentrations of potential health concern in the area. Ambient air concentrations of these two pollutants remain within Ohio state-wide and national averages, especially in taking into consideration the proximity and location of the interstate highway located next to Countywide. Formaldehyde and acetaldehyde have also been measured in ambient air concentrations near concentrations of potential concern. Interpreting the location of the emissions of these carbonyl compounds are further complicated by the fact that both of these pollutants are emitted from mobile sources (internal combustion engines in cars and other vehicles). The measured concentrations of these compounds are not inconsistent with what could be expected considering the vehicle traffic on Interstate 77 next to the facility.

Carbonyl compounds also exhibit no correlation with wind patterns or other indices regarding emissions from the Countywide facility. Formaldehyde and acetaldehyde consistently were detected at all community sampling locations. While the reported quantities for both compounds are near the upper limit of the screening levels for each (indicating a potential for concern), Ohio EPA concludes it is appropriate at this time to allow these compounds to be monitored on a monthly basis remaining aware that any radical increase in ambient air concentrations of these compounds may require new investigation on the part of Countywide. This approach is reasonable considering there remains no apparent correlation between the sampling locations' orientation to the landfill, prevailing wind (e.g., upwind, downwind, or crosswind), and the resultant ambient air concentration of either formaldehyde or acetaldehyde. The ambient air monitoring to date cannot reliably attribute any incremental concentration of aldehydes to landfill activities.

Finally, the measured detections of hydrogen fluoride and hydrogen chloride throughout this sampling program have consistently remained below detection limits for the compounds (for the majority of the sampling events performed). As such, monitoring for these compounds may be discontinued from this time forward, beginning January 2010.

Summary

Countywide and its contractor(s) can reduce the frequency of ambient air monitoring for toxic pollutants from a weekly (1 in 6 day) to a monthly (1 in 30 day) schedule beginning with the sampling event scheduled to begin on January 5th, and terminate on January 6th 2009. As an additional change in requirements, the reporting requirement to Ohio EPA is hereby modified to be required quarterly, as opposed to monthly. A Quarterly reporting schedule would require a report to Ohio EPA once every 3 monthly sampling events.

Please address any comments or questions to Paul Koval of my staff in the Division of Air Pollution Control at 614-644-2270 or Bryan Zima of my Legal Staff at 614-644-3037. This letter satisfies all requirements of my previous DFF&O's authorizing my reduction of the ambient air sampling requirements to a monthly schedule.

Sincerely,



Chris Korleski
Director, Ohio EPA

Cc: Paul Koval DAPC
Bryan Zima Legal
Scott Heidenreich DSIWM
Paul Ruesch U.S. EPA
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