

1200 North Pitt Street,
Alexandria, VA 22314
Jan. 8, 2007

Anthony J. Como
Department of Energy
Office of Electricity Delivery and Energy Reliability
NEPA Document Manager

Re: Nov. 2006 Special Environmental Analysis (SEA) by Dept. of Energy
Objections

Dear Mr. Como:

My first objection to the SEA is DOE's extending the radius of the PM 2.5 and SO₂ receptor grid to 36 miles*, thereby also extending the health effects to 240,581 people within the larger geographic area. By doing so, the 4000 people living very close to the plant and impacted by the highest PM 2.5 pollutants are not the focus, yet they are the most seriously affected by PM 2.5 particles. These microscopic particles are the most dangerous to public health since they are breathed directly into the lungs, causing respiratory infections, asthma attacks, bronchitis, irregular heartbeats, heart attacks and deaths.

The DOE should have addressed those living closest to the plant and most affected to demonstrate a true scientific evaluation of the environmental impacts of the facility. Instead, by extending the receptor grid radius, the analysis smoothes out the high impacts of all criteria pollutant excesses affecting those immediately surrounding the plant.

Further, by increasing the geographic area, the DOE used Arlington's Aurora Hills monitoring station to achieve a PM 2.5 measure of 14.4 micrograms per cubic meter, just under the EPA standard of 15 ug/m³ (annual). However, once again the Arlington station is far from the most intense PM 2.5 fallout, which occurs very near the plant on its surrounding densely populated urban neighborhood. In that area, the EPA PM 2.5 standard is greatly exceeded.

The analysis, in extending the receptor grid, also smoothes out the 2005 VDEQ downwash effects of all excessive criteria pollutants on the nearby population which resulted in the August 2005 plant shutdown.

The SEA textual commentary fails to examine the larger PM 2.5 health effect categories: respiratory infections, asthma attacks and emergency room visits. Instead, the text focuses on numbers of deaths only, which is relatively small. By neglecting to include the larger health effect categories, the SEA commentary minimizes the intensity and impact of health effects caused by PM 2.5.

In assessing the effects of Plant operations (S-6), the SEA did not consider in its impact topics *trona usage which was initiated without public health studies to determine its effects, especially on local nearby populations. In fact, when I asked the EPA for health studies on trona (1/24/06), I was told I'd have to initiate a Freedom of Information Act process to obtain the health studies from them. The FOIA process was completed. However, the EPA then responded that there were no public health studies on trona's effects on public health.*

In checking the Material Safety Data Sheet for Trona T-200 (sodium sesquicarbonate), which the Plant uses, it states exposure can cause irritation to skin and eyes as well as necessitating emergency procedures if the product is inhaled, ingested or directly contacts the eyes. Also, trona contains silica, a known carcinogen (Solvay Chemicals Technical Publication, "Safety & Handling T-200 Trona"). Given these health and safety concerns regarding trona T-200, identified by both the MSDS and trona producer Solvay Chemicals, the SEA characterizes trona as simply "a naturally occurring substance similar to baking soda," (SEA 4), omitting all health and safety issues. Why did this omission occur?

The DOE's SEA, distributed in late November, 2006, acknowledges that the highest impacts from the plant occur to those nearest the plant, especially in Blocks 1 and 2 (SEA106). It further indicates that during scheduled line outage situations, modeled exceedances of NAAQS are likely to occur, putting at risk the health of thousands of people near the facility. Further, trona, initiated without public health studies and used to curb SO₂, can only achieve a 50% reduction, due to limited on-site trona storage space (109). The study, however, only discusses SO₂ exceedances during line outage situations, but no other criteria pollutant exceedances during these situations. Why were these omitted?

It is clear that the DOE, in this report, is concerned about the serious public health risks to those living and working near the plant during planned line outage situations (SEA, Section 5). Yet, instead of immediately putting in place procedures to protect public health in these situations, the DOE report merely extends to the future all possible mitigating actions (108 forward).

Last month (Dec. 1—20, 2006), a planned line outage situation did occur. Neither the City of Alexandria, nor the residents near the plant, were notified of the event, even though their public health was put at risk. None of the controlling agencies -- not the DOE who issued the Emergency Order resulting in likely NAAQS exceedances during line outage situations, not the EPA which is committed to protecting public health, and not the VDEQ, which is committed to protect Virginia's public health -- even notified City officials and citizens, whose health was put at risk. This failure of all three agencies can only be interpreted as negligence.

Finally, the analysis states, in error, that the Federal Consent Decree, based on the plant's 2003 NO_x violation, has been completed (SEA76, note 25). This document has not been completed, nor has it gone before the court for evaluation.

*The VDEQ Downwash Study used a 5 mile radius around the plant to determine the greatest PM 2.5 particle fallout and its health effects on that population.

*The Alexandria City Downwash Study used a 7.5 kilometer radius around the plant to demonstrate the greatest PM 2.5 particle fallout and its health effects on that population (4,000 people).

Thank you for the opportunity to respond to the DOE Special Environmental Analysis.

Sincerely,

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