

**Response to Comments Related to  
Draft Air Pollution Control Permit #OP-95-066  
for  
Putney Paper Company  
Putney, Vermont**

Letter received from Mr. Craig Stead, P.E. dated October 15, 2001. Mr. Stead's comments have been grouped together and are italicized, responses are in bold type.

1. *First and foremost, I object to any permit being issued based on permit conditions (10) and (11) titled nuisance and odor. Putney Paper is continuously contaminating the ground level air in the town with odors that smell of sulfur, a soap type odor, and a diesel smell. These odors are most commonly found in the early morning when the air is very still in town and it is foggy. When this odor is in the air, I find I have headaches that clear when the sun burns off the fog and a breeze picks up. I live less than a quarter of a mile from the mill in Putney Center and downhill from it.*

*There is also a strong odor from the paper mill uphill from Basketville on Route 5. This odor occurs during the day when the air is still.*

*What are the sources of the odor? In reviewing the responses to my letter of 8/7/01, the sulfur odor seems to be from sulfides and mercaptans produced at the wastewater plant. These compounds are very toxic and at low level air concentrations are of concern because of their toxicity.*

**The conditions in an Air Pollution Control Operating Permit stipulate requirements with which the affected Facility must comply. The issuance of a permit with conditions (10) and (11) addressing the need to comply with §5-241 should not be viewed as "allowing" the Facility to emit objectionable odors. If the Facility were in violation of the *Regulations*, then the permit would need to contain a compliance schedule.**

**During past inspections the Division has not been able to independently verify any violations of any requirements contained in the Clean Air Act or the *Regulations* as a consequence of Putney Paper's operations.**

2. *The soap odor may be associated with Callaway 4063, a polyamide solution that is used at the rate of 103 tons per year. Putney Paper did not include the MSDS for this chemical in their original filing with the State and they state the boiling point of the solids is too high to evaporate. I don't believe this to be true. Examination of the MSDS for Callaway 4063 reveals the following information:*

*\* Boiling point: 210-215 °F.*

*\* This product contains 1,3-dichloro-2-propanol (<1.0%). When fed to rats in their drinking water for two years, 1,3-dichloro-2-propanol caused liver, kidney, tongue and thyroid cancers.*

*\* This product also contains small amounts (<0.1%) of epichlorohydrin and glycidol which have been found to be carcinogenic in laboratory studies.*

*Putney Paper has provided no information how Callaway 4063 is used or its final fate in the process. If it were present in the water boiled off in the dryer section of the paper machine, it would be expected to be an air pollutant to which the public of Putney is exposed. The toxicological data provided in the MSDS is totally inadequate to determine the effect on public health of this air pollutant.*

**The Facility has eliminated the use of Callaway 4063.**

3. *Putney Paper states they do not intentionally purchase recycled paper stock with a carbonless paper content. They have provided no documentation to demonstrate that carbonless paper is not included in the recycle paper they purchase. No testing has been done to demonstrate the mill does not currently use carbonless paper in its recycle paper stream.*

*It is known that the sludge lagoons in Putney have PCBs in the older sludge layers. These PCBs were a component of carbonless paper contained in the recycled paper stock used by Putney Paper. Today butylated naphthalenes have replaced PCBs in carbonless paper. These butylated naphthalenes would be converted to chlorinated butylated naphthalenes in the recycle paper process from contact with the hot chlorine bleach. Chlorinated butylated naphthalenes would be expected to be an air pollutant of a highly toxic and cumulative nature. I would also expect the presence of chlorinated methyl and ethyl compounds as air pollutants from the mill. Again these are similar to chlorinated dry cleaning solvents and would be expected to have both toxicity and be a cumulative burden on the body.*

**PCBs have not been used in the manufacture of carbonless paper since 1971. The 'pipeline' of waste paper for recycle now has insignificant quantities of pre 1971 carbonless paper. If PCBs were detected in the sludge dredged from the lagoons, it was from waste paper used at the facility a long time ago.**

**For the current product line produced at the Facility, the use of carbonless paper would result in undesirable black specs in their final paper products. For product quality reasons, Putney Paper avoids the use of carbonless paper in their feed stock.**

4. *Putney Paper uses large quantities of Rochester Midlands 1316E in their wastewater treatment to assist flocculation and settling of solids. This chemical contains 25% petroleum distillates. Unknown is the fate of these distillates. Although Putney Paper states the distillates reside in the sludge that is disposed of in a landfill, the petroleum also could be dissolved or emulsified in the recycled water reused in the paper process. These distillates would convert to chlorinated compounds when exposed to hot bleach and become part of the air pollution from the dryer section of the process. Chlorinated compounds are known to have toxicity, with the degree of toxicity depending upon the chemical structure. It is entirely possible that the chemicals produced by chlorination of the petroleum distillates would be dioxins and furans, which are some of the most toxic compounds known.*

**The VOC content of RMC 1361E has been reduced from 25% to 13.6%.**

**The use of sodium hypochlorite in the high pH environment present in the stock preparation system at the Facility is not expected to produce any chlorinated dioxins or furans in detectable quantities.**

5. *Your technical analysis dated May 23, 2001 states Putney Paper is running at a production rate of 23,789 tons per year, and has the potential production rate of 40,150 tons per year (365 days per year times 110 tons per day). The air pollution permit is written for the full production capacity of 40,150 tons per year. I strongly object to allowing a doubling of existing capacity when there are the problems identified in this public comment with both odors off site and toxic releases to the air that have not been either quantified or qualified.*

**While Putney Paper produced 23,789 tons of paper in 2000, the existing capacity at the Facility is 40,150 tons/year. The Facility's emission estimates are based on the full production capacity of the mill and represent a 'worst case' estimate.**

**Many of the odors noted are due to non-production conditions such as paper machine wash-ups and/or low throughput in the waste water treatment system (more likely to go anaerobic and produce reduced sulfur compounds). If the mill were to operate at full production rate for extended periods of time, it is not expected that there would be an increase in the odors associated with the Facility.**

6. *In sum, there is work to be done prior to any air pollution permit being issued for Putney Paper's production activities in the town of Putney. I feel the following are needed in addition to another public hearing after the facts on the Putney Paper air pollution are known.*

*Analyze the recycled water used in the paper process for the presence of petroleum and chlorinated petroleum compounds.*

*Analyze the exhaust gases from the dryer train for the presence of chlorinated hydrocarbons and Callaway 4063.*

*Analyze the air pollution near Basketville for the presence of sulfide and mercaptan compounds. The air sampler should be placed at the location where the odor is most commonly found.*

*If compounds as suggested above are found, then Putney Paper must control their process so these compounds and odors are not leaving the plant site.*

**There are no plans for another public hearing for the Putney Paper Air Pollution Control Permit to Operate #OP-95-066.**

**It is not necessary nor is it required by the regulations to conduct exhaustive sampling and analysis of the Facility's recycled water and/or the exhaust gases from the papermaking processes.**

**Based on the available information, chloroform is the only Hazardous Air Contaminant that may potentially exceed its Action Level.**

**The existing ambient air monitoring stations in Vermont have been positioned in the State based on Federal criteria. The State, as a rule, does not conduct ambient air monitoring for specific facilities. At this time the State of Vermont does not have plans to test the ambient air quality in the town of Putney, VT.**