

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

General Response 1: Responses will be limited to comments that relate to the draft permit and the development of the final Operating Permit for the Putney Paper facility in Putney, VT.

General Response 2: The Division has not independently verified any violations of any requirements contained in the Clean Air Act or the *Regulations* as a consequence of Putney Paper's operations.

General Response 3: If at any time there is concern with the compliance of the Putney Paper facilities in Putney or Dummerston with any the provisions of the Air Pollution Control Regulations, then the Air Pollution Control Division's Field Services Section should be contacted directly with specific information. Contact Christian Jones, Section Chief, phone: 802-241-3851.

General Response 4: If there is concern with the compliance of the Putney Paper facility in Putney with any of the provisions of the Solid Waste Regulations, then you should contact the Waste Management Division. Contact information is available on the internet: <http://www.anr.state.vt.us/dec/wmd.htm>

Letter received from Mr. Nathaniel Hendricks dated October 15, 2001. Mr. Hendricks's comments are italicized, responses are in bold type.

1. *The Technical Analysis ("TA") of an Air Contaminant Source for a Permit to Operate, at page 1, fails to provide UTM coordinates for all sources of air pollution.*

The TA fails to provide specific coordinates for the numerous stacks, flues, vents, conduits, ducts at the paper mill on Mill Street, for stacks other than the boiler room at the Hi-Lo Biddy Lane mill, the three sludge lagoons next to Sackett's Brook, for the Sludge Dump off Blood Lane and River Road, the Converting Plant in Dummerston, Vermont, and the mixing area for the wastewater discharge to the Connecticut River in the state of New Hampshire. All operations of the company must be identified and quantified as one stationary air contaminant source.

The Technical Analysis ("TA") is an informational document prepared to summarize the Air Pollution Control Division's ("Division") review of the operating permit application. The Division is not obligated by law or regulation to prepare such technical reviews. However, as a matter of the practice the Division does write up its review to assist in the preparation of its findings. UTM coordinates are identified in the TA so as to provide a general reference of the location of the facility. The Division is not obligated by law to specify the UTM locations of each stack or vent at a particular facility.

Stationary source in the Vermont Air Pollution Control Regulations ("Regulations") means any structure(s), building(s), facility(ies), equipment, installation(s), or operation(s) (or combination thereof) which emits or may emit any air contaminant, which is located on one or more contiguous or adjacent properties and which is owned or operated by the same person (or persons under common control). Based upon this definition the Converting Plant and mixing area are not considered part of the stationary source (meaning the paper mill). Furthermore, based upon the Division's inspection and review of the activities at the sludge lagoons, mixing area and Converting Plant, there does not appear to be any potential for significant air contaminant emissions. Therefore, no further review will be conducted regarding these activities.

2. *The "Classification of Source Under 5-401, Table 1-1, Administrative Summary, TA, page 2, fails to identify section 5-401(16) as air contaminant sources.*

The numerous stacks, flues, vents, conduits, ducts at the two paper mills, the lagoons, the sludge dump, the converting plant and the mixing area all are operations processes or activities which may cause or contribute to air pollution and subject to regulation pursuant to the Clean Air Act, as amended, 42, USC 7401, et, seq.

Table 1-1, page 2 of the TA fails to identify section 5-401(18) as an air contaminant source.

The numerous, haul roads, the public highways splattered with waste sludge, the work yards, the paper storage, the sludge lagoons, the sludge dump, and the Connecticut River mixing area in the state of New Hampshire, all are operations, processes, activities which may cause or contribute to indirect air pollution.

For the purposes of determining applicability of the operating permit program, the Division need only qualify the facility under at least one item of section 5-401. The Division does not normally list all potential categories of applicability in the TA, since it is sufficient to only identify applicability with at least one item. Once subject, then emissions are estimated for each activity within the stationary source (see definition in response to item 1. above) that can be reasonably quantified, and not considered insignificant or trivial.

3. *Table 1-1 of the TA, page 2, fails to properly identify the Facility SIC Code and Description. The correct code would also include Secondary Fiber, De-inking.*

According to the 1987 Standard Industrial Classification Manual produced by the Office of Management and Budget, there is no specific SIC code associated with Secondary Fiber, De-inking. This activity is a subset of the Paper mills category already referenced by the Division in its TA.

4. *Table 1-1 of the TA, page 2, fails to correctly calculate the Future Allowable Air Contaminant Emissions (tons/year).*

The table fails to include all particulate matter including fibers, cellulose dust, asbestos, talc, clays, fillers, inks, dyes and chemicals from all operations, including the mills, lagoons, dump, excavations, work areas, and the converting plants, in violation of 40 CFR 60.2. Particulate matter emissions in air are defined as any airborne finely divided solid or liquid material, except uncombined water, emitted to the ambient air.

The table fails to include all particulate matter and emissions from all mill operations areas, the mill roadways, and other work areas.

I have observed areas covered with waste sludge, waste paper and wastes, from paper making operations. See page 11 photo.

I have observed constant splatters of waste sludge on the public highways, Mill Street, Hi-Low Biddy and Main Street. As the waste dries, particulates and contaminants pollute the air.

The table fails to include emissions from the numerous stacks. I have personally observed powerful emissions from numerous parts of the mills and the converting plant see attached photos. See photos, p. 11, 12, and 13.

I have personally smelled strong, noxious, and harmful odors from the mills from 1951 to the present.

The table fails to include all chemicals, compounds, and materials used in the various mill operations.

The table fails to include chemicals and compounds used at the sludge lagoons. The table fails to include all chemicals and compounds used at the sludge dump.

The table fails to include all and chemicals and compounds used at the converting plant.

The table fails to include all contaminants, chemicals and compounds, inks, dyes, VOC's, PCB's in the waste paper stock used as the raw material to make paper. I know for a fact that waste paper contains numerous and varied contaminants such as, inks, dyes, VOC's, carbonless paper, carbon paper, clays, asbestos, talc.

The table fails to include all indirect emissions and particulates from the sludge dump off the River Road. I have personally seen thick dust storms from the sludge dump. I have observed foul gases bubbling up from the sludge dump. I have smelled foul caustic odors in the vicinity of the sludge dumps. The sludge dumps have been tested by U.S. EPA contractors and have been found to contain PCB's and dioxins.

I have smelled noxious, caustic odors coming from the sludge lagoons. I have observed the lagoons bubbling with strong and very objectionable odors.

I have observed particulates and emissions from the converting operations in Dummerston.

I have observed extensive bubbling in the water and smelled noxious emissions from the waste water mixing area in the Connecticut River, state of New Hampshire.

Emissions are estimated for each activity within the stationary source (see definition in response to item 1 above) that can be reasonably quantified, that is not considered insignificant or trivial. The Technical Analysis takes into account quantifiable air emissions from volatile organic compounds emitted from the paper making process. There are negligible particulate emissions from this process. Your photos labeled 12, 13, and 14 appear to be examples of visible water vapor. Water vapor is not regulated as an air pollutant. The potential for fugitive particulate emissions from the sludge handling process will be reviewed during periodic compliance inspections.

5. *The TA, 1.2 Basis of Review, page 3, incorrectly notes "This Facility was constructed prior to July 1, 1979, and has not undergone ANY [emphasis added] modifications..."*

The company is in violation of 10 V.S.A. 556 and 5-501 of the Regulations.

According to 5-101 of the Regulations all structures, equipment, installations, or operations, or combination thereof are considered the Facility.

Since July 1, 1979, the company has constructed an extensive sludge dump, excavated a large area next to the Connecticut River, re-built the Mill Street mill after destruction by fire, made major modifications to the Mill Street facility, the Hi-Lo Bidy facility has undergone several major modifications, the sludge lagoons have been modified, the effluent pipe to the Connecticut River has been modified, and the converting plant in Dummerston has been modified. All the modifications and construction require Agency review and approval.

According to the Division's files, Putney Paper Company has not informed the Division of any changes or alterations to its operations that satisfied the definition of modification within section 5-101 of the Regulations. Additionally, the Division's inspectors have not documented changes or alterations to the operations that warranted Division review and approval pursuant to 10 V.S.A. §556 and Subchapter V of the Regulations. Therefore, the Division is not aware of any projects that have been constructed at Putney Paper that triggered the construction permit process. Several of

the projects noted above, such as the excavation, the sludge dump, and alteration of the effluent pipe, would not constitute a modification requiring the review and approval of the Air Pollution Control Division. The other changes noted above are not identified with enough specificity to determine whether or not such projects were subject to 10 V.S.A. §556 and Subchapter V of the *Regulations*.

6. *The TA, page 3, 2.1, Description of Plant Layout and Surrounding area incorrectly states the Facility is only located in the town of Putney, Vermont. The converting plant is located in Dummerston, Vermont, the mixing area in the Connecticut River is in the state of New Hampshire. All are part of the "Facility."*

Pursuant to the definition of stationary source, the converting plant is considered a separate facility. The Division has visited the site, reviewed its potential for emissions, and has determined the Converting Plant is not subject to the operating permit program identified in Subchapter X of the *Regulations*. Furthermore, the mixing area is not considered a significant source of air contaminant emissions, and therefore, emissions have not been quantified as part of the operating permit. The primary source of air contaminant emissions is the paper mill located in the town of Putney.

7. *The TA, page 4 & 5, 2.3.2 Description of Compliance Monitoring Devices. "No devices have been proposed to continuously monitor emissions produced at this Facility."*

Because of serious violations of the CAA and the Vermont Air Pollution Control Regulations and the strong possibility of the emissions of hazardous compounds including dioxins, furans, PCB's, lead, asbestos, polynuclear aromatic hydrocarbons (PAH's), other semi-volatile organics, and particulates:

I PETITION for the immediate installation of devices to continuously monitor emissions from all direct and indirect sources at the entire Facility.

See General Response 2.

As far as monitoring is concerned, it is not practical to continuously monitor for all the above noted pollutants from all potential points of discharge. Technically, there is no available technology to continuously monitor pollutants such as dioxin/furans, PCB's, asbestos, PAHs, and semi-volatile organics. Furthermore, the Division has not determined that there is a need for such aggressive monitoring of emissions.

8. *The TA, page 6, 3.1. Emission Related Information.*

Emissions have been estimated only from fuel burning equipment on-site and the paper machines.

Estimates fail to consider particulate emissions from all stacks and indirect sources.

Estimates fail to consider emissions from the chemicals and contaminants in the waste paper stock.

Estimates fail to consider emissions from contaminants in the water supply.

Estimates fail to consider emissions from pulping, bleaching, wastewater, sludge lagoons, sludge dumps and other sources.

The estimates are based on chemical usage of 5.23.01 with an estimated production of 23,789 tons. The permit however is written for double that production figure and the emissions are not

adjusted for the higher particulate discharge from all sources and increased use of chemicals.

The emissions fail to consider the delivery and storage of all process chemicals.

Commenter has observed delivery of large tank truck of chemicals at the Mill Street mill. Commenter smelled noxious fumes during and after the delivery. Also, I have smelled noxious fumes at my Main Street residence from tank trucks passing by my residence after delivery to the company. The company has failed to control emissions from the delivery, storage and use of process materials and chemicals. See photo p. 15.

The TA has addressed the significant sources of regulated air pollutants from the facility. It is not the intent of the permitting process to quantify insignificant emissions of all air pollutants.

The value of 23,789 tons/year of paper production was used to estimate the VOC emissions per unit of paper production. This factor was in turn used to estimate the annual emissions from the papermaking process running at the maximum production rate.

9. *The TA, page 6, 3.1, Emission Related Equipment incorrectly that “The operation of the paper lines results in the discharge of VOC’s resulting from the volatilization of materials ADDED DURING [emphasis added] the production of paper products.”*

The draft permit fails to consider VOC’s from the process water from Sackett’s Brook and from the waste paper stock.

Several State of Vermont hazardous waste sites, and other sources may be discharging contaminants into the water used by Putney Paper Company. It is my understanding that there are several leaking underground storage tanks and hydrocarbon spills including, but not limited to, the Putney Fire Company, Mountain Paul’s gas station in the immediate area of the paper company water supply.

When the dam on Sackett’s Brook was cleaned out, I observed what appeared to be leaking hydrocarbons in the dam holding area.

Any hydrocarbons in the paper mill water supply would result in emissions from the facility. All contaminants in the water supply must be considered for facility emissions.

Contaminants contained in the waste paper stock have not been considered in the Facility emissions. Contaminants would include chromium, arsenic, lead, asbestos, dioxins, PCB’s furans, VOC’s, inks, dyes, polynuclear aromatic hydrocarbons and other hazardous materials.

The water supply from Sacketts Brook and waste paper feed stock used at the Facility are not considered to be significant sources of VOCs or other volatile air contaminants at the Putney Paper mill.

See response to Comment 4.

10. *The TA, page 7, 3.4, Table 3-1, Allowable Emissions for Putney Paper.*

The table of allowable emissions is incorrect.

The table fails to include particulates from all sources including all mill and converting operations, the sludge lagoons, the sludge dump, the mixing area and from storage and work areas.

The table for VOC's fails to include contaminants contained in the water supplies and from the waste paper stock. Emissions from the sludge lagoons, the sludge dump, the mixing area and from storage and work areas have not been included.

The figure for lead fails to include contaminants from the water supplies and from the waste paper stock. There may be lead emissions from other portions of the facility. The state of Vermont and U.S. EPA tests found elevated lead in sludge wastes and water tests at the sludge dump.

The figure for HAP's fails to include contaminants from the water supplies and from the waste paper stock and from all parts of the facility.

See response to Comment 4.

The only known potential source of air emissions of lead from the facility is from the combustion of fuel oil. The lead emission estimate in Table 3-1 is from the combustion of fuel oil.

The Technical Analysis used a mass balance approach to estimating the VOC emissions from the papermaking process. The emission estimate listed in Table 3-1 for the paper machines would include potential VOC emissions from other processes downstream of the paper machine such as the waste water treatment system.

The raw materials used at the Facility have been reviewed for the presence of HAP's. This review concluded that this facility is not a significant source of HAP's.

11. *The TA, page 7, 4.1, Citation and Description of all Applicable Requirements.*

In violation of state Regulations, 40CFR60.2 and other federal regulations the application fails to consider particulate matter emissions from all operations for the entire facility.

The company has failed to obtain construction permits mandated under 10 V.S.A. 556.

The company has failed to quantify contaminants in the water sources, waste paper stock, emissions from the sludge lagoons, the sludge dumps, the mixing area and from the converting plant.

See responses to Comments 4, 5, & 10

12. *The TA, page 8, 4.1, Vermont Air Pollution Control Regulations 5-201 and 5-202 Open Burning Prohibited and Permissible Opening (sic) Burning.*

The company is in violation of 5-201 and 5-202 and 5-203. I have observed open burning of waste materials at the converting plant in Dummerston. The burning has not been in conformance with the Regulations

The company has failed to comply with 5-202(8). The selectmen of the town of Dummerston have not complied with the procedures outlined in Section 5-203 of the Regulations.

The Dummerston selectmen have not notified the Secretary of the location of the site to be utilized for the public disposal of natural wood by open burning. The Secretary has not certified in writing that this site is the one place within the municipality that will be used for the open burning of wood.

The subject Facility for this draft permit is Putney Paper plant in Putney, Vermont.

See General Response 2 and General Response 3.

13. *The TA, page 9, 4.1, 5-231(1(a) Prohibition of Particulate Matter; Industrial Process Emissions.*

The draft permit only measured particulate matter from the boiler stack. This is in violation of the Regulations and 40 CFR Part 60.2. All particulate matter from all stacks, flues, vents, conduits, ducts at the two mills, the lagoons, the sludge dump, excavation areas, the converting plant, storage areas and roadways must be included.

The company is not compliance with particulate matter emission limit.

Also, the draft permit fails to provide ongoing monitoring of particulates, asbestos, talc, and other contaminants.

See response to Comment 4 and General Response 2.

14. *TA, page 10, 4.1, 5-231(4) Prohibition of PM; Fugitive PM*

The company is in violation of 5-231(4).

The company shall not cause, suffer, allow, or permit any process operation to operate that is not equipped with a FUGITIVE PARTICULATE MATTER control system.

Putney Paper has not equipped all operations with a fugitive particulate matter control system.

Putney Paper has caused, suffered, allowed and permitted materials to be handled, and transported without taking reasonable precautions to prevent particulate matter from becoming airborne.

I have observed particulate matter airborne at all Putney Paper operations and facilities. I have never seen any precautions taken such as removing waste materials, wetting down the areas or the use of surfactants.

Putney Paper has created a public nuisance by splattering waste sludge on Main Street from Sackett's Brook south to the Public Library in violation of 5-231(4).

The company is in gross violation of 5-231(4). Fugitive PM control equipment has not been installed on all process operations. Few precautions have been taken to prevent PM from becoming airborne during the handling, transportation, storage and the use of roads. I have observed waste materials on roadways, work areas and public highways.

See General Response 2.

15. *TA, page 11, 4.1, 5-241(1) and (2), Prohibition of Nuisance and Odor.
The company is in gross violation of this regulation.*

I have detected strong odors are detected beyond the property line from all operations of the facility, including the two mill, the sludge lagoons, the sludge dump and the mixing area in the Connecticut River.

The company has violated 5-241(1) by discharging, causing suffering, allowing and permitting from all operations and all sources of and contaminants and other materials which cause injury, nuisance and annoyance to the residents and visitors to the town of Putney and Dummerston, Vermont. The discharges also endanger the comfort, repose, and health and safety to me and

to the public. The type and vast amount of toxic chemicals used in the process with out any air control devices is in violation of 5-241(1).

The combination of chlorine bleach, other process chemicals, various types of hydrocarbons from the process chemicals, hydrocarbons from the water supply and hydrocarbons in the waste paper stock create hazardous compounds including, but not limited to PCB's, dioxins and furans. These emissions are hazardous to public health and safety and violation of 5-241(1). Emissions of this kind have been demonstrated to cause serious injury to personal health including asthma and cancer. I have been diagnosed by my doctor to have asthma.

The company is in violation of 5-241(2) odors. Putney Paper has discharge, caused, suffered, allowed and permitted emissions of objectionable odors beyond the property line of the various premises, including the two mills, the sludge lagoons, the sludge dump, and the mixing area in the Connecticut River. See photo p. 16.

The company is in violation of 5-241(3) Controls of Odor from Industrial Processes. The paper making process is an odoriferous process and all gases, vapors and gas-entrained effluents from the facility must be incinerated at a temperature of 871 degrees C. The company is in violation of 5-231(3)(d) and (e). Odor-bearing air contaminants out of the process are not confined to the point of origin. They are liberated into to atmosphere, in violation of 5-231(3)(e) and the company has failed to treat the discharge in violation of 5-241(3)(a).

I PETITION the Air Pollution Control Officer for a determination that the secondary fiber, deinking papermaking process is an odoriferous process.

Regarding compliance with §5-241, see response to Comment 7

As stated in the response to Comment 4: emissions are estimated for each activity within the stationary source (see definition in response to item 1 above) that can be reasonably quantified, that is not considered insignificant or trivial.

Photo 16 illustrates a condensed steam drain that is unrelated to sludge, sludge lagoons, the "mixing area in the Connecticut River" or a source of odors.

The Agency has determined that the secondary fiber deinking process is not an odoriferous process per se.

16. TA, page 15, 5.0, Hazardous Air Contaminants. Table 5-1: Comparison of HAC Emission Rates to Action Levels.

The emission rate calculated for Formaldehyde is incorrect.

The Material Safety Data Sheet for ELCOFIX IDC, dye fixer (blue-pink) lists 1-2% formaldehyde, CAS No. 50-00-0.

Putney Paper's representation that ELCOFIX contains "0.15%" is not believable.

There is no basis for ELCOFIX ICD to contain ten times less formaldehyde that the official MSDS reports.

The Facility has stopped using Elcofix IDC.

17. The draft permit fails to address 5-253.14 Solvent Metal Cleaning. How are the machines cleaned? What happens to the cleaner? Is it handled in conformity with the Regulations?

Condition (6) of the draft permit does address 5-253.14. This condition applies to metal

parts cleaning units that use solvents degrease and otherwise clean metal components; this is usually associated with maintenance activities.

The paper machine wet end is cleaned with a non-solvent, alkaline based cleaning chemical, and thus not subject to §253.14. The resulting waste water from the cleaning of the paper machine's wet end is treated in the wastewater treatment system.

18. *The company is in violation of 5-261(2) Notification of HAZARDOUS air contaminant Emissions.*

The company has failed to provide the Air Pollution Control Officer with an inventory listing the identity and quantity of all hazardous air contaminants emitted by all portions of the mills, the sludge lagoons, the sludge dump, the converting plant and the mixing area in the Connecticut River in the state of New Hampshire.

See response to Comments 2, and 7.

19. *According to 5-261(4) of the Regulations, I PETITION the Secretary of ANR to mandate Putney Paper to submit an air quality impact evaluation to demonstrate that the actual emissions from the sources, in conjunction with emission from all other sources, will not cause or contribute to ambient air concentrations in excess of any HAZARDOUS AMBIENT AIR STANDARDS as set form in Appendix C of the Regulations.*

Please note that the mill operations are close to residences, day care centers, schools, colleges, medical centers, population centers and other sensitive human receptors. The emission dispersion characteristics at the sources are poor due to the air inversions in the Connecticut River valley and Putney area.

Based on the available information, chloroform is the only Hazardous Air Contaminant that has the potential to exceed its Action Level. If it is established that the emission of chloroform will exceed the Action Level, then the Agency will determine if an Air Quality Impact Evaluation is warranted.

20. *It appears that the company is in violation of 5-261(5) of the Regulations, Hazardous Air Standards.*

The company has discharged hazardous air contaminants from the various stationary sources which cause or contribute to ambient air concentrations in excess of the HAZARDOUS AMBIENT AIR STANDARD.

See response to Comments 19.

21. *PCB's, dioxins, furans and other chlorinated hydrocarbons are not listed in Appendix B of the Regulations. There is ample, sufficient and extensive health data demonstrating the hazardous nature of these contaminants.*

These contaminants are known to be the by-product of paper mill operations using chlorine and hydrocarbons. The Putney Paper Company uses some 2,191,084.9 pounds of heavy duty chlorine bleach each year.

There are hydrocarbons in the water supply, the process chemicals and in the raw materials, i.e. the waste paper stock.

Therefore, it would be expected that emissions from the facility contain these hazardous compounds. These compounds have been found in the sludge and discharges from the mill operations.

As mandated by 5-261(7) of the Regulations, the Secretary has failed to establish the HAZARDOUS AMBIENT AIR STANDARD or STATIONARY SOURCE HAZARDOUS AIR IMPACT STANDARD for Putney Paper Company for chlorinated hydrocarbons, PCB's, dioxins and furans.

I PETITION for the immediate establishment of the HAZARDOUS AMBIENT AIR STANDARDS or a STATIONARY SOURCE HAZARDOUS AIR IMPACT STANDARD for chlorinated hydrocarbons, PCB's dioxins and furans for Putney Paper Company, Putney, Vermont.

You are incorrect in your assertion that certain chemicals are not listed in Appendix B of the Regulations. Polychlorinated biphenyls (PCBs), chlorodibenzodioxins ("dioxins"), chlorodibenzofurans ("furans") and many types of chlorinated hydrocarbons are listed in Appendix B of the Regulations. Appendix C of the Regulations lists the Hazardous Ambient Air Standards for these compounds.

You are correct that it is possible to form chlorinated dioxins and furans from certain aromatic hydrocarbons when in contact with elemental chlorine at very low pH conditions present in the chlorination stage in the bleached kraft pulping process. However, the Facility does not use elemental chlorine as a bleaching agent. 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.

Even if present in detectable quantities, these compounds are not anticipated to be released into the atmosphere from the Facility.

22. *Commenter raises the issue of sufficiency and legality of all notice and filings. A portion of the facility is located in the state of New Hampshire, the discharge mixing area in the Connecticut River. Have all state, local, federal rules and regulations been observed? Have notices been published in the state of New Hampshire?*

As required for Title V Air Pollution Control Permits, the Federal Environmental Protection Agency as well as the State of New York, the Commonwealth of Massachusetts and the State of New Hampshire were notified of the issuance of a draft permit. A public notice is not required to be published in the State of New Hampshire.

23. *Commenter has requested from the Agency at the public meeting, through letters, telephone calls and Freedom of Information Law requests additional documentation. Only a portion of the material has been provided. Commenter reserves the right to amend and add to these comments within a reasonable time from the receipt of all documents.*

The public comment period for this draft permit closed on 10/15/01.