Air Quality Permitting
Response to Public Comments

September 3, 2015

Permit to Construct No. P-2015.0007

Clearwater Paper Corporation
Lewiston, Idaho

Facility ID No. 069-00001

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AIR QUALITY DIVISION

Final

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BACKGROUND

The Idaho Department of Environmental Quality (DEQ) provided for public comment on the proposed permit to construct for the Pulp Optimization Project at Clearwater Paper Corporation's Lewiston Mill from July 21, 2015 through August 19, 2015 in accordance with IDAPA 58.01.01.209.01.c. During this period, comments were submitted in response to DEQ's proposed action. Each comment and DEQ's response is provided in the following section. All comments submitted in response to DEQ's proposed action are included in the appendix of this document. In this response package, the comments are often paraphrased to provide clarity and to consolidate several similar comments into one comment to avoid duplication.

PUBLIC COMMENTS AND RESPONSES

Public comments regarding the technical and regulatory analyses and the air quality aspects of the proposed permit are summarized below. Questions, comments, and/or suggestions received during the comment period that did not relate to the air quality aspects of the permit application, the Department's technical analysis, or the proposed permit are not addressed. For reference purposes, a copy of the Rules for the Control of Air Pollution in Idaho can be found at:

http://adm.idaho.gov/adminrules/rules/idapa58/0101.pdf.

Comment 1: Comments were provided indicating particular interest as to why hazardous air pollutants (HAPs) were not subjected to air pollution dispersion modeling like toxic air pollutants (TAPs) were. Several comments were received regarding HAP emissions and MACT standards.

Response 1:

Hazardous Air Pollutants (HAPs) are regulated by the federal National Emission Standards for Hazardous Air Pollutants (NESHAPs). Examples of affected sources are all of the pulping equipment (e.g. digesters), chemical recovery processes (e.g. recovery furnaces and lime kilns), paper coating operations, the wastewater treatment basin, power boilers, and emergency engines. The vast majority of emission units at the Clearwater Paper Corporation are subject to NESHAP standards (these federal standards apply whether DEQ issues a permit or not). All of these NESHAP standards that are applicable to the proposed changes at the facility are required to be detailed in the Tier I Operating permit that is issued to the facility and there is no need to repeat them in the permit to construct. This is described in the Statement of Basis that supports the proposed permit. DEQ is currently processing the Clearwater Paper Corporation Tier I Operating permit renewal and all applicable regulations will be detailed in that permit. These NESHAPs are referred to as Maximum Achievable Control Technology (MACT) standards and are published in the Code of Federal Regulations at 40 CFR 63. The authority for these standards originates from Section 112 of the Clean Air Act (CAA). This section of the CAA specifies that, "Emissions standards promulgated under this subsection and applicable to new or existing sources of hazardous air pollutants shall require the maximum degree of reduction in emissions of the hazardous air pollutants subject to this section, (including a prohibition on such emissions, where achievable) that the Administrator, taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements, determines is achievable for new or existing sources in the category or subcategory to which such emission standard applies, through application of measures, processes, methods, systems or techniques…". As previously stated the vast majority of HAP emissions at the facility are covered by these standards.

Toxic Air Pollutants (TAPs) emissions associated with the proposed changes at the facility are regulated by the Rules for the Control of Air Pollution in Idaho (Rules) at IDAPA 58.01.01.210. These Rules are unique to the State of Idaho and are not required by EPA. In short, the Rules limit ambient impacts of TAPs from the changes at the facility to "acceptable ambient concentrations" listed in Sections 585 and 586 of the Rules. As the commenter indicates, air pollution dispersion modeling was conducted for TAPs and ambient impacts were determined to be within acceptable concentrations as specified by the Rules. The Rules state in Section 210.20

that if the TAP emissions from a source are regulated by DEQ or EPA under an applicable NESHAP, then "no further procedures for demonstrating preconstruction compliance will be required under section 210 for that toxic air pollutant as part of the application process."

The EPA MACT standards are subject to a periodic Residual Risk and Technology Review. For the Pulp and Paper Industry EPA published this review in the Federal Register[1] on September 11, 2012. In evaluating the regulation the Clean Air Act (CAA) calls for review of the technology-based standards no less frequently than every 8 years. Secondly, within 8 years of promulgating the standards EPA is required by the CAA to evaluate the risk to public health remaining after application of the standards and to revise the standards, if necessary, to provide an ample margin of safety to protect public health or to prevent, taking into consideration costs, energy, safety and other relevant factors, an adverse environmental effect. These standards[2] developed by EPA are applicable to Clearwater Paper Corporation and are detailed in the Tier I operating permit that is issued to the facility. This permit is available on DEQ's webpage[3].

Comment 2: There were several comments stating concern that the modeling done did not adequately address the climatic conditions that would lead to high pollution levels with HAPS and NAAQS criteria pollutants.

Response 2:

As described in Response 1 above, HAP modeling is not required. All TAP modeling conducted by Clearwater's consultant (RTP Environmental Associates, Inc.) was performed by adhering to EPA modeling guidance (APPENDIX W, CFR 40 part 51, Guideline on Air Quality Models). AERMOD is EPA's recommended Air Quality model for use in near field (less than 50 kilometers in distance from emissions sources) modeling analyses. The applicant used recently collected on-site meteorological data (collected at the Clearwater Paper facility) to best assess actual on-site conditions. All TAPS that are not regulated by NESHAP that had emissions above DEQ screening Emission Levels (EL) thresholds as defined in the Rules Section 210 were modeled using EPA's recommended tools and the best available meteorological data. The resultant maximum concentrations were all well below the acceptable ambient concentrations (AAC) as listed in the Rules Section 585 and 586.

As discussed in the modeling memorandum, developed to ensure compliance with the IDAPA 58.01.01. 203.02, because criteria air pollutant emission increases are below DEQ modeling thresholds modeling was not required to assure that the proposed changes at the facility will not cause or significantly contribute to a violation of the National Ambient Air Quality Standards. Following is an excerpt DEQ's modeling memorandum regarding criteria pollutant modeling.

"If project-specific total emissions rates are below Level I thresholds, project-specific air impact analyses are not necessary for permitting. Use of Level II Modeling Thresholds are conditional, requiring DEQ approval. DEQ determined Level II Thresholds were appropriate for the proposed project for all criteria pollutants because of the following: 1) emissions primarily occur from elevated stacks having an uninterrupted vertical release and are released at an elevated temperature; 2) the ambient air boundary of the site is at a considerable distance from the sources; 3) there are no identified sensitive receptors in the immediate area. Approval for the use of Level II Thresholds was issued by DEQ during the modeling protocol approval phase of the project. Facility-wide project emissions of criteria pollutants were below all Level II Level Thresholds, as listed in Table 3."

[1] Federal Register Vol. 77, No. 176/Tuesday, September 11, 2012 page 55698.
[2] 40 CFR 63 Subpart S, National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry.
[3] http://www.deq.idaho.gov/media/803295-clearwater-paper-corp-pulp-paperboard-lewiston-t1-permit-0712.pdf

Table 3. Modeling Applicability Analysis Results					
Pollutant	**Averaging Period**	**Project Potential Emissions Increases**	**Level I Modeling Thresholds**	**Level II Modeling Thresholds**	**Modeling Required**
$PM_{2.5}$	24-hour	0.602 lb/hr	0.054	0.63	No[a]
	Annual	2.64 ton/yr	0.35	4.1	No[a]
PM_{10}	24-hour	0.72 lb/hr	0.22	2.6	No[a]
NOx	1-hour	2.01 lb/hr	0.20	2.4	No[a]
	Annual	8.80 ton/yr	1.2	14	No[a]
SO_2	1-hour, 3-hour	0.01 lb/hr	0.21	2.5	No[a]
	24-hour	0.01 lb/hr	0.21	2.5	No[a]
	Annual	0.5 ton/yr	1.2	14	No[a]
CO	1-hour, 8-hour	8.57 lb/hr	15	175	No[a]
Pb	monthly	0.007 TPY	14		No[a]

[a] DEQ determined Level II Modeling Thresholds were appropriate for sources of this pollutant.

Comment 3: It was a major disappointment that the application did not address nor verify reductions in NO_x, SO_2 and CO as reported by Clearwater Paper. If DEQ is going to call for a public review of the proposal, this is the kind of information that is most useful to concerned community members. These reductions should be reported as a percentage relative to the current emissions.

Several comments were submitted regarding the fact that DEQ did not require Clearwater to quantify emissions reductions that may be occurring at Clearwater Paper.

Response 3:

Proposed changes to existing facilities such as Clearwater Paper Corporation are subject to specific regulations prescribing how emissions changes must be calculated. The regulation requires a two part test in order to determine if the changes at the facility are a major modification or not. The first step is to determine if the proposed changes at the facility (considering only emission increases) is significant[4] or not. If the increases from the project in the first step are significant, then the second step is triggered. The second step is to determine if there is a significant net emissions increase (including all contemporaneous emission increases and decreases). Emission increases for the project (i.e. the first step) were determined not to be significant. Therefore, the second step of the two step process was not triggered and DEQ could not require Clearwater to document any associated emission reductions in the application.

In summary, since emission increases from the project were determined not to be significant, the Rules do not require quantifying emission decreases. DEQ could not justify determining the application incomplete because Clearwater did not document emissions reductions that may be occurring at the source.

Similarly, for purposes of determining air pollution dispersion modeling was required for criteria air pollutants the emission increases from the project were compared to the modeling thresholds. Since emissions increases were below the modeling thresholds emission decreases were not required to be quantified.

As described in the Statement of Basis, the new continuous digester system and polysulfide pulping process will be more energy efficient. That energy efficiency will result in a decrease in overall energy demand and result in emissions reductions. Those reductions were not quantified by DEQ and were not required to be quantified to assure compliance with the applicable air permitting regulations.

[4] Definition of significant at 40 CFR 52.21.b(23)

Comment 4: By Idaho rules the dispersion/convection modeling of HAPS was not required nor was a worst case scenario permitted. The worst case scenario is characterized by El Nino and other high pressure centers, temperature inversions, probable ozone creation when sun lit, and complex terrain to large distances.

Response 4:

Modeling of HAPS was not required as mentioned above in Response 1. Modeling for some TAPS was required and resulting concentrations in ambient air were found to be less than acceptable ambient concentrations (AAC). Five years of on-site meteorological data, as recommended by EPA modeling guidance, was used in the modeling analysis.

The Gaussian dispersion model AERMOD was used to evaluate air pollutant impacts to ambient air. IDAPA 58.01.01 (Rules) Section 202.02 requires that estimates of ambient concentrations be based on air quality models specified in 40 CFR 51, Appendix W (Guideline on Air Quality Models). Appendix W, Section 4.2.2.b. states, "For a wide rate of regulatory applications in all types of terrain, the recommended model is AERMOD." The AERMOD model does not specifically address stagnation conditions, but does take into account actual meteorological conditions (with wind speeds greater than about 0.5 meters per second or 1 mile per hour), and incorporates the effects of complex terrain in its algorithms.

Assessment of impacts from ozone is not typically explicitly modeled. Ozone differs from other criteria pollutants in that it is not typically emitted directly into the atmosphere. Ozone is formed in the atmosphere through reactions of VOCs, NOx, and sunlight. Atmospheric dispersion models used in stationary source air permitting analyses cannot be used to estimate ozone impacts resulting from VOC and NOx emissions from an industrial facility.

Addressing secondary formation of ozone has been somewhat addressed in EPA regulation and policy. As stated in a letter from Gina McCarthy of EPA to Robert Ukeiley, acting on behalf of the Sierra Club (letter from Gina McCarthy, Assistant Administrator, United States Environmental Protection Agency, to Robert Ukeiley, January 4, 2012):

> *. . . footnote 1 to sections 51.166(I)(5)(I) of the EPA's regulations says the following: "No de minimis air quality level is provided for ozone. However, any net emission increase of 100 tons per year or more of volatile organic compounds or nitrogen oxides subject to PSD would be required to perform an ambient impact analysis, including the gathering of air quality data."*
>
> *The EPA believes it unlikely a source emitting below these levels would contribute to such a violation of the 8-hour ozone NAAQS, but consultation with an EPA Regional Office should still be conducted in accordance with section 5.2.1.c. of Appendix W when reviewing an application for sources with emissions of these ozone precursors below 100 TPY."*

Allowable emissions estimates of VOCs and NOx are below the 100 tons/year threshold, and DEQ determined it was not appropriate or necessary to require a quantitative source specific ozone impact analysis.

Comment 5: The permitting requirements, pollution standards, and supportive modeling dictated by the IDEQ appear to be ineffective in predicting health hazards. The clinical threshold of human sensitivity to kraft mill pollutants is lower than Idaho admits. Comments are provided with the hope that the approval process, standards, and modeling for the pulp mill industry will improve in the future. I am herby submitting a formal public complaint regarding Idaho's inability to effectively and realistically manage the permitting process.

Response 5:

DEQ implements the permitting process as dictated by the Rules for the Control of Air Pollution in Idaho (Rules). The Rules are developed through a public negotiated rulemaking process and are promulgated by the Board of Environmental Quality and approved by the Idaho legislature. As discussed above all but the TAP Rules are rules developed to meet federal requirements that DEQ is authorized to implement. Clearwater Paper Corporation submitted an application as required by those Rules and DEQ processed the application in accordance with those Rules. DEQ found that Clearwater's proposed action met the Rules and developed a Statement of Basis that details the technical and regulatory requirements applicable to the proposed changes at Clearwater. As documented in the Statement of Basis, DEQ found that proposed changes at Clearwater Paper will not cause or significantly contribute to a violation of standards, including standards for particulate matter, nitrogen oxides, sulfur dioxide, ozone, and TAPs. The Rules include a requirement to provide an opportunity for public comment on DEQ's proposed action. DEQ provided a comment period on its proposed action from July 21, 2015, to August 19, 2015, and DEQ did not receive any comments alleging that the proposed action violates the Rules. Since DEQ has found that the Rules are met it is legally obligated to issue the permit to construct.

Comment 6: Clearwater submitted comments on the proposed permit. Clearwater's only substantive comment was that they did not believe that the volatile organic compound emissions testing is warranted on the chip line bleach plant because testing is not required by the rules, testing is costly, and the emission factors upon which emission estimates are based are asserted to be very reliable.

Response 6:

Volatile organic compound emission increases from the project are estimated to be 36 tons per year, which is 90% of the significant emissions rate threshold. Estimated emissions increases from the chip line bleach plant itself are estimated to be 14.48[5] tons per year. An increase of emission greater than those estimated from the chip line bleach plant may result in triggering a more detailed regulatory assessment of the project to assure more stringent permitting requirements are not triggered. Clearwater based the emission estimate for the chip line bleach plant on a summary of National Council on Air and Stream Improvement (NCASI) emission factors developed from source tests on bleach plants. These emission factors are sufficient enough for DEQ to issue a permit but not sufficient enough to conclude that source testing is not warranted. Source testing is warranted because the summary of NCASI emission factors for other bleach plants indicated significant variability in the emission data. These factors provide that the highest VOC (as Carbon) emissions rate is 4.7 times greater than the mean of the 34 measured values. If Clearwater's actual emissions vary by a factor of 1.5 from the estimated emission rate a more detailed regulatory assessment will be required to assess whether Prevention of Significant Deterioration requirements have been triggered or not. For these reasons, a VOC emission test on the chip line bleach plant is a reasonable permit condition.

[5] Difference of Projected Actual Emissions and Baseline Actual Emissions.

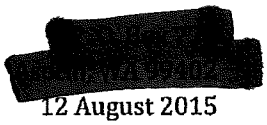
Appendix

Public Comments Submitted for

Permit to Construct

P-2015.0007

RECEIVED
AUG 17 2015
DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE AQ PROGRAM



12 August 2015

Mr. Dan Pitman
DEQ State Office
Air Quality Division
1410 N. Hilton
Boise, ID 83706

Dear Sir:

Through our recent conversations you have become aware that my health has been adversely impacted by emissions from the Clearwater Paper (CP) pulp mill over a 10 year period during which pollutants were captured by my Asotin home at night when a certain winter climatic condition occurred. Recent changes in that winter condition appear to have increased my risk because that climatic pattern has occurred more frequently over longer durations.

I have reviewed Clearwater Paper's permit application looking for evidence as to why I am affected. I was particularly interested in that portion that addressed air quality modeling hoping to see evidence of predicting HAPs to ranges of at least 11.3 km (where I live) as the TAP components had been (out to 15 km). Unfortunately, HAP modeling results were not available in the application nor even required by IDEQ.

I suspect that one or more of the following compounds SO_2, NO_x, O_3, or H_2SO_4 mist, (All HAPs) is/are irritating my sinuses but I am not excluding other possible compounds. Had the transport of HAPs been modeled I would have liked to see RTP focus on the worst case climatic condition that affects me. This climatic condition causes high pollution levels to accumulate within the confines of the Valley over periods of days. It appears that IDEQ wants to avoid realistically modeling the transport of HAP components when they impact real people. As a consequence, my health or life may be at risk.

It was also a major disappointment that the application did not address nor verify reductions in NO_x, SO_2 and CO as reported by CP. They anticipated reductions of 15 tons/year of SO_2, 500 tons/year of CO, and 100 tons/year of NO_x, once the pulp mill is upgraded. If IDEQ is going to call for a public review of the proposal, this is the kind of information that is most useful to concerned community members. These reductions should be reported as a percentage relative to a current emission component level or both the reduction and the current component level should be reported to be meaningful to the layman. CP has also reported a 25% reduction in GHGs as a results improved efficiencies in

their pulp mill process, a scientific and political important fact although not related to TAPs or HAPs at least in the short term.

In view of the complexity and extensive details in properly documenting emission components from pulp mills, I believe that the scope of process should be extended to realistic transport modeling and the application should be reviewed and vetted by both qualified Idaho insiders and outsiders not residents of Idaho if the review process is to have technical merit and integrity. Until technical integrity emerges from within the process and portions written for a layman's consumption, I am fearful that I may have to leave the Valley to protect myself.

Please find attached a White Paper which discloses my concerns in more detail. I am available to discuss this matter at your and Clearwater Paper's convenience.

Sincerely,

[redacted]

Attachment: In Response to IDEQ's Call for Public Comment on Clearwater Paper's Permit Application

Copy with enclosures to:

Mr. John Tippet, Head
IDEQ
DEQ State Office
1410 N. Hilton
Boise, ID 83706

Mr. Stuart Clark
Head of the Air Quality Division
Washington DOE
P. O. Box 47600
Olympia, WA 98505-7600

Ms. Tanya Chin
Dept. of Environmental Quality
Air Quality Division
1410 N. Hilton
Boise, ID 83706

In Response to IDEQ's Call for Public Comment on Clearwater Paper's Permit Application

[redacted]

August 2015

Introduction

The Idaho Department of Environmental Quality (IDEQ) has called for a public response to Clearwater Paper's (CP's) application and proposal to modernize their kraft paper production facility. The project involves full replacement of the 12 batch digester system on the wood chip line by installing 1) a continuous digester system, 2) a polysulfide generator to recycle and enhance digester fluids, 3) modifications to increase productivity on the pulp dryer, and 4) miscellaneous other changes to the chip line to include brown stock washing, oxygen delignification and a bleaching system. A wood saw dust digester line is to also undergo a small enhancement.

According to the application the enhanced system will 1) improve energy efficiency of the wood chip line, 2) decrease water consumption, 3) increase the production capacity, and 4) reduce operating costs. Unfortunately, there was no mention of reductions in emissions when compared to the emission of the current mill even though CP had published these reductions elsewhere.

I am responding to IDEQ's call for public comment not because I am against the modernization effort. Indeed, I favor the pulp mill upgrade because it appears CP will actually reduce the annual hazardous emission load by reasonable amounts, if the limited information publically shared by CP is correct. Instead, I write because the permitting requirements, pollution standards, and supportive modelling dictated by the IDEQ appear to be ineffective in predicting health hazards. As a PhD, former Professional Engineer, I am compelled to protect the public interest by sharing my findings and experience with the hope that the approval process, standards, and modeling for the pulp mill industry will improve in the future. I am hereby submitting a formal public complaint regarding Idaho's inability to effectively and realistically manage the permitting process.

An Opportunity Missed

There was an opportunity within CP's application to predict reductions in the hazardous emissions with enhanced mitigating controls but the permitting process never required such predictions nor did CP offer that information. From public sources CP anticipates reductions of 15 tons/year of SO_2, 500 tons/year of CO, and 100 tons/year of NO_x, once the pulp mill is upgraded. If IDEQ is going to call for a public review of the proposal, this is the kind of information that is most useful to concerned community members. These reductions should be reported as percentages in comparison to the current component levels or as a reduction of a component and the current component level to be meaningful to the layman. CP has also reported a 25% reduction in GHGs as a results improved efficiencies in their pulp mill process, although not a hazardous emission directly but of public concern.

This approval approach is hardly helpful to an open and healthy relationship between the greater Valley community and CP or the State and perhaps the EPA for that matter.

Recognize that there are many in the community who would like to know whether the environment will get better and how much better.

The permitting process could also be a wonderful opportunity for the State of Idaho to review and vet proposals and even suggest system improvements by using both inside and outside experts resident in other states so as to impart technical merit and integrity to the review process. This would not replace the current system of public comment. However, it would produce public confidence in the entire process. As our population increases and systems become more complex, we must learn to team in openness to respect those who we serve and live with. We need to learn to live cooperatively with openness and technical integrity as opposed to subjecting communities to ineffective or misplaced directives and excessive pollution.

Pollution Standards and Transport Modeling Are Not Realistic

When I selected the Valley as my retirement community, I was fully aware that a paper mill operated in the community. Since my sinuses had been sensitized by emissions from a steel mill during my youth, I purposely looked for property remote to the mill or high on the benches above the mill. I might add that in the intervening years between childhood and retirement, my sinuses caused me little concern. Since suitable property was not available on the benches about the Valley nor were they in Pullman or Moscow, I chose a lot in Asotin, seven (7) miles, as the crow flies, from the mill and ten (10) miles by river.

During my first year in Asotin, I faintly noticed that pulp mill fumes tended to accumulated in my house during quiet winter nights. Initially I attempted to neutralize the fumes by using a carbon filter in the HVAC system but without effect. Within a few years my nasal passages began clogging under the same conditions. Within these early years I learned to operate the heating system during the winter at reduced temperatures so that the fan would not operate often during the night since the fan pulls in outside air and pollutants through a venturi effect. Modern homes which are tightly built are designed to operate in this manner. I even attempted to close the HVAC vent to outside air but found that fumes would then enter through other vents (drier, bathroom, and kitchen vents) even though their louvers were closed. However, it would then become difficult to rid the house of the emissions once accumulated without opening the HVAC outdoor air vent once again.

In recent years I have had to irrigate my sinuses with a light saline solution to clear my nasal passages and spray an aerosol in the house to precipitate the fumes when present. In recent years I have also lost my sense of smell. Some of this loss may have occurred because an acidic mist passed over me on several occasions when fishing several miles upriver of the pulp mill during a west wind.

I have identified the weather condition that brings the pulp mill fumes to my home. The fumes are generated and concentrated when the Valley is under the influence of a high pressure system and the sun shines. Under these conditions the cloud of emissions is confined to the valley as the result of air descending within the high pressure system. Daytime heating of the benchtops makes the entrapment more effective by producing a temperature inversion there. The sun probably also creates smog (ozone added to the

emissions) above and around of the mill. I postulate that at night, as the sun induced turbulence and heating on the benches abates and stratified air flow sets in, the smog is transported with dispersion towards Asotin whenever the wind blows from the northeast, a direction associated with a high pressure system located to the west of the Valley.

This past winter the Valley has had more frequent episodes of high pressures over longer periods of times. This condition arose because El Nino placed an almost stationary high pressure (cyclonic) center near Seattle which with time slowly moves eastward. Recognize that cyclones influence weather hundreds of miles from their centers.

This past winter I often awoke under the above condition because my sinuses had swollen shut and I found myself breathing through my mouth. I am fearful that I could suffocate if my mouth fails to open during such an episode.

Unfortunately, the pollutant transport modeling in the CP application never predicted my sinus response at a distance of seven miles because HAP modelling and a worst case scenario were never required by Idaho rules. This worst case scenario was probably accompanied by ozone and occurred frequently this past winter. Furthermore the Idaho standards did not recognize my inherent level of sensitivity to Clearwater Paper emissions probably because the clinical standards are ineffective in protecting people.

Conclusions

The above documentation supports the following conclusions:

1. The clinical threshold of human sensitivity to kraft mill pollutants is lower than Idaho admits
2. By Idaho rules the dispersion/convection modeling of HAPs was not required nor was a worst case scenario permitted in which emission accumulate over the day beneath the benchtops and only partially dissipate at night.
3. The worst case scenario is characterized by El Nino and other high pressure centers, temperature inversions, probable ozone creation when sun lit, and complex terrain to large distances. (It may be possible that the resulting emissions eventually arrives to my house by way of the river system)
4. The permitting process is not effective as it could be because it could reveal reductions in emissions when they exist even though there is no requirement to do so. Furthermore, the process is not vetted in the open by qualified outsiders to give it creditability and technical integrity.

If the above assertions are accurate and the CP predicted reductions remain ineffective during worst case conditions, I offer the following potential solution: Could CP operate the continuous digester and rolling mill at reduced speeds under the worst case weather condition to reduce the accumulation of trapped emissions? Could the loss in production be made up at other times with the increased capacity of the new system and still reach quotas within a reasonable period?

Also see the cover letter for an Executive Summary of the above material at a layman's level.

A Revised Addendum
to
In Response to IDEQ's Call for Public Comment
on Clearwater Paper's Permit Application

[redacted]
August 2015

The Frequency, Duration, and Spatial Extent of the Pollution

It is at night that these high HAP levels are spread into different parts of the Valley depending on the wind direction. It is also at night that people's health is affected by the HAPs. This weather condition occurs throughout the winter roughly every 10 to 20 days with durations less than half the period, i.e., 5 to 10 days. The intensity of the event is dependent on whether the pulp mill emissions are illuminated by sunlight during the day. I suspect not every such weather patterns produce hazardous levels; however, El Nino is producing more and longer conditions.

I have recently been interviewing people with respiratory conditions (like sinus sensitivity or asthma) and have learned they almost invariably indicate that their condition becomes active during winter nights. When these people seek help from their physician, the physician often points to the pulp mill. I spoke with a mother from Lewiston who indicated that her young son was bothered at night during the winter months with asthma. When mailing my previous comments to IDEQ a young lady at the Postal Service indicated that she had just move into the Valley never having had any respiratory problems. During the first winter here she had breathing problems at night within her Clarkston home. This summer while seeking medical attention for her respiratory condition, her physician suggested that Clearwater Paper as the source of her problem. She is currently being diagnosed more carefully, but it is likely asthma. In both of these cases, I am beginning to strongly suspect that pulp mill induced ozone is the cause of the asthma.

The Importance of Truth in an Open Forum

One of the noblest pursuits that anyone can undertake is to <u>seek the truth</u>. It is said that truth will reveal and enlighten our condition and with application leads us into the path of righteousness. However, it is clear that the CP application failed to reveal the reductions in pollutants in the proposed system in comparison to the current system. There were no statements made in the proposal that CP would emphasize the maximum use of MAC technology to reduce the HAPs and TAPs. In a recent conversation with a representative of CP, I asked whether the proposed system would emphasize the use of MAC technology. I was told that he could not respond to that question because of competition in the industry. It is clear that the bottom line is more important than the

health of the community and as a result CP would not take leadership in the industry in using MACT to help protect other communities.

It appears that there is a systemic failure by government to protect communities having pulp mills. Regulators seem to fail to recognize the serious hazards pulp mills can oppose to communities. What is so frightening regarding the entire supposedly protective process is that

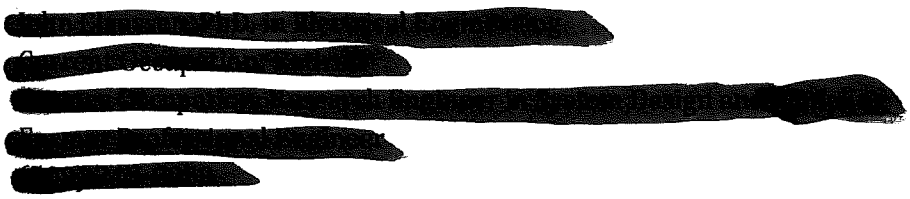
1. Not even IDEQ requirements call or argue for a reduction in the HAP or TAP emissions when installing new technologies in the upgrade.
2. Neither IDEQ nor CP monitors the health of this community to see if the HAPs and TAPs are impacting us
3. Although the proposal called for public comment, the document was not really written for public consumption. Rather it was written using plenty of undefined acronyms and failed to reveal what the public really wanted to know
4. There is no effective way and process to reporting hazardous health conditions. Phone calls when you do get through don't trigger an investigation. In fact try to find a CP number now that they use cell phones locally. Use of their corporate phone number results in having to navigate through their hostile automated switchboard which doesn't respond to zero for human contact, it instead requires that you spell a person name to make contact with someone, and after you have done so tells you there is no one here by that name. There is no emergency phone number on their website nor can one be found in the local phone books.

It is indeed very sad that jobs are more important than the health of our community, especially those that are vulnerable. At a recent public meeting in Nez Perce' county the commissioners were taking public comment as to consider whether to grant Clearwater Paper a partial tax deferment. The meeting focused on the benefits that Clearwater Paper brought to the community, the preservation of jobs, and the need to protect Clearwater Paper's competitiveness in the marketplace. Any discussion of the public health hazards that CP poses was suppressed, instead referring to the problem to DEQ. The effectiveness of DEQ and it processes in protecting my community is illusive if not questionable. The impact of CP emissions not only impacts my health but also the resale value of my home. Everyone in my neighborhood has taken a $100,000 or more loss on their home in recent years.

I am hopeful that we "can have both our cake and eat it too". I suspect that modern technology can significantly reduce pulp mill emission when mills are properly designed. However, let us shine a light on it and not cover it up with bureaucracy. We are hopefully in this together as community or else we shall all lose the best of side of our humanity.

All of the above appears to indicate that the pulp industry are bent on getting government protection at the expense of a community's health and that government is accommodating them. We have become and are now really a corporatocracy and are no longer a democracy. Industries have better access to government than do individuals. This story repeats itself across many industries who a) seek privileged places in the marketplace, b) misuses technology to abuse pricing, or c) deliver defective products. **How utterly sad!**

We can judge the quality of our culture by evaluating how we treat the young, old, and vulnerable. The decision and ability to correct the above described hazard belongs to The State of Idaho and Clearwater Paper.



An Addendum
to
In Response to IDEQ's Call for Public Comment
on Clearwater Paper's Permit Application

[redacted]
August 2015

It is at night that these high HAP levels are spread into different parts of the Valley depending on the wind direction. It is also at night that people's health is affected by the HAPs. This weather condition occurs throughout the winter roughly every 10 to 20 days with durations less than half the period, i.e., 5 to 10. The intensity of the event is dependent on whether the pulp mill emissions are illuminated by sunlight during the day. I suspect that not all such weather patterns produce hazardous levels.

I have recently been interviewing people with respiratory conditions (like sinus sensitivity or asthma) and have learned they almost invariably indicate that their condition becomes active during winter nights. When these people seek help from their physician, the physician often points to the pulp mill. I spoke with a mother from Lewiston who indicated that her young son was bothered at night during the winter months with asthma. When mailing my previous comment to IDEQ the young lady at the Postal Service indicated that she had just move into the Valley never having had any respiratory problems. During the first winter here she had breathing problems at night and her physician suggested that Clearwater Paper as the source of her problem, likely asthma. She is currently being diagnosed more carefully. In both of these cases, I strongly suspect that ozone is the cause of the asthma.

www.idahoconservation.org

Idaho Conservation League
PO Box 844, Boise, ID 83701
208.345.6933

August 17, 2015

Dan Pitman
Air Quality Division
DEQ State Office
1410 N. Hilton
Boise, ID 83706

Submitted via email: Daniel.Pitman@deq.idaho.gov

Re: PTC number P-2015.0007 regarding Clearwater Paper Corp.

Dear Mr. Pitman;

Since 1973, the Idaho Conservation League has been Idaho's voice for clean water, clean air and wilderness—values that are the foundation for Idaho's extraordinary quality of life. The Idaho Conservation League works to protect these values through public education, outreach, advocacy and policy development. As Idaho's largest state-based conservation organization, we represent over 25,000 supporters, many of whom have a deep personal interest in protecting Idaho's air quality.

We understand that the pulping optimization project will reduce GHG emissions by approximately 150,000 tons per year through an overall reduction in energy use at the facility.

Thank you for providing us an opportunity to review proposed facility's draft air permit.

Please contact me if you have any questions at 208-345-6933 x 24 or jhayes@idahoconservation.org

Sincerely,

Justin Hayes
Program Director

August 12, 2015

Dan Pitman
DEQ State Office
Air Quality Division
1410 N. Hilton
Boise, ID 83706

Dear Mr. Pitman:

The Lewis Clark Valley Chamber of Commerce represents more than 850 businesses and more than 16,000 jobs in Idaho and Washington. We support Clearwater Paper's permit to construct a new digester. The $160 million project will replace twelve batch digesters that were built in the 1950s. The new continuous digester will improve energy efficiency, decrease water consumption, increase production capability, and reduce operating costs. This project will also generate approximately 200 new jobs. These are great benefits for the Lewiston-Clarkston Valley.

Sincerely,

Kristin Kemak, President/CEO

(509) 758-7712 · fax (509) 751-8767
502 Bridge Street · Clarkston, WA 99403 · lcvalleychamber.org

Daniel Pitman

From: Clayton Steele <Clayton.Steele@clearwaterpaper.com>
Sent: Friday, August 14, 2015 2:09 PM
To: Daniel Pitman
Cc: Michael Simon; William Rogers; Amber Rand; Melissa Rhein; Peter Keller
Subject: TRIM: P-2015.0007

Dan,

Thank you for your work on the pulping optimization project. Clearwater Paper would like to provide the following comments. Please see below.

Table 1.1 – Regulated Sources: Control Equipment column for Continuous Chip Digester
Existing Lime Kilns, Existing NCG Incinerator~~, existing Recovery Furnace~~

2.1 – Process Description

Clearwater will produce wood pulp in two digester lines. One line is for wood chips and the other is for sawdust. Wood pulp is generated in the continuous digesters using polysulfide cooking liquor. The pulp is washed, bleached ~~dried~~ and otherwise treated to be used as the feedstock for pulp or paper product production. The existing 12 batch digesters on the chip line will be replaced by a continuous digester, the existing sawdust continuous digesters remain~~s~~ unchanged except that polysulfide will be used as the cooking liquor. The emissions from the digesters are controlled by existing permitted equipment (lime kilns, NCG incinerator~~, recovery furnace~~). Changes are not required to those existing permits.

4.1 – Process Description & Control Description

The existing ~~two Plup~~ Pulp Dryers ~~are~~ is similar to a regular paper machine but produces a thicker sheet of bleached pulp that can be utilized by manufacturers to produce paper products. The Pulp Dryers consists of a wet end forming section, a natural gas fired dryer, pulp sheeting and a bailing line. Emissions from combusting natural gas and from the drying process are combined and are emitted unabated to the atmosphere through two dryer exhaust stacks. ~~a stack on each pulp dryer.~~

4.2 – Emission Limit

$PM_{2.5}$ emissions from the pulp dryers~~ combined~~ shall not exceed 1.91 pounds per hour, including condensable particulate matter. The permittee shall use EPA Methods 5 and 202, or EPA Methods 201A and 202, or such comparable and equivalent methods approved by DEQ, to determine compliance with the PM2.5 emission limit.

5.1 – Process Description

Clearwater Paper Corporation is proposing to ~~a~~ add a polysulfide generator …

5.4 – Source Obligation: 52.21(r)(6)(v) requirements

In the middle of paragraph, the reference to condition 4.2(c) should be 5.2(c).

5.7 – Performance Testing Requirements

Clearwater requests that this requirement be removed from the PTC because: 1) it is not required by regulation, 2) it is unnecessary given the quality of emission factor data used to estimate project emissions, and 3) the testing requirement imposes a substantial cost to Clearwater that the Company does not feel is justified. Emissions estimates for the chip line bleach plant are based on NCASI emission factors for speciated VOC compounds for the corresponding emission unit category. The emission factors are rated "A," which is the

highest possible quality rating. Because project emissions estimates for the chip line bleach plant are based on reliable emission factors and conservative production inputs, the testing requirement is not necessary.

Thank you for your consideration,
Clayton Steele