BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

In the Matter of the Proposed Title V Operating Permit *Issued by the* South Dakota Department of Environment and Natural Resources *to* Pope and Talbot, Inc. to operate a lumber mill in Spearfish, South Dakota	)	Permit No. 28.4401-09

PETITION FOR OBJECTION TO ISSUANCE OF OPERATING PERMIT FOR POPE AND TALBOT LUMBER MILL

Pursuant to Section 505(b)(2) of the Clean Air Act ("CAA"), 40 CFR § 70.8(d), and the applicable federal and state regulations, Biodiversity Conservation Alliance, Rocky Mountain Clean Air Action, Defenders of the Black Hills, Native Ecosystems Council, Prairie Hills Audubon Society of Western South Dakota, Center for Native Ecosystems, Nancy Hilding, Brian Brademeyer, Jeremy Nichols (hereafter "Petitioners") hereby petition the Administrator of the U.S. Environmental Protection Agency ("EPA") to object to the Title V operating permit (hereafter "Title V permit") issued by the South Dakota Department of Environment and Natural Resources ("DENR") for Pope and Talbot, Inc. to operate a lumber mill in Spearfish, South Dakota (hereafter "lumber mill"), Permit Number 28.4401-09.[1] Petitioners request the EPA object to the issuance of Permit Number 28.4401-09 for the lumber mill and/or find reopening for cause for the reasons set forth within this petition.

[1] The Proposed Permit and the accompanying Statement of Basis are attached as Exhibits 1 and 2, respectively.

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INTRODUCTION

Pope and Talbot operates a lumber mill that has the potential to emit into the air of Spearfish numerous pollutants from numerous sources. The lumber mill has the potential to emit nearly 636,000 pounds per year. Of this, 242,000 pounds of particulate matter less than 10 microns in size ("PM_{10}"), 1/7 the width of a human hair, are released into the air of Spearfish. Particulate matter less than 10 microns in size is small enough to get into human lungs closely linked to respiratory ailments and the incidence of asthma.[2] The mill also has the potential to emit 558,000 pounds per year of carbon monoxide ("CO"), which at high levels can kill people.[3] The mill has the potential to emit into the air of Spearfish 46,000 pounds of hazardous air pollutants ("HAPs"), including formaldehyde and methanol, a year.

Pollution from Pope and Talbot's lumber mill also affects the Black Hills region of western South Dakota, including the scenic vistas of Wind Cave National Park and Badlands National Park, both of which are protected as Class I areas under the CAA. 42 USC § 7472(a)(4). The Black Hills region of western South Dakota consists of over a million acres of public lands, including the Black Hills National Forest, and is vital to the health and sustainability of many communities. A forested island within the sea of the Great Plains, the Black Hills also support a unique, isolated ecosystem that hosts a diversity of plants and animals found nowhere else in the world. The Black Hills are also sacred to countless indigenous peoples who have lived around the Black Hills region for millennia, relying upon the health and sustainability of the surrounding land, air, and water for survival and cultural well-being. Air

[2] See, www.epa.gov/airtrends/pm.html.
[3] See, www.epa.gov/iaq/pubs/coftsht.html.

pollution from the plant threatens to degrade the irreplaceable scenic, natural, and cultural values of the region.

The DENR submitted the proposed Title V permit for Pope and Talbot's lumber mill to the EPA for review on or around December 22, 2005. The EPA's 45 day review period thus ended on or around February 5, 2006. During the EPA's review period, the agency did not object to the issuance of the Title V permit. This petition is thus timely filed within 60 days following the conclusion of EPA's review period and failure to raise objections.

This petition is based on the objections to the Title V permit raised with reasonable specificity during the public comment period. To the extent the EPA may somehow believe this petition is not based on comments raised with reasonable specificity during the public comment period, Petitioners request the Administrator also consider this a petition to reopen the Title V permit for Pope and Talbot's lumber mill in accordance with 40 CFR § 70.7(f).[4] A permit reopening and revision is mandated in this case because of one or both of the following reasons:

1. Material mistakes or inaccurate statements were made in establishing the terms and conditions in the permit. See, 40 CFR § 70.7(f)(1)(iii). As will be discussed in more detail, the Title V permit for the plant suffers from material mistakes that render several terms and conditions meaningless, ambiguous, unenforceable as a practical matter, in violation of applicable requirements, etc.; and

[4] To the extent the Administrator may not believe citizens can petition for reopening for cause under 40 CFR § 70.7(f), Petitioners also hereby petitions to reopen for cause in accordance with 40 CFR § 70.7(f) pursuant to 5 USC § 555(b).

2. The permit fails to assure compliance with the applicable requirements. See, 40 CFR § 70.7(f)(1)(iv). As will be discussed in more detail, the Title V permit for the plant fails to assure compliance with several applicable requirements.

PETITIONERS

Biodiversity Conservation Alliance is a Laramie, Wyoming based nonprofit organization dedicated to protecting and restoring ecological health and sustainability in the Black Hills region of western South Dakota. Members and supporters of Biodiversity Conservation Alliance depend upon clean air in the Black Hills region to ensure unimpaired visibility, healthy plant and animal communities, successful wildlife viewing, and enjoyable recreational experiences.

Rocky Mountain Clean Air Action is a newly founded, Denver, Colorado based citizens group dedicated to protecting clean air in Colorado and the surrounding Rocky Mountain region for the health and sustainability of local communities.

Defenders of the Black Hills is a nonprofit organization, without racial or tribal boundaries, whose mission is to ensure that the provisions of the Fort Laramie Treaties of 1851 and 1868 are upheld by the federal government of the United States. Defenders' actions seek to restore and protect the environment of the Black Hills to the best of their ability.

Native Ecosystems Council is a Rapid City, South Dakota based, unincorporated, non-profit, science-based conservation organization dedicated to protecting and restoring the health of the Black Hills ecosystem. Members and supporters of Native Ecosystems Council use and enjoy the Black Hills for wildlife viewing, recreation, and scientific study.

Prairie Hills Audubon Society of Western South Dakota is a South Dakota-based, nonprofit organization with almost 200 members in the Black Hills region. Members of Prairie Hills Audubon Society use and enjoy the Black Hills for, among other things, bird-watching, and

depend upon clean air for the health of their own communities, as well as those of the wildlife, fish, and plants of the Black Hills.

Center for Native Ecosystems is a Denver, Colorado based non-profit, science-based conservation organization dedicated to protecting and recovering native and naturally functioning ecosystems in the Greater Southern Rockies and Great Plains. Using the best available science, the Center for Native Ecosystems participates in policy and administrative processes, legal actions, and public outreach and education programs to protect and restore imperiled native plants and animals and the air, land, and water they depend upon.

Nancy Hilding is a Blackhawk, South Dakota resident who depends upon clean air for her health and happiness. Ms. Hilding suffers from asthma, which is exacerbated by air pollution, and is most happy when she can breathe clean, clear air. Ms. Hilding is also the President of Prairie Hills Audubon Society of Western South Dakota and in this capacity works to protect and restore the health and sustainability of the Black Hills ecosystem. In her capacity as President of Prairie Hills Audubon Society of Western South Dakota, Ms. Hilding takes great pleasure in educating others about the natural values of the Black Hills and depends upon clean air to carry out the educational goals of the organization.

Brian Brademeyer is a Rapid City, South Dakota resident who depends upon clean air for his health and happiness. Mr. Brademeyer enjoys hiking in the Black Hills and working on his home, located in Palmer Gulch in the Black Hills near Mt. Rushmore. Several years ago, Mr. Brademeyer underwent open heart surgery. Mr. Brademeyer now depends upon clean air to ensure pure oxygen, free of poisonous compounds, reaches his heart to help this sensitive organ regain its strength and stamina. Mr. Brademeyer also has a home in the Black Hills and enjoys

viewing the peaks within the Black Elk Wilderness and Norbeck Wildlife Preserve. Clean air is essential to ensuring unimpaired views of these peaks.

Jeremy Nichols is a resident of Denver, Colorado, an avid bicycle rider, outdoor enthusiast, and regular visitor to the Black Hills of South Dakota who is deeply concerned about air quality in the Black Hills region and its effects on the health and welfare of people, plants, and animals. Mr. Nichols is also the founder of Rocky Mountain Clean Air Action and in this capacity works carry out the mission of the group to ensure protection of clean air for communities throughout the Rocky Mountains, including the Black Hills.

On November 11, 2005, Petitioners submitted comments to the DENR by certified mail in regards to the proposal to renew the Title V permit for the lumber mill.[5]

GROUNDS FOR OBJECTION

I. The Permit Fails to Ensure Compliance with Carbon Monoxide Limits

Pope and Talbot's lumber mill is considered an existing major source of CO emissions according to the DENR. See, Response to Comments at 1 and 2.[6] The lumber mill is an existing major source because it has the potential to emit more than 250 tons/year of CO. Because of this, the DENR emplaced a facility-wide limit on CO emissions of 238 tons/year to exempt the source from Prevention of Significant Deterioration ("PSD") requirements at 40 CFR § 52.21, et seq. See, Title V permit, Condition 6.9. Unfortunately, the Title V permit fails to ensure compliance with the 238 tons/year limit on CO emissions and fails to actually limit potential to emit below major source thresholds under PSD. As will be explained in more detail, the DENR's conclusion that the lumber mill is not subject to PSD is therefore erroneous.[7]

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[5] These comments are attached as Exhibit 3.
[6] The DENR's Response to Comments are attached as Exhibit 4.
[7] Petitioners' raised specific concerns over the ability of the Title V permit to ensure compliance with PSD in their comments. See, Comments at 1-3. Petitioners' also raised specific concerns over the lack of CO limits in the Title

A. The Title V Permit Allows CO Limits to be Exceeded as Practical Matter

To begin, the Title V permit provides no limits on wood waste and natural gas combustion, and/or hours of operation, that would actually ensure CO emissions are limited to 238 tons or less per year. Based on the operating rates allowed by the Title V permit, CO emissions will greatly exceed 238 tons/year. Thus, the Title V permit fails to ensure compliance with the 238 ton/year limit on CO emissions.

Indeed, in relation to the boiler, or Unit #1, the Title V permit actually allows over 250 tons/year of CO to be emitted from this single unit. According to Condition 1.1, the boiler is limited to a maximum of 102 million Btus per hour of heat input. If the boiler were to be operated 24 hours a day, seven days a week, and 52 weeks a year, this would amount to a maximum heat input of 891,072,000,000 Btus per hour. Condition 6.9 then requires CO emissions to be calculated based on an emissions factor of 0.6 pounds of CO/million Btus consumed. **Given this, if the boiler were to be operated 24 hours a day, seven days a week, CO emissions would amount to 534643.2 pounds—or 267.32 tons—per year.**

Despite the fact that, as a practical matter, the boiler is allowed to emit CO in excess of 238 tons/year, nothing in the Title V permit actually limits wood waste consumption to levels that would assure compliance with the limit on CO emissions. Although the facility may not operate 24 hours a day, seven days a week, and 52 weeks a year, the Title V permit allows the source to do so. Thus, as a practical matter, the Title V permit allows CO emissions from the

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V permit, stating, "It is of particular concern that the Title V permit entirely fails to include CO emission limits, as the mill is a major source of CO based on its potential to emit under PSD." Response to Comments at 3. Although Petitioners' did not raise concerns over the ability of the draft Title V permit to ensure compliance with the annual CO limit, this was due to the fact that the CO limit was not emplaced until after the public comment period. The CO limit established at Condition 6.9 and at issue in this petition was only emplaced after Petitioners' submitted comments. Thus, Petitioners' could not have possibly commented on the adequacy of the CO limit during the draft Title V permit comment period.

boiler, or Unit #1, to exceed 238 tons/year given the failure of the Title V permit to limit wood waste consumption and/or the failure of the permit to limit hours of operation at the lumber mill.

In relation to the dryer, or Unit #10, the Title V permit fails to limit natural gas consumption to ensure compliance with the annual CO limit. Indeed, the Title V permit requires CO emissions from the dryer to be calculated based in large part on "Monthly natural gas usage, in million cubic feet." Title V permit at Condition 6.9. Despite this, nothing in the Title V permit limits natural gas consumption in any way to ensure compliance with the 238 tons/year limit on CO emissions. **In fact, no limits whatsoever on natural gas consumption are set forth in the Title V permit**. Condition 1.1 in the Title V permit only limits heat input into Unit #10, yet entirely fails to limit natural gas consumption.

It is facetious at best for the DENR to claim that Pope and Talbot will comply with the 238 tons/year limit given that, as a practical matter, the Title V permit actually allows CO emissions to exceed 238 tons/year given the lack of operational limits. Even the DENR itself admits that, "Operational limitations are only required if Pope and Talbot were applicable to the PSD program and wanted to avoid it." Response to Comments at 11. Although the DENR may claim that emissions will not exceed 238 tons/year, the Title V permit does not contain " emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements," in violation of 40 CFR § 70.6(a)(1). The Title V permit thus fails to limit CO emissions below major source thresholds for PSD purposes and the Administrator must object to the issuance of the Title V permit for its failure to either: (1) Limit CO emissions below major source thresholds under PSD or (2) Ensure compliance with PSD requirements at 40 CFR § 52.21.

B. The Title V Permit Fails to Require Sufficient Periodic Monitoring of CO Emissions

Limits on CO emissions are also unenforceable as a practical matter due to the lack of sufficient periodic monitoring of CO emissions. Condition 6.9 of the Title V permit only requires monitoring of CO emissions once every five years in accordance with Condition 7.6, which is wholly insufficient under 40 CFR § 70.6(a)(3)(i)(B).

To begin with, one-time performance testing simply fails to constitute sufficient periodic monitoring in accordance with 40 CFR § 70.6(a)(3)(i)(B). Indeed, in Appalachian Power Co. v. Environmental Protection Agency, the Court of Appeals for the D.C. Circuit specifically held that a one-time performance test failed to constitute sufficient periodic monitoring, stating:

> State permitting authorities therefore may not, on the basis of EPA's Guidance or 40 CFR § 70.6(a)(3)(i)(B), require in permits that the regulated source conduct more frequent monitoring of its emissions than that provided in the applicable State or Federal standard, unless that standard requires no periodic testing, specifies no frequency, or requires only a one-time test.

Appalachian Power Co. v. Environmental Protection Agency, 208 F.3d 1015 (D.C. Cir. 2000) (emphasis added). Thus, on its face and in accordance with the applicable requirements, one-time performance testing does not constitute sufficient periodic monitoring.

Indeed, Condition7.6 only requires monitoring for CO emissions once during the permit term, or once every five years, thereby failing to provide data from the representative time period. Condition 6.9 explicitly requires a rolling 12-month total of CO emissions to be calculated. Monitoring only once every five years fails to provide monthly CO emissions data in order to maintain rolling 12-month totals and ensure compliance with the 238 tons/year limit on CO emissions.

Condition 7.6 also fails to provide data that is representative of the source's compliance with the yearly CO limit. Indeed, monitoring CO emissions only once-per-permit term, or in essence one day every five years, fails to provide data that indicates whether or not the source is in compliance with annual CO limits based on a 12-month rolling average as required by the Title V permit. Monitoring only one day every five years as required under Conditions 6.9 and 7.6 cannot possibly provide data representative of the source's compliance as it does not provide monthly CO emissions data for use in assessing compliance with the annual CO limit. **At best, monitoring under Condition 7.6 provides CO emissions data from one day**. It is difficult, if not impossible, to believe one day of CO emissions monitoring data can be representative the source's compliance with annual CO limit of 238 tons/year, especially when this limit is based on rolling 12-month averages. Further, as a practical matter, monitoring only once every five years allows the source to exceed annual CO limits. Monitoring once every five years allows the source to exceed annual CO limits for up to four years.

Conducting a performance test only once every five years also fails to ensure that CO emissions resulting from emergency conditions are accounted for. Indeed, Condition 6.6 of the Title V permit explicitly allows Pope and Talbot to exceed emission limits in the event of an emergency condition. Testing once every five years fails to ensure that the CO emission limit set forth at Condition 6.9 is met in light of any emergency conditions that may occur. Performance testing required by Condition 7.6 therefore fails to provide reliable data representative of the source's compliance with the 238 tons/year limit on CO emissions set forth under Condition 6.9 in light of the emergency conditions exemption at Condition 6.6.

Furthermore, it is unclear how Condition 7.6 provides reliable data on CO emissions given the potential range of emission rates from the Pope and Talbot lumber mill. As the EPA itself has noted:

> Because emission factors essentially represent an average of a range of facilities and of emission rates, they are not necessarily indicative of the emissions from a given source at all times; with a few exceptions, use of these factors to develop source-specific permit limits or to determine compliance with permit requirements is generally not recommended.

See, *In the Matter of Chevron Products Company, Richmond, California Facility*, Petition No. IX-2004-8 (March 15, 2005) at 23-24 (emphasis added). For one thing, it is difficult, if not impossible, to believe the boiler and dryer at the lumber mill will emit CO at a consistent rate throughout the life of the permit. As a practical matter, the only way emission factors—especially emission factors derived from once-per-permit term performance testing—can provide reliable data is if emission rates are consistent. Unfortunately, the Title V permit fails to require consistent operation rates, thereby failing to ensure consistent CO emissions. The use of emission factors derived from once-per-permit term performance testing to monitor CO emissions therefore fails to provide reliable data in accordance with 40 CFR § 70.6(a)(3)(i)(B).

Additionally, the Title V permit only requires a performance test for the boiler and dryer to be conducted "while operating the unit at or greater than 90 percent of its maximum design capacity, unless otherwise specified by the Secretary." Title V permit at Condition 7.1. This requirement is problematic for two reasons. First, "maximum design capacity" is not explained and/or defined in the Title V permit in relation to the boiler and dryer. Thus, while the permit requires performance tests to be conducted while operating at or greater than 90% of maximum design capacity, it is unclear, based on the Title V permit, what this actually means. Second, Condition 7.1 inappropriately and arbitrarily gives the Secretary of the DENR the authority to

allow the source to conduct performance tests at any operational capacity, including at much lower than 90% of maximum design capacity. While it is unclear from what applicable requirement this authority stems from, the Title V permit also fails to explain under what circumstances the Secretary may allow performance tests at alternative operating capacities and fails to limit and/or define the boundaries of this authority in any way. For example, as a practical matter, Condition 7.1 gives the Secretary the authority to allow the source to conduct performance tests on the boiler and dryer at only 10% of maximum design capacity. Because Condition 7.1 gives the Secretary unreasonably broad authority to define the operating conditions under which performance tests may be undertaken, Condition 7.6 fails to provide reliable data regarding CO emissions from the boiler and dryer.

Finally, compounding the aforementioned flaws is that the DENR has provided no explanation as to how and/or why emission factors for the boiler and dryer, which will be derived from a once-per-permit term performance test, provide reliable data representative of the source's compliance with the established CO limit from the representative time period. In neither its response to comments nor the Statement of Basis for the Title V permit does the DENR explain how and/or why it determined the use of emission factors to monitor CO emissions constitutes sufficient periodic monitoring in accordance with 40 CFR § 70.6(a)(3)(i)(B). Nowhere does the DENR explain how and/or why it determined the use of emission factors provides data that is indicative of the source's CO emissions in light of the range of emission rates at the lumber mill. The failure of the DENR to explain how and/or why the CO monitoring set forth at Conditions 6.9 and 7.6 constitutes sufficient periodic monitoring renders the Title V permit fatally flawed and the CO limit at Condition 6.9 unenforceable as a practical matter. The Administrator must therefore object to the issuance of the Title V permit.

C. A Schedule of Compliance May Need to be Included in the Title V Permit

Applicable requirements at 42 USC § 7661b(b)(1) and 40 CFR § 70.5(c)(8)(iii)(C) require that if a facility is in violation of an applicable requirement at the time of permit issuance, the facility's permit must include a schedule containing a sequence of actions with milestones, leading to compliance with any applicable requirement. As already explained, the Title V permit for Pope and Talbot's lumber mill fails to ensure CO emissions are limited below major source thresholds under PSD. As a practical matter, the source's potential to emit has not been limited below major source thresholds. The Title V permit is therefore currently not in compliance with PSD requirements. The Administrator must therefore object to the issuance of the Title V permit for the failure to include a schedule containing a sequence of actions with milestones, leading to compliance with PSD. Such schedule must ensure compliance with Best Available Control Technology requirements under PSD, ensure protection of visibility in Class I areas, ensure protection of PSD increments, and ensure compliance with any and all other requirements under 40 CFR § 52.21 and the South Dakota SIP.

II. The Permit Fails to Ensure Compliance with South Dakota SIP and Title V Permit Procedures Regarding Title V Permit Modifications

In addition to the failure of the Title V permit to ensure compliance with CO limits and PSD requirements, the permit also inappropriately subverts Title V processes set forth in the South Dakota State Implementation Plan ("SIP") and the Title V permit in relation to Condition 6.9. In particular, the Title V permit allows CO emission factors for the boiler and dryer to be changed through minor permit amendments, regardless of the significance of the changes in relation to CO emissions and regardless of criteria set forth at Condition 3.4 in the Title V permit, which is also enumerated in the South Dakota SIP at ARSD 74:36:05:35.

Indeed, calculations of CO emissions are based on emission factors derived from performance tests conducted in accordance with Chapter 7.0 of the Title V permit. See, Title V permit at Condition 6.9. For example, in relation to the boiler, the permit states, "The wood waste emission factor shall be revised based on the most recent performance tests conducted in accordance with Chapter 7.0." Id. The Title V permit, however, then states that any change in CO emission factors "will be considered a minor permit amendment." Id.

The Title V permit cannot automatically authorize a minor permit amendment in relation to CO emission factors for the boiler and dryer. Condition 3.4 of the Title V permit and ARSD 74:36:05:35 states that the Secretary will only consider proposed changes to Title V permits to be minor permit amendment if the proposed change:

> 6. Does not violate any applicable requirements;
> 7. Does not involve significant changes to existing monitoring, reporting, or record keeping requirements;
> 8. Does not require or change a case-by-case determination of an emission limit or other standard, a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis; or
> 9. Does not seek to establish or change a permit term or condition for which the source has assumed to avoid an applicable requirement, a federally enforceable emission cap, or an alternative emission limit. An alternative emission limit is approved pursuant to regulations promulgated under section 112(i)(5) of the federal Clean Air Act.

Title V permit at Condition 3.4. In this case, not only does the Title V permit fail to show that changes in CO emission factors for the boiler and dryer would qualify as minor permit amendments under Condition 3.4 and ARSD 74:36:05:35, but all indications are that any change in CO emission factors, especially changes that result in higher CO emissions, would not qualify as minor permit amendments.

In fact, if performance tests yield CO emission factors that demonstrate emissions that exceed 238 tons/year, then a minor permit amendment would, as a practical matter, be seeking to

"establish or change a permit term or condition for which the source has assumed to avoid an application requirement, a federally enforceable emission cap, or an alternative emission limit." In this case, a minor permit amendment would not be allowed. By automatically granting permit amendments to change CO emission factors, Condition 6.9 is contradictory to Condition 3.4 of the Title V permit and violates the South Dakota SIP. The Administrator must therefore object to the issuance of the Title V permit.

III. The Permit Fails to Require Sufficient Periodic Opacity Monitoring and/or Monitoring that Ensures Compliance with the 20% Opacity Limit

The Title V permit fails to require sufficient periodic monitoring of opacity and/or fails to require monitoring that ensures compliance with the applicable requirements, in violation of 40 CFR § 70.6(a)(3)(i)(B) and 40 CFR § 70.6(c)(1). Petitioners raised concerns with reasonable specificity over the adequacy of opacity monitoring in their comments on the draft Title V permit on pages 8-9.

A. The Permit Fails to Require Continuous Opacity Monitoring

To begin, the Title V permit fails to require sufficient periodic monitoring of opacity and/or fails to require monitoring that ensures compliance with the applicable requirements, in violation of 40 CFR § 70.6(a)(3)(i)(B) and 40 CFR § 70.6(c)(1) because the permit fails to require continuous opacity monitoring at Condition 8.1. According to the Title V permit, the 20% opacity limit set forth at Condition 6.1 applies at all times. Thus, as a practical matter, in order to ensure compliance with this continuous limit, the Title V permit must require continuous opacity monitoring. The Administrator must object to the issuance of the Title V permit due to the failure to require continuous opacity monitoring in accordance with 40 CFR § 70.6(a)(3)(i)(B) and 40 CFR § 70.6(c)(1).

B. The Title V Permit Fails to Require Sufficient Periodic Opacity Monitoring and/or Monitoring that Ensures Compliance with Opacity Limits in Other Ways

Even if continuous opacity monitoring may not be required, Condition 8.1 further fails to require sufficient periodic monitoring of opacity and/or fails to require monitoring that ensures compliance with opacity limits as it fails to ensure continuous compliance with the applicable opacity limit at Condition 6.1 in other ways.

To begin with, the monitoring set forth at Condition 8.1 fails to require actual monitoring of opacity using quantitative measurements. Condition 8.1 only requires monitoring for visible emissions, which does not indicate whether or not the source is in compliance with the 20% opacity limit. Although Step 2 of Condition 8.1 requires Method 9 observations if a visible emission is observed, as a practical matter, this allows the source to exceed the applicable opacity limit. Indeed, visible emissions could exceed the 20% limit, but until such time as a Method 9 observation is conducted, it would be impossible to determine the opacity of any visible emissions and impossible to determine the compliance status of the source The visible emissions monitoring required by Condition 8.1 cannot substitute for Method 9 readings and as such, the Title V permit fails to require sufficient periodic monitoring and/or monitoring that ensures compliance with the 20% opacity limit. The Administrator must therefore object to the issuance of the Title V permit.

Although Condition 8.1 is flawed because it relies upon visible emissions monitoring to ensure compliance with the 20% opacity limit, the monitoring set forth at Condition 8.1 is further flawed because it only requires monitoring for visible emissions once-per-month. As a practical matter, such infrequent monitoring allows the source to violate opacity limits. Indeed, monitoring visible emissions once-per-month allows the source to exceed the 20% opacity limit

for up to 30 days, depending on the month, and as such fails to ensure compliance with the 20% opacity limit set forth in the Title V permit.

The EPA itself has noted that monitoring of visible emissions must occur at least on a daily basis. In an April 18, 1997 memo from EPA Region 7, the EPA stated:

> [T]he permit authority should require the source to certify at least annually—or more frequently—that they conducted a visible emissions survey each day the plant operated and that they were in compliance with, or in violation of, with the applicable opacity requirements.

EPA Region 7, Policy on Periodic Monitoring for Opacity (April 18, 1997).[8] On its face, the monitoring set forth at Condition 8.1 is insufficient as it fails to ensure monitoring of visible emissions or opacity at least on a daily basis and the Administrator must object to the issuance of the Title V permit.

C. The Title V Permit Inappropriately Allows for Less Frequent Opacity Monitoring

The Title V permits further fails to require sufficient periodic monitoring and/or monitoring that ensures compliance with the 20% opacity limit set forth in Condition 6.1 because Condition 8.1 allows for visible emissions monitoring only once every six months to only once every year. Under Condition 8.1, visible emissions monitoring frequency can be reduced to semiannually if "no visible emissions are observed from a unit in six consecutive monthly visible emission readings" and to annually if "no visible emissions are observed from a unit in two consecutive semiannual visible emission readings." Title V permit at Condition 8.1.

The fact that visible emissions may not be observed during the required monthly observations for six consecutive months or for one consecutive year does not justify and/or support less frequent monitoring. Indeed, nothing in the Statement of Basis, the Title V permit,

[8] This policy document is attached as Exhibit 5.

or the Response to Comments explains why such infrequent monitoring can possibly be allowed. The EPA itself has determined that a large margin of compliance alone is insufficient to demonstrate that emissions will not change over the life of the permit. See *In the Matter of Fort James Camas Mill*, Petition No. X-1999-1 (December 22, 2000) at 17-18. As a practical matter, by allowing the source to conduct less frequent visible emissions monitoring, such as semiannually or annually, the Title V permit increases the chances of exceedances and/or violations occurring undetected. Furthermore, by allowing such infrequent monitoring, Condition 8.1 fails to provide data representative of the source's compliance with the 20% opacity limit. The Administrator must object to the Title V permit because Condition 8.1 inappropriately allows opacity monitoring to occur only semiannually and even annually, thereby failing to require sufficient periodic monitoring and/or monitoring that ensures compliance with the applicable requirements and the limits and conditions in the Title V permit in accordance with 40 CFR § 70.6(a)(3)(i)(B) and 40 CFR § 70.6(c)(1).

D. There is no Reasonable Explanation as to how the Monitoring Constitutes Sufficient Periodic Monitoring and/or Ensures Compliance with the 20% Opacity Limit

Finally, compounding the aforementioned flaws is that the DENR has provided no explanation as to how and/or why the opacity monitoring set forth at Condition 8.1 constitutes sufficient periodic monitoring and/or how the monitoring ensures compliance with the 20% opacity limit set forth at Condition 6.1. In neither its response to comments nor the Statement of Basis for the Title V permit does the DENR explain how and/or why it determined the monitoring set forth at Condition 8.1 constitutes sufficient periodic monitoring in accordance with 40 CFR § 70.6(a)(3)(i)(B) or ensures compliance with the 20% opacity limit in accordance with 40 CFR § 70.6(c)(1). The failure of the DENR to explain how and/or why the opacity

monitoring set forth at Condition 8.1 constitutes sufficient periodic monitoring and/or ensures compliance with the 20% opacity limit renders the Title V permit fatally flawed. The Administrator must therefore object to the issuance of the Title V permit.

IV. The Permit Fails to Require Prompt Reporting of Permit Deviations

The Title V permit fails to require prompt reporting of permit deviations, in violation of 40 CFR § 70.6(a)(3)(iii)(B). The Administrator must therefore object to the issuance of the Title V permit.

A. The Permit Fails to Require Prompt Reporting of Opacity Deviations

Condition 6.2 of the Title V permit exempts compliance with opacity limits "during soot blowing, start-up, shutdown, or malfunctions." Title V permit at Condition 6.2. Unfortunately, the Title V permit fails to require prompt reporting of opacity deviations in the event of soot blowing, startups, shutdowns, and malfunctions. Petitioners raised concerns over this issue with reasonable specificity on page 7 of their comments on the Title V Permit.

While the Title V permit requires reporting of permit violations under Condition 5.7, according to Condition 6.2, opacity deviations during soot blowing startups, shutdowns, and malfunctions may not be violations and thus, would not be required to be reported under Condition 5.7. This, despite the fact that they are deviations from opacity limits. Furthermore, although the DENR may claim that Condition 5.8 requires visible emissions to be recorded in a monitoring log, this requirement does not fulfill prompt permit deviation reporting requirements under 40 CFR § 70.6(a)(3)(iii)(B). Indeed, Condition 5.8 only requires Pope and Talbot to record visible emissions, but requires no reporting to the state, the EPA, or the public.

B. The Permit Does not Require "Prompt" Reporting

Finally, Condition 5.7 of the Title V permit requires reporting of permit violations. Unfortunately, this Condition fails to require prompt reporting of permit violations, as required by 40 CFR § 70.6(a)(3)(iii)(B). Of concern is that the Condition allows the Secretary to extend the submittal deadline for a written report of permit violations up to 30 days. **Thirty days is not "prompt" in relation to prompt reporting**.

Compounding the fact that 30-days is not prompt is that nowhere in the Statement of Basis, the Title V permit, or the Response to Comments does the DENR explain why it considers 30 days to be prompt in relation to all permit violations. As the EPA recently noted in regards to a Title V permit issued to Onyx Environmental Services:

> The permit record does not include IEPA's explanation of why the deviation reporting required for the applicable emissions limitations is prompt "in relation to the degree and type of deviation likely to occur and the applicable requirements." In this case, Onyx incinerates hazardous and toxic materials and IEPA has not explained why it considers a thirty day reporting period to be prompt for all deviations. For this reason, U.S. EPA is granting on this issue. U.S. EPA directs IEPA to explain how a thirty day reporting requirement for all deviations is prompt or require a shorter reporting period for deviations as is provided for in 40 C.F.R. Part 71.

See, *In the Matter of Onyx Environmental Services*, Petition No. V-2005-1 (February 1, 2006) at 15 (emphasis added). In this strikingly similar case, the DENR has failed to explain why 30 days is "prompt" in relation to the degree and type of violations likely to occur and the applicable requirements and the Administrator must object to Pope and Talbot's Title V permit and direct the DENR to explain how a 30 day reporting requirement for all violations is prompt or require a shorter reporting period for violations.

V. The Lumber Mill is Subject to Maximum Achievable Control Technology Requirements to Reduce Toxic Emissions

Petitioners raised concerns with reasonable specificity over the accuracy of the potential to emit calculations for HAP emissions from the boiler, or Unit #1 on page 4 of their comments. Hazardous air pollutant emission factors and potential to emit calculations are inaccurate, thus rendering the DENR's finding that the lumber mill is not a major source of HAPs and not subject to maximum achievable control technology ("MACT") requirements unsupported. According to the Statement of Basis, HAP emission factors for the boiler were derived from AP-42, Chapter 1.6, (09/03). See, Statement of Basis at 8. **According to Chapter 1.6, emission factors for HAPs have a very low rating**. Total organic compound and total VOC factors have ratings of D.[9] It is unclear, in light of this low rating, how DENR could reliably use AP-42 to derive potential to emit for HAPs from the boiler. Furthermore, although the Statement of Basis indicates that methanol is the single most abundant HAP, AP-42, Chapter 1.6 does not even list emission factors for methanol. It is unclear how methanol emissions were calculated for the purposes of determining whether the mill is a major source of HAPs under the CAA.

The EPA itself has noted the significant downfalls in relying on AP-42 emission factors to calculate potential emissions from existing sources. As the agency stated:

> An AP-42 emission factor is a value that roughly correlates the quantity of a pollutant released to the atmosphere with an activity associated with the release of that pollutant. The use of these emission factors may be appropriate in some permitting applications, such as establishing operating permit fees. However, EPA has stated that AP-42 factors do not yield accurate emissions estimates for individual sources. *See In the Matter of Cargill, Inc.*, Petition IV-2003-7 (Amended Order) at 7, n.3 (Oct. 19, 2004). Because emission factors essentially represent an average of a range of facilities and of emission rates, they are not necessarily indicative of the emissions from a given source at all times;

[9] AP-42 Chapter 1.6 is available online at http://www.epa.gov/ttn/chief/ap42/ch01/final/c01s06.pdf. The EPA has stated that rating of "D" "means that it was developed from a small number of facilities, and there may be reason to suspect that the facilities do not represent a random or representative sample of the industry." See, *In the Matter of Chevron Products Company, Richmond, California Facility*, Petition No. IX-2004-8 (March 15, 2005) at 24.

> with a few exceptions, use of these factors to develop source-specific permit limits or to determine compliance with permit requirements is generally not recommended.

See, *In the Matter of Chevron Products Company, Richmond, California Facility*, Petition No. IX-2004-8 (March 15, 2005) at 23-24 (emphasis added). In the same vein, the DENR's reliance upon AP-42 emissions factors to calculate the potential to emit for HAPs from the boiler is inappropriate, especially given the low rating of the emission factors in Chapter 1.6.

In response to this comment, the DENR simply asserted, "The use of EPA's AP-42 documents and those published by National Council of Air and Stream Improvement are an acceptable method to determine the potential to emit for hazardous air pollutants." Response to Comments at 6. Yet, as the EPA has flatly held, the use of AP-42 emission factors is not an acceptable method to determine the potential to emit for HAPs. Furthermore, since the emission factors relied upon have a low rating and especially since emission factors for methanol are not even listed in Chapter 1.6 of AP-42, the DENR's reliance upon AP-42 emission factors to estimate potential to emit for HAPs from the boiler is doubly unacceptable.

Section 112(a)(1) of the CAA Amendments of 1990 defines a major source of HAPs as:

> [A]ny stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants.

Under Title III of the CAA Amendments of 1990, major sources of HAPs are subject to MACT requirements. Thus, the failure of the DENR to accurately calculate potential to emit for HAPs from the boiler means the DENR's finding that the lumber mill is not a major source of HAPs and not subject to MACT requirements is wholly unsupported. The Administrator must

therefore object to the issuance of the Title V permit for the failure of the DENR and the Title V permit to ensure compliance with the applicable requirements under Title III of the CAA.

VI. Problems with Other Permit Conditions Warranting Objection by the Administrator

A. Condition 5.4

Petitioners raised concerns with reasonable specificity over the adequacy of Condition 5.4 in their comments on page 6 of their comments. Condition 5.4 requires the source to maintain a monitoring log that contains the following information:

1. The amount of fuel, in Btus, burned in Unit #1;
2. the actual operating time, in hours, of Unit #1;
3. The number of hours Unit #10 operated;
4. The volume of natural gas burned in Unit #10; and
5. The number of hours Units #2 through #9, #11, #12, and #13 operated.

Title V permit at Condition 5.4. Unfortunately, nothing in the Title V permit explains how this information is to be monitored, let alone "calculated and recorded" to ensure compliance with this Condition and/or the applicable requirements. For example, while Condition 5.4(1) requires the source to calculate and record the amount of fuel burned in Unit #1, nothing in the Title V permit explains how the source "shall calculate and record" such data. The Administrator must object to the issuance of the Title V permit due to the failure of the permit to explain how the source "shall calculate and record" the data required in Condition 5.4.

B. Condition 6.1

Petitioners raised with reasonable specificity concerns over the adequacy of Condition 6.1 in their comments on pages 6-7. Condition 6.1 states that, "This provision does not apply when the presence of uncombined water is the only reason for failure to meet the requirement." Title V Permit at Condition 6.1. Unfortunately, this statement renders Condition 6.1

unenforceable as a practical matter. Indeed, no monitoring requirements within the Title V Permit actually require monitoring the presence of uncombined water and/or its effects on opacity to ensure that this exemption (hereafter "uncombined water exemption") is properly utilized and not abused by Pope and Talbot. The Title V permit therefore fails to require sufficient periodic monitoring to ensure compliance with the limits and conditions of the permit, as well as the applicable opacity requirements, in violation of 40 CFR § 70.6(a)(3)(i)(B) and 40 CFR § 70.6(c)(1). As written, Pope and Talbot could claim that uncombined water is the cause for opacity violations and since no monitoring requirements exist in the Title V permit to verify this claim and/or ensure compliance with the exemption, it would be impossible to refute this claim and enforce opacity standards. The Administrator must object to the Title V permit because Condition 6.1 is unenforceable as a practical matter as no monitoring requirements exist to ensure compliance with the uncombined water exemption.

C. Condition 6.3

Petitioners raised specific concerns over Condition 6.3 in their comments on pages 7-8. Condition 6.3 is unenforceable as a practical matter due to the lack of TSP monitoring in the Title V permit. The Title V permit fails to require sufficient periodic monitoring of TSP and/or monitoring that ensures compliance with TSP limits. The Title V permit in fact requires no actual monitoring of the amount of TSP emissions released into the atmosphere. Without any monitoring of TSP emissions, the limits set forth at Condition 6.3 are unenforceable as a practical matter and/or fail to ensure compliance with the applicable requirements and the Administrator must object to the issuance of the Title V permit.

In response to Petitioners' comments, the DENR raised several arguments attempting to discount Petitioners' concerns, all of which are invalid, flawed, and must be set aside by the

Administrator through an objection. To begin with, DENR stated, "Permit condition 7.6 requires Pope and Talbot to stack test several units to demonstrate compliance with the total suspended particulate limit." Response to Comments at 10. One-time performance testing, however, fails to constitute sufficient periodic monitoring in accordance with 40 CFR § 70.6(a)(3)(i)(B). Indeed, in Appalachian Power Co. v. Environmental Protection Agency, the Court of Appeals for the D.C. Circuit specifically held that a one-time performance test failed to constitute sufficient periodic monitoring, stating:

> State permitting authorities therefore may not, on the basis of EPA's Guidance or 40 CFR § 70.6(a)(3)(i)(B), require in permits that the regulated source conduct more frequent monitoring of its emissions than that provided in the applicable State or Federal standard, unless that standard requires no periodic testing, specifies no frequency, or requires only a one-time test.

Appalachian Power Co. v. Environmental Protection Agency, 208 F.3d 1015 (D.C. Cir. 2000) (emphasis added). Thus, one-time testing, such as the performance testing required by Condition 7.6 in the Title V permit, fails to constitute sufficient periodic monitoring in accordance with 40 CFR § 70.6(a)(3)(i)(B), contrary to the DENR's assertions.[10] The Administrator must therefore object to the issuance of the Title V permit.

The DENR further claims that, "Permit condition 8.1 requires Pope and Talbot to monitor the visible emissions from each unit, which is used to indicate if particulate emission limits are in compliance." Response to Comments at 10-11. However, this argument is baseless because nothing in the Title V permit states that compliance with opacity limits indicates and/or can be used as a surrogate for compliance with TSP limits in this case. Nothing in the Statement of Basis or any other supporting permit documentation indicates that compliance with the 20%

[10] Condition 7.6 is also flawed in several ways that warrant an objection by the Administrator, as explained under Section I(B) of this petition.

opacity limit will, in fact, limit TSP emissions below the allowable limits set forth at Condition 6.3. The DENR can't simply claim, without any supporting information, such as basic correlation data, that compliance with the 20% opacity limit automatically indicates compliance with the TSP limits set forth at Condition 6.3.

In order to support the use of opacity to demonstrate compliance with the applicable TSP limits, the DENR must show a correlation exists between opacity and TSP emissions that would ensure compliance with the limits at Condition 6.3. Furthermore, the Title V permit must explicitly state that compliance with the TSP limits at Condition 6.3 is based on compliance with the opacity limit at Condition 6.1. In this case, no correlation has been demonstrated by the DENR and the Title V permit fails to state that compliance with TSP limits is based on compliance with the 20% opacity limit.[11] The Administrator must therefore object to the issuance of the Title V permit.

In sum, the Title V permit fails to require sufficient periodic monitoring of TSP emissions and/or monitoring that ensures compliance with the TSP limits at Condition 6.3 in accordance with 40 CFR § 70.6(a)(3)(i)(B) and 40 CFR § 70.6(c)(1). The Administrator must therefore object to the issuance of the permit because of its failure to comply with the applicable requirements.

D. Condition 6.5

Petitioners raised specific concerns over Condition 6.5 in their comments on page 8. Condition 6.5 is unenforceable as a practical matter because "manufacturer's specifications" are not defined and/or referenced. It is thus unclear exactly how the control devices listed in Table 1

[11] As already explained in this petition, the Title V permit also fails to require sufficient periodic opacity monitoring and/or monitoring that ensures compliance with opacity limits. Thus, the reliance upon opacity monitoring to ensure compliance with TSP limits is further inappropriate.

of the Title V permit are to be operated and how the polluter is to ensure compliance with this Condition.

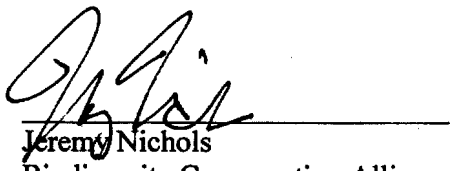
While manufacturer's specifications may be proper methods of operation and maintenance, in this case it is unclear what these specifications may be, from what source they are derived, and whether they are subject to revision and/or modification. As a practical matter, it is impossible to ensure the control devices listed in Table 1 of the Title V permit are properly operated and maintained and that the requirements of Condition 6.5 are met. The Administrator must therefore object to the issuance of the Title V permit.

CONCLUSION

The Title V permit for Pope and Talbot's lumber mill fails to prevent significant deterioration of air quality, fails to follow permit modification procedures, fails to require adequate opacity monitoring, fails to ensure prompt reporting of permit deviations, fails to protect air quality from toxic air emissions from the mill, fails to ensure compliance with particulate matter limits, and fails to ensure compliance with the CAA in other ways. Petitioners therefore request the Administrator object to the Title V operating permit proposed for issuance by DENR for Pope and Talbot's lumber mill. As thoroughly explained, the proposed permit fails to comply with the requirements of the CAA and other applicable requirements. The Administrator thus has a nondiscretionary duty to issue an objection to the proposed permit within 60 days in accordance with Section 505(b)(2) of the CAA.

Dated this 6th day of April, 2006.

Respectfully Submitted,



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EXHIBITS TO PETITION

1. Proposed Title V Operating Permit for Pope and Talbot, Inc. Lumber Mill, Issued December 22, 2005
2. Statement of Basis for Title V Operating Permit for Pope and Talbot's Lumber Mill
3. Comments on Draft Title V Operating Permit for Pope and Talbot's Lumber Mill (November 11, 2005)
4. South Dakota Department of Environment and Natural Resources Response to Comments (December 14, 2005)
5. EPA Region 7, Policy on Periodic Monitoring for Opacity (April 18, 1997)