1 2	MARC CHYTILO Law Office of Marc Chytilo	
	Post Office Box 92233 Santa Barbara, California 93190	
3	Telephone: 805.682.0585	
4	Facsimile: 805.682.2379	
5	Attorney for Petitioners	
6	Susie Collins and Scott Enright	
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9	BEFORE THE ADMINISTRATOR UNITED STATES ENVIRONMENTAL PROTECTION AGENCY	
10	SUSIE COLLINS and SCOTT ENRIGHT,	)
11	Petitioners,	)
12	V.	)
13	STEPHEN L. JOHNSON, ADMINISTRATOR	Application for Initial Permit No. 0625-01
14	of the United States Environmental Protection	) Covered Source Permit No. 0625-01-C
15	Agency,	)
16	Respondent.	)
17		)
18		
19	PETITION REQUESTING THAT THE ADMINISTRATOR OBJECT TO ISSUANCE OF THE PROPOSED TITLE V OPERATING PERMIT FOR TRADEWINDS FORESTRY PRODUCTS	
20		
21		
22	Pursuant to Section 505(b)(2) of the Clean Air Act ("CAA"), 40 C.F.R. § 70.8(d), and applicable	
23	Federal and State regulations, Susie Collins and Scott Enright hereby petition the Administrator of the	
24	U.S. Environmental Protection Agency ("EPA") to object to the proposed Title V operating permit	
25		
26	("Title V permit") issued by the Environmental Management Division of the Clean Air Branch, Hawaii	
27	Department of Health ("DOH"), for the Tradewinds Veneer Mill proposed in Ookala, Hawaii.	
28	Petitioners urge the EPA Administrator to object because Tradewinds' permit fails to ensure compliance	

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with the Federal Clean Air Act, State permitting requirements and other applicable requirements. Under such circumstances, EPA is under a duty to object. *See* 42 USC § 7661d (b)(1) CAA § 505 (b)(1), 40 C.F.R. § 70.8(c).

This petition is timely filed within sixty days following the end of U.S. EPA's 45-day review period as required by Clean Air Act § 505(b)(2) and 40 C.F.R. § 70.8 (d); EPA is required to grant or deny this petition within 60 days.

It is not permissible for EPA to defer to state authority regarding the adequacy of a Title V permit; if the permit violates the CAA, the Administrator <u>must</u> object. CAA § 505(b)(2); *New York Public Interest Research Group v. Whitman* (2d Cir. 2003) 321 F.3d 316, 333, *quoting* 136 Cong. Rec. S16, 895, S16, 944 (1990) ("'the Administrator is required to object to permits that violate the Clean Air Act. This duty to object to such permits is a nondiscretionary duty. Therefore, in the event a petitioner demonstrates that a permit violates the Act, the Administrator must object to that permit."')

A Title V permit violates the CAA if it fails to ensure compliance with 'applicable requirements' (42 USC § 7661c (a), CAA § 504 (a)), including but not limited to: any standard or other requirement under sections 111 and 112 of the Act; any standard or other requirement provided for in the applicable implementation plan; and any standard or other requirement of the regulations promulgated to protect stratospheric ozone under title VI of the Act (40 C.F.R. § 70.2).

Tradewinds' draft Title V permit violates the CAA in that it fails to ensure compliance with applicable requirements in section 112 of the CAA, Hawaii rules limiting emissions of hazardous air pollutants (HAPs), and MACT requirements contained in 40 C.F.R. § 63.43. The Permit further violates the CAA in failing to provide for monitoring capable of ensuring compliance with emissions limitations for HAPs. Moreover the Permit fails to properly identify and consider all Project emissions of VOCs and NOx, omitting some emissions sources, understating others, and ultimately failing to require

compliance with BACT requirements for NOx and VOCs. The failure to properly quantify the total Project emissions avoids the proper application of New Source Review requirements, contained in the Hawaii Administrative Rules (HAR) Title 11, Chapter 60.1, that properly apply to this Project.

In light of these numerous permit deficiencies, construction and operation of the Tradewinds facility violates the Hawaii SIP, the State's Title V permitting program requirements, and the minimum standards for permits established under the Act and Part 70 regulations, and poses a risk to human health and the quality of Hawaii's environment. Because the proposed permit is not in compliance with the applicable requirements and the requirements of Part 70, the EPA is under a duty to object to this Permit, and must direct that this permit application be subject to the state's Title V permitting process as a Major Source.

### BACKGROUND

The Tradewinds Veneer Mill and Cogeneration facility ("Tradewinds Facility") will use mainly eucalyptus wood to make veneer, then utilize the waste eucalyptus wood and other waste materials gathered from around the island as fuels to run a power generating facility; major equipment includes a veneer dryer and a cogeneration boiler. Based on generic AP-42 emissions factors, air pollution emissions from the facility are expected to be considerable, including HCl emissions exceeding CAA and Hawaii Administrative Rules (HAR) Major Source thresholds for hazardous air pollutants and criteria pollutants. Moreover, published research establishes that combustion of eucalyptus wood results in considerably higher emissions of HCl than associated with other woods, and it is self-evident that eucalyptus wood contains high concentrations of aromatic oils that leads to increased VOC emissions during the drying process.

Following the initial public comment period and Petitioners' initial petition to the Administrator, the applicant and/or State revised the permit and recirculated it as a synthetic minor source permit,

claiming to rely on a 5.7 tpy cap on HCL emissions, but actually failing to include adequate controls, impose proper emissions and source testing, require adequate monitoring, and specify adequate permit limitations to assure that this emissions cap would not be exceeded. The inadequate limitations fail to ensure that emissions will not exceed the major source threshold, and consequently, the source should be recognized as a major source.

Further, the revised permit fails to include best available control technology for this source category as required by the Clean Air Act and the Hawaii state implementation plan (SIP).

The town of Ookala is a hamlet of 94 homes, located on the Hamakua coast on the Island of Hawaii. The Tradewinds facility is proposed to be located in the midst of this residential community. As evidenced from the public comments and testimony, most residents of Ookala oppose the proposed permitting of the facility, citing concerns about health, safety, welfare and overall quality of life concerns. Many residents of Ookala experience respiratory illnesses including asthma; many residents of Ookala are elderly, and a considerable portion of the community are ethnic and/or cultural minorities. The Tradewinds facility threatens the quality of Ookala's air, the integrity of its natural ecosystems, and the health of its population. Significantly, additional permit controls mandated by Federal and State authority could alleviate these concerns.

Petitioners are residents of Ookala who are deeply concerned that deficiencies in the Title V operating permit for the Tradewinds facility does not ensure compliance with requirements of the CAA and the Hawaii permitting program and that operation of the Tradewinds facility will adversely and disproportionally impact air quality in Ookala, unnecessarily endangering the health, safety and welfare of themselves and their community. Petitioners and other concerned residents of Ookala raised numerous objections to the adequacy of the Title V permit proposed for the Tradewinds facility during state proceedings; this petition is based on those objections that were raised with reasonable specificity during the public comment period.

#### **GROUNDS FOR OBJECTION**

Following are the specific objections that Petitioners have to the adequacy of Tradewinds' proposed Title V permit. These objections make clear that the permit is not in compliance with the Clean Air Act and the state's Title V permitting program, and therefore EPA must object to the proposed permit. 40 C.F.R. § 70.8(c); *Whitman, supra*, 321 F.3d at 333.

The Clean Air Act defines a Major Source of hazardous air pollutants as "any stationary source...that emits or has the potential to emit ...10 tons per year of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants ["HAPs"]." 42 USC § 7412 (a)(1); CAA § 112 (a)(2). Hawaii uses the same definition. HAR § 11-60-1 (defining "Major Source"). The Tradewinds Facility qualifies as a Major Source of HAPs, as defined by the CAA and the HAR.

 The Project has Potential to Emit Emissions in Excess of Major Source Threshold and is Subject to Major Source Review

EPA has issued at least three guidance documents $^1$  addressing appropriate strategies to artificially limit Potential to Emit (PTE) for otherwise major sources to allow them to enjoy minor source status. EPA must have a "direct right" to enforce these limitations, and they "must be enforceable as a practicable matter".

a. EPA's Legal Enforceability

The HCL emissions limit is unenforceable during the period of initial startup until source testing is completed and reporting provided. Initial source testing must be performed not later than 60

<sup>&</sup>lt;sup>1</sup> EPA's Potential to Emit Guidance is found in three Memoranda dated January 25, 1995 and restated August 25, 1996 and July 10, 1998.

days after reaching maximum production rate or 180 days, and reporting is due 60 days after source testing. Thus the facility's emissions will not be known, and cannot be enforced, until a date as late as 240 days after initial startup. Thus nearly 15% of the life of the five-year Title V permit will expire before these requirements become enforceable. During this period, the permit terms are not federally enforceable. After-the-fact enforcement does not remedy the air pollution or human health consequence, and Petitioners are gravely concerned that were this facility ever constructed and operated even initially, the operator would seek to achieve permit modifications to allow the much higher actual emissions. Since the State has failed to properly quantify projected emissions and secure adequate initial and on-going emissions, and to impose practically and federally enforceable emissions limitations, EPA cannot adequately enforce these limitations and thus must object to this permit and achieve its revision.

The response to comments (RTC) attempts to explain away this problem with the statement "In advance of approaching the operational limits, the permittee will be aware of the amount of fuel that can be consumed and if necessary will be required to curtail operations." RTC 9.b., P. 36. This conclusion lacks a foundation. The source will almost certainly seek to gradually ramp up production to break in the new facility and ensure the best possible conditions for the initial source test. Thus, they will avoid achieving maximum operations, avoiding triggering the testing deadline and thereby operating the facility at lower levels of operation for a longer period of time. If, as shown by eucalyptus emissions factor data submitted by Petitioners during the first permit review and Petition period, the eucalyptus emissions factors are eight times higher than the levels relied upon by the State in drafting the permit, the source will have well exceeded even its annual emissions limits before the initial source test is completed.

b. The Permit is not Practically Enforceable

Not only is the boiler HCL emissions limits unenforceable as a legal matter, it is also not practically enforceable. As noted, the source could exceed its entire annual emissions limitation in the 240 days before the initial source testing data is released to the State. The failure to prevent this potentiality, which has a considerable probability of occurring given higher chloride concentrations present in eucalyptus and other proposed waste wood streams, indicates this permit's limitations, as a practical matter, cannot be enforced. As such, it violates EPA's guidance for determining Potential to Emit and thus cannot be relied upon to ensure the project's HCL emissions will not exceed 10 tpy. This should be considered a major source or the testing protocols be modified to ensure emissions will not be allowed at such levels before limitations become effective.

c. Boiler Controls Should Reduce Permissible Emissions Limits

The State improperly refused to apply Selective Non-Catalytic Control (SNCR) as best available control technology (BACT) for this source. Petitioners submitted substantial evidence demonstrating that SNCR has been successfully employed as BACT in over a dozen different facilities throughout the nation, including attainment areas, nonattainment areas and maintenance areas. There is no justification for giving Tradewinds preferential treatment in its air pollution control technology requirements for this facility, in contravention of Clean Air Act goals and purposes.

Further, the State incorrectly asserts that the BACT requirements for this project are "stateonly" requirements. Response to comments 2.c. The Hawaii Administrative Rules clearly adopt the federal definition of BACT at HAR § 11-60.1-1 states:

"Best available control technology" means an emissions limitation including a visible emission standard based on the maximum degree of reduction for each pollutant subject to regulation approved pursuant to the Act which would be emitted from any proposed stationary source or modification which the director, on a case-by-case basis, taking into

account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. [ ]" HAR § 11-60.1, along with the rest of Chapter 60 of Title 11 of the Hawaii Administrative Rules, was adopted into the Hawaii SIP and 40 C.F.R. Part 52. See, 70 Federal Register 44852 (August 4, 2005) (identifying federally enforceable provisions of the HAR, and for "EPA approved State source specific requirements" stating "none."). See also USEPA Region 9's SIP page,

http://yosemite.epa.gov/R9/r9sips.nsf/Agency?readform&count=500&state=Hawaii&cat=Hawaii+DOH <u>-Agency-Wide+Provisions</u>, (establishing the federal applicability of BACT to all sources subject to HAR § 11-60.1).

d. The Variable Fuel Mix Undermines Reliance on Initial Source Testing

Tradewinds' comments, disclosed for the first time after this permit was issued by the State, establishes that Tradewinds intends to seek relief from many permit limitations at the first opportunity $\langle^2$ and further intends to burn a completely unregulated and opportunistic fuel source. RTC 11.E.b. contains reference to Tradewinds' plan to burn "crates, pallets, wood shop trimmings and resort tree trimmings." Id., p. 52. Pallets are unfavorable as a fuel source due to the potential contamination from spilled chemicals, chemically treated wood, and similar contaminants. According to Tradewinds, treated and waste wood have the highest chlorine content of wood tested in the Phyllis database upon which Tradewinds urges the State rely. Letter Byran to Harai, September 10, 2007 (unnumbered original). The testing protocol ignores this inconsistency, and mandates testing only when other fuels are in use.

<sup>&</sup>lt;sup>2</sup> Tradewinds' comments are responded to throughout the response to comments, but the most glaring comments appear at § 11.B.-J. where Tradewinds objects to many special conditions in the permit.

This is a major flaw, as the permit's emissions limitations rely exclusively on calculated and projected emissions levels, and do not include provisions for continuous emissions monitoring of HAPs and VOCs. This protocol allows the permit limits to be established using one fuel, but operations to be fueled by other fuels, at least some of which possess markedly higher chlorine concentrations.

Requirements established at 40 C.F.R. §§70.6 (a)(3) and 71.6 (a)(3) "specifically note that each permit shall contain periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit." EPA Periodic Monitoring Guidance, pp. 3-4. HAR § 11-60.1-90 (7)(B). The monitoring provided for in the Tradewinds permit consists exclusively of initial and annual source performance testing, which is not sufficient to ensure compliance with these standards.

The public and EPA have been effectively excluded from critical fuel information having a material effect on Project emission. This permit has been crafted based on one relatively dirty fuel source, when in fact an even dirtier fuel source is contemplated for use by the operator. The limitations, which are founded on limited source testing of only one fuel source, are illusory in light of the operator's proposed use of other fuels they themselves admit have higher concentrations of pollutants. Either the testing must continuously reflect the fuel stream, such as through continuous emissions monitoring, or all new fuels should be subjected to pre-burn testing, with regular verification, to ensure permit compliance.

e. Additional Limitations Are Necessary

i. Pollution to energy parameter

It is unclear why the permit's emissions limits for the boiler do not include a lb/MMBtu limitation, in addition to the lb/hour limit. The applicant committed to the State "to limit HCL emissions from the O'okala boiler to no more than 0.010 lb/MMBtu." Letter, Bryan to Nolan Hirai, September 10, 2007. This omission precludes a further monitoring metric appropriate to ensure adequate monitoring of this source. See, generally, *Sierra Club v. EPA*, 536 F.3d 673 (D.C.Cir., 2008). This additional monitoring parameter should be included in the permit's limitations.

ii. More frequent compliance testing and monitoring

HAR § 11-60.1-90 (7)(B) and applicable federal regulations require that permits contain testing and monitoring requirements sufficient to yield reliable data that is representative of the source's compliance with its permit. The infrequent testing provided for in Tradewinds proposed permit cannot be expected to yield reliable data given the considerable variability in eucalyptus wood constituents and their emissions levels, and therefore does not ensure compliance with HAR § 11-60.1-90 (7)(B) and applicable federal regulations.

This Permit fails to adequately limit Potential to Emit at this source to less than 10 tpy of HCL through enforceable, practical limitations to ensure emissions will not exceed major source thresholds. Under these circumstances, it is incumbent upon EPA to object to this permit as inconsistent with Title V regulations, the Hawaii SIP, and the Clean Air Act.

2. Cumulative HAP Emissions are Not Properly Limited

While the permit proposes a specific limit on HCL and various monitoring procedures to purportedly try to keep the HCL emissions below 10 TPY from the boiler under certain conditions, the permit contains no such detail for the other HAPs, which total 24.9 TPY, extremely close to the 25 TPY trigger for Major Source treatment. The state's response to comments do not refute the conclusion that Project HAP emissions are calculated at 24.9 tpy.

The additional HAPs are principally emitted as part of the VOC emissions from the veneer dryer. The calculations are deeply flawed and unreliable, necessitating EPA objection to this permit.

## a. Annual Dryer VOC Limits

The permit and response to comments fails to properly quantify dryer VOC emissions and constitute an enforceable and practical limit on the facility's Potential to Emit. There is no annual limit, only a 3 hour average limit, even though the response to comments admit that the AP-42 emissions factors could define the facility as a major source.

# b. Eucalyptus VOC Emissions Profile

The State's calculation of emissions is deeply flawed by the assumption that because eucalyptus is classified as a hardwood, generic hardwood emissions factors may be employed. As shown previously regarding combustion of eucalyptus in the boiler, eucalyptus is not comparable to other north American hardwoods due to its high concentrations of volatile oils and other constituents. These higher concentrations equate directly to higher VOC emissions, however it appears the state completely ignored these differences. The applicant is given the opportunity to hide this increased emissions factor by the State's employment of a cursory initial testing regime and the absence of any further mandatory corroborative or operational testing. Permit, §G.4. This failure infects not only major source treatment for criteria pollutants, but also for the HAP constituents present in these VOCs. If all VOC emissions are HAPs, the hourly average limitation, even if not abused, would translate to HAP emissions in excess of 29 tpy, compelling major source treatment.

c. Other Facility Emissions Count Towards Facility Classification

The RTC recites that mobile source emissions are not subject to permit, but the emissions from these activities, which are exclusively attributable to the source, must be included in the Source's emissions inventory and considered for purposes of determining classification.

HAR §11-60.1-82 does appear to exempt the mobile source emissions from <u>regulation</u>, however they should be <u>included in the emissions inventory</u> for the source. Without the stationary source, these

emissions would not occur, thus it is incumbent upon the State to integrate these emissions into the stationary source's emissions inventory for purposes of determining whether the covered source exceeds major source thresholds. This conclusion is supported by the Hawaii SIP, §11-60.1-82, which provides as follows:

(e) The owner or operator of any insignificant activity identified in subsections (f) and (g) may begin construction, reconstruction, modification, or operation of the activity without first obtaining a covered source permit, provided:

(1) The insignificant activity is not by itself subject to subchapters 8 or 9;

(2) The insignificant activity does not cause a noncovered stationary source to become a major source;

Thus, the SIP contemplates that stationary sources emissions cannot cause a non-major stationary sources to become a major stationary source. This can only occur by counting the §11-60.1-82 exempted mobile source emissions towards the stationary source's emissions inventory. The State has failed to observe the requirements of the SIP and thus, EPA must object to the Tradewinds Permit.

d. Errors in Dryer Emissions Calculations

The VOC emissions from the facility are understated because dryer emissions were based on veneer 3/8" thick (Addendum to Initial Application, Table 1), whereas the Project Description indicates that veneer will be cut to a thickness of 1/8" (Revised Initial Application, p. 2-1). A thinner slab has more surface area and therefore more VOCs can be expected to be released during the drying process. Additionally, VOC emissions are calculated based on an annual dryer throughput of 83,000 Msf (Revised Initial Application, p. 4-14), when the actual throughput will be 106,189 Msf (Addendum to Revised Initial Application, p. 4-2).

These discrepancies suggest that VOC emissions from the dryer may in fact be much higher than indicated by the emission factor used in the Permit, and therefore that the Tradewinds facility will emit considerably greater VOC emissions than considered in the permit and exceed Major Source Thresholds.

3. Initial Source Testing Calibration must use Maximum Concentrations

The Initial source testing for both the boiler and dryer allow averaging the maximum results from three separate test runs. Given the variable and dynamic fuel source, the permit's status (as major or minor source) and the project's operational limits should be set based on the maximum observed concentrations during initial source testing, and using a representative sample of the actual fuel source. This is particularly important for the project's HAP total emissions, which are calibrated, under the permit, at 24.9 tpy. This manipulation of the PTE artificially seeks to maximize production and thus emissions, but retain the economic advantage as a minor source. The effect is to externalize the costs of the air pollution from the Tradewinds facility upon the residents of Ookala. This facility is and should be regulated as a major source.

### 4. Inadequate Statement of Basis

Petitioners noted that despite numerous requests, the State never provided a statement "that sets forth the legal and factual basis for the draft permit conditions." 40 C.F.R. § 70.7(a)(5).

In responses to comments, the State contends that their listing of the legal authority for each permit condition suffices meet this requirement, (RTC 14.b.), however this ignores the factual basis that must publicly underlie each permit condition.

The responses to comments also refers, amorphously, to "the Administrative Record" for a "summary of the proposed changes" but this neither constitutes an adequate reference to the factual basis nor is the State's assertion that mere presence of such information in the Administrative Record adequate compliance with this requirement. There is no apparent supplementation of the technical

reports that were submitted as part of the initial application. Petitioner has made repeated requests for all technical information submitted by the applicant and all determinations made by the State in its review of this application, and no such additional analysis has been provided.

5. Water Supply

Petitioners raised concerns for the adequacy of the water supply for the Project's cooling towers, but the response to comments failed to address this issue. Even with the drift eliminator system suggested in response to Petitioners' comment, the project will consume and release in the form of water vapor in excess of 2,000,000 gallons of potable water per year, yet has no demonstrated source of water. In the absence of a water supply adequate to accomplish process cooling, project emissions will be much greater, and thus the permit should not issue until the water supply is identified and its adequacy established.

6. Prior Petitioner Incorporated by Reference

Petitioners hereby incorporate by reference their prior Petition to the Administrator, filed February 4, 2008. As of this date, no substantive response by the Administrator has been received, and many of the issues raised therein remain ripe and applicable to the permit at issue. Petitioners restate all such applicable components of the prior Petition.

### CONCLUSION

In sum, the Permit is not in compliance with the Clean Air Act and applicable requirements in State and Federal regulations. The facility is a major source of hazardous air pollutants but due to improper and unjustified lowering of emission factors, the Permit is not subject to Major Source procedures that is necessary to ensure that the requirements germane to hazardous air pollution control are implemented. The permit fails to include practically enforceable limitations on emissions, and it is likely that the Project's total emissions will exceed major source thresholds from either HCL exceeding 10 tpy, and/or total HAPs exceeding 25 tpy total emissions will exceed major source thresholds from either HCL exceeding 10 tpy, and/or total HAPs exceeding 25 tpy. From a practical perspective, this source could be more completely controlled with the addition of Selective Non-Catalytic Controls on the boiler and comparable BACT on the veneer dryer emissions. Residents of Ookala are asked to endure the health impacts of excessive and completely avoidable air pollution, regardless of regulatory requirements. Due to these and other deficiencies, the Administrator must object to the Title V permit for the Tradewinds Veneer Mill and Cogeneration facility in Ookala, Hawaii.

Respectfully submitted on this 3<sup>rd</sup> Day of November, 2008.

MARC CHYTILD Law Office of Marc Chytilo Attorneys for Petitioners SUSIE COLLINS and SCOTT ENRIGHT