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September 29, 2008

Siskiyou County Planning Commissioners

Ms. Terry Barber, Planning Director

Siskiyou County Dept. of Public Health & Community Development – Planning Division

PO Box 1085

Yreka, CA 96097

**Comment on Final Environmental Impact Report for
Roseburg Biomass Cogeneration Plant in Weed, CA Project # UP-07-05
for Public Hearing - September 30, 2008 - 9:00 a.m., Yreka, CA**

Dear Planning Commissioners, Ms. Barber, and whom it may concern,

Please incorporate the following comments for the Public Hearing on September 30, 2008, regarding the Roseburg Biomass Cogeneration Plant (RBCP) Final Environmental Impact Report.

Overview

The Final Environmental Impact Report (FEIR) for the Roseburg Biomass Cogeneration Plant is deficient and inadequate, containing numerous errors and omissions, and a failure to follow the mandates of the California Environmental Quality Act (CEQA), particularly with regard to air quality impacts, noise impacts, trucking and traffic impacts, and cumulative impacts. The Findings in the Staff Report are flawed, as will be further described in detail in these comments.

The Commissioners should not and cannot in good faith approve and certify this project with the present Final Environmental Impact Report (FEIR) and Findings.

The Final EIR improperly fails to identify significant impacts, fails to include baseline air quality data for Weed, fails to properly describe the environmental setting, has procedural problems, glosses over substantive comments with inadequate or invalid responses, and offers ineffective and inadequate mitigations. The EIR must be revised to include missing information and correct erroneous analysis, and then recirculated for the required 45 days, to allow adequate public review of newly disclosed significant information. Only by properly adhering to CEQA, with full public disclosure of all information, and with proper mitigations incorporated within the FEIR, can this project be legally certified. For example:

- The EIR neglects to disclose that the project's cooling towers might release deadly airborne Legionella bacteria that can be spread for miles ... a newly reported risk of industrial cooling towers.
- The EIR hides well known information that wood dust is a known carcinogen, as announced even on Roseburg Forest Products' website, and fails to assess the health risk this wood dust poses to its workers and neighbors.
- Baseline air quality data for Weed is suspiciously absent - therefore accurate air quality impacts of this project cannot be accurately assessed and mitigated. Even the county's own monitoring of PM10 data was not included in the EIR.
- The EIR fails to disclose other serious air quality impacts the project will exacerbate, including NOx, particulate pollution, dust, carcinogenic diesel exhaust emissions, global warming emissions, and odors.
- The FEIR does not adequately describe, analyze and mitigate for the CO2 emissions / global warming aspects of the entire project as now required by law, rationalizing that the science is "too young". The FEIR relies on outdated studies from the IPCC regarding carbon emissions from biomass burning that is now refuted by numerous other more recent studies and reports.
- Preparers of the Draft EIR withheld critical information until the public comment period was closed, only providing it at the last moment, and refused to allow the public its right to review significant new information for the minimum 45-day period (regarding the noise study prepared by Roseburg's consultant EORM)
- The EIR preparers improperly substituted a Roseburg-prepared, flawed noise study for one they contracted with the County to prepare but never did. Their EIR then underestimates the project's significant noise impacts on neighbors and related health disorders, choosing instead to deny facts that these noise impacts will be significant.
- Numerous public comments are responded to inadequately or not at all. Even though a comment appears to be "addressed", the FEIR response often has nothing to do with what the commenter wrote, or else provides an inadequate explanation.
- The DEIR fails to inform the public that nearby Beughton Creek wildlife habitat may be seriously polluted from discharges flowing from this project site through an existing drainage adjacent the project that flows to this creek. Nor does the EIR provide water quality mitigations to protect this creek.
- The DEIR does not disclose how loud the new electric turbine generator will be, as well as the noise generated by other project equipment.
- The DEIR does not reveal this project's inconsistency with the General Plan, a serious roadblock for this project, because it can only be approved if found consistent with the General Plan. A conditional use permit approval can not be allowed when the County doesn't have a current Noise Element and Circulation Element of its General Plan.

- The EIR does not disclose what routes the project's heavy trucks that carry wood for fuel will take through other Siskiyou County communities so that their citizens can consider the toxic diesel fume emissions and noise impacts those trucks will cause. The EIR also fails to include an analysis of increased truck traffic impacts at the busiest intersection in downtown Weed.
- The DEIR had several procedural noticing problems, including failing to identify significant impacts in the Notice, as required by CEQA. (Please see Endnote ¹)
- The Public has had little more than a week to review this FEIR and discover and comment on its inadequacies prior to the public hearing.

The following sections contain more detailed substantiation and description concerning the above points.

1. Health Impacts not disclosed

A. Legionnaire's disease

The DEIR and FEIR fail to inform the public that one of the most common sources of the Legionella Bacteria (the cause of Legionnaire's Disease) is from industrial cooling towers, such as the one Roseburg will be installing. Recent research in the *Journal of Infectious Diseases* show that water droplets containing Legionella Bacteria can travel up to 6 miles from its source, through airborne spread, and remain infectious. In 2003-04, 86 people were infected in France and 18 perished. The source was a cooling tower from a petrochemical plant, and some of the victims were 7 miles distant. And in 1976 the infamous "Legionnaires' disease sickened 221 Americans, causing the deaths of 34. From 8,000 to 18,000 people are affected per year from the disease in the US. This potential health impact is nowhere described or analyzed in the DEIR or FEIR.

B. Wood dust, a carcinogen

The FEIR fails to disclose and analyze the environmental or health impacts of wood dust. The FEIR states that wood dust is regulated, but the FEIR does not describe how wood dust will be generated throughout the project, the quantity that will be generated, its environmental and health impacts, and how it will be mitigated. This constitutes another failure to adequately describe the project, as well as mitigate for serious health impacts.

Weed resident Robert Hall provided comment that **wood dust** is carcinogenic. (Comment GP11-13) The FEIR evades this comment entirely and responds to a different issue by only saying: "There is no evidence that Roseburg's wood dust is finer or more dangerous than that generated by International Paper." (Final EIR p. 2-23) The FEIR must be Revised and recirculated to properly describe, evaluate, and mitigate for this impact. See the following footnotes and endnotes, containing Materials Safety Data Sheets (MSDS), (including one posted on Roseburg's

website), and other numerous publications and reports concerning the health impacts of wood dust.¹ and
Endnote ii

C. Health impacts from noise not described and mitigated

Noise impacts, as identified in the FEIR, already exceed standards in Weed, and this project, by any incremental increase in noise, therefore creates a significant impact. The health risks posed by these significant noise impacts have not been disclosed whatsoever in the EIR documents, nor mitigations offered. A large body of evidence exists citing health impacts from noise disturbances to people's sleep, mental and emotional well being, endocrine systems, immune systems, etc. Exposure to noise constitutes a health risk. There is sufficient scientific evidence that noise exposure can induce hearing impairment, hypertension and ischemic heart disease, annoyance, sleep disturbance, and decreased school performance.² Excess noise even when we sleep can increase blood pressure and increase heart rate, contributing to cardiovascular disease. Noise causes stress hormones to be released, effects the ability of children to learn, worsens some mental illnesses, and has social impacts such as aggression and argumentiveness.³ These impacts need to be described in the EIR, and the DEIR revised and recirculated with this important information for the public to review.

D. Health impacts from diesel truck exhaust disclosed and mitigated

For over a decade, CA has identified diesel exhaust particulate matter ("diesel PM") as a toxic air contaminant based on its potential to cause cancer, premature death and other health problems. Diesel exhaust also contributes to California's fine particulate matter (PM2.5) air quality problems. Children and the elderly are most vulnerable to the effects of diesel PM, and diesel emissions are responsible for the majority of California's known cancer risk from outdoor pollutants.⁴ Failure to more thoroughly analyze these impacts is improper under CEQA.

2. Procedural and substantial errors prevent approval of FEIR

The FEIR has now added substantial new information not originally included in the DEIR. This requires that the DEIR be recirculated for review, so the public has a chance to review this significant new information. These include:

¹ Wood Dust MSDS

www.ufpi.com/literature/wooddust-165.pdf

www.rfpco.com/pdfs/msds/WoodDust.pdf

www.collinswood.com/WoodProducts/Resources/MSDS_Wood_Dust.pdf

www.fctg.com/pdf/Ref_list2007.pdf

See numerous additional references on carcinogenic wood dust in Endnotes of these comments.

² *Noise Exposure and Public Health*, Willy Passchier-Vermeer and Wim F. Passchier. Environmental Health Perspectives, www.ehponline.org/members/2000/suppl-1/123-131passchier-vermeer/passchier-vermeer-full.html

³ *Quiet, Please! How Noise Pollution Could Send You to the Hospital*, Ursula Sautter and Mary Desmond Pinkowish, Ode, www.alternet.org/story/91463

⁴ <http://www.arb.ca.gov/research/diesel/diesel-health.htm>

- A. EORM's noise study that was never provided in the DEIR or its Appendices or the County's publicly viewable files during the period of public review.
- B. New noise contour maps that were added to the FEIR, not made available during the review period.
- C. Expershare's comment letter from 7-19-07 that was not published in the DEIR Appendices as were other comment letters, and
- E. A new acknowledgment that some existing noise impacts are already significant, etc. (See CEQA 21092.1; CEQA Guidelines 15088.5)⁵
- G. The DEIR and FEIR fail to adequately describe the environmental setting in terms of the project's drainage into Beaughton Creek, despite receiving public comment asking that this error be corrected. Only Boles Creek is identified.

3. Air quality – No baseline data; significant impacts not adequately assessed or mitigated

The DEIR and FEIR continue to be flawed as there exists no baseline data for Weed in either document. This is especially true for the *existing* RFP operations and the proposed expansion of this stationary source to allow for biomass electricity cogeneration. There is no air monitoring/data from the Weed area, where air pollution is greatest in the county, according to statements made by APCD staff. Baseline studies of air quality are needed. Disclosure is a fundamental requirement of CEQA. Only then can the impacts of the project be accurately assessed and mitigated. The current EIR mistakenly claims that the air impacts from this project are less than significant and thus the environmental review process has failed to provide any sort of protection in the form of mitigations to the community at greatest risk, the residents of Weed and nearby communities of Lake Shastina and Mount Shasta.

It is noteworthy that the DEIR's preparers chose to entirely ignore *all* the air pollution data collected and submitted by the public within the Expershare report submitted during project scoping in July 2007 by Greg Messer, which we incorporate by reference. All the DEIR states is that:

⁵ (a) A lead agency is required to recirculate an EIR **when significant new information is added to the EIR** after public notice is given of the availability of the draft EIR for public review under Section 15087 but before certification. As used in this section, the term "information" can include changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. "Significant new information" requiring recirculation include, for example, a disclosure showing that:

- (1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
- (2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
- (3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.
- (4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded. (Mountain Lion Coalition v. Fish and Game Com. (1989) 214 Cal.App.3d 1043)

(b) Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR.

Key sources of information used in the preparation of this section were obtained from the Air Quality Impact Assessment Report for the Boiler-Turbine Project at Roseburg Forest Products in Weed, California (Golder Associates 2008).

Further, the EIR fails to include PM10 data from Weed gathered by the APCD for 6 months in 2007. After requests from citizens, the mobile PM10 unit was relocated from Tule Lake to Weed Elementary School, to gather baseline PM10 data specifically because of the Roseburg project. This data has not been included in the DEIR, the FEIR, nor has it been made available to the public by the APCD, despite public records requests for this data.

As noted in the EIR, Siskiyou County is non-attainment for ozone. We stressed in our comments that the County was in a status of non-attainment for ozone to demonstrate that “the proposed project would increase emissions such as NOx that contribute to ozone impacts and that have not been sufficiently analyzed and mitigated.” The FEIR’s response found at OG 1-3 totally ignored the first two parts of this comment about (1) the non-attainment problem with excessive ozone pollution and (2) that the DEIR failed to analyze the project’s NOx emissions which would contribute to ozone pollution. Instead, it focused only on the selective non-catalytic reductive (SNCR) issue.

There are two basic flaws with the FEIS response to this comment, OG 1-3. First, CEQA is not satisfied when an EIR fails to disclose how large a significant impact such as NOx emissions may create and contribute to an already existing problem. Second, the EIR takes the position that the public doesn’t have a right to know about this potentially significant impact *now* during the EIR phase because the APCD will issue a permit *later*. However, the air permit cannot be issued until *after* the EIR is certified -- the air permitting process is dependent on the disclosure, the data, the findings, and the mitigations of the EIR. Therefore the EIR preparers are not following the mandates of CEQA by deferring this to a later permit process. The EIR describes the air permit as if all the permit conditions - including the application of SNCR technology - have been approved and are final, but this has **not** occurred.⁶ That is why we have requested that air mitigation measures be included in the Mitigation and Monitoring Plan which would include everything that the EIR claims would be in the air permit. This would include SNCR and all other forms of control technology, including the filtration to control diesel particulate matter emissions from fuel handling equipment, such as the bobcat and front loaders.⁷

The FEIR’s response is evasive about the County’s lack of ozone compliance. Both the DEIR and FEIR are flawed in failing to make findings of significant air impacts with the project and the mandated appropriate mitigations for that finding of significance. The EIR should be corrected and recirculated.

One serious problem with the Roseburg FEIR is the erroneous conclusion that all the air project impacts are less than significant. As mentioned, Siskiyou County is classified "non-attainment" since 2007 for ozone; thus any additional ozone from this Roseburg project's wood burning and diesel exhaust fumes would, according to CEQA, create a significant impact. But the DEIR and FEIR doesn't correctly recognize this significance. Accordingly, the DEIR and the FEIR fails to consider any project alternatives that are capable of reducing the ozone pollution.

⁶ The FEIR Response to OG 1-16 describes Air Permit Condition No. 12 ; The FEIR Response to OG 1-15 describes Air Permit Operation Condition No. 16. However, the FEIR Response OG1-3 does not refer to any specific permit condition although it claims that SNCR would be part of the air permit.

⁷ FEIR Response GP7-1 claims the project applicant would utilize this filtration system to control diesel emissions, however without a clearly written mitigation measure, this is simply an *unenforceable* claim.

The smoke particulate pollution (PM10) in Weed also may also very well exceed state standards - except that this information is not available because the EIR fails to include the new six months of PM10 data collected nearby at the Weed Elementary School since last fall (2007). This baseline data needs to be made available, or remeasured, to properly complete the air quality assessment. If PM10 pollutants are in fact in non-compliance with regulatory air standards, then any *additional* smoke pollution would also be considered significant. A Finding of Significant Impact would mandate mitigation measures that currently do not exist in the DEIR and FEIR . Without this data, the conclusions drawn in the EIR process are based on incomplete data, desired conclusions and the lack of existing science.

Environmental baseline is lacking

MSBEC commented the DEIR fails to disclose current air emissions at RFP and thus fails to comply with CEQA requirement to reveal an environmental baseline.

But the FEIR p. 2-26 now only responds (to comment OG1-2):

“Existing facility operations were included as part of the ambient background concentrations for analysis of the direct project impacts. Chapter 4 of the Draft EIR discusses the cumulative impacts associated with the proposed project.

Mitigation is not appropriate as the effects of the proposed project are not cumulatively considerable; i.e., the incremental effects of the proposed project are not considerable when viewed in connection with the effects of past, present, or reasonably foreseeable future projects.”

This Response is evasive and erroneous.

1) The DEIR p. 3.2-17 claims to “discuss existing air quality conditions”. That claim is illusory because it only includes air data from Yreka, Mt. Shasta, and Lava Beds, and none from Weed. Weed residents are the most harmed. Nowhere in the DEIR are existing air pollutant emissions from RFP revealed. The FEIR’s response that RFP’s emissions were included in the DEIR is meaningless, when the APCD’s outdated measurements only up to 2006 were taken seven, thirty or more miles away!

2) The FEIR then erroneously points to Chapter 4 of the DEIR as if RFP’s current emissions can be found there. But the DEIR (pp. 4-5 to 4-6) provides no disclosure of current emissions. The DEIR even admits that it doesn’t analyze “criteria pollutants” (such as PM10 and ozone):

Existing facility operations were considered part of ambient background concentrations for evaluative purposes. Since there were no criteria pollutant increases above the significance thresholds established by the SCAPCD, no further cumulative impact analysis for criteria pollutant emissions was conducted.

The DEIR and FEIR never identified nor quantified the large amounts of dust that RFP currently emits in Weed neighborhoods, and that numerous residents have repeatedly complained about. That dust is not measured by the APCD’s PM10 testers because it is comprised of particles generally larger than 10 microns. There already are existing air impacts in the surrounding neighborhood as documented in written and oral comments. It is a very important point in CEQA in that this supports our statements that the EIR is defective in describing the baseline/existing conditions—these oral and written comments from the neighbors are contrary to the findings in the EIR.

The FEIR inadequately addressed our comments on these and future increased fugitive dust emissions. The FEIR Response at OG 1- 16 claims that it would be regulated by air permit condition 12 and

mistakenly claims that “it is not appropriate for characterization as an additional mitigation measure.” A regulation or condition does not waive the need for mitigations, if anything, the regulation sets the CEQA standards that the mitigation measures must meet.

The DEIR also doesn't disclose any measurement data on the existing “toxic air contaminants” (such as found in diesel emissions). It only concludes, without evidence, that the project will reduce such TACs.

Nor are the project's existing trucking emissions disclosed in the DEIR.

We strenuously object to the blatant lack of such important information in this EIR, which seems an attempt to evade the CEQA requirement to gather and publicly disclose that air quality data. In the absence of such air quality data, Jones and Stokes had a responsibility to do the measurements themselves, or contract it out, instead of concluding that “it doesn't exist in Weed” and then base air analysis on averages found in other distant Siskiyou County locations.

A major source of RFP's existing diesel pollutants is the freight train that delivers plywood from the facility. Yet the DEIR is absolutely silent on that significant source of air pollution from freight train exhaust. (DEIR 3.2-13, etc.) The DEIR does mention train shipments, but it never analyzes the air pollution or noise pollution resulting from such freight trains.

While the new co-generation project probably does not involve train shipments of burnable wood chips, those plywood shipments and other chip shipments by train and their emitted pollutants must be analyzed in the DEIR to establish an accurate baseline for the facility's total pollution. Similarly the noise from those trains that pass within a dozen or so feet from some homes must be disclosed.

Air Quality Comments from the CA Air Resources Board (CARB) not included in DEIR

The attached letter from the CARB, dated August 13, 2008, (and just viewed for the first time by us today) was not included in the DEIR for public review. Their letter points to the deficiency in Toxic Air Contaminants, acute non-cancer risks, the more effective use of SNR for NOx emissions versus the proposed SNCR, and areas where the permit conditions need to be more specific. The FEIR relies on the air permit, which hasn't been approved yet and this letter notes some very important areas where the permit needs to be improved.

CARB also tells the Siskiyou County APCD that the daily emissions limits *are unenforceable* by a source test, so the reliance on this method to assure that air pollutants will comply with what is projected in the EIR, comprises a major flaw in the FEIR.

Please incorporate this letter from CARB and all its attachments into a revised DEIR and recirculate it for public review for the minimum required 45 day period. In addition, please also incorporate an ATC comment letter for this project that CARB references, from the USEPA, Region 9, which we have not yet had the opportunity to review.

4. Global Warming and Greenhouse Gases (GHGs) - Inadequate Climate Change Analysis

The EIR fails to adequately address the projects global warming and climate change impacts. The EIR fails to provide CO2 emissions data, analysis, and mitigations for the entire project, including from diesel emissions, and incorrectly states the project is “carbon neutral” from outdated IPPC (Intragovernmental Panel on Climate Change) guidelines.

The California legislature has found that “global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California.” (HSC 38501.a). Yet the FIER for the project does not adequately disclose the effects of the project on emissions of greenhouse gases, makes no attempt to quantify or even to estimate the current levels of greenhouse gas emissions that the project will cause, makes no attempt to analyze the effects of those increases on global warming or the greenhouse gas emission reductions required by AB 32, and does not adopt all feasible mitigation measures, nor makes findings supported by substantial evidence that such mitigation measures are infeasible – all in violation of CEQA.

Instead the FEIR (on p.2-26) attempts to sidestep that requirement by claiming that greenhouse gas (GHG) emission analysis and climate change is a field that is "too young" to study for this co-gen project, and the local APCD hasn't yet adopted rules on how to evaluate its GHG impact. is no excuse. Other agencies throughout California, including Shasta County,⁸ are evaluating and mitigating GHG impacts of their projects now.

The FEIR was revised to state that the US Environmental Protection Agency, has not, as yet adopted regulations for greenhouse gas emission. AN EIR is not limited to mitigations where regulations have already been imposed. Just because regulations are not adopted yet, does not relieve one of CEQA obligation to address and describe impacts, and analyze and mitigate for them when evidence is presented of a significant impact.

The California Attorney General’s office is taking a strong role in requiring counties to adequately address global warming. In fact, The Attorney General’s office has very recently reminded Siskiyou County planning officials that they are required to evaluate such GHG impacts (for the Nestle Water’s project), and offer effective mitigations.⁹ To quote from the Attorney General letter:

“The DEIR Fails to analyze the global warming impacts resulting from the Project. Global warming presents serious challenges to California and the Nation. All phases of a project must be considered when evaluating its impact on the environment. The diesel truck emissions from this project will result in releases of both carbon dioxide and diesel soot. Yet the DEIR entirely fails to address global warming resulting from either pollutant. (Truck emissions also create air quality and health impacts, discussed below.) Diesel soot – or black carbon – has been identified as a substantial contributor to global warming. Because the EIR omits any discussion of the emissions of carbon dioxide and diesel soot resulting from the project, it is impossible to determine the full extent of the impact of these emissions. Further, because they are not identified, they are also not mitigated where feasible, as required by CEQA. “The DEIR fails to discuss emissions of ozone, carbon dioxide and PM2.5 that will result from hundreds of diesel truck trips every day.”

⁸ *City grapples with new emissions law - Officials need to lessen pollution from proposed development, but how to do it is unknown*, Redding Record Searchlight, by Scott Mobley, Thursday, September 18, 2008

⁹ Letter from Attorney General’s Office, to Siskiyou County Planning Department, July 28, 2008.

These criticisms are similarly applicable to the deficient EIR prepared for the Roseburg project. The DEIR provides no data, calculation or technical analysis to support its conclusion that the GHG emission impact will be less than significant. Instead, it merely relies upon a now incomplete and now outdated statement from the IPCC that biogenic carbon burning will not increase atmospheric carbon dioxide. The DEIR avoids the typical scientific analysis required of any EIR. The DEIR's determination is accordingly without adequate support to meet CEQA requirements.

In addition, the Attorney General again has taken a strong position on the need to address global warming adequately in an EIR preparation, in a lawsuit filed in April 2007 against San Bernadino Co. Board of Supervisors, April 13, 2007, regarding certification of their General Plan Update.

The Mount Shasta Bioregional Ecology Center commented (OG1-4) that the DEIR failed to adequately analyze the project's greenhouse gases and climate change impacts. MSBEC also commented that the DEIR failed to analyze the impacts of GHGs from the trucks carrying biofuels and from forest thinning. (Comments OG1-5; 1-6.) The FEIR p. 2-27 responds inadequately; it provides no measurement data or analysis of those GHG emissions. Instead, it merely offers unsupported conclusions that things will be overall better with the project because it will reduce GHG production.

The DEIR relies upon outdated, 12 year old studies of the *Intragovernmental Panel on Climate Change*, (IPCC) that burning biomass is carbon neutral.^{10 11} But newer studies have refuted these conclusions.¹²
13 14

Biomass, often generated through the use of wood products and byproducts, *is not* carbon neutral. While it is likely that energy generated through combustion of biomass results in fewer carbon emissions than energy generated through combustion of fossil fuels, it is incorrect to characterize biomass as "zero emission" fuel.¹⁵

These more recent studies demonstrate that forests fifteen years and older are an important active carbon sink, and collectively act as a storehouse for up to 10 percent of the world's total net CO₂ uptake.

As noted in the FEIR, Roseburg will obtain some of its biomass wood from logging live trees, that otherwise would have held or sequestered carbon in the trunks, limbs and roots, while banking some of

¹⁰ Intergovernmental Panel on Climate Change. *Greenhouse Gas Inventory Reference Manual: Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories*, Vol. 3, Pg. 6.28, (Paris France 1997).

¹¹ "Since the IPCC does not carry out its own research, it operates on the basis of scientific papers and independently documented results from other scientific bodies, and its schedule for producing reports requires a deadline for submissions prior to the report's final release. In principle, this means that any significant new evidence or events that change our understanding of climate science between this deadline and publication of an IPCC report cannot be included. In an area of science where our scientific understanding is rapidly changing, this has been raised as a serious shortcoming in a body which is widely regarded as the ultimate authority on the science." http://en.wikipedia.org/wiki/Intergovernmental_Panel_on_Climate_Change

¹² *IPCC 'wrong' on logging threat to climate*, <http://environment.newscientist.com/article/dn14466-ipcc-wrong-on-logging-threat-to-climate.html>

¹³ Associated Press. *Study says old growth forests bank carbon dioxide*, by Jeff Barnard 09.11.08, Grants Pass, OR

¹⁴ "Old Growth Forests as Global Carbon Sinks", *Nature*, 455, 213-215 (11 September 2008)S. Luyssaert

¹⁵ http://lomapieta.sierraclub.org/lp0203_ClearCutting.html

the carbon in the soil too. When cut and burnt, the trees' CO2 is released into the atmosphere immediately rather than only partially hundreds of years later.

The EIR for this project must also assess the cumulative global warming impacts of RFP's entire logging and veneer operation when it evaluates carbon dioxide emissions, which is particularly important in light of the negative carbon emission impacts of commercial logging in general: *(this will be further discussed in 8. Cumulative Impacts, below)*

Logging Releases Significant Amounts of Carbon

Scientists estimate that a large fraction of all the carbon transferred to the atmosphere by humans has been released due to forest exploitation. In recent decades CO2 emissions resulting from human-induced changes to forests exceed CO2 emissions from all motor vehicle sources combined, but forest releases are less than total emissions from all uses of fossil fuels. Not surprisingly, logging accelerates the transfer of carbon to the atmosphere by killing trees that would otherwise continue to capture and store carbon through photosynthesis and growth.

Short-rotation clearcutting typically practiced by private industrial forest land-owners is probably the worst possible way to manage forests for carbon storage, because the young forests never develop large carbon stores; significant soil carbon is lost during and after clearcutting, slash disposal, and site preparation; and the resulting wood products produced have limited longevity.

Current enthusiasm for fuel reduction must be tempered with a realization that removing too much fuel makes forests hotter, dryer, and windier which increases fire hazard and increases decomposition rates, both of which counter carbon storage and other objectives.

Fewer trees means less carbon sequestration which leads to worse global warming. Growing trees absorb carbon dioxide, thereby slowing global warming through a process called carbon sequestration. Logging aggravates climate change by removing the trees, which increases carbon dioxide, and by directly adding carbon to the atmosphere through the burning of stumps and underbrush.¹⁶

5. Noise Impacts

The EIR must inform the public about the Roseburg facility's neighborhood noise conditions that currently exist and if the new project will significantly impact them even more. This requires two phases of review: existing and proposed. But this Co-gen EIR's noise impact analysis violates CEQA in failing to do that. (See Draft EIR p. 3.7-1)

Existing Noise Impacts are Significant - An EIR should disclose how loud the existing project site and surroundings are. This is vital to see if the existing neighborhoods affected by Roseburg noise either comply or exceed allowable noise standards. In fact, the Draft EIR revealed that noise is already excessive:

¹⁶ "The Straight Facts on Forests, Carbon, and Global Warming," *Oregon Wild Report on Forests, Carbon, and Global Warming*, http://www.oregonwild.org/oregon_forests/old_growth_protection/forests-global-warming/oregon-wild-report-on-forests-carbon-and-global-warming

“At some locations the City’s daytime noise ordinance standard of 50 dBA is exceeded. The City’s 40 dBA nighttime standard is exceeded at all locations where nighttime measurements were taken.” (Draft EIR, p. 3.7-7)

“A significant impact is considered to occur when a predicted noise level exceeds a threshold.” (Draft EIR, p. 3.7-8)

“Appendix G of the State CEQA Guidelines indicates that a project would have a significant effect on the environment if it would:

- * expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies;” (Draft EIR, p. 3.7-8)

At Union Street, Expershare’s existing noise measurements show noise levels between “55.0 to 62.3 dBA Ldn”. (Draft EIR p. 3.7-4) (Note: 60 dBA Ldn is the maximum standard the EIR uses to determine if a noise impact is significant. See p. 3.7-7)

But the Draft EIR never reveals if the existing facility’s impact on nearby residences is already significant. The Draft EIR announces the criteria by which such significance is evaluated, but it does not analyze or disclose whether or not people are already being significantly impacted. Instead it leaps over that first critical step and into evaluating noise levels only after the project begins.

That procedural error is seriously flawed because when a facility already contributes to a significant noise impact, then any additional new project noise it makes is defined by CEQA case law decisions as creating a cumulative significant impact.

Only belatedly does the Final EIR admit that this facility creates excessive noise on Clay Street that exceeds the maximum standard of 60 dBA Ldn. (See Final EIR p. 2-40). The Final EIR then revises the Draft EIR to acknowledge a significant cumulative noise impact. Yet in conflict with CEQA case law, the Final EIR still denies that any additional project noise would be cumulatively significant. (See Final EIR, p. 2-41, also see Los Angeles Unified School Dist. v. City of Los Angeles (1997) 58 Cal.App.4th 1019 – a decision that overturned an EIR for failing to acknowledge and mitigate a project’s cumulatively significant noise impact on an existing land use that was already excessively noisy.) Stated another way, the Final EIR violates CEQA because it reveals a significant noise impact that it inconsistently concludes is insignificant.

Any additional noise from the project, such as from more trucks, on-site equipment noise and cooling tower fans and generator noise must, by CEQA definition, be considered significant. Because the DEIR incorrectly concludes the opposite, a consequence is that the County hasn’t examined a viable project alternative where the cooling tower could be moved farther away from the existing homes only 220 feet away. If an impact is significant, then a DEIR must evaluate project alternatives capable of lessening such impacts. By incorrectly considering the noise impact insignificant, the DEIR avoids examining another location on this large site for this project’s noisy fan and cooling tower.

Existing Facility is Sometimes Too Loud - Rather than provide its own independent noise study, the Draft EIR relies on both EORM’s and Expershare’s noise studies. They both reveal that the existing facility already exceeds the County and the City of Weed noise standards. But the Draft EIR fails to admit that evidence means the facility already creates cumulative significant noise impacts. Accordingly, the Draft EIR fails to evaluate if there might be feasible mitigations to lessen the existing excessive noise levels.

New Equipment will also Create Significant Noise Impacts - The Draft EIR acknowledges that this new project will make additional noise from its large cooling tower fans and its new electrical generator. But it erroneously asserts the new noise increase will be small and therefore not be cumulatively significant. The Draft EIR provides no mitigations either for those additional noise impacts. Both of these mistakes are CEQA violations.

New Traffic Creates Significant Noise Impacts - The Draft EIR notes the project will also create more noise as many additional heavy trucks haul wood to fuel the generator's boiler. For this mobile noise source, the Draft EIR admits trucking noise will be sometimes significant and it proposes a mitigation to limit the delivery hours. It however never explains how additional daytime truck noise that is also cumulatively significant will be limited by that early morning mitigation. It won't. Once a neighborhood is already significantly impacted, then any additional noise, even during the daytime, is also considered cumulatively significant.

Regarding these significant noise impacts, the Draft EIR provides no mitigations for (1) the existing noise impacts or (2) for new cooling tower fans and new generator noise impacts.

Proposed Noise Conditions With Project in Operation are Cumulatively Significant - All of the project's related noise sources, acting together, are significant as they cumulatively increase the noise level that neighbors to levels that exceed allowable standards. The EIR is defective because it fails to analyze, disclose and mitigate this project's significant noise impacts. The EIR needs to be revised to properly evaluate the neighborhood's and the project's cumulatively significant noise levels.

Out-of-Date Noise Element Prevents the County from Approving this Project - California Planning and Zoning Law (see Gov. Code 65000 et. seq.) has the mandatory requirement that a noise element analyze "current and projected" (future) noise levels for roads, streets, freight operations and industrial plants. But the County's Noise Element was prepared around 1974, and its projected (future) noise levels only were then predicted up to 1996. Therefore it is now at least 12 years out of date. .

This law also states the noise element "shall identify and appraise noise problems in the community." Again, this is mandatory. Yet the County's Noise Element completely fails to identify or appraise Roseburg's noise problems with the neighboring homes. And there's no question that this is a problem when the Final EIR now admits some homes in Weed are exposed to more than the allowed standards of noise.

The County cannot legally approve a Conditional Use Permit for Roseburg's noisy co-generation project when the County's General Plan Noise Element fails to comply with state law, such as being 12 years out of date. State law prohibits the Planning Commission from approving this project if it is not consistent with a current and adequate General Plan's Noise Element.

6. Cumulative Impacts

The EIR fails to properly describe and evaluate cumulative impacts, particularly for Noise and Air Quality. CEQA requires an EIR to disclose and evaluate a project's cumulative impacts on every significant issue, including global warming, as the state considers greenhouse gas emissions and global warming to be significant. This EIR does not do that.

"The cumulative impacts from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present and reasonably foreseeable probable future projects." CEQA Guidelines section 15355(b).

The DEIR's discussion starts on page 4-1. It states:

Past development actions on and near the proposed project site and in the project vicinity include timber harvesting operations that have occurred on lands surrounding the Roseburg Veneer Manufacturing Facility, development in the City of Weed on three sides of the facility, the J. H. Baxter Wood Treatment Facility next to Roseburg, and construction of major roadways, such as US 97, SR-265, and I-5.

Therefore the EIR needs to evaluate the emissions of projects closely related to the biomass facility, which includes RFP's present logging operations and veneer operations, and all trucking associated with its overall facility operations, when evaluating greenhouse gases and climate change impacts.

But the EIR narrowly evaluates impacts of the biomass project only, and not related operations at the Weed facility, nor RFP's harvesting elsewhere on distant lands, nor its trucking emissions getting to Weed, comprising a failure to accurately consider and analyze and mitigate for total CO2 emissions.

The EIR doesn't even evaluate the cumulative CO2 emissions from Nestle Waters project trucking, a foreseeable future related project, due to the trucking emissions. The EIR looks at Nestle's truck traffic impacts on road capacity near Hwy 97, but not the air emissions.

When it suits RFP's purposes, the EIR suddenly broadens its outlook and discusses distant forest emissions. That's inconsistent:

"The biomass fuel associated with the proposed project would consist of significant amounts of material harvested from slash that is left from forest harvesting. This slash has historically been piled and burned in place. However, this results in extremely high levels of PM, CO, and NOx emissions. More often the slash is now being left in place to decay due to concerns over criteria pollutant emissions associated with open burning. The decaying process releases carbon dioxide and methane. The long term impact on global warming of the carbon would be lower if it were released as carbon dioxide, the primary carbon based by-product of combustion. Therefore, the impact associated with the GHG emissions from the proposed project is considered to be an overall net benefit."

This takes a limited, (convenient to industry) view of only a portion of the total project. The DEIR doesn't truly evaluate this project's cumulative and total GHG emissions. It instead falls back upon non-scientific conclusions that are not supported by data or rigorous analysis. It leaves out trucking impacts and carbon dioxide emissions from forests that are logged and thinned, have their slash and downed trees removed, allowing the soils to dry out and decompose faster, releasing stored carbon that would have been sequestered if the forests were undisturbed. (Please refer to studies cited in Section 6 which describe how present day logging practices contribute substantially to the global warming problem.) The EIR should address these and require carbon sequestering forestry practices as part of its overall operations that serve to reduce its global warming impact. For example:

Where logging is expected to continue, scientists recommend that carbon release can be mitigated if forest managers:

- Allow trees to grow much longer before harvest (i.e., longer rotations),
- Retain more live trees on every acre during harvest (i.e., thin instead of clearcut),
- Retain more dead wood after harvest (e.g. protect snags, practice less intensive slash disposal and site preparation), and
- Take steps to reduce road systems and prevent soil erosion, which would help store more carbon in forest soils.¹⁷

Cumulative Emissions of Criteria Pollutants

The EIR admits it prepared no cumulative impact analysis for even the existing Weed operations. Its rationalization is that those local emissions are minor and lower than county thresholds because measurements in Yreka and Mt. Shasta are less than the thresholds. That reasoning is flawed. It's like saying a noisy bar doesn't make intrusive noise and bother its neighborhood because the average noise levels everywhere in Siskiyou County are below certain allowable standards.

7. Forest and Biological Resources

In our draft EIR comments of July 18, 2008, we raised concerns about the sustainability of fuel supplies to provide 250 cords per day to keep the biomass plant operational. No analysis of where the fuels would come from was provided in the DEIR.

Jones & Stokes' response is somewhat reassuring, although very general, and does not address specific concerns that we hoped to see analyzed in the EIR. We have the following specific points that we would like further clarification on:

1. The response states that the quantity of residuals and hog fuels generated by Roseburg's veneer plant and timber operations would by itself be enough to supply the biomass plant. However, figures are given in annual BDTs (bone dry tons) rather than in daily cords, making it difficult for the public to compare fuels sources to biomass plant capacity.

We therefore request that the Final EIR make clear what rate of conversion is being used, and translate the 250 cords per day into annual BDTs, in order to clearly demonstrate in layman's terms that the capacity of the biomass plant is indeed commensurate with the regenerative capability of local forests.

2. Further, Jones & Stokes responded that the McCloud Ranger District of the Shasta-Trinity National Forests and the Goosenest Ranger District of the Klamath National Forests will have additional biomass material available, as stated in their Forest Plans, though it is not guaranteed that these quantities would be available to the Roseburg biomass plant.

¹⁷ Ibid, "The Straight Facts on Forests, Carbon, and Global Warming," *Oregon Wild Report on Forests, Carbon, and Global Warming*, http://www.oregonwild.org/oregon_forests/old_growth_protection/forests-global-warming/oregon-wild-report-on-forests-carbon-and-global-warming

However, the assumption seems to be that, since biomass from public lands “is not essential” [Response to Comment OG1-20], there is no need to assess the impacts of taking tons of biomass materials from the national forests. As a result of this belief, Jones and Stokes, did not address our questions regarding assurances that adequate biomass remains on the forest floors so that forests can regenerate ecologically.

Jones & Stokes’ response therefore does not address the impacts on soils of taking fuels, and whether methods will be used that would maximize nutrients available to soils. If the method is to take whole trees, impacts would need to be assessed and mitigation measures provided to assure that the twigs and needles needed for forest regeneration will be available.

We would like to see the final EIR specify that biomass removal methods will be employed to avoid ladder fuels and other fire risks to larger trees and older diverse forests which are capable of more carbon sequestering. Such methods would involve taking saplings, brush and small poles in biomass thinning projects, so that the objectives of reducing fire hazard and achieving better growing conditions for larger residual fire-resistant trees are achieved.

3. Finally, Jones & Stokes’ response completely fails to address criteria for burnable materials, as we had requested in our comments. In order to assure that more pollutants will not be added to the air, the EIR needs to address whether Roseburg’s veneer plant “residuals,” and any other fuels that may be used to provide fuel for the biomass plant, would include any processed waste, such as fiberboard, wafer board, or any materials using chemical compounds not found in natural hog fuel.

8. Hydrology

The Public Notification and DEIR for this Co-Gen Project erroneously fail to identify that a portion of the Project site that is downstream of RFP's possible discharges and surface drainage flows into Beughton Creek to the north. The County and its DEIR only identified Boles Creek as being impacted.

Silt, spills and industrial pollution RFP's Co-gen project site can flow into Beughton Creek north of the site. The DEIR does not identify this risk though. Beughton Creek was polluted previously by Baxter's superfund toxic chemicals and has recovered over the decades. But now RFP poses a threat to it and the DEIR is silent on this issue that could involve cooling tower spills, generator spills, and oils or chemicals leaking from various on-site and off-site equipment/trucks.

A map was submitted by Mount Shasta Tomorrow, "Beughton Creek.doc", noticing the county that the DEIR is defective and would need to be revised with new public notice. Such an error should trigger a renotification process so that citizens and agencies will be aware of this potential risk, and lead to a revision of the DEIR.

See the comment letter SA-3 from the North Coast Regional Water Quality Board. It appears as if the EIR for the proposed co-gen project has not fully disclosed plans for dealing with the by-products from co-gen operations. The time to review the disposal of the clinker by-product onto forest roads is *now*. The Waste Discharge Requirement is based on the CEQA process; the applicant cannot simply decide to change its current processing of clinker after the EIR is certified. Now is the time to disclose, analyze, and mitigate this disposal of clinker onto forest roads and any potential water quality impacts by its disposal onsite to RFP’s wood waste landfill.

The FEIR's response at SA-3 to the concerns expressed by the Water Board are inadequate and defer the necessary timely process required by CEQA of disclosure, analysis, and mitigations. This information on clinker processing, either to the RFP landfill or onto forest roads must be disclosed in the appropriate format of a recirculated EIR document.

9. Traffic

The EIR states that RFP currently receives approximately 3.3 truckloads per day of wood, yet RFP's spokespeople stated in 2007 at the Weed Elementary School gym that at times more than 100 trucks might occasionally arrive on one day. We asked that the EIR provide with greater specificity how the trucking numbers were arrived in terms of Roseburg's existing quantity of hog fuel use (with 20% coming in from outside sources, at an estimated 3.3 trucks per day), the additional quantity of hog fuel needed to fuel the new RBCP boiler; the estimated per-load truck hauling capacity, and each type of seasonal variation, to account for this large discrepancy of public statement by RFP with the FEIR estimates.

Additionally, the EIR does not disclose what routes the project's heavy trucks that carry wood for fuel will take through other Siskiyou County communities so that their citizens can consider the toxic diesel fume emissions and noise impacts those trucks will cause.

The EIR also fails to include an analysis of truck traffic increases in downtown Weed. The EIR seems to allude that the project only impacts areas adjacent to Weed, along Highway 97, and only evaluates two intersections there. This is erroneous since every truck approaching the project from the South (originating from I-5, whether from the north or south) must travel through the City of Weed, and the intersection of Highway 97 and Weed Blvd., on its way to the RFP project site. The DEIR on page 3.8-6 states that this will comprise 55% of the trucks for the project. The increase in traffic at this busy downtown City of Weed intersection has not been evaluated or included in either the DEIR or the FEIR. This analysis should be done, and the DEIR revised and recirculated with this new information.

10. Secondary Physical Deterioration resulting from Socioeconomic Impacts

These comments were inadequately addressed, or ignored. Secondary physical deterioration resulting from socioeconomic impacts is required to be addressed by CEQA, including effect on the community from the potential decline in property values due to the project. In addition, questions were not adequately answered about the potential of the project to strip nearby public lands of firewood for families and woodcutting businesses.

Findings are Erroneous

In reference to Section 5.1 of the Staff Report:

Finding 1. Finding is erroneous. The Final EIR is not adequate for all the reasons cited in these and our earlier comments.

Finding 3. Finding is erroneous. Changes have not been incorporated into the project that substantially lessen the significant impacts.

Finding 4 - Finding is erroneous. A reasonable range of alternatives were not reasonably evaluated.

Finding 5 - Finding is erroneous. The identification of significant impacts, and resulting mitigation measures, and inadequate, with regard to significant impacts of Noise, Water, Air, and Cumulative impacts. The County's proposed finding that added PM10 and ozone operational impacts are less than significant is erroneous. Because the County is designated as a non-attainment area for the ozone standard, then *any* additional ozone creation is considered by CEQA case law as a "cumulatively significant impact." This Finding correctly identifies that extra particulate matter and ozone will be created (though it doesn't directly state that ozone is a criteria pollutant). But when read carefully, it only mentions that boiler NOx emissions and some particulate emissions from the Bobcat and loader will be controlled. Nowhere does it mention that PM and ozone emissions from trucking will be controlled, or fugitive emissions (dust) from piles of chips will be controlled. This finding simply ignores those impacts. Instead it argues that the DEIR estimates the maximum daily emissions are less than significant, even though the DEIR's estimates don't include trucking emissions or emissions elsewhere in the forests when gathering wood fuel. The DEIR (pp. 4-5 to 4-6) provides no disclosure of current emissions. The DEIR even admits that it doesn't analyze "criteria pollutants" (such as PM10 and ozone). Thus, there is no substantial evidence to support the County's proposed finding that operational impacts on criteria pollutant emissions will be less than significant

Finding 6 - Finding is erroneous. The project is inconsistent with the General Plan. This project is not consistent with the General Plan Noise Element's 60 dBA Ldn max standard policies of the General Plan.

Finding 7 - Finding is erroneous. The RCBP *will* be detrimental to public health and safety, and materially injurious to properties in the vicinity, as described in these comments, particularly with regard to Legionella bacteria, air quality and noise, and secondary socioeconomic impacts. The DEIR also doesn't disclose any measurement data on the existing "toxic air contaminants" (such as diesel emissions). It only concludes without evidence that the project will reduce such TACs. The DEIR also fails to identify that there may be a risk of deadly Legionella bacteria emissions from the project's cooling towers that can waft for miles from this project site. Thus, there is no substantial evidence to support the County's proposed finding that operational impacts on toxic air contaminant emissions will be less than significant.

Finding 9 - Finding is erroneous. The Public Hearing was not duly noticed as per CEQA requirements.

Staff Report 4.1 Project does not conform with regional plans - Water Contamination Finding is erroneous: There are no requirements for filtering stormwater runoff from the site that would flow via a drainage ditch to Beaughton Creek, so this next statement in 4.5.1 is false that:

"As described in Section 3.5.2 (Hydrology, Water Quality and Water Supply) of the Draft EIR, the project design includes specific elements to ensure that no contamination of surface or ground water occurs as a result of the proposed project activities."

Hazardous Material Finding Is Erroneous: The County is proposing a finding that this project poses no environmental impact due to hazardous materials such as ash that's produced by burning wood. The DEIR states that "the ash residue is not a hazardous material." However, wood ash is known to contain surprisingly high levels of heavy metals such as lead, zinc and cadmium.^{18 iii} Cadmium is a serious toxic

¹⁸ EU call for regulation of wood ash fertilizers Source: European Commission, Environment DG
Published Apr. 22, 2008 <http://www.environmental-expert.com/resultEachPressRelease.aspx?cid=8819&codi=30819&idproducttype=8&level=0>
See full article in Endnotes.

substance and water pollutant to aquatic habitats. This project's site drains via a drainage ditch directly to Beaughton Creek. Any ash that escapes the facility, its stacks or the heavy trucks that haul it away daily may fall to the ground on the site and during rainstorms be washed into that ditch and Beaughton Creek. The DEIR does not describe how the ash will be shipped or what measures will be taken to prevent any of it from spilling from these trucks. The EIR provides no disclosure, analysis or mitigation for this potentially significant water quality risk. Accordingly there is no substantial evidence to support the County's proposed finding that the project's generation of hazardous materials will be less than significant:

Conclusion

The Mount Shasta Bioregional Ecology Center is ready to support appropriate alternative energy and sustainable forestry projects which transparently comply with environmental law, and are the best projects they can be, with accurate project assessments, and state of the art pollution controls and mitigations. These are particularly important when a project is located so extremely close to schools and neighborhoods, and at the base of a mountain recognized worldwide for its unique and pristine environmental qualities and beauty.

Despite this projects "green" label, and possible benefits of temporarily reducing wildfire risks, that is no excuse for an EIR to contain serious CEQA errors and omissions that threaten to significantly compromise human health, and environmental quality. This project *has the potential* to be a positive project for the local economy – if CEQA is adhered to, instead of obscured and avoided when inconvenient or perhaps will result in more expense. We continue to invite Roseburg and the County to meet with us in open forums to discuss more streamlined, efficient avenues in which the project can be realized, without unduly compromising human or environmental values.

Please incorporate by reference, all documents and comments submitted by MSBEC and others on the proposed co-generation project from RFP's first application in 2006 when the County incorrectly claimed the project (then UP-06-20) was Categorically Exempt. Please notify us of any future opportunity to review and comment on this project or to attend any hearings about it.

Respectfully submitted,

Michelle Berditshevsky

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Executive Director

Karen Rogers

Karen Rogers
Board of Directors

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cc: Jim Hardy, Supervisorial Candidate

Endnotes

ⁱ Public Notice Flawed

(1) The Public Notice violates CEQA because it fails to state "the address" where the public can view the Final EIR and related documents. That's required to be included in such a Notice also by CEQA 21092(b):

" and the address where copies of the draft environmental impact report or negative declaration, and all documents referenced in the draft environmental impact report or negative declaration, are available for review."

(2)The Public Notice is flawed for failing to mention the Co-Gen cooling tower is located on a former Superfund cleanup site. This information is mandatory to include in the Notice, by CEQA 21092(b)

(3)The County's Notice does **not** indicate any significant environmental impacts associated with the project, but CEQA section 21092(b) requires the county to list (within this Notice) "*all significant environmental impacts on the environment, if any*". The Notice fails to note that additional **ozone** air pollution will be released from this project's burning wood and trucking emissions. The County is rated "non-attainment" for ozone pollution since 2007, so ANY additional ozone emission is significant. Thus the Notice is required to disclose that. The Notice also fails to note that additional **noise** will result from the new generator and cooling tower and, in addition to existing plant noise, will significantly impact nearby neighbors.

ⁱⁱ Further references on carcinogenic danger of wood dust

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ii **EU call for regulation of wood ash fertilizers** Source: European Commission, Environment DG

Published Apr. 22, 2008 <http://www.environmental-expert.com/resultEachPressRelease.aspx?cid=8819&codi=30819&idproducttype=8&level=0>

Wood ash may not be an ideal fertilizer for the forest after all, according to new research, which found high natural levels of toxic trace elements in wood ash. In addition, the study showed that adding wood ash could affect the forest soils in such a way that toxic elements are more rapidly released into the receiving waters.

Wood ash is a by-product of wood burning which is classed as a form of green energy production because it is both carbon neutral and renewable. The production of wood pellets for use as a biofuel in power plants in Europe is increasing fast. In Sweden, the production of wood pellets increased from 10,000 tonnes in 1992 to 1,000,000 tonnes in 2004. In Germany, pellet production increased ten fold from 100,000 tonnes in 2003 to a planned 1,200,000 tonnes in 2007.

Using wood as a biofuel is accompanied by a considerable rise in wood ash production. Wood ash is rich in many essential plant nutrients. Since large amounts of nutrients are exported from forests during logging, there are proposals to return the nutrients to the forests by using wood ash as a fertiliser. However, wood ash also can contain surprisingly high levels of heavy metals such as lead, zinc and cadmium.

Norwegian researchers analyzed wood samples taken along a 120 km transect of land in southern Norway including the city and outskirts of Oslo. Wood ash generated from samples of birch and spruce taken well away from roads was analyzed for 26 elements. Analysis showed large differences between the species in the concentrations of elements. Worryingly, the maximum concentration of several toxic trace elements reached surprisingly high levels. Levels of cadmium, lead and zinc, were high enough for the wood ash to fall into the 'toxic waste' category.

The research suggests that using wood ash as a fertilizer carries a substantial risk of introducing unwanted high levels of toxic trace elements to the forest surface soils. In addition, wood ash is alkaline and large quantities could change the pH of forest soils. Changing the pH of the soil could severely disturb the natural biogeochemical cycles of many elements and could result in toxic trace elements being more rapidly released to the receiving waters.

Currently, there are strict regulations on the use of sewage sludge as a fertilizer on agricultural soils, but, other than in Sweden, no levels have been defined for spreading materials such as wood ash on forest soils. Although a forest fire would have a similar effect, these are rare events. Policy makers should consider appropriate regulations for wood ash, perhaps through the requirement of an analytical certificate. Maximum allowable concentrations of trace elements should be established before wood ash is used widely as a forest fertilizer or spread in other near-natural ecosystems. Also see: <http://jeq.scijournals.org/cgi/content/abstract/33/5/1595>

“The biotoxic effects of ash application can roughly be divided into two categories: primary and secondary. Among the primary effects is toxicity deriving from compounds in the wood ash **and cadmium is probably the worst among these**. The secondary effects of wood ash are generally due to its alkaline capacity and a release of ions into the soil and soil water, and finally, watercourses and lakes. Given current knowledge, we would recommend site- and wood ash-specific application practices, rather than broad and general guidelines for wood ash application to forests.”

<http://jeq.scijournals.org/cgi/content/full/33/5/1595>

“The effects of [wood ash] on aquatic organisms and ecosystems are highly uncertain. Wood ash application will increase pH in the water, increase nutrient content, and possibly mobilize toxic compounds. This is likely to have negative effects for aquatic organisms.”

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