

December 27, 2010

Barbara A Adkins, AICP  
Mason County Department of Community Development  
411 N 5<sup>th</sup> Street  
Shelton, WA 98584

Dear Ms. Adkins:

Concerned Citizens of Mason County requests that the Department of Community Development require an Environment Impact Statement be conducted for ADAGE Mason LLC based on their modified SEPA filing of November, 2010. Furthermore, since the original SEPA filing has been dramatically changed, we request that the community be allowed the maximum allowable period to provide scoping statements for the development of the EIS.

The following are some of the primary reasons for re-issuing a Determination of Significance (DS) requiring an Environmental Impact Statement (EIS) for the proposed ADAGE biomass incinerator (plant):

1. **EPA's Tailoring Rule** requires regulation NOW of the 600,000 tons of CO<sub>2</sub> that would be produced by the plant as harmful greenhouse gas pollutants.

The Washington general emissions standards are enforceable via the Notice of Construction (NOC) air permit which is legally “informed” by the SEPA finding. WAC 173-400-040(5) is a general emissions standard with which ADAGE must comply. The Washington "general emissions standards" encompass and prohibit conduct that would violate common law standards for nuisance. The general emissions standards also require all sources of air pollutants to use RACT. WAC 173-400-040.

The general emissions standards contained in WAC 173-400-040 state that "[n]o person shall cause or allow the emission of any air contaminant from any source if it is detrimental to the health, safety, or welfare of any person, or causes damage to property or business." ADAGE has failed to comply with this requirement in relation to emissions of CO<sub>2</sub> from plant in its revised SEPA filing of November of 2010.

WA “operating permits”—and therefore, SEPA, in anticipation of, and informing, air operating permits to be issued—“must contain all existing applicable requirements at time of permit issuance” per WAC 173-401-600(1).

SEPA must inform and anticipate the issuance/rejection of the Notice of Construction air permit for the plant by the Olympic Region Clean Air Agency (ORCAA).

Applicable requirements also include requirements promulgated or approved by EPA, Ecology, or a local air authority through rulemaking at the time of permit issuance, which have a future effective compliance date. WAC 173-401-200(4). ADAGE failed to comply with this

requirement in revised SEPA checklist in regard to the EPA's "Tailoring Rule" for greenhouse gas emissions, 75 Fed. Reg. 31514 (EPA GHG Rule).

U.S. EPA's "Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule," was finalized on June 3, 2010, 75 Fed. Reg. 31514 (EPA GHG Rule).

WAC 173-401-200(4) defines "applicable requirements" to include requirements that "have been promulgated or approved by EPA...through rule making at the time of permit issuance but have future-effective compliance dates." WAC 173-401-200(4)(a)(ii). Contrary to law, ADAGE's revised SEPA filing fails to comply with the Tailoring Rule.

Under the Tailoring Rule, all sources of air pollution that result in a Prevention of Significant Deterioration - significant emissions increase for at least one non-greenhouse gas pollutant and that will also result in an increase of greenhouse emissions of 75,000 tons (tpy) per year CO<sub>2</sub> equivalent or more are subject to Prevention of Significant Deterioration (PSD) permitting requirements for greenhouse gases, with an effective date of Jan. 2, 2011.

Under the Tailoring Rule, as of July 1, 2011, major new sources of pollution that result in an increase in greenhouse gas emissions of 100,000 tons per year or more greenhouse gases must comply with this new rule.

Effective July 1, 2011 - a legally binding "future effective date" Adage will need to comply with the requirements of the Tailoring Rule under the Clean Air Act. Therefore, Mason County's SEPA review must NOW assess the plant's projected 600,000 tons per year of CO<sub>2</sub> emissions as harmful pollutants. The revised Adage SEPA filing fails to do this. Mason County must do this by conducting an EIS after a DS SEPA finding.

2. **ADAGE is an Energy Recovery Facility requiring an EIS** – Nothing material has changed in ADAGE's revised SEPA submission regarding the fuel that will be burned in its proposed biomass incinerator. The proposed Adage biomass incinerator is still a solid waste burner requiring an EIS.

The Stoel Rives, LLP Legal Memorandum (LM) attached to the revised SEPA checklist submitted by Adage in November of 2010, incorrectly states Adage fuel is not a waste but a commodity with a value. Slash is slash. Currently it is either left on the ground to rot or is burned. It is waste to humans. You make this case very well in your Oct. 10, 2010 letter finding for DS.

The LM uses circular reasoning to try to give slash economic value. The only economic value comes from Adage and other incinerators buying it. Under this crooked logic, LM would have us believe municipal solid waste (garbage) fed into a waste incinerator has economic value because it has been purchased--and therefore is not waste!!

The Washington Department of Natural Resources (DNR) classifies slash as waste only given value by incinerator developers like ADAGE purchasing and burning it. In DNR's September, 2010 publication, "Forest Biomass: Hot Topics and Emerging Issues", DNR states:"...the use

of forest biomass as an energy feedstock is helping to create a market for a product previously seen as 'waste' ". [http://www.dnr.wa.gov/Publications/em\\_biomass\\_hot\\_topics\\_fact\\_sheet.pdf](http://www.dnr.wa.gov/Publications/em_biomass_hot_topics_fact_sheet.pdf)

LM states that the purpose of the ADAGE biomass project is not to convert solid waste to energy--but that is precisely the main function of the plant. Perhaps it is not the publicly stated purpose, but the main function is converting solid waste (slash with no economic value if not fed to incinerators) to electricity.

ADAGE fails ORCAA's test copied as "Table 1" into the LM for determining solid waste or not--meaning, if slash is slash is waste to be burned or left to rot, then, by ORCAA's rules, ADAGE would burn solid waste.

ORCAA Table 1 asks: "Is the Material a Traditional Fuel?" The answer is "No" since only by ADAGE purchasing and burning the forest slash does it have a function as fuel. Otherwise, the slash is burned in open air fires intended to dispose of it as unusable waste, or the slash is left to rot – abandoned - on the forest floor.

ORCAA Table 1 asks: "Has the Material been Discarded in the First Instance (I.e., disposed, abandoned, thrown away)?" Answer is "Yes". The forest slash has been abandoned to rot or to be burned as waste. Since answer is "yes", ORCAA classifies this "secondary material (the slash) as waste".

ORCAA Table 1 asks: "Does the Material Satisfy the Legitimacy Criteria below?" One of the four Legitimacy Criteria is "Does the material contain contaminants at levels comparable to or lower than traditional fuels which the unit is designed to burn?" Answer is "No" since studies accepted by the federal Environmental Protection Agency (EPA) document that burning biomass releases more carbon dioxide, more nitrogen oxides, and more particulate matter than burning fossil fuels releases, per unit of energy produced. ORCAA Table 1 then states: "If the answer to one of the legitimacy criteria is no, the secondary material is a waste (sham recycled and therefore considered to be 'disposed')". (bold by ORCAA).

The proposed ADAGE Biomass Incinerator project would burn waste material as defined by ORCAA under three different criteria.

The proposed Adage biomass project would be a "sham recycled" burner, per ORCAA.

3. **Forest Health** – SEPA is violated by omitting consideration of environmental impacts of removing large amounts of woody material from forests to fuel the plant. This omission must be corrected in an EIS.

The revised SEPA filing submitted by ADAGE in November of 2010 fails to discuss the forest environment from which the forest biomass will be harvested as fuel for the ADAGE plant.

The revised SEPA filing submitted by ADAGE in November, 2010 fails to discuss impacts in the forest environment from which the forest biomass will be harvested as fuel for the ADAGE plant. Consequently it also fails to discuss mitigation of those impacts in the forest. It is essential

that these impacts be thoroughly evaluated to avoid degrading our forests, watersheds, and wildlife.

These omissions violate SEPA requirements and may also violate other State and Federal laws as well.

The revised SEPA filing submitted by Adage in November, 2010 also fails to address whether or not a large removal of biomass from our local forests can be done sustainably. In the past, the biomass stayed in the woods and replenished the soil, especially when it is left on the ground to decay. Biomass such as slash and downed woody material is very important to provide nutrients and maintain soil fertility, prevent erosion, retain habitat structure for wildlife and biodiversity, and protect water quality and riparian areas. The ADAGE plant threatens to remove all those nutrients from the forest and deplete the soil to a degree never before experienced in this region.

There are seven states that have guidelines for forest biomass removal, but Washington State does not yet have any, and is just beginning to develop them. In general, guidelines call for leaving on-site a significant portion of the slash, tops and limbs that are generated by a forest harvest operation. How much is left in the forest depends on the number of live trees left on the site, the time between harvests, and the available soil nutrients. The main point is that a significant amount of biomass needs to be left on the ground in the forest, and the revised SEPA filing submitted by ADAGE in November, 2010 fails to address this.

In August, 2010, the State of Washington Department of Natural Resources (DNR) started a rulemaking process to add forest biomass removal to the definition of “forest practices,” so that DNR can begin regulating biomass removal under the State’s forest practices rules. The revised SEPA filing submitted by ADAGE in November 2010 fails to discuss how the upcoming new DNR rules might limit the amount of biomass that could be removed from an area, which could force plant operators to go longer distances to obtain their fuel, potentially making plant operation uneconomical.

DNR also recently issued a Request for Proposals (RFP) to conduct a statewide inventory of the available supply of forest biomass that can be harvested sustainably from all forest ownerships – private lands, tribal lands, State lands and federal lands. DNR hopes the inventory can be completed by mid-2011. By law, DNR cannot enter into long-term supply contracts for biomass from State lands until this statewide inventory is completed. DNR’s RFP says that the new inventory is needed because existing supply studies “do not address the limitation on availability necessary to address site productivity and ecological requirements,” and existing studies “do not address operational and economic factors related to biomass removal and transportation.”

Listed below are just a few of the other concerns that warrant the Department of Community Development continuing to requiring an EIS:

## **Capability to Ensure Public Safety - Catastrophic Fire, Explosion and Chemical Spills**

An EIS is necessary to address whether or not the community has the equipment and manpower to protect the public if:

- ⊗ a fire in the plant that is 150 feet tall and/or of the 50,000 gallon tank(s) of diesel fuel stored on site;
- ⊗ a chemical spill of ash, oil, ammonia and sulfates all stored and handled on site;
- ⊗ an explosion in the plant of significant proportions; and
- ⊗ the evacuation of the approximately 100 homes in the Hiawatha Park neighborhood, the Christian K-8 School, nearby apartment homes, the MCRA playfields, adjacent businesses and the Shelton Rehabilitation Center.

## **Water Contamination – Ground Water and Highly Critical Aquifer**

The aquifer at this site is hydrologically connected both vertically and horizontally to the aquifers serving the greater Shelton area. Furthermore, the level of the ground water is only 16 to 25 feet below the surface, and is reported to fluctuate with the tides so may be much closer to ground level during rain events. Some of the issues to be addressed by an EIS are:

- ⊗ The impact of dewatering during construction;
- ⊗ The impact of removal of trees and other plant materials that currently serve to protect the critical recharge area of the Johns Prairie aquifer and previously identified adjacent wetlands
- ⊗ The impact of settling ponds that invade ground water levels;
- ⊗ The understatement of the infiltration long range rate by using the lowest values and using a reduction factor 4;
- ⊗ The impact of a spill of ash, oil, ammonia and sulfates all stored and handled on site and ability to clean up the aquifer if it is contaminated and
- ⊗ The impact of polluted rain being absorbed into the ground water and aquifers during times of low winds in the rainy season.

## **Fuel and Plant Size – Megawatts and Fuel Quantity**

The SEPA application states that the proposed ADAGE project is a 60 megawatt plant but data provided indicates the level of fuel usage is for a 50 megawatt plant. The EIS should address the actual amount of fuel needed to run the 60 megawatt plant size. Consequently, the EIS should also determine if the air pollution estimates are understated. The following issues should be resolved.

- ⊗ There has been a dramatic reduction in the amount of PM2.5 that needs to be explained and verified (Original SEPA 96.3 tons per year and the Modified SEPA 66.4 tons per year). Specific equipment or fuel change documentation should be required to justify this level of improvement.
- ⊗ The advantages from the cleaner fuel, natural gas, to diesel is glossed over because they are using low sulfur diesel. The EIS needs to explore if natural gas would be better for the

environment as a startup and back up fuel. The added risks of trucking diesel into the plant are not addressed.

- ⊗ The State of Washington has not determined the sustainability of woody biomass as a fuel given the number of proposed and existing plants. The EIS should consider the finding of the DNR study due out in July 2011. It should also consider the impact of the 10 other proposed incinerators and the 2,750,000 tons of forest wood required yearly.
- ⊗ The impact on the forest should be considered by an EIS. This is not addressed in the SEPA

### **Puget Sound – Acidification and Pollution**

The analysis of the chemical deposition affecting Oakland Bay is wrong. The conclusions are based entirely on average concentrations over a 25 x 25 kilometer or 625 square kilometer impact area whereas the plume will be over Oakland Bay most of the time and the Bay is roughly only 1 x 7 kilometers. Obviously, since concentrations fall off with distance and the Bay is near, on the many days that the plume will be over the Bay the estimated deposition will fall mostly in the seven square kilometers of the Bay rather than in the rest of the 25 x 25 kilometer area. The ratio 625/7 being 89, using the correct area for Oakland Bay plume impacts will raise the impacts stated in the SEPA document by a factor that approaches two orders of magnitude. An EIS needs to require the correction of the impact analysis for acid and other pollutants in Oakland Bay.

- ⊗ Rain falling into the Bay will fall through the heavy pollution up in the plume, not through the estimated concentrations of the SEPA document that were rendered low by being chosen to be surface-level estimates and by being averaged over the arbitrarily-large and arbitrarily-defined 625 square kilometer area.
- ⊗ The pH of precipitation falling on Oakland Bay will actually be lowered by about 0.3 to 0.5 pH units due to the plume's very frequent residence over the Bay rather than the not more than 0.01 pH units that was put forth in the SEPA document through averaging over the entire 625 square kilometers.
- ⊗ The SEPA document states that the impact on sulfate and nitrate deposition “would be less than 1.2%”, which figure is for the 625 square kilometer area. To get a pertinent impact estimate for Oakland Bay this would have to be multiplied by something like the factor of 89. Thus the increase for Oakland Bay would be something like 107% rather than the stated 1.2% increase.

Obviously, plenary analyses of the biological impacts on the Bay are warranted, particularly with regard to the shellfish industry and the exposed North Bay bottom at low tide. Since La Grand deposition measurements were used to establish the baseline as though they were Shelton measurements, and since La Grand is downwind of Centralia and its large coal-fired power plant, actual baseline levels in Shelton are *much* lower than was assumed. So the impacts that were expressed relative to existing levels in Shelton need to be factored up even more because of that.

### **Quality of Life**

There are significant errors and omissions in the ADAGE revised SEPA that cause the impacts on air

and water quality to be understated. An EIS, using realistic and correct information, should address such issues as:

- ⊗ The ability to live in a secure and safe environment. This plant would impinge on the ability of local residents to enjoy their property without concern for the noise, air pollution, traffic hazard, water pollution, fire, chemical spill and explosion risk all generated by the plant.
- ⊗ The size of the facility is inappropriate for the location.
- ⊗ The health risk that the PM2.5 may cause when the model for the local air pollution is corrected and at risk populations are considered.
- ⊗ The true impact of the traffic if studies were completed at appropriate times rather than 6pm on a Friday evening.

We appreciate your department's careful consideration of all of the important environmental questions raised by a project of this type and size. It is our hope that your department will hold ADAGE Mason LLC to the highest possible standards during an EIS process and that you will do your utmost to protect the health, safety and quality of life that Mason County residents look to you to safeguard.

Sincerely,

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