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REVISED Mitigated Determination of Nonsignificance (MDNS)

W.A.C. 197-11-340

Revised April 5, 2011

Environmental Review Application No.: SEPA # 04-10

Project Name: **Simpson Lumber Shelton Biomass
Cogeneration Plant**

Location: 421 Front Street, Shelton, WA 98584
Assessor's Parcel Numbers 32019-41-00700 and 32019-14-60400

The subject property is located within the City of Shelton, Washington on the Oakland Bay waterfront. The project site is set within the Simpson Lumber Mill Complex, on the north side of Goldsborough Creek, east of an existing wood-fired boiler and west of the existing Simpson Railroad "roundhouse" structure, on a paved area currently utilized for finished lumber storage.

Proponent: Solomon Renewable Energy Company
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I. Project Background and Description:

Simpson Lumber Company (Simpson) currently owns and operates a 140,000 pound wood-fired boiler at their Shelton waterfront mill site which utilizes approximately 100,000 tons of wood fuel per year. The boiler, installed in the mid 1980's, produces low pressure steam which provides heat for a number of dry kilns associated with existing Simpson Lumber Company milling

Simpson/Solomon Biomass Cogeneration Facility

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operations as well as the Olympic Panel Products plywood plant, both located on the Shelton Oakland Bay waterfront adjacent to the boiler. The existing boiler is supplied water from Simpson's on-site Department of Ecology registered well and the process water from the boiler is conveyed to the City of Shelton wastewater treatment plant. The boiler is entirely fueled with "hog fuel", that is, wood material comprised of mill residuals from Simpson Lumber and Olympic Panel Product milling operations and, occasionally, mill residuals from other local mills. Simpson Lumber also maintains a small (20,000 pound) natural gas boiler, located within the existing boilerhouse, that is occasionally used during boiler outages or during periods of maintenance to the existing wood fired boiler to keep heated water and steam flowing through the process piping.

Simpson has applied on behalf of Solomon Renewable Energy Company (Solomon) for operating permits to construct a 31 megawatt biomass cogeneration power facility within the complex of the existing, Simpson owned, lumber mill property located on the Oakland Bay waterfront in Shelton. The proposed facility would be located on an approximately 2 acre paved area contained within what is currently utilized as a finished lumber storage area for the Simpson Lumber Milling operations also on the site. The 2 acre site is located immediately west of the existing wood fired boiler and fuel house, to the east of the existing Simpson railroad "roundhouse" structure and main north/south millsite access road, and to the north of an existing east/west millsite access road and Goldsborough Creek. The proposed facility would be comprised of: a new fuel house, a new two-cell evaporative cooling tower, a new stoker type wood-fired boiler, a new 31 megawatt steam turbine generator, new stormwater facilities for the redeveloped area, a new "truck dump" area for fuel delivery from off-site sources, and associated fuel transfer/conveyance equipment consisting of covered belts and conveyors from an existing wood fired boiler fuel house to the proposed new fuel house addition and new boiler facilities and boiler ash handling equipment (See Project and Site Plans, Attachment 1). The proposed boiler would have a rated heat input capacity of 435.5 million British thermal units per hour and be designed to only burn woody biomass fuel including (primarily) sawmill by-products such as sawdust, bark and shavings, as well as forest derived hog fuel from logging operations as periodic make-up fuel. The estimated fuel consumption of the facility is 210,000 tons of wood fuel a year at maximum output. The proposed facility is considered a combined heat and power (cogeneration) facility that would be capable of producing high pressure steam to turn a turbine for the production of electrical power for sale to the power grid while simultaneously producing lower pressure process/drying steam for the Simpson Lumber mill operations as well as the Olympic Panel Products plywood mill, both located on the Shelton waterfront.

Fuel House. A proposed new fuel house would be located directly west of, and adjacent to, the existing fuel house which provides fuel to the existing wood fired boiler at the facility. The new fuel house would be oriented in a north/south fashion and measure 175' long by 100' wide by 68 feet tall at roof peak. The structure would be situated approximately 95' north of Goldsborough Creek (at its nearest point) just north of the existing paved access road, and approximately 300' east of the existing railroad "roundhouse" structure located at the site.

Two Cell Evaporative Cooling Tower. A two cell evaporative cooling tower structure would be located approximately 160' north of Goldsborough Creek, approximately 15' west of the new fuel house structure and approximately 85' east of the existing railroad "roundhouse" structure. It would be oriented in an east/west fashion and measure 42'

wide by 96' long and stand 46' tall.

Stoker Type Wood Fired Boiler, Emissions Controls, and Stack. A new wood fired boiler structure would be located approximately 130' north of Goldsborough Creek, 15' west of the new fuel house structure, 90' east of the existing railroad "roundhouse" structure, and 120 feet west of the existing fuel house. The structure would be oriented in an east/west fashion and measure 75' wide by 113' long and stand 105' tall. The wood fired boiler would have attached emissions controls and stack that would be located immediately west of the boiler itself (located 90' east of the existing railroad "roundhouse" structure). The emissions controls for the boiler would be oriented in a north/south fashion and measure approximately 44' wide by 200' long and stand approximately 85' tall. The proposed stack would be approximately 8' in diameter and stand a maximum of 140' tall.

31 Megawatt Steam Turbine Generator. A new 31 megawatt generator would be located adjacent to and just north of the proposed boiler, 150' east of the existing railroad "roundhouse" structure, and 15' west of the proposed new fuel house. The structure housing the generator would be oriented in an east/west fashion and measure 115' long by 45' wide and stand 40' tall.

New Truck "Dump" Area. A new fuel delivery truck "dump" area would be situated directly north of the existing main (paved) roadway which provides access to the existing boiler area, mill 3, and secondary access to Olympic Panel Products. It would be located approximately 73' north of Goldsborough Creek and 120' east of the existing railroad "roundhouse" structure. It would have a hopper fitted with covered conveyors to transport fuel to the new fuel house structure.

Fuel Transfer Equipment. New covered conveyors would be installed between the existing fuel house, new fuel house, and new boiler to convey fuel to and from each facility as necessary.

Ash Handling Equipment. New enclosed conveyors would be installed from the proposed boiler emissions controls to a proposed ash silo to be located north of the proposed truck "dump" area.

The proposed facility would be supplied water by an existing on-site well while used process water would be conveyed to the City of Shelton wastewater treatment plant. The proposed plant would be fueled primarily with woody mill residuals ("hog fuel") created by existing Simpson lumber milling operations (both on and off-site) as well as mill residuals from the Olympic Panel Plywood Plant (also located on the Oakland Bay waterfront), other local milling operations, and also by forest derived hog fuel as a make up fuel (see section below entitled "Fuel Type and Source").

II. Background and Analysis:

Simpson Lumber submitted initial permit applications, SEPA Checklist, and supporting documentation to the City of Shelton on May 3, 2010. The originally submitted Environmental Checklist was amended and resubmitted on August 6, 2010 as were revised permit applications

to reflect Solomon Renewable Energy Company as the project proponent. The City of Shelton issued a public Notice of Application and notice of Optional Determination of Non-Significance Process on September 2, 2010. The comment period for the notice was to originally run from September 2, 2010 until September 30, 2010 (28 days) but was extended an additional seven days until October 7, 2010 (35 days) at the request of the Washington State Department of Ecology. The City also held a public informational meeting to provide information to the public about the proposal and the permitting process as well as to provide an avenue for the public to ask questions of City Staff, Simpson representatives, and Olympic Region Clean Air Agency (ORCAA) staff on September 23, 2010. The comment period and public meeting yielded 22 separate formally submitted comment letters (See Comment Letters, Attachment 2).

City staff spent a considerable amount of time reviewing the comments and identifying the best avenue to research and address them. Some comments were sent to various State Agencies with primary review authority over the subject matter for review and response, while others were directed towards Simpson Lumber to provide additional information and/or clarification to the City, and others were addressed directly by City staff. Follow up discussions with State Agencies and Simpson Lumber ensued to clarify many of these concerns.

Primarily, comments and concerns received revolved largely around 8 main topics; Air Quality and Permitting as it relates to both public health and the overall environment, proposed fuel type(s) and their source(s), impacts of additional vehicle and truck traffic on the environment and City Streets, impacts of chemicals and the potential for chemical release to the environment, the accounting for and mitigation of greenhouse gasses, the Prevention of Significant Deterioration (PSD) permit process applicability, impacts of the proposal on Goldsborough Creek, and statutory requirements for the City of Shelton to issue a Determination of Significance (DS) and prepare an Environmental Impact Statement (EIS) for the proposal.

Air Quality and Permitting.

General Summary of comments received. Comments received expressed concern over the potential health impacts of the proposal due to project related emissions, the extent of air quality modeling (including the inclusion of other existing and proposed emission sources in air quality modeling) that will be required by ORCAA in conjunction with review of the application, what process might ensue should Simpson/Solomon attempt to modify their air quality permits after the fact, how will the proposals impacts on local air quality be determined and assessed, and to what extent does the air quality permitting process take into account dioxins and fine particulate emissions.

Response. The Olympic Region Clean Air Agency (ORCAA) retains air quality permitting and enforcement authority for new emission sources as it relates to ensuring compliance with State and Federal air quality regulations and air quality standards. Simpson/Solomon submitted a Notice of Construction (NOC) air quality permit application to ORCAA on August 26, 2010. ORCAA staff reviewed the submitted information and requested that additional information/clarification be submitted by Simpson/Solomon. Once a resubmittal is received, ORCAA Staff will continue to evaluate the proposal based on:

- Federal and State performance standards for boilers, which prescribe limits on the amount of allowable air pollution from wood boiler exhaust stacks.

- Best Available Control Technology (BACT), which requires new sources of emissions to use the best available pollution control technology to reduce emissions of “Criteria Air Pollutants.” “Criteria Air Pollutants” are those air pollutants for which an ambient air quality standard has been adopted (Criteria Air Pollutants are: Carbon Monoxide (CO), Nitrogen Dioxide (NO₂), Ozone (O₃), Lead (Pb), Particulate < 10 micrometers (PM₁₀), Particulate < 2.5 micrometers (PM_{2.5}), and Sulfur Dioxide (SO₂)).
- State Ambient Air Quality Standards (AAQS). These standards define the concentrations for “acceptable” air quality on a pollutant specific basis. New projects, like the Simpson/Solomon proposal, are required to demonstrate through project modeling that their impacts will not cause or contribute to violation of any ambient air standard. Both background ambient air quality as well as contribution from other significant air pollution sources will be considered in the modeling analysis. ORCAA staff will review the modeling input/output files provided by Simpson/Solomon consultants and assess the results to ensure that the analysis is accurate and conforms to EPA’s standards for ambient air modeling including requirements for modeling nearby existing and planned sources that may add to the cumulative impact of the proposed new source.
- The State of Washington’s regulations for New Toxic Air Pollutant Sources, which requires new sources of toxic air pollutants to use “Best Available Control Technology for Air Toxics”, commonly referred to as TBACT, and to control emissions in compliance with the program to protect human health and safety from potential carcinogenic and/or other toxic effects.

As part of the ORCAA review process Simpson/Solomon representatives are required to provide cumulative modeling analysis for the proposal which considers emissions from any nearby sources that significantly contributes to ambient pollutant concentrations in the impact area of the project. Nearby sources determined to have significant impact in the project’s impact area are required to be considered and included in the cumulative analysis pursuant to Washington Administrative Code Section 173-400-113(3). Further, the Simpson/Solomon project will be subject to the new federal requirements for boilers commonly referred to as the “Area Source Boiler Standards”.

A commentor submitted privately compiled data obtained from ORCAA records which suggests that air quality in Shelton between October 2009 and March 2010 (winter months which have frequent stagnant air advisories) was deemed “unhealthy” to “hazardous” 54.3% of the time due to elevated particulate matter levels, suggesting that existing air quality in the area is unhealthy and addition of new sources would only act to exacerbate the issue. A number of other comments received by the City referenced this same submitted data. ORCAA staff reviewed the comments and computations and determined that they were based on incorrect computations. ORCAA staff went on to provide the City with validated WAQA air quality rating data gathered in Shelton for the entirety of 2009 based on ORCAA’s database as being:

- Good – 325 days
- Moderate – 28 days
- Unhealthy for Sensitive Groups – 7 days
- Unhealthy – 0 days
- Very Unhealthy – 0 days
- Hazardous – 0 days

ORCAA staff also submitted a clarification letter dated October 12, 2010 from the State of Washington Department of Health to the Mason County Health Officer which provides more data which characterizes Mason County's air quality in response to the Mason County Health Officer's recent paper titled "Air Quality in Mason County", dated August 9, 2010 (see Attachment 3 for both letters) which provides a general overview of air quality in Mason County.

The air quality analysis provided by ORCAA will regulate all particulate matter emitted from the boiler which means the project will be subject to an emissions limitation in terms of total particulate in compliance with State law. In addition, fine particulate (PM10) and ultra fine particulate (PM2.5) may be subject to independent emissions limits pending ORCAA staff review and conditioning of the NOC. ORCAA staff is responsible for ensuring that appropriate and accurate emissions factors are utilized in the Solomon/Simpson application modeling analysis prior to establishing base regulatory determinations and emissions rates in review and assessment of ambient air impacts in compliance with State and Federal law.

Commentors question statements made by Simpson representatives indication (at the September 23, 2010 public informational meeting) that dioxin emissions by the proposed facility would be in the range of .000005 pounds per year. Comments received express skepticism over this number and believe the amount cited is incorrect "...by many orders of magnitude." ORCAA staff has stated that actual dioxin rates can only be confirmed through stack testing after the boiler is constructed and operating but that, for permit review purposes, the dioxin emissions rate is conservatively stated in the application as .0000505 pounds per year. ORCAA staff went on to state that the State of Washington regulations for new sources of toxic air pollutants under Chapter 173-460 of the Washington Administrative Code and requires the applicant to:

- Employ Best Available Control Technology for Air Toxics (TBACT) to control dioxin emissions to the maximum extent possible; and,
- Demonstrate that resulting dioxin emissions are sufficiently low to protect human health and safety from potential carcinogenic and/or other toxic effects based on State and Federal Standards.

The Acceptable Source Impact Levels (ASILs) provided in WAC 173-460 define the State of Washington's thresholds for determining whether emissions are sufficiently low to protect human health and safety from potential carcinogenic and/or other toxic effects. Each air pollutant has a corresponding ASIL and ORCAA staff will review the proposal to ensure compliance with State Air Quality requirements during permit review. If the applicant cannot demonstrate compliance, the air permit is not approved.

It is the position of the City of Shelton that compliance with State and Federal air quality regulations and standards, this includes ORCAA specific standards, as regulated by the State of Washington and the Environmental Protection Agency will assure that project emissions rates and emissions of particulate matter will be sufficiently low to protect human health and welfare from unacceptable health risks due to air pollution. A determination of compliance or non-compliance with State and Federal standards will be made by ORCAA through the NOC permit review process and will be based on analyzing the impacts of emissions from the proposed boiler in accordance with ORCAA's and the State of Washington New Source Review requirements. Emissions will be modeled using EPA approved ambient air quality models and

impacts will be compared to the ambient air standards approved by the State of Washington. The proposed boiler will be required to employ the Best Available Control Technology (BACT) and the Best Available Control Technology for Toxic Air Pollutants (TBACT) as well as demonstration of compliance with Washington's regulations for new toxic air pollutant sources or the Notice of Construction (NOC) permit will not be authorized.

Should the NOC be approved and the Solomon/Simpson proponents choose to apply to amend their NOC permit(s) at a later date, including but not limited to; modifications that increase air pollutants emissions, installation of new equipment and equipment replacements, changes in fuel types, etc., this would require review and approval by ORCAA through the same Notice of Construction (NOC) permit process that the current proposal is being reviewed under. Any proposal that has the potential to increase emissions above the "de minimus" threshold contained in ORCAA's Rule 6.1.3 will be subject to a 30-day public notice and comment period.

Mitigation measures incorporated into the City of Shelton's SEPA review of the proposal also require amendment to the any City land use permits prior to any future decisions made by ORCAA or any other State or Federal Agency that would trigger a new and/or amended NOC application (See Mitigation Measures 5 through 7). This will allow the City of Shelton Commission the discretion to review any proposed changes to the proposal in the future.

Fuel Source and Type.

General Summary of comments received. *Comments received expressed concern over the sufficiency of the amount of fuel for the proposed boiler, the sufficiency of the amount of fuel for the proposed and existing boiler at the site, as well as the larger environmental impacts that could be realized if forest biomass is removed in an unsustainable manner to fuel the facility.*

Response. Following the September 23, 2010 public informational meeting staff requested additional information relating to fuel source(s) and fuel quantity(ies) that would be required for operation of both the existing (steam only) boiler as well as the proposed (steam and electricity) boiler at the site. Simpson provided clarification in a letter dated November 16, 2010 which provides more detail regarding fuel projections and sources, (See Attachment 4) excerpted as follows (excerpts in *italics*):

"During the "startup" phase of the new boiler there will be times where both the new boiler and the existing boiler operate simultaneously. The new boiler manufacturer states it will be necessary to take the new boiler from startup to shut down 5-10 times to make adjustments and perform predicted early maintenance. This activity normally occurs within the first 3 to 4 months of initial startup. During this period of startup the reduced steam production due to periodic curtailment of the new boiler will be replaced with make up steam from the existing boiler in order to sustain lumber kiln and plywood drying operations. There will be periods where the new boiler is brought to capacity and tested for opacity, steam output, functionality, and electricity output. During these times both boilers may operate. When both boilers are operating in this configuration neither boiler will operate at full capacity for the full duration of the test period. As an example, the new boiler may be at full capacity while the existing boiler is idling or off; or the existing boiler could be at full capacity and the new boiler idling or off. The most likely scenario is both boilers will operate at reduced capacity occasionally during the startup period until the new boiler is certified ready to

operate. During this period, little to no additional fuel beyond the original description will be required.

In the future configuration with the new boiler operating, the need for additional process steam at the lumber kilns of the plywood dryers, or the need for additional steam to increase power production may result in operating both the existing boiler and the new boiler for limited periods of time. These periods are expected to be less than 30% of the time and not expected to exceed 120 days on an annual basis. Events of limited joint operation are likely to be of limited duration of approximately 5 to 15 days and occur infrequently over the course of the year...."

"Fuel Demand:

Operating New Boiler at Full Capacity: Biomass fuel requirement is approximately 210,000 Bone Dry Tons (BDT's) a year.

Operating Existing boiler at Full Capacity: Biomass fuel requirement to provide steam for drying with new boiler operating is approximately 100,000 Bone Dry Tons (BDT's) a year.

Total hypothetical maximum fuel requirement with both boilers operating 365 days per year is approximately 310,000 BDT's a year.

Biomass Fuel Availability

Fuel from Simpson Lumber Operations and within the greater Shelton area can approximate:

- Shelton Waterfront Operations: 215,000 BDT's a year*
- Simpson Lumber Mill Number 5: 40,000 BDT's a year*
- Simpson Lumber John's Prairie Operations: 40,000 BDT's a year*
- Other local supplies, if necessary, are estimated at 80,000+BDT's a year (bark from whole log chipping operations, other (non Simpson) sawmill residuals, land clearing and slash).*

Total fuel availability is approximately 375,000+ BDT's a year with up to 295,000 BDT's a year from Simpson mill operations alone.

The 375,000 BDT's a year of fuel easily exceeds the hypothetical maximum operating demand from both boilers of 310,000 BDT's a year. To the extent lumber markets reduce operating hours of Simpson operations then steam demand for lumber drying is also curtailed eliminating the need to run the existing boiler for steam, thereby taking the annual fuel demand to 210,000 BDT's a year for the new boiler alone. In such an instance this fuel demand would be filled by a combination of all the sources listed above."

"...in actuality, however, the existing boiler will not run at this level for an entire year. The existing boiler operating plan is to run only as needed to provide steam during new boiler outages (testing, maintenance, repair and inspection) and during limited periods of increased mill steam demand and/or power demand. The new boiler outages and periods of increased demand are estimated at no more than 30% of the time or approximately 120 days over an entire year, which would lower the existing boiler actual demand to a range of 30,000 to 50,000 BDT's a year depending on mill drying requirements. For example, during

any given day when the existing boiler and the new boiler both operate, the existing boiler could run anywhere from 1 hr a day to 24 hours a day depending on kiln and plywood steam demand. These variable operating hours are easily accomplished with 30,000 to 50,000 BDT's of biomass fuel.

In summary, the actual anticipated operating configuration described in the paragraph above results in a maximum case fuel demand of 240,000 to 260,000 BDT's a year for expected limited operation of both the existing boiler and the new boiler. This expected fuel demand is still only 65% to 70% of the available fuel and easily met with fuel from the Simpson operations alone as detailed above."

The primary fuel for the facility is a byproduct of Simpson sawmill activities. Simpson/Green Diamond sources all of their timber activities from Sustainable Forestry Initiative (SFI) certified sources. The State of Washington Department of Natural Resources (DNR) reviews and approves all timber harvest plans applicable for Simpson/Green Diamond and their affiliates pursuant to the Forest Practices Act for all of their logging operations. Under the scenario described above for operation of the proposed boiler there would typically be no additional fuel taken from Washington forests as the referenced mill operations currently exist, operate, and produce mill residual in large enough quantities to fuel the boiler(s). Under limited circumstances Simpson/Solomon may need to purchase hog fuel derived from forest slash, as documented in the above described scenario. DNR is the state agency responsible for regulating timber cutting and reviewing commercial Timber Harvest Plans within Washington State. In August of 2010, the State Forest Practices Board added forest biomass removal as a category of "forest practice" which officially subjects the use of forest biomass from public and private forests to the permitting requirements found in the Forest Practices Act rules. The Forest Practices Act includes regulations designed to maintain forest health and viability. These considerations will be applied by DNR staff to any use of forest biomass by Solomon if they use those materials in addition to, or instead of, fuels produced as a byproduct of their existing milling operations.

The project would utilize natural gas as a startup fuel for the facility. Natural gas mains exist in close proximity to the project site. Utilization of natural gas as a startup fuel will aid in bringing the boiler up to operating temperature as quickly as possible.

Additional Vehicle and Truck Traffic.

General Summary of comments received. *Comments received expressed concern over the number of vehicle trips that would be associated with the project and their impacts to local roads, especially relating to the number of heavy diesel truck trips associated with the proposal and their associated air quality impact.*

Response. The City of Shelton has adopted a Level of Service (LOS) Standard of "D" for all City roadways. By adopting a minimum LOS standard for the City's roadways, Shelton has committed to an LOS that must be maintained as new development occurs over time. As new development is proposed and impacts assessed, developers and/or the City must mitigate transportation impacts to ensure that LOS does not fall below the established standard. First Street at Mill Street and First Street at Railroad Avenue are the main access areas for the Simpson Lumber Mill campus. Currently, the intersections are operating at a LOS level of "C"

and "A" respectively and operate above the service level adopted by the City of Shelton. To aid in offsetting potential long term traffic impacts associated with new development, in 2008 the City of Shelton adopted new traffic impact fees which apply to all new development. That is, all new development is required to pay a traffic impact fee commensurate with their projected impact on the overall city roadway network. The intent of the fees is to allow the City to fund system wide improvements, over time, that increase roadway capacity as the City grows and each project that contributes (incrementally) to traffic on City roadways pays their proportionate share to fund the improvements.

It is important to note that the proposed project site is located within a very busy, "working" and industrialized waterfront that contains a number of businesses that utilize the common waterfront access roadways (Railroad Avenue and Mill Street). The major businesses that use these roadways are: Simpson Lumber Company, Olympic Panel Products, and Manke Lumber Company, all currently located along the Shelton waterfront. There are also a number of smaller private businesses located in an existing industrial complex (privately owned) on the far south end of the waterfront which utilizes the Mill Street access road.

In order to aid staff in review of the potential traffic impacts of the proposal the applicant submitted a traffic analysis to the City for review (Simpson Biomass Plant Traffic Impact Analysis Level 1, dated May 2010) which quantified proposed trips associated with the proposal. In response to a request by the City for additional information which quantified total added vehicle trips that could be expected due to the proposal with both boilers in operation, including during construction, the applicant submitted a revised traffic analysis (Solomon Renewable Energy Company, LLC Biomass Plant Traffic Impact Analysis, dated November 2010, see Attachment 5). Under the highest impact scenario where both the existing and proposed facility are under operations the additional projected traffic expected totals 42 vehicle and truck trips spread through the day with a total of 6 trips expected to occur during the "PM Peak" hour on average (the "PM Peak" average is what intersection LOS is evaluated on). Fifteen of the total vehicle trips per day, under that scenario, are anticipated to be diesel fuel delivery trucks bringing fuel to the site.

According to the analysis, during construction of the facility there are anticipated to be periodic "peaks" in vehicle trip rates associated with the project that would not exceed 162 "PM peak" hour trips to the facility (The traffic analysis conservatively assumes one vehicle for each anticipated construction employee during peak construction activity when, in actuality, there is likely to be some carpooling of construction workers). However, these impacts would be short lived and associated only with specific periods during construction of the project. The additional vehicle trips associated with the project itself would not lower any impacted intersection to a point below acceptable levels (LOS D) pursuant to the City of Shelton Comprehensive Plan.

As indicated above, the applicant is required to pay traffic impact fees to the City of Shelton, in compliance with City Ordinance Number 1733-1008, prior to issuance of building permits for the proposal. Also as stated above, the intent of the fees is to aid the City in the funding of long-term system wide traffic capacity improvements. Further, to ensure that the short term impacts associated with construction activities and any needed heavy construction equipment accessing the site during said construction does not have an adverse direct effect on City roadways, the City of Shelton has incorporated a mitigation measure which will establish a "baseline" assessment of existing street and driveway conditions on Mill Street, First Street, and Railroad

Avenue (the main access points for the site) by City engineering staff and require repair of said streets if it is determined that they have been degraded due to construction impacts.

A number of comments suggest that the City should assess and require mitigation for greenhouse gas emissions that would be associated with additional vehicle trips associated with the proposal. The City is not aware of a legal mandate for vehicle emissions to be mitigated in association with review of any project and, further, the City has no adopted mechanism to review or require greenhouse gas emissions mitigation associated with vehicle trips from any proposal.

That said, when considering that an average single family residence produces over 9 vehicle trips per day according to the Institute of Traffic Engineers trip generation rate for single family residences, the City of Shelton considers the addition of 42 additional vehicles per day by the proposal (conservatively equivalent to the traffic impacts that could be associated with five single-family residences) to be a relatively negligible overall impact.

Chemicals and Potential for Chemical Release.

General Summary of comments received. Comments received expressed concern over the use/presence of chemicals, including constituents contained in fly ash (by product of burning biomass), associated with the proposal and the risk of their release into the environment.

Response. The City of Shelton reviews all proposals for compliance with the 2005 Department of Ecology Stormwater Management Manual (Manual) for Western Washington. The manual establishes the minimum requirements for development and redevelopment projects of all types and sizes and provides (State) guidance on how to prepare and implement stormwater site plans at the local level. The stated intent of the manual is to provide uniform guidance to local jurisdictions throughout western Washington in order to comply with the Federal Clean Water Act, Federal Safe Drinking Water Act, and State Water Pollution Control Act. The manual is required to be complied with for all new development within City limits and would be applied, in this case, specifically to the 2 acre area of the site proposed for redevelopment and construction of the facility as well as any other areas of the site impacted by the project. The applicant has submitted a preliminary stormwater control plan for review by the City Engineer.

Further, the Washington State Department of Ecology (DOE) is responsible for administering the State's industrial wastewater discharge program as well as ensuring that Simpson/Solomon has an approved spill response plan in place for the entire site (common practice for Industrial Sites). Simpson/Solomon is required to obtain a separate wastewater discharge permit (separate from the City of Shelton's existing permit for its wastewater treatment facility) for the proposed conveyance of the new facility's process water to the City of Shelton wastewater system. The Washington State Department of Ecology will also require an amendment to the existing Industrial Stormwater General Permit for the entire Simpson site. This process establishes "benchmarks" and action levels for selected water quality parameters. These benchmarks are established in the site's Industrial Stormwater General Permit administered by DOE and monitored by DOE Staff for compliance.

According to Simpson, ash from the existing boiler is moistened to minimize the potential for dust and conveyed to enclosed/covered storage containers. Once full, the containers are removed by Evergreen Recycling (a State approved recycling facility) in Seattle Washington via

a self-tarping truck for incorporation into concrete and concrete materials. Ash from the proposed boiler is anticipated to be handled, stored, transported, and reused/disposed of in a similar fashion.

In the event Evergreen Recycling (Simpson's current ash hauler) is unable to receive boiler ash for any reason, Simpson/Solomon will first seek another ash recycler. If no State (DOE) approved recycling facility can be located as an alternative, ash would then be transported to a state (DOE) approved landfill for disposal.

Greenhouse Gas Emissions.

General Summary of comments received. *Comments received express concern over the amount of Greenhouse gases that would be emitted by the proposal and how said gasses would be accounted for and offset. Specific comments inquire as to the applicability of the EPA "Tailoring Rule" as well as WAC 173-407 (Carbon dioxide mitigation program, greenhouse gases emissions performance standard and sequestration plans and programs for thermal electric generating facilities).*

Response. Staff consulted at length with ORCAA representatives to inquire as to the applicability of the tailoring rule as well as Washington Administrative Code (WAC) 173-407. The following is a summary of the ensuing discussion(s):

The "tailoring rule" establishes a Greenhouse Gas (GHG) applicability for two existing air permitting programs pursuant to the Federal Clean Air Act – Prevention of Significant Deterioration (PSD) and the Title V Air Operating Permit (AOP) program. The PSD and AOP programs are two longstanding permitting programs that apply to major sources of regulated air pollutants. On April 2, 2007, the Supreme Court found that Green House Gasses (GHG's), including carbon dioxide, are air pollutants covered by the Clean Air Act (CAA). Since the PSD and AOP programs are pursuant to the CAA, GHG's are, therefore, now subject to these permitting programs.

Since GHG's are emitted at rates significantly greater than any of the traditional air pollutants regulated previously, the applicability criteria for these programs needed to be amended by adding an applicability threshold tailored specific to GHG's. In other words, the threshold triggering applicability of these permitting programs with respect to GHG's was adjusted, or "tailored", in order to limit the number of facilities potentially subject to these programs due to their emissions of GHG's. This was done to limit applicability to just those facilities with significant GHG emissions. The proposed Simpson/Solomon facility will be reviewed by ORCAA staff for compliance with the tailoring rule. If GHG emissions are above the Tailoring Rule thresholds, then an Air Operating Permit (AOP) will be triggered for GHG's. An AOP is an "operating" permit and required to be secured within the first 12 months of operation of any new facility.

ORCAA staff will also review the facility based upon the requirements found in WAC 173-407, Carbon Dioxide Mitigation Program, if applicable. The section may apply since the facility would utilize a fossil fuel (Natural Gas) as a startup fuel. If applicable, this regulation requires new electric generation facilities to mitigate greenhouse gases caused by combustion of fossil fuels

and establishes GHG emissions performance standards. Since the primary fuel type is woody biomass (a non fossil fuel) the amount of GHG requiring mitigation will be potentially offset by a special credit for facilities that qualify as "Cogeneration Facilities" as found in WAC 173-407-050. ORCAA staff will review and apply appropriate conditions to the proposal, as necessary, to ensure compliance with State law.

ORCAA staff will also be reviewing the applicability of RCW 70.35 as it relates specifically to RCW 70.235.020(3) which may exempt carbon dioxide from industrial combustion of biomass from being considered a greenhouse gas.

The applicability and details of the Simpson/Solomon compliance plan for these regulations will be determined through ORCAA's air permitting process.

Applicability of the Environmental Protection Agency (EPA) Prevention of Significant Deterioration (PSD) Permit Program.

General Summary of comments received. Several comments question the lack of application of the EPA's Prevention of Significant Deterioration (PSD) permit process and advocate its applicability to the Simpson/Solomon proposal.

Response. The Prevention of Significant Deterioration (PSD) permitting program is a Clean Air Act permitting program for new and modified major sources of air pollution such as power plants. The program applies to a new plant that will have "major" and "significant" amounts of air pollution for any criteria pollutant ("Major" and "Significant" are terms defined by EPA). It also applies to an existing plant that plans to modify its operations such that the modification leads to increases of air pollution that will be "major" or "significant".

The Washington State Department of Ecology (Ecology) is mandated review authority relative to the applicability of the PSD permit process for individual projects. Ecology requested and received information from Solomon representatives relative to the contractual relationships between the 3 companies involved in the proposal (Simpson Lumber, Solomon Renewable Energy Company, and Olympic Panel Products) along with engineering information on the projected emissions, sources of fuel, and usage of steam by each operation. Ecology compared this information with EPA guidance relative to determinations where 2 or more industrial operations are under common control or ownership or are otherwise so intimately connected that one could not exist without the other in order to make the appropriate permit applicability determination. *This is important as the projected emissions of the Solomon facility, taken on its own, are below the PSD applicability threshold*. In the end, Ecology's analysis indicated that the Solomon proposal, the Simpson operations, and Olympic Panel Products operations do not have a common control and ownership connection and the three operations could exist independent of the others. On this basis, Ecology has determined that the Solomon proposal is not subject to the PSD process (See attachment 6, Letter from the Department of Ecology).

Impacts of the proposal on Goldsborough Creek.

General Summary of comments received. Comments received express concern over the location of the proposal adjacent to Goldsborough Creek within its floodplain, and the lack of mitigation for impacts associated with the proposal.

Response. Goldsborough Creek traverses the Simpson site from east to west draining into Oakland Bay to the west. The Creek has been armored/channelized throughout the entire Simpson property, contains 3 bridge crossings, and is bordered by multiple Simpson Railroad tracks, a large log storage yard, and Simpson Sawmill number 3 on its south side and is entirely paved to the north of the creek with a (roughly) 8 foot wide pedestrian pathway and east/west site access road lying directly north of the creek and along the top of the armoring, as well as a pumphouse building, railroad roundhouse, existing fuelhouse, boiler, and associated emissions equipment present as well. The subject 2 acres of property lies to the west of the existing fuelhouse and boiler, east of the Simpson railroad roundhouse structure, and north of the existing access road and pedestrian pathway and is presently paved and utilized for finished lumber storage. With the exception of some lessened finished lumber storage area (due to the proposal) these existing uses would remain unchanged. This is important as the City of Shelton Critical Areas Ordinance addresses creeks within the City on a "reach" based approach with Goldsborough Creek, to the east of First Street (Simpson Owned property) being contained within a single "reach" due to the existing creek conditions and development present. The regulations require that the entire reach be subject to a restoration/management plan to be developed and implemented at the time of "substantial" site development. "Substantial" is defined in the regulations as the expansion of impervious surfaces by more than 50 percent (the project would result in no addition of impervious surfaces as the area is currently paved), the expansion of floor area of structures by more than 50 percent (the proposed improvements constitute less than a 10% increase in floor area), or remodeling or renovation that exceeds one hundred percent of the value of the structures or other improvements. The project would not exceed any of the noted thresholds on the site. Further, The City's Critical Areas regulations do not apply/extend across "roads or other lawfully established structures or hardened surfaces that are functionally and effectively disconnected from the stream."(SMC 21.64.320D). Given the site's intense existing development, along with the very armored and channelized nature of Goldsborough Creek throughout the site, the proposal is anticipated to have a net neutral impact on the creek habitat as indicated in the submitted Critical Areas Assessment prepared for the proposal by Curtis Wambach (see Attachment 7).

The project site is located within the FEMA identified 100 year flood plan as indicated on Flood Insurance Rate Map Community Panel Number 530116-0002B. The proposed (new) facilities are required to comply with all applicable regulations for development within identified flood plains. Compliance with the regulations is mandatory and is verified during building permit (plan) review and subsequent inspections during project construction.

An EIS should be required based on State Law.

General Summary of comments received. *Comments received state that various provisions of State Law, as they relate to solid waste, necessitate that the City prepare an Environmental Impact Statement (EIS) for the proposal as the proposed facility is a "solid waste or energy recovery facility".*

Response. The City of Shelton consulted with the Washington State Department of Ecology (Solid Waste Division) and the Olympic Region Clean Air Agency to review pertinent regulations (WAC 173-350 and WAC 173-434) and underlying sections of the RCW (RCW 70.95). All three agencies are in agreement that Chapters 173-350 and 173-434 of the Washington

Administrative Code (WAC) do not apply to the proposal. This is due to the fact that the proposed cogeneration facility would be fueled primarily with hog fuel derived from milling operations (a historic fuel source for lumber mills) and, periodically, a small amount of hog fuel derived from forest slash as a makeup fuel. This fuel is not "Solid Waste" pursuant to State law and, therefore, the facility is not a waste handling facility and is not subject to the requirement. This conclusion is based on the following:

- RCW 70.95.700 states that *"No solid waste incineration or energy recovery facility shall be operated prior to the completion of an environmental impact statement..."* Definitions contained in the section define "solid waste" as: *"Solid waste" or "wastes" means all putrescible and nonputrescible solid and semisolid wastes including, but not limited to, garbage, rubbish, ashes, industrial wastes, swill, sewage sludge, demolition and construction wastes, abandoned vehicles or parts thereof, and recyclable materials."* The definition does not include mill residuals nor forest biomass in the definition of solid waste. Further, RCW 70.95D.010(4) defines "incinerator", as contemplated in the legislation, as *"a facility which has the primary purpose of burning or which is designed with the primary purpose of burning solid waste or solid waste derived fuel, but excludes facilities that have the primary purpose of burning hog fuel."*
- The wood fuel proposed for use by Solomon is neither "solid waste" nor "wood waste" as these terms are defined in WAC 173-350-100 because the wood fuel in question is not a "waste" and is not considered "waste" by the industry but, rather, a byproduct of lumber production and traditional fuel source (and commodity) of the logging industry as a whole. For example, Simpson Lumber has utilized hog fuel in various boilers to produce process steam at their Oakland Bay waterfront facilities for over 75 years and currently produces an "excess" of mill residual derived hog fuel from their milling operations. That excess hog fuel is sold to other facilities for their use.
- Hog Fuel is not "Wood Derived Fuel". WAC 173-350-100 defines "Wood Derived Fuel" as "wood pieces or particles used as a fuel for energy recovery, which contain paint, bonding agents, or creosote." The City's understanding is that the facility proposed by Solomon would combust only clean hog fuel purchased from Simpson Lumber, derived primarily from existing lumber and plywood production and, as a makeup fuel, from logging operations. These fuel streams will not contain any post-consumer wood that was previously discarded or wood that contains paint, bonding agents, or creosote.
- Regulations for Solid Waste Incinerator Facilities under Chapter 173-434 (WAC) do not apply to the proposal. The proposed fuel for the plant is woody mill residual and limited forest slash which is not considered "Solid Waste" pursuant to the definitions contained in the Chapter (173-434-030 WAC).

III. THRESHOLD DETERMINATION

State Environmental Policy (RCW 43.21C) and the State Administrative Rules (SEPA Rules, WAC 197-11) stipulate that an EIS be prepared when there is a potential significant adverse environmental impact for which mitigation is not easily identified. The City of Shelton believes that the information being provided gives adequate information for the City of Shelton to identify potential impacts with potential mitigation measures thus, an EIS is not required.

Lead Agency: City of Shelton

The lead agency for this proposal has determined that the project does not have a probable

significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public upon request.

MITIGATION MEASURES:

The following mitigation measures are required by the City of Shelton to address and mitigate for potential impacts created by the proposed project:

1. The applicant shall apply for and be awarded building permits for the proposal prior to the initiation of construction at the site
2. Prior to issuance of building permits for the proposal, the applicant shall be awarded all applicable land use permits through the City of Shelton, including: Shoreline Substantial Development and Conditional Use Permit, and Special Use Permit. The project shall be subject to all terms and conditions of the pending land use permits.
3. Prior to issuance of building permits for the proposal, the applicant shall submit full Civil Improvement Drawings for project associated utilities, including stormwater, for the review and approval of the City Engineer. The Civil Improvement Plans shall be drawn and signed (stamped) by a Civil Engineer licensed to practice in the State of Washington.
4. Prior to holding any public hearing or issuance of any permits by the City, including Shoreline Substantial Development and Conditional Use Permits, Special Use Permit, and building permits, the applicant shall be awarded all applicable air quality permits and approvals from all agencies including, but not limited to, the Olympic Region Clean Air Agency (ORCAA) and the Washington State Department of Ecology (DOE), as applicable. Full compliance with applicable air quality permit determinations is mandatory.
5. This SEPA determination is based on evaluation of a woody biomass facility that is proposed to utilize only woody biomass as a fuel source with natural gas utilized as startup fuel. Should Solomon or any subsequent operators of the facility request the use of any fuel other than those noted above, the City shall re-evaluate the proposal based on the proposed fuel, its associated impacts, and issue a new and/or revised SEPA determination and project related land use permits as determined necessary by the Shelton City Commission.
6. Any future amendments to the proposal that would require that a new and/or amended Notice of Construction or similar permit be obtained through the Olympic Region Clean Air Agency, the Washington State Department of Ecology, or other agency with jurisdiction, shall allow the City to re-assess the proposed changes relative to project related land use permits and the SEPA determination relative to the facility, as determined necessary by the Shelton City Commission. A City determination as to whether the proposal requires amendments to any local approvals or SEPA determination shall be required prior to ORCAA, DOE, or other agency with jurisdiction rendering a decision on the amended/new application.
7. The Simpson owned (steam only) boiler shall operate no more than 120 days per year in tandem with the proposed wood fired boiler. Solomon and Simpson shall submit monthly reports to the City of Shelton quantifying the number of days/hours and dates of operation of both facilities. A "day" of tandem operation shall be defined as both boilers operating in tandem one-hour or more in a 24 hour period for the purposes of this

determination. Exceedance of this threshold allows the City of Shelton the right to re-assess project associated impacts and re-consider project associated permits and SEPA determination, as determined necessary by the Shelton City Commission.

8. Prior to issuance of building permits for the proposal, the applicant shall pay all traffic impact fees and general facilities charges (for sewer service) as applicable.
9. Prior to issuance of building permits for the proposal the City Engineer and/or liaison shall inspect all access streets to the site and document with photographs as well as other applicable means common to the engineering trade to document the current state of said access streets. The applicant shall be responsible for repairing any street that is negatively impacted through construction equipment wear or damage to City streets or sidewalks from construction of the project.
10. Prior to issuance of building permits for the proposal the applicant shall secure a Wastewater Discharge Permit, amend their existing Industrial Stormwater General Permit, as well as secure all other applicable permits through the Washington State Department of Ecology.
11. Operation of the facility shall meet the requirements of WAC 173-60 governing maximum environmental noise levels.
12. Except as may be required for security and worker safety, fixtures for night lighting associated with the proposal shall be cutoff style and downcast type in order to minimize light intrusion on adjacent properties, roadways, and the night sky.
13. Construction of the facility could expose previously unknown archeological or cultural resources. If these resources are discovered during construction, work in the area will be halted immediately and the applicant shall contact the City of Shelton and Washington State Department of Archaeology and Historic Preservation (DAHP) as well as local tribes. The applicant shall work with the City, DAHP, and local tribes to determine an appropriate course of action.

This MDNS is issued under the Optional Determination of Nonsignificance process codified in WAC 197-11-355 and no additional comment period is required.

This MDNS is issued under WAC 197-11-355. As noted previously, the applicant has also filed for land use permits (Shoreline Substantial Development and Conditional Use Permit, and Special Use Permit) with the City of Shelton. In order to receive approvals of these permits the applicant is required to demonstrate that the project meets the applicable requirements of the City of Shelton Master Shoreline Program, the City of Shelton Municipal Code, and the City of Shelton Comprehensive Plan.

Public Hearing

A public hearing is required for the land use permits noted. A public hearing date has not been scheduled but will be noticed under separate cover in accordance with the requirements of the Shelton Municipal Code.

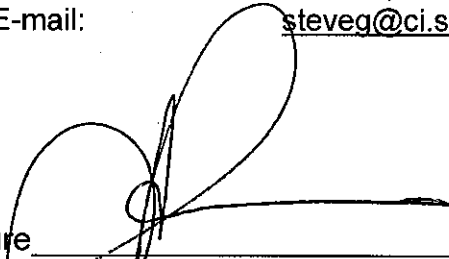
Appeals:

There are no provisions for an administrative appeal of this threshold determination and MDNS to the City of Shelton. An appeal of this threshold determination must be made in conjunction with a specific governmental action. As a permit decision has not yet been made, the date, place, and related information regarding an appeal of any government action cannot be provided at this time and will be stated as part of any future permit decision(s). Judicial appeals are

subject to the Revised Code of Washington Section 43.21C.075.

Responsible Official: Steve Goins
Position Title: Community and Economic Development Director
Address: City of Shelton
525 W. Cota Street
Shelton, WA 98584
E-mail: steveg@ci.shelton.wa.us

Signature



Date: April 5, 2011

Attachments:

- 1) Project Plans and Site Plans
- 2) Comment Letters/e-mails Received
- 3) Mason County Health Officer White Paper and Washington DOH response letter
- 4) Simpson Response Letter
- 5) Revised Traffic Impact Analysis
- 6) Department of Ecology Letter Regarding PSD Applicability
- 7) Critical Areas Assessment
- 8) SEPA Checklist