INDUSTRIAL FOOTPRINT PROGRESS REPORT

Date: August 10, 2007
Recipient: Carolyn Gangmark, EPA Region 10
Cc: Kristina Heinemann, EPA Headquarters
Agreement Number: EI-96028401
Report Number: 5
Reporting Period: May 1, 2007 – July 31, 2007
Agreement Project Period: May 3, 2006 – April 1, 2009
Recipient Contact Person: Angela Fritz
Project Coordinator/Project Manager: Marc Crooks/Carol Kraege

I. Progress Achieved in Accomplishing Project Goals/Objectives, Outputs, and Outcomes:

Milestone/Task# 1:
Secure agency resources. Task 1 is 100% complete, as described in Quarterly Report Number 2.

Milestone/Task# 2:
Secure mill participation. See attached milestone/task chart to view changes made to the Project Schedule.

Planned:
Continue to secure mill participation. Invitation to participate and project updates will be sent to Kimberly-Clark (Everett), Nippon Paper USA (Port Angeles), Georgia Pacific West (Bellingham), Georgia Pacific (Camas), Port Townsend Paper, Sonoco (Sumner), Weyerhaeuser (Longview), and Longview Fibre Paper and Packaging.

Actual Work Completed:
Continued contact with mills underway. Participation letter sent to all participating mills. Appreciation plaque created and purchased. Project logo created and published. Verbal and/or email invitations and project updates sent to Kimberly-Clark, Nippon Paper USA, Georgia Pacific West, Georgia Pacific Camas, Port Townsend Paper, Weyerhaeuser and Longview Fibre. A formal letter of invitation and update was sent to Weyerhaeuser (see appendix A).

Output and/or Outcome Achieved:
Visited Nippon Paper USA, who agreed to participate. Georgia Pacific Camas, Georgia Pacific Camas, Port Townsend Paper, Longview Fibre and Weyerhaeuser (Longview) have decided not to participate in the project at this time. Kimberly-Clark has been non-

responsive. Georgia Pacific Bellingham is interested in participating in the project and will make the decision by the end of August. Participation letters, signed by Ecology director Jay Manning, were issued to the four mills participating on June 19, 2007. Project logo posted on the web page, on the Ecology Industrial Section web page list of mills and printed on the plaque. Task 2 is 40% complete

Unit Cost thus far to accomplish this goal/objective:
Approximately $3500.00 for this reporting period

Milestone/Task# 3:
Select sector indicators. See attached milestone/task chart to view changes made to the Project Schedule.

Planned:
Conduct mill collaboration and stakeholder involvement meetings to finalize sector indicators.

Actual Work Completed:
Mill Collaboration Meeting held on June 5, 2007. All draft indicators (environmental, social and economic) were shared.

Output and/or Outcome Achieved:
See attached draft indicator chart in Appendix B. Task 3 is 81% complete.

Unit Cost thus far to accomplish this goal/objective:
Approximately $1118.28 for this reporting period

Milestone/Task #4:
Conduct community outreach. See attached milestone/task chart to view changes made to the Project Schedule.

Planned:
Hire contractor. Develop and implement community/stakeholder outreach plan. Send update of project progress to all mills, in order to encourage participation and for the purposes of informing participating mills of what the others are doing. Update web page as necessary.

Actual Work Completed:
Contract negotiations underway. Draft letter updating those who are not participating of the project's progress is under development. Webpage updated as necessary and placed in Ecology's Spotlight on the Ecology homepage. Mill information for Grays Harbor Paper, Simpson Tacoma Kraft and Nippon Paper USA added; participation letters and logo

added. Accepted invitation to make a presentation at the September National Council for Air and Stream Improvement (NCASI) west coast regional meeting in Portland, OR.

Output and/or Outcome Achieved:
Web page highlighted on Ecology's Spotlight section of Ecology's homepage in May and June. According to webtrends website tracking database, webpage received 410 views in May, 389 views in June, and 268 views in July. Stakeholder plan shared with contractors interviewed. Draft letter updating those who are not participating of the project's progress is under development. Task 4 is 40% complete.

Unit Cost thus far to accomplish this goal/objective:
Approximately $500.00 for this reporting period

Milestone/Task #5:
Secure contractor support. See attached milestone/task chart to view changes made to the Project Schedule.

Planned:
RFP Proposals due May 10, 2007; Proposal evaluation complete May 17, 2007; Oral interviews with finalists complete May 24, 2007; Announce "Apparent Successful Contractor" and send notification via fax or e-mail to unsuccessful Consultants by May 31, 2007; Negotiate contract June 6, 2007 – June 11, 2007; File contract with OFM June 11, 2007; Begin contract work June 25, 2007.

Actual Work Completed:
Two fully responsive proposals received, reviewed, and interviews held. Announced "Apparent Successful Contractor" on June 7, 2007. Notification to unsuccessful Consultant occurred on June 7, 2007. Began contract negotiations on June 19, 2007. Scope of work drafted. Financial language under development.

Output and/or Outcome Achieved:
Interviewed WE Consulting and Earth Economics. Earth Economics has been selected. Contract negotiations ongoing. Task 5 is 65% complete.

Unit Cost thus far to accomplish this goal/objective:
Approximately $4500.00 for this reporting period

Milestone/Task #6:
Select indicators for 8 mills. See attached milestone/task chart to view changes made to the Project Schedule.

Planned:

Partner with 8 mills and 8 mill communities to develop mill specific indicators. Select indicators for mills. Work with mills and stakeholder groups on indicator selection. Indicator selection for individual mills 80% complete.

Actual Work Completed:
Partnership established with Nippon Paper USA to develop mill specific indicators. Presented draft indicator list to participating mills for their review and comment as to how they would relate to the different mills.

Output and/or Outcome Achieved:
Mill collaboration continues. Task 6, as it pertains to indicator analysis, is 56% complete.

Unit Cost thus far to accomplish this goal/objective:
Approximately $1500.00 for this reporting period

Milestone/Task# 7:
Amend the Quality Assurance Project Plan (QAPP). See attached milestone/task chart to view changes made to the Project Schedule.

Planned:
Amend QAPP as necessary.

Actual Work Completed:
None

Output and/or Outcome Achieved:
None

Unit Cost thus far to accomplish this goal/objective:
$0.00

Milestone/Task #8:
Develop stakeholder involvement plan. See attached milestone/task chart to view changes made to the Project Schedule.

Planned:
Hire contractor. Develop and implement stakeholder involvement plan. Determine budget and timeline for meetings. (Meetings will vary between public meetings, focus groups, and workshops.)

Actual Work Completed:
Draft stakeholder involvement plan given to contractor Earth Economics. Scope of work

within the contract as it pertains to the stakeholder involvement plan and stakeholder meeting schedule finalized.

Output and/or Outcome Achieved:
Contractor scope of work, as it pertains to the stakeholder involvement plan and stakeholder meeting schedule, finalized. Task 8 is 65% complete.

Unit Cost thus far to accomplish this goal/objective:
Approximately $100.00 this reporting period

Milestone/Task #9:
Develop baseline footprints for 8 mills. See attached milestone/task chart to view changes made to the Project Schedule.

Planned:
Work with participating mills on data selection. Waste indicator portion of Boise Wallula footprint complete. Data collection for indicator development for one indicator will be completed for both Gray's Harbor Paper and Simpson Tacoma.

Actual Work Completed:
None

Output and/or Outcome Achieved:
None

Unit Cost thus far to accomplish this goal/objective:
$0.00

II. Difficulties Encountered:

Milestone/Task# 1:
Secure agency resources. Completed as described in Quarterly Report 2.

Milestone/Task# 2:
Secure mill participation.

Problem(s):
Number of mills participating is lower then projected. Most of the major facilities continue to see this project as a burden that will not benefit them. Unless more funds are secured, contractor scope of work covers only five mills.

Resolution/Corrective Action Plan and Schedule:
Milestone chart will be updated to reflect changes in anticipated schedule. We will proceed with those mills that have agreed to participate and continue to pursue others. We expect the more reluctant mills will become more interested as our efforts to integrate the footprint project with ongoing agency incentives work continues. Recent press interest may also work in our favor. Pursue contact with Georgia Pacific West, as they have expressed interest. Contact Sonoco in Sumner, WA. A letter demonstrating the progress of the project will be sent to all mills, in order to encourage participation and for the purposes of informing participating mills of what the others are doing. Further funding will be sought, both by Ecology and Earth Economics individually and jointly, in order to facilitate the inclusion of eight mills.

Milestone/Task# 3:
Select sector indicators.

Problem(s):
Need input for pulp and paper sector and stakeholders on sector indicators.

Resolution/Corrective Action Plan and Schedule:
Milestone chart will be updated to reflect changes in anticipated schedule. Give presentation at NCASI west coast regional meeting in September 2007. Hold a second Mill Collaboration Meeting with the participating mills in September 2007. Hold one stakeholder meeting for each participating mill in the time frame of August 31-October 15, 2007. Finalize sector indicators by December 2007.

Milestone/Task #4:
Conduct community outreach.

Problem(s):
While Earth Economics has been selected, the contract has not yet been signed. Therefore, community outreach did not take place as anticipated.

Resolution/Corrective Action Plan and Schedule:
Milestone chart will be updated to reflect changes in anticipated schedule. Contractor will be in place August 2007. A final community involvement plan developed by August 31, 2007. Hold one stakeholder meeting for each participating mill in the time frame of August 31-October 15, 2007. Make presentation at September NCASI meeting.

Milestone/Task #5:
Secure contractor support. See attached milestone/task chart to view changes made to the Project Schedule.

Problem(s):
Due to administrative procedures and vacation schedules, the contract with Earth Economics has not yet been signed.

Resolution/Corrective Action Plan and Schedule:
Milestone chart will be updated to reflect changes in anticipated schedule. Contractor support will be secured August 2007.

Milestone/Task #6:
Select indicators for 8 mills.

Problem(s):
Number of mills participating is lower than projected. Stakeholder meetings to vet indicators has not taken place.

Resolution/Corrective Action Plan and Schedule:
Milestone chart will be updated to reflect changes in anticipated schedule. We continue work to secure mill participation. A letter demonstrating the progress of the project will be sent to all mills, in order to encourage participation and for the purposes of informing participating mills of what the others are doing. Mill specific indicators will be developed as each new mill agrees to participate and collaboration and stakeholder meetings are held.

Milestone/Task# 7:
Amend QAPP.

Problem(s):
Amendment II did not occur.

Resolution/Corrective Action Plan and Schedule:
Milestone chart will be updated to reflect changes in anticipated schedule. Contract with Earth Economics hired August 2007. QAPP will be amended to reflect quality objectives for individual mill footprint data as indicators are finalized.

Milestone/Task #8:
Develop stakeholder involvement plan.

Problem(s):
Require contractor expertise to fully develop and implement stakeholder involvement plan. Budget and timeline for meetings not yet determined.

Resolution/Corrective Action Plan and Schedule:
Milestone chart will be updated to reflect changes in anticipated schedule. Contractor

support will be secured August 2007. Stakeholder involvement plan will be finalized and implemented August 2007, to include gathering information about the community's perceptions of the impacts, both positive and negative of the mill in their community, and information about potential improvements to the mills, budget and meeting schedule.

Milestone/Task #9:
Develop baseline footprints for 8 mills

Problem(s):
Number of mills participating is lower than projected. Given that sector and individual mill indicators have not been finalized, no data was collected from participating mills as anticipated during this reporting period.

Resolution/Corrective Action Plan and Schedule:
Milestone chart will be updated to reflect changes in anticipated schedule. Continue work to secure mill participation. A letter demonstrating the progress of the project will be sent to all mills, in order to encourage participation and for the purposes of informing participating mills of what the others are doing. Collect data from participating mills during the next quarter.

III. Activity Anticipated During Next Reporting Period:

Milestone/Task # 1: Task 1 complete, as described in Quarterly Report Number 2.

Milestone/Task# 2: Appreciation plaques will be presented to the participating mills in August. Continue to secure mill participation. Pursue contact with Georgia Pacific West, as they have expressed interest, either verbally or by email. Contact Sonoco in Sumner, WA, either verbally or by email. A letter demonstrating the progress of the project will be sent to all non-participatory mills, in order to encourage participation and for the purposes of informing participating mills of what the others are doing.

Milestone/Task# 3: Conduct second Mill Collaboration Meeting in September. Hold one stakeholder meeting for each participating mill, presenting and getting feedback on indicators, during the time frame of August 31-October 15, 2007. Finalize sector indicators by November 1, 2007.

By September 30, 2007, Earth Economics will look at life cycle impacts arising from management of forests where pulpwood originates to facility operations to markets where pulp and paper products are consumed and to atmospheric, aquatic, and terrestrial sinks that absorb waste products. To identify these impacts, a comprehensive literature review

will be conducted and combined with information gathered from the stakeholder involvement process.

Based on the comprehensive tally of impacts, Earth Economics will evaluate the draft set of sector indicators and make recommendations on ways to refine and supplement the set by September 30, 2007. Comments will address how well each indicator relates to one or more impacts researched and will include suggestions for deleting, adding, or refining indicators as appropriate to insure that all major impacts are captured.

Milestone/Task #4: Finalize and implement community/stakeholder involvement plan with Earth Economics. Publish news releases as appreciation plaques are presented in August. Make presentation at September NCASI meeting. Hold one stakeholder meeting for each participating mill during the time frame of August 31-October 15, 2007. Update webpage as necessary.

Milestone/Task #5: Contract to be signed the first half of August 2007.

Milestone/Task #6: Work with Earth Economics, mills and stakeholder groups on indicator selection to identify indicators appropriate for each facility and to proceed with gathering the relevant data to support each indicator. While most industrial-level indicators are expected to apply, there may be unique circumstances at individual facilities to warrant exclusion of particular indicators. If this complicates inter-facility comparisons, another method may be used if approved by Ecology. If the final set of indicators must be limited due to budget and time constraints, Ecology must first approve the list. This will be completed by January 1, 2008.

Milestone/Task# 7: Amendment II of the QAPP by October 31, 2007.

Milestone/Task #8: Develop and implement stakeholder involvement plan by August 31, 2007.

Milestone/Task #9: Ecology will be responsible for gathering data from mills for Earth Economics to process. Earth Economics will recommend to Ecology ways to aggregate indicators in order to produce a single numerical rating for each facility – the Industrial Footprint. One aggregation scheme will be the "sustainability circles" scheme. Earth Economics will research other systems as well and prepare a memo for Ecology describing options.

Earth Economics will provide an Excel-spreadsheet tool that will be used to convert data into individual indicator scores as well as an overall Industrial Footprint for each facility.

This will be completed by January 1, 2008.

Future Quarterly Report due dates:

November 10, 2007
February 10, 2008
May 10, 2008
August 10, 2008
November 10, 2008
February 10, 2009
Close-out - April 4, 2009

IV. Financial Report

Financial Information removed by EPA as confidential business information.

Signature (Recipient Authorized Official): _____Carol Kraege _____
Date:____August 15, 2007_____
(If progress report is transmitted by e-mail, please save the e-mail as part of the official project file).

Note: Upon receipt of progress report, the EPA project officer should make a notation on report as to whether it is acceptable or not and provide guidance to the grantee on changes that will be required for subsequent reports and amendment to the current report.

APPENDIX A: WEYERHAEUSER LETTER

July 13, 2007

Ken Johnson
Weyerhaeuser Company
EC2-2C1
PO Box 9777
Federal Way, Washington 98063-9777

Dear Mr. Johnson:

Thank you for your prompt email response to my inquiry about scheduling a meeting to discuss Ecology's Industrial Footprint Project. I apologize for the long delay in our response to your letter regarding the Industrial Footprint Project dated June 26, 2006.

As you noted in your email message, much has changed since June 2006. Ecology now has staff assigned to the project and four mills have signed on to participate. Ecology's director, Jay Manning, has sent each of the four mills a letter thanking them for their support and participation. In fact, as we noted in the letters to Boise Paper Solutions Wallula, Grays Harbor Paper Hoquiam, Simpson Tacoma, and Nippon Paper Port Angeles; Ecology has prepared a participation plaque which our Program Manager, Cullen Stephenson, will present to the participating mills' management and environmental staff.

This project is not only drawing the interest of Ecology's management, but also great interest from EPA Region 10 and EPA Headquarters, Washington, D.C. It is an innovative approach to evaluate our progress in reducing environmental, social and economic impacts. This represents a big step towards measuring sustainability. I am also keeping this project aligned with EPA's integrated permit effort and EPA's broad sector approach that is underway in their air program with American Forest & Products Association involvement.

Ecology recognizes and congratulates Weyerhaeuser on the company's existing goals toward sustainable business practices. Weyerhaeuser's work in the area of sustainability is compatible

with the footprint project, and your participation in the project would be a natural next step.

In your letter, you asked what tangible business value might be realized through participation. Below is a short list of significant outcomes I believe could result from the Footprint Project. These ideas have been developed during the start-up of the project over the last six months. Without mill specific costs, I cannot predict the specific amount of capital savings, but the savings are there.

- As I noted in a couple of recent Weyerhaeuser emails regarding BART and regional haze, the Pulp and Paper (P&P) industry in the Pacific Northwest is mature. Also, the raw material base (i.e., wood chips) is probably not sufficient to support a new mill. The industrial footprint project will be addressing raw materials and waste steams through specific indicators now under development. This analysis will generate information that could have a very real impact on efficiencies in the raw materials markets, and produce a material exchange or material for exchange advertising spot on the footprint web page. Any new technique and application will likely result in regulation flexibility and a financial payback to your company.

- Over the next few years older fossil fuel-fired boilers will be retired, and new steam generating technologies installed (including cogeneration, biomass-fired boilers, and biorefineries). The footprint analysis will provide advanced planning and result in a more efficient use of staff resources at Weyerhaeuser and at Ecology. This will result in cost savings to both Weyerhaeuser and Ecology.

- Participation will also mean increased input and information through me to government committees, and access to developing federal regulatory control programs under consideration such as the integrated permit program, and the air broad sector strategy.

- I expect that finding an inclusive way to look at economic, social, and environmental impacts from large industrial facilities will provide the basis for significant reform in the way we focus our efforts here at the Industrial Section. The Industrial Footprint Project holds the potential to produce a new strategic approach of setting priorities. The footprint project could set the stage for changes in the flexibility under existing rules, new rules, or new statutes. The projects results and recommendations might also help EPA build in more flexibility to their rules as well.

- The industrial footprint project is not the only effort by Ecology to explore ways to promote and reward sustainable practices. Some agency efforts are now underway, such as Ecology's development of an Envirostars program. Information coming out of the footprint project will help shape all of these other agency efforts.

Participation in the Industrial Footprint Project brings membership in an exclusive group moving forward to develop environmental stewardship, quality, trust, community leadership, and improve performance.

I very much look forward to exploring and implementing incentives that will produce meaningful environmental improvements. It is my expectation that projects generated from analysis of a mill's footprint will receive a more efficient approval and permitting from Ecology because the knowledge gained from the footprint analysis will provide Ecology with a pre-engineering review of facility improvements. Therefore, your company's participation would result in expedited permitting and a more efficient use of your company's capital.

The industrial footprint web page is regularly updated with the latest developments of our project. We have just added our new project logo's icon to the names of the participants on the Industrial Section P&P web page mill list http://www.ecy.wa.gov/programs/swfa/industrial//pulpl.html). Anyone that clicks on the footprint icon will be taken to the footprint project web page. (http://www.ecy.wa.gov/programs/swfa/industrial /IndFootprint.html)

Carol Whittaker and I are planning to meet to further discuss the project and participation. I invite you and any others from your company that might contribute to our discussion, to join us. I will contact you regarding potential meeting times after Monday, July 23rd.

My telephone number is 360-407-6934, and my email is mcro461@ecy.wa.gov. I am looking forward to sitting down with you in the near future to discuss the project and answer any questions you might have.

Sincerely,

Marc E. Crooks
Industrial Section
Washington Department of Ecology

cc: Greg Bean, Weyerhaeuser Longview
Brien Kirby, Weyerhaeuser Longview
Vance Marlow, Weyerhaeuser Longview
Brian Wood, Weyerhaeuser Longview
Carol Kraege, Ecology

APPENDIX B
DRAFT INDICATOR LIST

Footprint Analysis Worksheet						
Indicator	**Description**	**Data Value (unit less)**	**Data Date**	**Data Required by Permit**	**Performance Target**	**Stakeholders**
Economic						
Cost of Goods and Services	Items and services purchased in local community (such as production and packaging materials, trucking services, service contracts on facilities and equipment)			No		
	Payroll, including benefits					
	Federal and State taxes					
	Subsidy or government-assisted financing					
Community Involvement	Donations - monetary					
	Donations – material					
	% of donations given of net facility profits					
	Contributions to non-profit organizations (such as sponsoring blood drives, food/goods collections, soldier or natural disaster support, Cancer Society					

Footprint Analysis Worksheet						
	Description	**Data Value (unit less)**	**Data Date**	**Data Required by Permit**	**Performance Target**	**Stakeholders**
	Walk, United Way…)					
	Education to the local area (such as an internship program for local area students, speaking at educational venues, providing scholarships, mill open houses and tours w/safety education, having a fair booth)					
	Someone at the mill having membership in local Emergency Planning Committees					
	Support of mill families (such as financial support to children for county fair livestock program)					
Environmental						
Materials	Percentage of materials used that are wastes (processed or unprocessed) from sources external to the facility)			No		
	Percentage of materials that are of local origin					
Energy	Electricity usage - percent of electricity generated to electricity purchased			No		

Footprint Analysis Worksheet						
Indicator	**Description**	**Data Value (unit less)**	**Data Date**	**Data Required by Permit**	**Performance Target**	**Stakeholders**
	Efficiency of energy using systems to conserve energy usage and therefore mitigate cost					
Water	Percent of monthly average TSS to TSS permit limit					
	Water usage - Percent of water recycled to raw water intake			No		
	Impacts of water usage on ecosystems/habitat					
	BOD					
Air	Percentage of NO_x to total air emissions reported					
	Percentage of CO_2 to total air emissions			No		
	Percentage of SO_2 to total air emissions					
Biodiversity and Natural Habitat	Existence of any within property grounds and steps taken to protect/preserve it					
Remediation Projects	Remediation projects undertaken on site					
Compliance	History of compliance with laws and regulations (How many violations?) and any resulting fines					

Footprint Analysis Worksheet						
	Description	**Data Value (unit less)**	**Data Date**	**Data Required by Permit**	**Performance Target**	**Stakeholders**
Waste	Amount produced minus amount recycled and composted			No		
Social						
Environmental Nuisance	# of monthly average traffic, odor, dust, lighting, vibration and noise complaints			No		
Labor Practices and Decent Work	% Wages and Employee Benefits exceed area's median			No		
	Percentage of the number of jobs provided to the community (demographics of salaried vs. hourly and the benefits given to employees)					
	Average range of hours worked per employee and per shift, by type of employee (hourly or salary)					
	Employee benefits beyond what is legally mandated (such as paternity or education benefits)					
	Turn-over rate of non-management positions					
	Programs of procedures for getting employee input on					

Footprint Analysis Worksheet						
	Description	**Data Value (unit less)**	**Data Date**	**Data Required by Permit**	**Performance Target**	**Stakeholders**
	changes in facility operation					
	Ratio or open management and supervisory positions filled by internal advancement vs. outside hire.					
Safety	Number of accidents, percent of increase/decrease of accidents, lost time due to injury					
	History of OSHA compliance and any resulting fines					
	Exercise room or physical therapy offered on site					
Human Rights	Policies in place to ensure good and fair treatment of all employees, ethical behavior, non-retaliation/harassment, equal opportunity employment					
Environmental Justice	Any policies, programs, or procedures in place to ensure that environmental justice issues are addressed.					
Social Awards	Awards received for social, ethical, and environmental performance			No		