

Survey of Post-Consumer Feedstock Usage in the County of Santa Cruz



Prepared for:



Prepared by:

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July 3, 2014

Via Email

Subject: Santa Cruz County, Survey of Current and Potential Feedstock and Recycled Content Usage within the Central Coast Recycling Market Development Zone.

Dear Ms. Rose:

In accordance with our Agreement, IntelliWaste, Inc. (IntelliWaste) is pleased to present our survey of current and future feedstock and recycled content usage within the Central Coast Recycling Market Development Zone (CCRMDZ) for Santa Cruz County.

The purpose and goal of this survey was to:

- 1) To identify and survey manufacturers that currently use recycled materials to manufacture new products within the CCRMDZ as to their ability to increase their use of recovered materials.
- 2) To identify manufacturers not currently using recycled materials to manufacture new products within the CCRMDZ as to their ability to use recovered materials.

While the term “manufactured” is used throughout this survey report, we have also included building and construction companies as part of the group of companies we contacted. These non-manufacturing industries can and do use recycled feedstock post-consumer materials as part of their industry practice.

To accomplish these purposes and goals, IntelliWaste performed the following tasks:



TASK 1:

Identify manufacturers from publicly available databases using available sources specifically for Santa Cruz County. We developed a list of the industries most likely to have recycled product feedstock requirements.

TASK 2:

Contacted the candidate manufacturers and conducted a telephone interview to discuss the company's raw material usage and feedstock requirements. Interviews were conducted predominately over the phone, as we have learned that this is the most effective way for reaching companies. In the event that a company's phone number was not made publicly available, we used emailed as an alternative means for communication. During each interview, we asked basic questions from each company regarding the type of business they are engaged in. These interviews were supplemented by internet research used to develop a work paper profile for each company. Using this information, each company profile consists: the company name; interviewee name; telephone number; website, if applicable; number of company employees; recycled content type and usage; equivalent raw material source and usage; future plans to substitute and incorporate local recycled materials into their manufacturing process; and other pertinent information.

TASK 3:

Identified current material generator flow pathways of recycled feedstock within Santa Cruz County to determine where materials are moving from and to.

TASK 4:

Identified recycling/reuse/options in Santa Cruz County for recycled feedstock materials. We will discuss the present recycling/reuse conditions within Santa Cruz County and present findings.

RECYCLED FEEDSTOCK MATERIALS

Feedstock is defined as raw material required for an industrial process. Recycled feedstock is further defined as material that has been previously recycled that can again be used as basic feedstock or reused in a primary manufacturing process. While the definition is applied to manufacturing processing, we have further expanded the term to include agricultural industries that use organic products such as compost. The following recycled feedstock materials are known to be used in various manufacturing and agricultural processes.

- Metals such as copper, aluminum and steel

- Plastics
- Construction and Demolition Materials (C&D) such as concrete, aggregate and rock
- Glass
- Wood and organic materials such as compost
- Tires

In the case of recycled feedstock as a raw material, the likely target customer is an industrial manufacturer who would be willing to test, reformulate, and retool (if necessary), to use the recycled feedstock. Depending on the process and the end product, either a percentage of recycled feedstock can be used in a formulation, or when technically feasible, 100% recycled-content feedstock is used. The recycled-content feedstock must have some measurable benefit; e.g., more efficient production, better product performance or aesthetics, more flexible delivery, or lower cost.

LIST OF SURVEY QUESTIONS

For each company contacted, IntelliWaste prepared a specific list of questions to inquire about recycled feedstock usage (post-consumer) either current or for potential use in the future. Depending on the initial response from the manufacturer, some or all of the questions were posed as part of the interview process. Some interviewees wished not to have their name published for a variety of reasons in order to participate in the survey. Given the nature of their response and in keeping with the spirit and goals that the CCRMDZ maintains in conducting this survey, future follow-up can be made at the address and phone number referenced. The interview questions included:

FEEDSTOCK SURVEY QUESTIONS

1. What type of feedstock material(s) do you use?
2. What are some of the advantages of using recycled vs. raw or virgin material?
3. What are the disadvantages?
4. What was one of the primary reasons your company decided to engage in using recycled material?
5. Were government subsidies or tax benefits a decision in using recycled materials?

6. How much recycled feedstock material comes from Santa Cruz County?
7. Do you produce waste from your recycled material?
8. Where does most of your recycled material come from?
 - Curbside
 - Manufactured recycled material
 - Processed
9. Do you recycle the waste?
10. Do you plan to expand or abandon the use of recycled feedstock material within the next 5 years?

During the interview process, we provided information regarding CCRMDZ programs and encouraged manufacturers to explore future usage of recycled feedstock and post-consumer materials into their product specifications.

PROFILE OF COMPANIES CONTACTED IN SANTA CRUZ COUNTY

The following presents a profile of each of the companies contacted as part of this survey. In some cases, no representative from the company called back, and thus the information presented is preliminary and to be confirmed at a later date.

Advantage Manufacturing
2400 Pine Flat Road
Santa Cruz, CA 95060
(831) 423-8998
www.advantageman.com
Contact: N/A

Operating since 1992, Advantage Manufacturing products pool, pond, and spa water filtration products and other related equipment. The company was founded by Mike Collins. According to the company's website, most items are manufactured in California, while some items are imported. The company declined to answer any questions or provide additional information.

Aerotec Corporation
719 Swift St
Santa Cruz, CA 95060
(831) 423-3911
www.aerotecdesign.com
Contact: N/A

Aerotec Corporation was established in 1974 and manufactures agricultural valves, lighting systems, and bicycle parts. Calls to the company went unanswered.

Almar Surf Works
815 Almar Ave
Santa Cruz, CA 95060
(831) 459-0411
Contact: N/A

No information is available online regarding Almar Surf Works. Calls to the company went unanswered.

Anatometal Inc.
411 Ingalls St
Santa Cruz, CA 95060
(831) 454-9880
www.antatometal.com
Contact: N/A

Anatometal Inc. is a manufacturer of piercing jewelry and has been operating for 22 years. According to the company's website, they manufacture all of their body jewelry within the United States, though it is unclear whether or not this manufacturing takes place within Santa Cruz County specifically. The company contact stated that the company does not use any recycled materials for safety purposes, but would not answer any additional questions. The company contact stated they are not interested in learning about how to use recycled feedstock.

Annieglass Store
110 Cooper St
Santa Cruz, CA 95060
(831) 761-2041
www.annieglass.com
Contact: Sherlyn Torres, Customer Service Manager/Shipping Manager

Annieglass Store has been operating for 31 years and currently has 30-35 employees. The company manufactures handmade glass dinnerware, using glass and precious metals like gold and platinum. The glass is sourced from within California and the precious metals come from out-of-state. According to the company contact, Sherlyn Torres, all of these materials need to be raw because of the unique process of production, and there is no potential for the use of recycled feedstock in the future. All excess glass is recycled post-production.

Arc-Tec Welding
116 McPherson St
Santa Cruz, CA 95060
(831) 459-9944
Contact: N/A

No information is readily available online regarding Arc-Tec Welding. Calls to the company went unanswered.

Aura Hardwood Lumber Inc.
1115 Thompson Ave #2
Santa Cruz, CA 95062
www.aurahardwoods.com
(831) 462-1525
Contact: N/A

Aura Hardwood Lumber is a Lumber Company. The company declined to partake in our survey.

Bellow 3
109 Vine Hill School Rd
Scotts Valley, CA 95066
(831) 440-9709
Contact: N/A

No information regarding Bellow 3 is readily available online. When speaking with the receptionist, we learned that the company manufactures backpack hooks, though we were not able to gather any additional information. Messages left for the company's owner went unanswered.

Better Brand Foods Inc.
256/258 Kearney Ext
Watsonville, CA 95076
www.betterbrandfoods.com
(831) 724-7243
Contact: N/A

Better Brand Foods, Inc. was established in 1947 and specializes in a variety of food industry products. This includes seafood, meats and cheeses, spices and nuts, designer dishes and utensils, eco-friendly paper products, eco-friendly cleaning supplies, and restaurant equipment. Calls to the company went unanswered.

Big Creek Lumber Company
3564 Highway 1
Davenport, CA 95017
(831) 722-7137
www.big-creek.com
Contact: Mary Samuels, Office Manager

Big Creek Lumber Company was established 68 years ago and currently has 220 employees in several locations. The company logs wood through their own land as well as land they lease through contracts with other companies. The wood they log is milled and sold as boards. Naturally, the company has no use for recycled wood, as they are in the business of working with raw wood. However, the company does recycle all of its wood scraps.

Billet Metal Craft
112 Coral St
Santa Cruz, CA 95060
(831) 421-9601
www.billetmetalcraft.com
Contact: Asher Rios, Owner

Billet Metal Craft is a machine shop that has been operating for six years and currently has three employees. The company manufactures car parts, sporting goods, and hardware for construction purposes. They utilize 3D CAD software and CNC machines for all of its manufacturing needs. The materials they utilize include aluminum, steel, stainless steel, and plastics. The owner, Asher Rios, stated that they mainly use raw materials, though he stated that he is unsure if they use any recycled materials in their manufacturing process. These materials are sourced from various suppliers within California.

The owner stated that they would not be able to switch to using recycled feedstock, as this may compromise the structural integrity of their products. Furthermore, their choice of materials is dictated by the customer's instructions, so they do not have significant influence in choosing the materials they work with. The company does, however, recycle all of the aluminum scraps and some of the steel scraps. All plastic scraps are currently sent to the landfill.

Blaine Fabrication
363 Coral St
Santa Cruz, CA 95060
(831) 427-3296
www.blainefab.com
Contact: Alan Blaine, Owner

Blaine Fabrication is a race car fabrication shop that has been operating for 8 years with a single employee. The materials used include aluminum and steel, as well as a small amount of plastic, composites, and cloth. The aluminum is always purchased raw, while the steel is occasionally recycled in order to save money. The owner, Alan Blaine, estimates that approximately 10% of the steel he uses is recycled and is obtained locally. The company saves any scraps and sells them. The owner stated that he is interested in learning more about recycled feedstock options and ways he can save money by using more recycled materials.

Brady Cabinets
117 Post St
Santa Cruz, CA 95060
(831) 423-4203
Contact: N/A

No information is available online regarding Brady Cabinets. Calls to the company went unanswered.

Brady's Tool Tech
228 Fern St
Santa Cruz, CA 95060
(831) 479-1985
Contact: N/A

No information is available online regarding Brady's Tool Tech. Number associated with the company is disconnected, suggesting the company is out of business.

Brightman Design
821 Swift Street, Suite D
Santa Cruz, CA 95060
(831) 252-7226
www.brightmandesign.com
Contact: Chris Brightman

Brightman Design is a manufacturer of exhibition and retail display light fixtures. The main material used is aluminum, which is obtained in raw form. The company has been operating for over 30 years, but will close down shortly and is therefore not relevant to this study.

Brinks Awards & Signs
184 Benito Ave
Santa Cruz, CA 95062
(831) 426-2505
www.brinksawards.com
Contact: Dorothy

Brinks Awards and Signs has been producing trophies, signs, and other awards since 1974. The company contact stated that the company does not define itself as a manufacturer, but rather as an assembler of parts. They use a wide variety of materials, including plastic, metal, and glass. The company contact would not provide any additional materials regarding the company's specific material usage or recycling strategies.

Bronze Works, Inc.
200 Coral St
Santa Cruz, CA 95060
(831) 454-9098
Contact: N/A

Bronze Works, Inc. creates bronze castings. Calls to this company went unanswered.

Cabinet Town
2117 Delaware Ave
Santa Cruz, CA 95060
(831) 425-3570
www.cabinettown.com
Contact: Kit, Owner

Cabinet Town is a manufacturer and distributor of cabinetry for residential and commercial needs, and has been operating for 24 years with 4 employees. The company supports environmental sustainability and has designed its manufacturing process to have as little environmental impact as possible. They recycle all waste such as packaging materials, stone waste, and sawdust, as well as purchase wood from companies that practice sustainable forestry. They use a stone countertop fabrication process consisting of 100% recycled water, optimize materials in a way that leaves little room for waste, and offer green countertop surface materials.

According to the company's owner, Kit, Cabinet Town uses plywood and hardwood which are sourced mainly from within Santa Cruz County from a local supplier. The company chooses recycled feedstock materials when possible because of their commitment to sustainability, though recycled feedstock only comprises about 10% of their total feedstock usage. The reason for this low percentage is due to the fact that it is significantly more expensive to use recycled or reclaimed wood for cabinetry. In general, the type of wood required for cabinetry work is not available recycled. Given this, the company's owner does not feel they can expand their use of recycled feedstock at this time.

Cassar Hardwood Floors
715 San Juan Ave
Santa Cruz, CA 95065
(831) 427-3566
Contact: N/A

No information is available online regarding Cassar Hardwood Floors. Calls to the company went unanswered.

Cordell Davis Plastering, Inc.
606 Market St
Santa Cruz, CA 95060
(831) 459-0750
www.cordelldavisplastering.com
Contact: N/A

Cordell Davis Plastering, Inc. specializes in exterior lath and plaster, interior plaster, and stucco stone application. Calls to the company went unanswered.

Craft Tile Inc.
2015 Sequoia Dr
Santa Cruz, CA 95065
(831) 818-2211
www.crafttileinc.com
Contact: N/A

Craft Tile Inc. installs ceramic, glass, and marble tile. Calls to the company went unanswered.

Dank String
314 River St
Santa Cruz, CA 95060
(707) 495-1436
www.dankstring.com
Contact: N/A

Dank String produces string and wicks made from beeswax and organic hemp. Calls to this company went unanswered.

Davis Machine Products
116 McPherson St
Santa Cruz, CA 95060
(831) 454-0281
Contact: N/A

No information is available online regarding Davis Machine Products. Calls to the company went unanswered.

DBA Strive Surfboards
815 Almar Ave
Santa Cruz, CA 95060
info@strivesurfboards.com
www.strivesurfboards.com
Contact: N/A

DBA Strive Surfboards was founded by Jon Henderson in 1999. Emails to the company went unanswered.

Deane Industrial Machining
1204 Fair Ave
Santa Cruz, CA 95060

(831) 426-4406

Contact: N/A

No information is available online regarding Deane Industrial Machining. The company contact declined to answer questions and asked to not be contacted in the future.

Donk Precision Machining

228 Fern St

Santa Cruz, CA 95060

(831) 459-7401

Contact: N/A

No information is available online regarding Donk Precision Machining. Calls to the company went unanswered.

Drapery Enterprises

1334 Brommer St

Santa Cruz, CA 95062

(831) 458-2587

www.draperyenterprises.com

Contact: Lois, Owner

Drapery Enterprises was established in 1948 and currently employs 8 staff. The company manufactures drapes, shades, bedding, hardware, upholstered headboards, and pillows. According to the owner, the company uses all raw fabric and has never considered integrating recycled textiles into their production process. The owner stated that they are interested in looking into the use of recycled feedstock. This company would therefore be a good candidate to contact in the future.

Dynamic Engineering

150 Dubois St

Santa Cruz, CA 95060

(831) 457-8891

www.dyneng.com

Contact: N/A

Dynamic Engineering was established in 1988 and provides embedded solutions services. The company has its manufacturing facilities in Santa Cruz. Calls to the company went unanswered.

Elements Mfg Inc.
115 Harvey West Blvd
Santa Cruz, CA 95060
(831) 421-9440
www.elementsmfg.com
Contact: Trista Moreno

Elements Manufacturing Inc. was established in 1994 and currently employs 35 staff. The company manufactures cabinets and countertops using plastic laminate and corian. The company contact, Trista Moreno, was unsure if the materials they use are recycled or not, though she is aware that they use recycled paperstone. All of these materials are sourced from within California, including San Jose and Hayward. In an effort to support green building, the company prices their LEED-certified products similarly to standard products. Ultimately, however, the company receives their specs from architects which indicate raw or recycled materials. The company contact stated that because they have to comply with what the architects they work with want, the company has no way of expanding its use of recycled feedstock.

Elizabeth Van Buren Aromatherapy
303 Potrero St
Santa Cruz, CA 95060
(831) 425-8218
www.elizabethvanburen.com
Contact: Nick Kirkendall, Production Manager

Elizabeth Van Buren Aromatherapy was founded by Elizabeth Jones 30 years ago. The company sells essential oils, massage oils, and lotion and has three to four employees. The oils used are sourced from all over and are raw. Any leftover oil not used in their production process is recycled and given to biodiesel companies. The packaging materials are purchased rather than produced in-house, and the company contact was unsure if these materials are made of raw or recycled materials. Given the nature of their product, there is little room for switching to recycled feedstock.

Free Form Fashions
2565 Mission St
Santa Cruz, CA 95060
(831) 429-5044
Contact: N/A

Free Form Fashions is a small company that manufactures bike clothing. Calls to the company went unanswered.

Graphic Works
137 Lance Ct
Santa Cruz, CA 95065
(831) 458-3014
Contact: N/A

No information is readily available online regarding Graphic Works. The phone number associated with the company does not work, suggesting the company closed down.

Graniterock Co.
303 Coral St
Santa Cruz, CA 95060
(831) 471-3400
www.graniterock.com
Contact: N/A

Graniterock supplies materials such as rock, sand, gravel, stone, concrete, and building materials to the construction industry. According to the company's website, they provide recycled product options to their customers, including high-fly ash content concrete, interlocking pavers, recycled baserock, sand, rock, and turfstone. Many of these products are stated to be manufactured locally using recycled materials. Their concrete products are specifically manufactured from a large percentage of recycled materials and post-industrial consumer waste. Calls to the company went unanswered, though we recommend continuing to attempt contact with this company given their commitment to recycled feedstock usage.

Healthy Choice Pet Supplies
1555 Merrill St #3
Santa Cruz, CA 95062
www.healthychoicepetsupplies.com
Contact: N/A

No information is readily available online regarding Healthy Choice Pet Supplies, including contact information. The website does not seem to work, suggesting the company closed down.

Heat Wave Custom Wetsuit
2301 Mission St
Santa Cruz, CA 95060
(831) 458-2960
www.heatwavewetsuits.com
Contact: N/A

Heat Wave Custom Wetsuit has been manufacturing custom-made wetsuits for more than 17 years. The company declined to participate in the study.

Indica Industries
1850 Bali Way
Santa Cruz, CA 95062
(831) 345-4859
Contact: N/A

No information is readily available online regarding Indica Industries. When contacting the company, we were informed that the company closed down approximately 10 years ago.

Ja-Co Machine Works, LLC
308 Encinal St
Santa Cruz, CA 95060
(877) 429-8175

www.jacoworks.com

Contact: Sarah Renson, Administrative Assistant

Ja-Co Machine Works, LLC is a manufacturer of mechanical parts for high technology industries. The company was founded in 1979 and is family-owned with 20 to 25 employees. The company's website states that it has an environmental focus by reducing its waste, conserving materials, promoting the reuse and recycling of materials, and responsibly disposing of waste. When speaking with the company contact, Sarah Renson, we learned that all of the materials used to manufacture their mechanical parts are raw because the certifications required by their customers do not allow for recycled materials to be used. These materials are sourced from within California. The company contact stated there is no possible way the company could consider using recycled feedstock in the future.

Jay Howe Masonry
144 Bradley Dr
Santa Cruz, CA 95060
(831) 429-9700
Contact: N/A

No information is available online regarding Jay Howe Masonry. Calls to the company went unanswered.

John Tremaine Tile
1369 Bulb Ave
Santa Cruz, CA 95062
(831) 588-1530
Contact: John Tremaine

John Tremaine Tile is no longer in business according to its former owner, John Tremaine. The company is therefore not relevant to this study.

Johnny Rice Surfboards
209 Columbia St
Santa Cruz, CA 95060
(831) 423-0175

www.johnnyrice.com

Contact: N/A

Johnny Rice Surfboards creates custom surfboards and longboards that are shaped by hand. These boards are made of wood, foam, and surftech epoxy. When contacting the company, we were informed that the owner is currently ill and may close down the company. The company contact asked to be taken off the contact list.

JT Metal Craft

34 Janice Way

Scotts Valley, CA 95066

(831) 332-9595

www.jtmetalcraft.com

Contact: N/A

JT Metal Craft was established by Jeremy Tucker in 2013. The company does customized metal fabrication. Calls to the company went unanswered.

Knew Concepts

719 Swift St #1

Santa Cruz, CA 95060

www.knewconcepts.com

(831) 234-4652

Contact: Lee Marshall, Owner

Knew Concepts has been operating for more than 30 years. The company manufactures saws used for woodwork and jewelry. The main material used is aluminum, which is always obtained raw. The company also used a small amount of raw steel. The company's owner, Lee Marshall, informed us that they only use raw materials because of their laser-cutting technology; they use a computer-controlled system to manufacture their saws, and the owner is concerned that the variations in recycled materials would damage the machines. The company does, however, recycle all of its scraps post-production.

L&B Woodworks
121 Burlwood Dr
Scotts Valley, CA 95066
(831) 461-1645
www.landbwoodworks.com
Contact: N/A

L&B Woodworks specializes in custom cabinetry and fencing woodwork. Calls to the company went unanswered.

Letland Industries
108 Sunset Terrace
Santa Cruz, CA 95066
(831) 247-1471
Contact: N/A

No information is readily available online regarding Letland Industries. When contacting the company, we were informed that the company closed down years ago.

Lewis Plaster Service
406 Ewell Ave
Aptos, CA 95003
(831) 684-1100
Contact: Harold Lewis, President

Lewis Plaster Service is a masonry and tile plaster contractor. It was established 24 years ago by Harold Lewis. The number of employees is currently at 4. The company is not a manufacturer, but rather applies stucco and plaster commercially and residentially. Given this, the company is not relevant to this study.

Lifeaid Beverage Company
2833 Mission St
Santa Cruz, CA 95060
www.lifeaidbevco.com

(888) 558-1113

Contact: N/A

Lifeaid Beverage Company manufactures energy drinks designed to enhance a particular targeted activity. Calls to the company went unanswered.

Lighthouse Windows

317 Potrero St

Santa Cruz, CA 95060

(831) 426-2601

www.lighthouse-windows.com

Contact: Christine Avila

Lighthouse Windows sells and installs windows and doors. The company contact, Christine, stated that the company is not a manufacturer and would not provide any additional company details.

LittleFootprint Lighting Inc.

101 Cooper St #234

Santa Cruz, CA 95060

(408) 691-4636

www.littlefootprintlighting.com

Contact: Nancy Wahl-Scheurich, Founder & CEO

LittleFootprint Lighting manufactures energy-saving LED task lighting, aiming to reduce its carbon footprint by manufacturing its lamps from locally sourced, recycle plastic. The company was established in 2009 and currently employs 2 people. The company prides itself in using recycled feedstock to manufacture its products, using recycled ABS plastic that comes from e-waste, as well as recycled steel. The e-waste is sourced from MBA Polymers, an electronic waste supplier that used to have facilities in Richmond, CA (this local facility has recently closed). The steel used for the base of their lamps is also recycled; with 70% made of scrap metal. This steel is also sourced locally from a supplier in Richmond. The only raw materials used are LED light bulbs and electronic parts; even the cardboard packaging is made of post-consumer content, though this is sourced from Minnesota. According to the company contact, Nancy Wahl-Scheurich, each lamp is comprised of 58.4% post-consumer content when completed.

The company also produces little waste during the manufacturing process; any material that is expended during the injection molding process is reused. This is an excellent example of a company striving to maximize its use of recycled feedstock. The company contact stated that she would like to learn more about ways her company can expand its recycled feedstock use further and potentially benefit from government subsidies and tax breaks.

Live Oak Design
2585 Mission St
Santa Cruz, CA 95060
(831) 429-8585
Contact: Alan Dodd, Owner

Live Oak Design was established in 1977 and is run by a single employee. The company produces cabinetry for residential needs and uses predominately wood. The owner, Alan Dodd, stated that occasionally he will use reclaimed wood to built a cabinet if the designer requests that materials. Otherwise, he typically uses raw wood in his manufacturing process. The owner stated that he is very interested in learning more about recycled feedstock and how he can incorporate these types of materials into his manufacturing process.

Lone Star Timber Harvesting, Inc.
17 Cottonwood St
Santa Cruz, CA 95060
(831) 423-7717
Contact: N/A

No information is available online regarding Lone Star Timber Harvesting Inc. Calls to the company went unanswered.

Lumeras LLC
207 McPherson St #C
Santa Cruz, CA 95060
(650) 575-7448
www.lumeras-labs.com
Contact: N/A

Lumeras LLC is a technology company that develops and manufactures short-wavelength laser sources. The company contact declined to answer any questions.

Lyons Marble & Granite, Inc.
128 Encinal St
Santa Cruz, CA 95060
(831) 425-7701
www.lyonsmarble.com
Contact: Jerry Lyons, Co-owner

Lyons Marble & Granite, Inc. has been operating for 12 years and currently employs 6 people. The company works with a variety of recycled materials, such as recycled glass and eco-stone. This is due to the fact that many customers often come in asking for recycled materials. However, the company does not manufacture anything, but rather installs marble and granite residentially and commercially. The company is therefore not relevant to this study.

Michael Wood Metalsmith
201 Fern St
Santa Cruz, CA 95060
(831) 430-6955
www.mwmetalsmith.com
Contact: N/A

Michael Wood Metalsmith has been in business for 4 years and is run by a single employee. The company owner and only employee, Michael Wood, classified the business as an artisan blacksmithing company that creates products for architectural and decorative needs. According to the owner, the main material used is recycled steel. The reason for using recycled steel rather than raw steel is because it is what the supplier provides him, in addition to the fact that it is a cheaper and more sustainable option. He stated that approximately 90% of the steel he works with is recycled. Occasionally, he uses raw steel when he is manufacturing a product that needs to be stronger structurally. Any waste that is created during the manufacturing process is recycled. The owner stated that while he is very busy, he would like to learn about expanding his use of recycled feedstock and ways he can benefit from tax benefits and government subsidies.

Mission Dental Lab
1017 Mission St
Santa Cruz, CA 95060
(831) 426-2377
Contact: N/A

No information is readily available online regarding Mission Dental Lab. Calls to the company went unanswered.

Mulberry Woodworking
501 River St
Santa Cruz, CA 95060
(831) 458-3457
www.mulberrywoodworking.com
Contact: Gene Cutler

Mulberry Woodworking has been operating for 35 years. Its current owner, Gene Cutler, has owned it for 10 years and currently employs 2 staff. The company creates custom doors and windows using a combination of raw and recycled wood feedstock. Recycled wood is typically used when the customer specifically requests recycled or found materials. Raw materials are used more frequently because of the structure and drying process; recycled wood typically dries naturally and therefore can have structural issues, as well as has hidden nails that compromise the wood. The owner expressed that it is difficult to use recycled wood for these reasons, though the company has researched it. This type of feedstock is used approximately 5% of the time, but the company uses certified wood when possible. The company also recycles its leftover wood scraps, turning them into firewood or wooden toys.

Noe Surfboards
2111 Delaware Ave
Santa Cruz, CA 95060
(831) 420-0663
www.noesurfboards.com
Contact: N/A

Noe Surfboards creates custom-designed surfboards. Calls to the company went unanswered.

Northwest Signs
120 Encinal St
Santa Cruz, CA 95060
(831) 469-8208
www.northwestsigns.com
Contact: N/A

Northwest Signs was founded in 1987 and manufactures electric signs for advertising purposes. The company currently employs 22 staff. The company declined to answer any questions.

Obentec, Inc.
500 Chestnut St, Suite 225
Santa Cruz, CA 95060
(831) 457-0301
www.laptoplunches.com
Contact: Tamara Cummings, Customer Service

Obentec, Inc. manufactures bento-style lunchboxes that are reusable. The company has been operating for 11 years and currently has approximately 10 employees. All of the company's products are manufactured in Livermore. The materials used to manufacture the lunchboxes include polypropylene and polyethylene, which are always raw materials. The company contact, Tamara Cummings, stated that because they manufacture food packaging products, they are required to use all raw materials for health and safety purposes. She does not believe they can consider using recycled feedstock in the future given this.

Oneto Tile Co.
1060 El Dorado St
Santa Cruz, CA 95062
(831) 476-4454
Contact: N/A

No information is available online regarding Oneto Tile Co. Calls to the company went unanswered.

Oxala Beads
688 Meder St
Santa Cruz, CA 95060
(831) 429-4166
Contact: N/A

No information is readily available online regarding Oxala Beads. All calls went unanswered, suggesting the company may be out of business.

Provision Glass 7 Window, Inc.
3455 Chanticleer Ave
Santa Cruz, CA 95065
(831) 477-1000
www.provisionglass.net
Contact: N/A

Provision Glass specializes in window replacement, new window sales, and installation. Calls to the company went unanswered.

Quanta Phy
440 Encinal St
Santa Cruz, CA 95060
(831) 427-1237
www.quantaphy.com
Contact: Ken Terry, President

QuantaPhy, Inc. is a manufacturer and wholesaler of phycobiliproteins and other fluorescent algal pigments. The company, which has been operating for 25 years with 10 employees, grows alga and extracts its pigments for diagnostics purposes. The president of the company, Ken Terry, stated that they send the algae to the landfill once they are finished with it. The main ingredient used in the manufacturing process is algae, which is not a product that can be obtained in recycled form.

Ramsey Fabrications
5940 Soquel Ave
Santa Cruz, CA 95062
(831) 462-3040
www.ramseyiron.com
Contact: N/A

Ramsey Fabrications is owned by Chris Ramsey and does metal and fabrication work. The company does structural steel work for customized residential applications, such as gates, railings, and doorways. Calls to the company went unanswered.

RCR Fabrication & Design, Inc.
221 Encinal St
Santa Cruz, CA 95060
(831) 429-8904
www.rcrfabrication.com
Contact: Melissa Barron, Accounts Manager

RCR Fabricating & Design, Inc. has been operating since 1997 and currently has 5 employees. The company provides custom metal fabrication and installation services. The main materials used include aluminum, stainless steel, brass, and copper. The company also occasionally uses wood and plastic, though these particular materials are provided by the customer. The company contact, Melissa Barron, stated that the feedstock materials they use are typically raw, because recycled versions of the materials are not readily available in the large size they require. Recycled versions of these materials are often made of smaller scraps that are pieced together, and the company requires single larger pieces for their manufacturing process. The company contact did state that while they use raw materials, the company is as green as it feels it can be.

Richard Johnson Manufacturing
1257 Thompson Ave #B
Santa Cruz, CA 95062
(831) 464-8217
Contact: Richard Johnson, CEO

Richard Johnson Manufacturing has been operating for 20 years and currently has 4 employees. The company manufactures chucks for the semi-conductor industry. The materials used to manufacture this product are aluminum and plastic. The company's owner and CEO, Richard Johnson, stated that these materials are all raw in order to ensure that the materials are top-grade. He stated that he is not interested in pursuing the use of recycled feedstock, but rather is only interested in using high quality materials. However, the company does recycle all of its scraps, which amounts to six 54-gallon barrels of aluminum scraps being recycled every three weeks.

Rick Turner Guitar Company

815 Almar Ave

Santa Cruz, CA 95060

(831) 460-9144

www.rickturnerguitars.com

Contact: Rick Turner, Founder and Designer

Rick Turner Guitar Company manufactures guitars. Calls made to the company went unanswered.

Roofscreen Mfg, Inc.

347 Coral St

Santa Cruz, CA 95060

(866) 766-3727

www.roofscreen.com

Contact: Mickey Parish, Sales Engineer

Roofscreen Manufacturing manufactures pre-engineered rooftop framing systems that are used as equipment screens and solar panel mounting racks for commercial buildings. The company has been operating for more than 10 years and currently has approximately 15 employees. The materials used include steel and aluminum, which are sourced locally. The company contact, Mickey Parish, is not sure if the materials used are raw or recycled, as they just receive what the vendor gives them. The company is open to using recycled materials if that option is more affordable.

Rowe Machinery

2131 Delaware Ave

Santa Cruz, CA 95060

(831) 458-9181

www.rowe-machinery.com

Contact: Elaine Heather

Rowe Machinery buys and sells new and used machinery for cutting metals, and has been operating for 25 years with three employees. The company is not a manufacturer, though they do use many recycled materials. Because Rowe machinery is not a manufacturer, the company is not relevant to this study.

Russo Company Masonry

106 Escalona Ct

Santa Cruz, CA 95060

(831) 458-9159

Contact: N/A

No information is available online regarding Russo Company Masonry. The company contact declined to answer any questions.

Santa Cruz Biotechnology Inc.

2145 Delaware Ave

Santa Cruz, CA 95060

(214) 902-3900

www.scbt.com

Contact: N/A

Santa Cruz Biotechnology Inc. manufactures products for the biomedical research market, including buffers, activators, and inhibitors. The company is headquartered in Dallas, Texas but potentially manufactures all products in Santa Cruz County. Calls to the company went unanswered.

Santa Cruz Guitar Company

151 Harvey West Blvd

Santa Cruz, CA 95060

(831) 425-0999

www.santacruzguitar.com

Contact: April Randell, Receptionist

Santa Cruz Guitar Company has been operating for four years and currently has approximately 100 employees. The company's website states that they manufacture guitars in an environmentally sustainable way by using materials such as reclaimed wood. A message was left with the receptionist for the owner to call back, though we have yet to hear back. This company would be a good candidate for continuing to attempt to contact in the future given their stated commitment to sustainability.

Scarborough Lumber
20 El Pueblo Rd
Scotts Valley, CA 95066
www.scarboroughlumber.com
(831) 438-0331
Contact: Jeff Olson, Assistant Manager

Scarborough Lumber is a family-owned business that has been operating since 1957. The company has six stores in Santa Cruz County and Carmel Valley. The company purchases most of its products from Ace Hardware, which are pre-made. Thus, the company does not manufacture any products and is not relevant to this study.

SCBBG Manufacturing
345 Swift St
Santa Cruz, CA 95060
info.scbbg@gmail.com
www.santacruzboardbuildersguild.blogspot.com
Contact: N/A

SCBBG Manufacturing stands for Santa Cruz Board Building Guild Manufacturing. The company manufactures surfboards. Emails to the company went unanswered.

Screwball Industries
815 Almar Ave
Santa Cruz, CA 95060
(831) 425-1433
www.screwballindustries.com

Contact: N/A

Screwball Industries manufactures surfboards. Calls to the company went unanswered.

SF Bay Concrete Repair

115 Korinek Ct

Aptos, CA 95003

(510) 509-0959

www.sfbayconcretere.com

Contact: N/A

SF Bay Concrete Repair is a cement contractor company that was established in 1979. It is owned by David Korinek. Calls to the company went unanswered.

Soaps Lulu

213 Pacheco Ave

Santa Cruz, CA 95062

laura@soapslulu.com

www.soapslulu.com

Contact: N/A

Soaps Lulu is a small company that manufactures handmade soap, lotion, body butter, and candles. Emails to the company went unanswered.

Stealth Precision

140 McLean Place

Santa Cruz, CA 95060

(831) 469-3511

Contact: N/A

No information is readily available online regarding Stealth Precision. Calls to the company went unanswered.

Surfboards by Michel Junod
815 Almar Ave #8
Santa Cruz, CA 95060
(831) 427-0712
www.surfboardsbymicheljunod.com
Contact: N/A

Surfboards by Michel Junod is a small manufacturer of surfboards. Calls to the company went unanswered.

Surfboards Travis Reynolds
345 Swift St
Santa Cruz, CA 95060
r@travisreynolds.org
reynoldssurfboards.blogspot.com
Contact: N/A

This business is owned by Travis Reynolds and consists of surfboard designing and manufacturing. Emails to the company went unanswered.

Suter Inc.
2636 17th Ave
Santa Cruz, CA 95065
(831) 475-7716
Contact: N/A

No information is readily available online regarding Suter Inc. Calls to the company went unanswered.

Tile & Marble Outlet
360 Coral St
Santa Cruz, CA 95060
(831) 459-9789
Contact: N/A

Tile & Marble Outlet is not a manufacturer, but rather imports tile from around the world and resells it. The company is therefore not relevant to this study.

Totally Tubular Design
3190 Winkle Ave
Santa Cruz, CA 95065
totallytubebags@yahoo.com
www.totallytubebags.com
Contact: Lauren Junker, Owner

Totally Tubular Design has two employees and has been operating as a business since 2010. The company creates bags and accessories made from recycled bicycle tubes and tires as well as car upholstery scraps. These materials are sourced from local bike and upholstery shops, which hold these materials until they are picked up by the company's owner, Lauren Junker. She estimates that she receives approximately 10 pounds of bike tubes per week. The only raw materials she uses in her production process are zippers, Velcro, and thread. She attempted to use recycled versions of these materials, but found that the process of extracting these materials from recycled products like pants and bags was too painstaking of a process.

The company does produce a small amount of waste during the manufacturing process, which is then sent to a landfill. Other materials that she receives from her suppliers that are too difficult for her to work with are also sent to a landfill. Ms. Junker stated in our interview that the idea to work predominately with recycled materials came from a desire to turn trash into something functional. Totally Tubular Design's use of recycled bike tires, an otherwise wasted resource, is very much a selling point for the company; many of her customers purchase her products specifically because they are made of recycled materials.

Ms. Junker confirmed that she has heard of some government programs that provide support to companies using recycled materials through word-of-mouth only. She stated that she is very interested in learning about ways her company can qualify for government subsidies and tax benefits as a way to grow her business and expand its use of recycled feedstock.

Wallis Wood Works
2608 Mission St
Santa Cruz, CA 95060
(831) 460-9183

www.walliswoodworks.com

Contact: David, Office Manager

Wallis Wood Works has been operating for 23 years and currently has three employees. The company manufactures cabinets and custom furniture using wood and plastic as its main feedstock materials. Occasionally the company uses reclaimed wood, but mainly raw materials are used. These materials are all sourced from out-of-state. According to the company contact, David, some of the leftover scraps are recycled, while some are sent to the landfill. He also stated that the company is unaware of any recycled feedstock options to utilize, though they are interested in pursuing the use of integrating recycled materials into their manufacturing process.

Walls and Associates, Inc.

329 Ingalls St

Santa Cruz, CA 95060

(831) 426-4283

Contact: N/A

No information is readily available online regarding Wall and Associates. The number associated with the company is disconnected.

Westside Woodworks

2533 Mission St B

Santa Cruz, CA 95060

(831) 459-0721

westsidewoodworks.com

Contact: N/A

Westside Woodworks is a single-employee cabinetry and furniture shop that has been operating for over 30 years. Upon contacting the company, the owner stated that he is about to retire and shut down his business. The company is therefore not relevant to this study.

SUMMARY PROFILES OF COMPANIES CONTACTED FOR THE RECYCLED FEEDSTOCK SURVEY

The table below summarizes each manufacturing company that was successfully interviewed for this survey. Companies that we could not get in touch with or declined to participate are not included.

Business Name	Address	Phone Number	Contact Person	Type of Recycled Feedstock	Comments
Big Creek Lumber Company	3562 Highway 1, Davenport, CA	(831) 722-7137	Mary Samuels, Office Manager	none	Company sees no recycled feedstock applications.
Roofscreens Mfg, Inc.	347 Coral St, Santa Cruz, CA	(866) 766-3727	Mickey Parish, Sales Engineer	unsure	Company is interested in exploring expansion of its use of feedstock materials.
Wallis Wood Works	2609 Mission St, Santa Cruz, CA	(831) 460-9183	David, Office Manager	some wood	Company is interested in exploring expansion of its use of feedstock materials.
Annieglass Store	110 Cooper St, Santa Cruz, CA	(831) 761-2041	Sherlyn Torres, Shipping Manager	none	Company sees no recycled feedstock applications.
Blaine Fabrication	363 Coral St, Santa Cruz, CA	(831) 427-3296	Alan Blaine, Owner	some steel	Company is interested in exploring expansion of its use of feedstock materials.
RCR Fabrication & Design, Inc.	221 Encinal St, Santa Cruz, CA	(831) 429-8904	Melissa Barron, Accounts Manager	none	Company does not feel it can expand its use of recycled feedstock.
Brightman Design	411 Ingalls St, Santa Cruz, CA	(831) 252-7226	Chris Brightman, Owner	none	Company is not interested in pursuing recycled feedstock usage.
Drapery Enterprises	1334 Brommer St, Santa Cruz, CA	(831) 458-2587	Lois, Owner	none	Company is interested in exploring expansion of its use of feedstock

					materials.
Elizabeth Van Buren Aromatherapy	303 Potrero St, Santa Cruz, CA	(831) 425-8218	Nick Kirkendall, Production Manager	none	Company sees no recycled feedstock applications.
Knew Concepts	719 Swift St #1, Santa Cruz, CA	(831) 234-4652	Lee Marshall, Owner	none	Company does not feel it can expand its use of recycled feedstock.
Obentec, Inc.	500 Chestnut St, Suite 225, Santa Cruz, CA	(831) 457-0301	Tamara Cummings	none	Company does not feel it can expand its use of recycled feedstock.
Quanta Phy	440 Encinal St, Santa Cruz, CA	(831) 427-1237	Ken Terry	none	Company sees no recycled feedstock applications.
Mulberry Woodworking	501 River St, Santa Cruz, CA	(831) 458-3457	Gene Cutler	some wood	Company does not feel it can expand its use of recycled feedstock.
Billet Metal Craft	112 Coral St, Santa Cruz, CA	(831) 421-9601	Asher Rios, Owner	unsure	Company does not feel it can expand its use of recycled feedstock.
Richard Johnson Manufacturing	1257 Thompson Ave #B, Santa Cruz, CA	(831) 464-8217	Richard Johnson, CEO	none	Company is not interested in pursuing recycled feedstock usage.
Cabinet Town	2117 Delaware Ave, Santa Cruz, CA	(831) 425-3570	Kit, Owner	some plywood and hardwood	Company does not feel it can expand its use of recycled feedstock.
Michael Wood Metalsmith	201 Fern St, Santa Cruz, CA	(831) 430-6955	Michael Wood, Owner	steel	Company is interested in exploring expansion of its use of feedstock materials.
Anatometal	411 Ingalls St, Santa Cruz, CA	(831) 454-9880	N/A	none	Company is not interested in pursuing

					recycled feedstock usage.
Elements Manufacturing	115 Harvey West Blvd, Santa Cruz, CA	(831) 421-9440	Trista Moreno	Paper-stone	Company does not feel it can expand its use of recycled feedstock.
Live Oak Design	2585 Mission St, Santa Cruz, CA	(831) 429-8585	Alan Dodd, Owner	some wood	Company is interested in exploring expansion of its use of feedstock materials.
Ja-Co Machine Works, LLC	308 Encinal St, Santa Cruz, CA	(877) 429-8175	Sarah Renson, Administrative Assistant	none	Company does not feel it can expand its use of recycled feedstock.
LittleFootprint Lighting, Inc.	101 Cooper St #234 Santa Cruz, CA	(408) 691-4636	Nancy Wahl-Scheurich, Founder & CEO	ABS plastic, steel, cardboard packaging	Company is interested in exploring expansion of its use of feedstock materials.
Totally Tubular Design	3190 Winkle Ave Santa Cruz, CA	totallytubebags@yahoo.com	Lauren Junker, Owner	Bicycle tubes and tired, car upholstery	Company is interested in exploring expansion of its use of feedstock materials.

IDENTIFY CURRENT MATERIAL GENERATOR FLOW PATHWAYS OF RECYCLED FEEDSTOCK WITHIN SANTA CRUZ COUNTY TO DETERMINE WHERE MATERIALS ARE MOVING FROM AND TO.

Based on the information gathered through this survey, the majority of recycled feedstock used by manufacturing companies in Santa Cruz County is principally generated outside the CCRMDZ area. Many companies source their materials from other areas of California, while others source their materials from other states or internationally.

IDENTIFY RECYCLING/REUSE OPTIONS IN SANTA CRUZ COUNTY FOR RECYCLED FEEDSTOCK MATERIALS.

This section discusses the present recycled feedstock conditions within Santa Cruz County as well as our findings based on our interviews with companies.

- Principal manufacturing companies in Santa Cruz County include cabinetry, surfboards, tiling, and woodworking. It appears as though there are many smaller sized companies present in the county, though that perception may be due to the fact that smaller companies tend to be easier to contact directly for purposes such as this study as opposed to larger manufacturers.
- The use of raw feedstock of any material type for manufacturing in Santa Cruz County is common due to a concern that using recycled feedstock would compromise the durability of the final product. Throughout the interviews, we identified a dominant perception that using all raw materials ensures the highest quality product. The same perception goes for their customers; often customers assume raw materials are the most durable, and therefore request those materials be used for their products. This then affects the manufacturers, many of whom manufacture their products based on what the customer requests.
- Many company contacts we spoke with disclosed that they are unaware of any potential recycled options for their industry and therefore continue to use raw materials out of convenience. Additionally, among the companies contacted, there is a commonly-held assumption that there are no recycled feedstock options available for their particular industry.
- Very few of the companies contacted were aware of government subsidies and tax benefits that are available to companies working to expand their use of recycled feedstock. This is also the case for companies that are currently using a high volume of recycled feedstock in their manufacturing process. This lack of knowledge about the available options to companies may indicate why so few companies consider exploring recycled feedstock as a viable option.
- Most of the companies' contacted attempt to recycle their waste post-production, even if they stated that sustainability was not a large factor in their business model.
- A portion of the manufacturing companies interviewed stated that they are not interested in pursuing sustainable business practices such as incorporating recycled feedstock into their manufacturing process.

* * * * *

IntelliWaste appreciates the opportunity to assist the CCRMDZ with this important survey project. If you have any questions, please feel free to contact me at 415-533-2070, or by email at intelliwaste@yahoo.com.

Sincerely,
IntelliWaste, Inc.

Bruce J. Murphy

Bruce J. Murphy
Managing Principal