

Peak Plastics Recycling, LLC

Pond/Pit Liner Recycling In Denver, Colorado

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# Recycling Resources Economic Opportunity Grant Program Draft - Final Report

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Organization Name: Peak Plastics Recycling  
Project Title: HDPE Pit Liner Solutions and Expansion of Plastics Reprocessing  
Organizational Contact/Phone Number: Don Waddell, General Manager/Owner, 303-388-0100

Project Summary: Peak Plastics Recycling (Peak) established a recycling facility to process HDPE, LDPE, LLDPE, PP, PS, and ABS, the bulk of which was being exported to other states for processing. Peak shreds, grinds, and washes most of the plastics it collects. The majority of the waste plastics that it does not process are sent an affiliate company in Molalla, Oregon called Northwest Polymers, Inc. This grant project will focus on recycling HDPE liners, a material used in the oil and gas industry to control spills at well sites. Peak hopes to become a central depository and recycler of this material for the entire mid-section of the United States.

Project Duration: 7/5/2013 -- 6/30/2016  
Grant Award Amount: \$178,293  
Report Time Frame: 1/1/2014 – 7/31/2014  
Report Due Date: 8/29/14

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Please answer all eight questions below. Provide as much detail as possible.

## 1) Executive Summary

To-date, Peak Plastics has had limited success with the pit liner recycling capabilities that were engineered for the Denver facility. The pit liner recycling program is finally gaining traction after a slow start primarily due to a change in the behavior required by suppliers who primarily work in the Oil & Gas industry. Our non-pit liner manufacturing capabilities have been performing well as we have an assortment of local suppliers sending waste plastic materials to us for recycle. All of our major pieces of equipment, including a major electrical upgrade to a leased facility are in place and operating. Peak has produced over 1.5 million pounds of plastic since starting up late last fall. July, 2014 was our best month from a financial results perspective and the momentum is continuing in August as we are beginning to receive liner materials from two significant sources. Areas for improvement include: continuing to develop additional supply sources for liner, expansion of our existing roller operations in North Dakota to other regions in the country including Colorado, cutting the rolls once they arrive at our facility here in Denver, CO., an upgrade to our water treatment system and an upgrade to our drying capabilities.

## 2) Project Description & Overview of Work Completed

Our one-of-a-kind engineered process is receiving positive feedback from our customers as the equipment is cleaning the material thoroughly enough to be sold at premium industrial prices. Our customers tell us that many of our competitors do not get the material as clean as we do. Peak is currently recycling over 60 gallons of water per minute through our closed-loop water

treatment system and our filters are removing all contaminants. An occasional purge of the water system is necessary to keep the material clean.

### **3) Summary of Findings & Results**

Some of the equipment installations, electrical upgrades, and permitting took longer than we anticipated. Peak has been successful at recycling liner materials out of Colorado, Wyoming, Utah, New Mexico, Texas, North Dakota, Oklahoma, Arkansas, Louisiana and Alberta, Canada. Supply has been a major problem as we have not received as many pounds as we expected from companies in the oil & gas industry. This is something we are working hard on and are beginning to see results from two major suppliers in Canada. We have not met our financial plan results primarily due to lower volumes of supply than expected.

### **4) Summary of Unanticipated Outcomes or Roadblocks**

Peak has experienced fairly significant difficulty in getting waste plastic liners out of the oil fields and into our plant for processing. We have invested in equipment and people to provide services to oil field companies to collect these waste liners from the site. The process involves cutting the plastic into long strips and rolling these strips into a large roll which makes it easy and economical to ship these rolls over long distances. The knife wear on our wet Herbold grinder has also been a bit worse than expected. We have added washing capability in the Trommel to help alleviate part of this problem.

### **5) Communication of Project Findings**

We have been spreading the word about our capabilities throughout the oil & gas industry. We have a website that does a good job marketing the company and its capabilities. We are getting positive recognition that we have the right technical solution for handling these waste plastic liners in the most to environmentally and economically friendly way. We could always use more help in this area and are constantly reaching out to build relationships with the appropriate people in this industry. We have held several plant tours with both customers and suppliers and receive positive feedback from these tours. We plan to continue this style of communicating our findings.

### **6) Future Impact of the Project**

Peak Plastics will benefit the recycling and business communities in a number of ways. First of all, our pit liner recycling program will save millions of pounds of pit liners annually from being disposed in the landfill. This is not only beneficial for our environment, but it also prolongs the lifespan of our current landfills. Secondly, Peak offers a wide array of recycling services for local communities and industries. To-date, Peak has provided recycled resins to local plastic product manufacturers that has proven to be a better alternative for them versus other supply sources, most of whom were from outside of Colorado. Lastly, Peak is the only plastic processor capable of effectively handling all waste plastic liners and other plastics which provides the opportunity for many companies to recycle their plastics within Colorado rather than having to ship them out of state or dispose of them in the landfill. This provides larger returns to our local customers and creates employment opportunities at Peak that would otherwise be outsourced to another state.

## 7) Financial Summary

Peak Plastics Recycling has not met its expected financial targets. The owners of the business are now actively managing the operations and there is positive momentum in our financial results. In fact, we were nearly at breakeven for the month of July and we are currently receiving significant volumes of waste liner which should dramatically improve results going forward. The owners are currently funding operations in a leased facility. Peak does have bank loans that were used primarily to fund various pieces of equipment.

## 8) Conclusion

We have a proven manufacturing technology that is acknowledged by our current supplier and customer base. Procuring a supply of liner at reasonable prices and in the right form has been the primary challenge. That said, we currently have significant volume commitments for waste liner and are very optimistic about our future. We need to continue to work hard on providing the right environmental and economic solution to the plastic waste problem that currently exists in the oil & gas industry. We thank the State of Colorado for their support in our quest to achieve this objective. We welcome the State of Colorado to visit our facility in the near future to see the progress we are making with the investment they made in Peak Plastics Recycling, LLC.

## 9) Appendix

a. Grant Metrics Table – see attached Excel spreadsheet.

b. Community Leader Contact Information

Pat Elliot, General Manager, Colorado Lining International Inc., 303 885 0261, [pelliott@coloradolining.com](mailto:pelliott@coloradolining.com)

Paul Bennett, Jr., President/Owner, Repsco, Inc., 303 883 1667, [pbennett@repsco.com](mailto:pbennett@repsco.com)

Michael Dinkel, Senior HSE Representative, Anadarko Petroleum Corporation, 785 691 7788, [mike.dinkel@anadarko.com](mailto:mike.dinkel@anadarko.com)

c. Manuals, Brochures, Print Ads, Pictures, Educational Materials, etc.

See our website ([peakrecycles.com](http://peakrecycles.com)) for a complete list of our business activities. Also attached are photos of our major pieces of equipment including our roller machine which has played a critical role in procuring pit liners which is our target market for our facility.

Please complete the following table, and fill in missing information where appropriate. A description of each column is provided below the table. End dates were updated based on past e-mails, conference calls, or site visits.

Task/Deliverable	Scheduled Duration/ End Date	New Deadline (if applicable)	Actual Date Completed	Reasons Deadline Not Met (if applicable)
Acquire inventory of up to one million pounds of pre-purchased HDPE pit liner	8/1/2013	9/30/2002		Difficulty of getting the material out of the field at economic prices. Working to convert some of the companies to use a recyclable product.
Hire and train 15 manufacturing employees, 1 administrator, 1 plant manager, and 2 sales and procurement reps	8/19/2013	9/15/2014		We currently have 10 manufacturing employees located in the State of Colorado and 7 manufacturing employees in North Dakota. We have 4 salaried employees. With the increase in supply, we are currently planning to go to two shifts which would raise the number of manufacturing employees in Colorado to between 18 – 20.
Complete equipment installations and building modifications	8/19/2013	n/a	11/29/2013	Permitting and electrical upgrades took longer than expected
Commence recycling operations	9/1/2013	n/a	12/17/2013	Permitting and electrical upgrades took longer than expected
Q1 update on progress in achieving goal of recycling 2.2 million pounds of plastic	9/30/2013	12/31/14		With the new supply commitments and deliveries to date in August, 2014, we should easily meet this target by this year's end.
Q2 update on progress in achieving goal of recycling 2.2 million pounds of plastic	12/31/2013	TBD	n/a	See previous response. We welcome a visit by the State of Colorado to see the progress we are making.

Task/Deliverable - Agreed upon per the contract and project updates.

Scheduled Duration/End Date - Agreed upon per the contract and project updates.

New Deadline - Indicate your new deadline if the task or deliverable was not completed during this reporting period.

Actual Complete Date - The date the task or deliverable was completed, if appropriate.

Reasons Deadline Not Met - If the task or deliverable was not completed by the "Scheduled Duration/End Date", explain why.

# Grant Metrics

Date project fully operational:

14/17/14

Based on deliverables. Provide the month during which the grant project increased diversion/created jobs/increased number of customers.

**Diversion Rates:**

Choose one material per box. Only list materials diverted as a direct result of the grant project. Must be listed in tons. See tab labeled "Conversion Tables" if needed.

Material Diverted #1	Plastics (#1-7)
Tons Diverted	
July-13	0
August-13	89
September-13	48
October-13	74
November-13	60
December-13	56
January-14	48
February-14	61
March-14	61
April-14	157
May-14	150
June-14	144
<b>Total</b>	<b>948</b>

Other div. material:

Material Diverted #2	<span style="border: 1px solid black; display: inline-block; width: 100px; height: 15px;"></span>
Tons Diverted	
July-13	
August-13	
September-13	
October-13	
November-13	
December-13	
January-14	
February-14	
March-14	
April-14	
May-14	
June-14	
<b>Total</b>	<b>0</b>

Other div. material:

Material Diverted #3	<span style="border: 1px solid black; display: inline-block; width: 100px; height: 15px;"></span>
Tons Diverted	
July-13	
August-13	
September-13	
October-13	
November-13	
December-13	
January-14	
February-14	
March-14	
April-14	
May-14	
June-14	
<b>Total</b>	<b>0</b>

Other div. material:

Material Diverted #4	<span style="border: 1px solid black; display: inline-block; width: 100px; height: 15px;"></span>
Tons Diverted	
July-13	
August-13	
September-13	
October-13	
November-13	
December-13	
January-14	
February-14	
March-14	
April-14	
May-14	
June-14	
<b>Total</b>	<b>0</b>

Other div. material:

Material Diverted #5	<span style="border: 1px solid black; display: inline-block; width: 100px; height: 15px;"></span>
Tons Diverted	
July-13	
August-13	
September-13	
October-13	
November-13	
December-13	
January-14	
February-14	
March-14	
April-14	
May-14	
June-14	
<b>Total</b>	<b>0</b>

Other div. material:

Material Diverted #6	<span style="border: 1px solid black; display: inline-block; width: 100px; height: 15px;"></span>
Tons Diverted	
July-13	
August-13	
September-13	
October-13	
November-13	
December-13	
January-14	
February-14	
March-14	
April-14	
May-14	
June-14	
<b>Total</b>	<b>0</b>

Other div. material:

Material Diverted #7	<span style="border: 1px solid black; display: inline-block; width: 100px; height: 15px;"></span>
Tons Diverted	
July-13	
August-13	
September-13	
October-13	
November-13	
December-13	
January-14	
February-14	
March-14	
April-14	
May-14	
June-14	
<b>Total</b>	<b>0</b>

Other div. material:

Material Diverted #8	<span style="border: 1px solid black; display: inline-block; width: 100px; height: 15px;"></span>
Tons Diverted	
July-13	
August-13	
September-13	
October-13	
November-13	
December-13	
January-14	
February-14	
March-14	
April-14	
May-14	
June-14	
<b>Total</b>	<b>0</b>

Other div. material:

**End use of diverted materials:**

Describe where materials are going (e.g. MRF, new products, reuse)

We wash and grind waste plastic materials into a material that plastic product manufacturers use to produce new plastic products.

**Number of Permanent Jobs Created:**

Include full-time & part time paid positions. 1 FTE = 40 Hours Per Week

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**Type of Permanent Job(s) Created:**

Provide titles of jobs created

General Management, Plant Manager, Operations Manager, Office Manager, ND Field Operation Manager, Production Leads, Equipment Operators and Laborers.

**Average Salaries of Jobs Created:**

Average of all jobs created

\$ 33,780 Annual

**Average Monthly Customers for FY 2014:**

July 1, 2013 - June 30, 2014

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**Average Monthly Customers for FY 2014:**

Estimate or refer to customer list

Avg. Monthly Amount	
July-13	-
August-13	25,878
September-13	13,362
October-13	21,511
November-13	20,842
December-13	53,323
January-14	30,948
February-14	34,682
March-14	60,115
April-14	113,146
May-14	99,390
June-14	152,022
<b>Ave. / FY 14</b>	<b>\$ 52,102</b>