MOORE

& Associates

Report #14501A

Summary Report:

Recycled Content Newsprint Programs/Legislation, the Newsprint, and Old Newspapers Markets

---

Provided For:

Wisconsin Department of Natural Resources

July 8, 2014

8935 Ridgemont Drive • Atlanta, GA 30350
Tel: (770) 518-1890 • www.MARecycle.com
MARecycle@aol.com

BACKGROUND

MA Recycle, Inc. DBA Moore *& Associates* (and referred to as such in the balance of this report) provides this summary report for the Wisconsin Department of Natural Resources (referred to as WI DNR in this document). The report contains information and opinions on recycled content newsprint legislation/voluntary programs, the newsprint market, and the recovered paper grade, old newspapers (ONP).

Moore *& Associates,* a paper recycling consulting company has a long history of analysis the subjects of this report over the last twenty years. Our company's expertise and experience in paper recycling analysis and research can be viewed at our web site – www. MARecycle.com. In 1998, Moore *& Associates* published an independent report on the various state recycled content newsprint mandatory and voluntary legislation/programs. We have worked in the past for WI DNR on this subject – specifically in 1997.

This report will address the following topics:

- An overview of current status of recycled content newsprint laws/voluntary programs in other states;
- The relevance of Wisconsin's newsprint target recycled content mandate in the context of industry trends;
- An opinion of the consequences of eliminating the recycled content mandate on newspaper recycling and the environment;
- Professional opinions on the likely effectiveness of 3rd party certification of suppliers as proposed by your state's newspaper publishers (through the Wisconsin Newspapers Association - WNA) considering the following:
    - Environmental benefits
    - Effects on paper recycling
    - Whether the certifications suggested by WNA are appropriate for the task or others should be considered.

Current Status of Recycled Content Newsprint Laws/Programs

Beginning in the late 1980s and through the 1990s, 28 states had put into place either mandatory or voluntary recycled content newsprint laws/programs. Please see Appendices 1 & 2 at the end of this report for a listing of these states. These actions were taken as a response to the upsurge in residential curbside recycling program from the late 1980s through the early 1990s, which generated an over-supply of ONP. With significant new generation of ONP and a slow reaction by the end user market (primarily newsprint producers) to increase the use of ONP, prices for the commodity plummeted and remained quite low for several years, negatively affecting the economics of residential recycling programs. ONP prices remained low from the end of the 1980s though much of 1993, due to the supply glut, but were also affected by the 1991 recession.

The recycled content newsprint laws/programs championed by recycling and environmental advocates were implemented as a reaction by state governments to stimulate new market demand for ONP. These new laws/programs together with the low prices for ONP did have the combined effect of significantly increasing the use of recycled fiber (primarily ONP, but also old magazines) throughout the North American newsprint mill system. Most of the new recycled newsprint production capacity additions occurred after 1990. Moore *& Associates'* conclusion is that the recycled newsprint laws/programs had a positive impact on balancing the supply/demand of ONP throughout the US.

Moore *& Associates,* together with WI DNR, surveyed the states that had enacted mandatory or voluntary recycled content newsprint laws/programs in order to ascertain their current status. The following are the conclusions/results of the survey effort:

- Wisconsin has had one of the most active approaches to continuing to monitor and enforce the recycled newsprint content law among all states.
- Several other states are active, or at least somewhat active, in monitoring their state programs, but almost none have taken any serious enforcement actions.
- Several states have had their recycled content newsprint initiatives repealed or let them expire
- A number of the states contacted were currently unaware that their state at one time had an active recycled content newsprint effort.

A summary of the recycled newsprint program survey results is available from WI DNR.

Moore *& Associates* overall conclusions on recycled content newsprint laws/programs are as follows:

- After significant activity in this area in the 1990s, there have been no new programs and limited activity regarding recycled content newsprint programs in the last fifteen years.
- These programs when first instituted were based on the real need of the sagging market for ONP and acted as a stimulus for new demand
- As circumstances in the ONP and newsprint/newspaper markets have changed dramatically since the late 1990s, the perceived and real need for stimulating the demand for ONP through recycled content newsprint programs is currently at a very low level. This item is covered in greater detail in the balance of this report.

The Relevance of Wisconsin's Newsprint Target Recycled Content Mandate in the Context of Industry Trends

The WI DNR has asked for Moore *& Associates* professional opinion on the subject of this section of the report and specifically, does market demand for newsprint make Wisconsin's recycled content mandate and reporting obsolete?

Moore *& Associates* believes that Wisconsin's recycled content newsprint has served its purpose and is not relevant in today's era of recycling. We point to the following reasons to support this conclusion:

- The ONP market has remained relatively strong over the last fifteen years, especially compared to the early 1990s, which is the most important factor in this relevancy analysis. Please see the chart in Appendix 3 at the end of this report for a graph of annual US deinking newsprint grade ONP from 1990 through 2013 illustrating this point. The average US price for deinking ONP in 1990 – 1993 was $25/ton (and was even lower at the end of the 1980s) versus $99/ton for the last ten years. The stronger, stabilized ONP pricing has been driven largely by offshore demand, particularly from China (please see Appendix 4 at the end of this report for statistics on ONP exports). Interestingly, even China's production of newsprint (and subsequently ONP) has become stagnant. Much of the ONP China imports from the US are used as part of the recipe for producing boxboard. We do not however see any collapse or major over supply in the ONP market for the foreseeable future.

- Newspaper readership and the size of newspapers have fallen dramatically over the last fifteen years to less than half of what it was in the year 2000. Please see Appendix 4 at the end of this report for statistics on Newspaper Supply, which is newsprint plus inserts. Although the total demand for ONP has decreased over time, the available supply of newspaper has declined at even a greater rate, leading to the stronger market prices for ONP. The North American (US and Canadian newsprint production is essentially one market) newsprint producers have been financially unsound for quite some time with almost all producers having been in bankruptcy over the last decade. Financial survival has been the driver in the sector and any external burdens on production decisions (such as mandates/requirement to use recycled fiber) would put the newsprint production companies further into financial trouble. Similar to the newsprint producer's financial plight, the US newspaper industry has operated under difficult financial conditions for the last fifteen years due to the declining readership.

- The cost to produce newsprint from recycled fiber has exceeded that of virgin fiber over the ONP pricing cycle for over a decade now. This has been the result of both higher prices for ONP and lower quality of the ONP produced, leading to lower yields at newsprint mills based partially or wholly on recycled fiber.

- ONP is a much smaller portion of residential recyclables than it was in the 1990s. Residential recycling is in a different era than in the 1980s/1990s and newspapers/ONP have much less impact on the economics of residential recycling programs.

- Most other states that have (or did have) recycled content newsprint initiatives have significantly reduced or eliminated any activity based on them. If Wisconsin continues its recycled content newsprint requirements, the state's newspaper publishers will be at an economic disadvantage compared to other states.

The Consequences of Eliminating the Recycled Content Mandate on Newspaper Recycling and the Environment

Moore *& Associates*, in our professional opinion, believes that there will be no impact on newspaper recycling and the environment as a result of eliminating the state of Wisconsin Recycled Content Mandate on Newspaper Recycling.

We believe that repeal of the state's law will not reduce the recycling of newspapers nor contribute to the landfill or disposal of any additional newspapers. The basic reasons for this conclusion are covered in the previous section of this report.

Professional Opinion on the Likely Effectiveness of 3rd Party Certification of Suppliers as Proposed the State's Newspaper Publishers

General

Moore *& Associates* believes there are several inaccuracies in the Newspaper Chain of Custody ("the document") reviewed for this section of our report:

- When the Wisconsin recycled content newsprint law went into effect, there were limited new recycled newsprint capacity additions slated for implementation. The large majority of recycled fiber based newsprint mill capacity additions occurred between 1990 and 1994.
- The law was aimed at increasing demand for ONP, not just reducing the impact on landfills.
- Moore *& Associates* would say that while ONP prices are moderately high compared to historical norms, they have not been extremely high in recent years, nor do we forecast this for the near future.
- It is not true that ONP is commonly used for insulation and roofing materials. Because the higher pricing for ONP, insulators have reduced their reliance on the grade and there is very little roofing material made from paper fibers anymore. The largest uses of US generated ONP in order of size are exports (which includes Canada, much of which is for newsprint production that will be exported to the US), US newsprint production, and recycled paperboard (boxboard products, etc.).

Environmental Benefits

Moore *& Associates* see no negative environmental impact from the publishers 3rd Party Certification proposal.

Indeed as pointed out in the document, the lower yield of producing recycled fiber content newsprint is an environmental negative as in many cases the resulting deinking sludge is landfilled. However in some cases deinking sludge is recycled into low value products or combusted. A part of this yield loss is related to ONP quality (yields of newsprint mills based on recycled fiber in the mid-1990s were over 80% as compared to today's norm of mid – 70%), but an inherent characteristic of deinking is significant fiber yield loss and clays contained in the newspaper sheet.

Effects on Paper Recycling

Moore *& Associates* believes that the proposal by the state's newspaper publishers will have minimal or no effect on newspaper recycling. The current market forces of newspaper size/readership, residential recycling infrastructure, and the stable ONP market are far more important for newspaper recycling. While we don't believe the proposal will have any negative effect on newspaper recycling, we see little potential for positive impact from it either from a paper recycling view. Moore *& Associates* does believe that in an economically challenged newsprint/newspaper industry, any external burdens placed on them that will not produce meaningful overall benefit are not warranted.

Are the Certifications Suggested by WNA Appropriate for the Task or Should Others be Considered?

The critical issue facing newspaper recycling is the low quality of ONP being produced by residential curbside recycling programs. This is the result of both single stream recycling and lack of public education on material inclusion in residential recycling programs. Single stream recycling has led to mixed collection of all paper materials and separating out high quality deinking grade of ONP from this mixed paper stream is very difficult. Moore *& Associates* dos not believe that any newspaper recycling program approach can change this situation and the market demand/value for high quality ONP will push local collection and processing operators to make the correct decisions on sortation of individual recovered paper grades.

However, Moore *& Associates* believes that a valuable addition to a state environmental program for newspaper recycling could include a public awareness/education program on the parameters of material accepted by recycling programs as well as proper material preparation. Early in the major roll out of residential recycling programs in all states, they were supported by good levels of public education. This effort has all but disappeared and is sorely needed. Moore *& Associates'* believes a better use of resources aimed at newspaper recycling would be better recycling program education rather than newsprint environmental certifications.

Appendix 1

States that Enacted Mandatory Recycled Content Newsprint Legislation

Arizona
California
Connecticut
District of Columbia
Florida
Illinois
Kentucky
Maryland
Missouri
North Carolina
Oregon
Rhode Island
Texas
Wisconsin

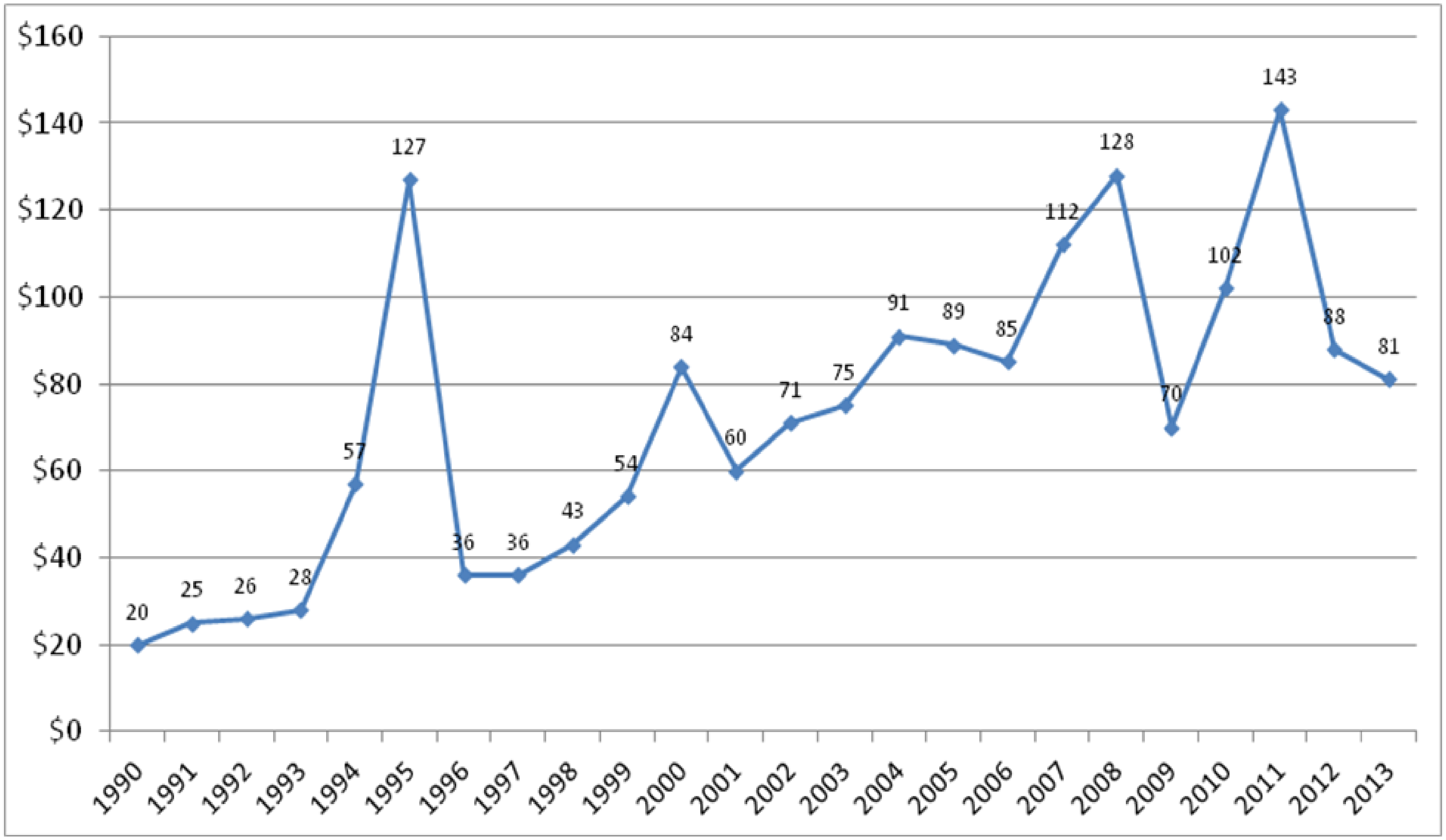
Appendix 2

States that Enacted Voluntary Recycled Content Newsprint Legislation/Programs

Colorado
Iowa
Louisiana
Maine
Massachusetts
Michigan
New Hampshire
New York
Oregon
Pennsylvania
South Dakota
Vermont
Virginia
West Virginia

Appendix 3

Annual US ONP Prices
$/ton, Baled – FOB Suppliers Dock



Appendix 4

ONP/Newspaper Supply/Demand

(000 tons/year)

Year	ONP Exports (includes Canada)	US Mill ONP Demand	Newspaper Supply
1993	1,706	7,288	15,578
1994	1,810	7,875	15,813
1995	2,096	8,023	15,832
1996	2,237	8,329	16,971
1997	2,381	8,847	18,266
1998	2,624	9,211	18,613
1999	2,793	9,536	19,152
2000	2,897	10,059	19,221
2001	2,827	10,261	17,414
2002	3,167	10,492	17,464
2003	4,005	11,129	17,404
2004	3,764	10,935	17,542
2005	4,122	11,068	17,175
2006	4,200	11,121	15,888
2007	4,606	10,586	15,397
2008	4,623	9,775	14,120
2009	3,780	7,612	10,829
2010	3,513	7,409	10,360
2011	3,474	6,925	9,552
2012	3,226	6,113	8,728
2013	3,153	5,631	8,331