

PAPER, PACKAGING AND FIBER MARKET NEWS AND PRICES FOR NORTH AMERICA

Supply shocks deepen as Arauco, NZ pulp mills shut due to pandemic; Domtar, Resolute set US increases

As the coronavirus (Covid-19) pandemic spread worldwide, talk of a simultaneous supply and demand shock on market pulp moved from expectations of slower demand to supply-side disruptions this week. At least four mills shut down production due to the pandemic. Arauco, the world's second biggest market pulp producer, closed its flagship 805,000 tonnes/yr market pulp mill in Chile after a worker tested positive for the virus, while three mills in New Zealand idled production after its government ordered shutdowns.

Against that backdrop, North American pulp markets are seeing increased demand and a surge in spot market activity driven >>> continued on page 19

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US boxboard market busier in March on carton and takeout virus-related demand; industry eyes conditions ahead

US boxboard prices were unchanged in March while industry players said they were seeing an initial and strong run-up in orders and interest driven by Covid-19-related higher buying of packaged food and pharmaceuticals and to restaurant closures that allowed for take-out food delivery in paperboard containers.

The busier March market conditions followed a steady February that nonetheless was when some published prices were lowered based on prolonged reports of discounting and a stall in the implementation of the tail end of price increases from 2018.

*** continued on page 11

Ching keeps changing the rules for RCP trade Get forecasts for all major recycled fiber markets risi.com/ching.rcp

RISI slashes US box shipment forecast for 2Q, 3Q, sees dramatic decline even with busy March, April

The coronavirus Covid-19 outbreak is expected to eventually strangle US economic growth for three to as many as four months, and potentially lead to a decline in total US actual box shipments for this year, below the 2019 total.

Fastmarkets RISI this week revised its forecast for US shipments to a decline of 0.4% for 2020, compared with 2019. This revision occurred after RISI, before the outbreak, forecast that US full-year shipments would increase 1.1% in 2020. This was to follow a flat year of actual shipments in 2019 and five years of almost cumulative 9% growth. The restatement >>> continued on page 10

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Printing paper

Demand starts to fall due to coronavirus, while prices hold

Printing and writing paper contacts reported unchanged prices for uncoated freesheet (UFS), coated freesheet (CFS), and coated mechanical (CM) paper in North America this month, but said demand has started to drop, affected by the Covid-19 coronavirus outbreak.

"We don't see price changes (on CFS) for regular business, but spot opportunities with prices below market do exist," a buyer commented.

"I have been approached by some suppliers offering lower prices. I expect to see some adjustments in (coated) No. 4 and No. 5," another buyer stated.

UFS pressure. One paper importer stated that "domestic mills have been showing more appetite for taking orders" and the market price has plunged to some extent.

"Prices for (20-lb office/copy paper) cutsize are still about the same as last month.

>>> continued on page 14

CLARIFICATION: Fastmarkets RISI's Principal Economist on Tissue Esko Uutela was quoted in a Mar. 20 Fastmarkets RISI PPI Pulp & Paper Week about a boom in US tissue paper production related to the coronavirus outbreak. Uutela's comments were at first attributed to RISI pulp economist David Fortin.

COVERAGE NOTE: Open consultation on methodology for North American Packaging Paper and Board and North American Recovered Paper

SAN FRANCISCO, March 25, 2020 (Fastmarkets RISI) - Fastmarkets RISI is inviting feedback from the industry on the pricing methodologies for North American Packaging Paper and Board and North American Recovered Paper, as part of its announced annual methodology review process.

This consultation, which is open until Apr. 24, 2020, seeks to ensure that our methodologies continue to reflect the physical market under indexation, in compliance with the International Organization of Securities Commissions (IOSCO) principles for Price Reporting Agencies (PRAs). This includes all elements of our pricing process, our price specifications and publication frequency.

You can find the current methodology for North American Packaging Paper and Board <u>here</u>, and the methodology for North American Recovered Paper <u>here</u>.

Please send responses in writing, preferably in electronic format, to the following address: pricing.risi@fastmarkets.com. Please add the respective subject heading "NA PPB annual methodology review" or "NA RCP annual methodology review." Please specify whether your response is confidential. Opinions offered in confidential responses may be referenced but will not be attributed in any way.

Fastmarkets will publish the outcome of this methodology review by Apr. 30, 2020, including a summary of the feedback with the exception of those marked as confidential. Any proposals to make material changes, discontinue or launch prices will involve a separate market consultation, the length of which will depend on how substantial the change is.

NOTE TO READERS:

Fastmarkets RISI has received inquiries on news stories related to the global Covid-19 pandemic, and its impact on the paper and forest industries.

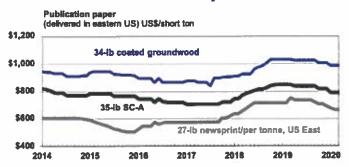
To find these stories, use the general news search available on the Fastmarkets RISI website. The website's URL is www.risiinfo.com. Search tools are available in the upper right corner of our site with a magnifying glass icon, or drag your browsing curser over the news section of the website and select the search tag.

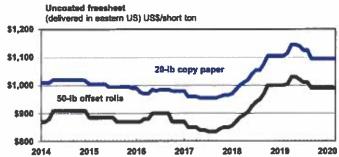
The search page offers searches by grades and topics and others. For a general search for Covid-19 related stories, use the Keyword search, and type coronavirus, Covid-19 or other related terms to find the appropriate news. You can also search for company news using a Keyword or a specific search by company. Stories will be shown in order of date posted to our website and in order of priority. The search can be saved and also made available in your personal Custom news.

If you need further assistance, please contact customer service at info.risi@fastmarkets.com or your account management team.



PRICE WATCH: Paper





Delivered US\$/short ton (unless otherwise noted). Ranges represent the range of prices in which the bulk of transactions have taken place. However, there is significant tonnage that transacts at prices outside of this range.

The state of the s			Current months	Year-to-year		
	Unit	Mar. 2020	Feb. 2020	Jan. 2020	Mar. 2019	% chg.
NEWSPRINT 1						
45-g (27.7-lb) East	tonne	666	666	676	751	-11.3
45-g (27.7-lb) West	tonne	656	656	666	741	-11.5
UNCOATED MECHANICAL						
35-lb MF offset, 65 bright	sh. ton	740 - 760	740 - 760	740 - 760	770 - 790	-3.8
35-lb supercalendered (SC-A)	sh. ton	780 - 800	780 - 800	780 - 800	835 - 860	-6.8
33-lb supercalendered (SC-B)	sh. ton	720 - 770	720 - 770	720 - 770	750 - 800	-3.9
45-lb offset substitute, 83/84 bright	sh. ton	880 - 925	880 - 925	880 - 925	900 - 945	-2.2
COATED PAPERS						
Premium 80-lb sheets 4	sh, ton	1,400 - 1,500	1,400 - 1,500	1,400 - 1,500	1,440 - 1,540	-2.7
Economy 80-lb sheets 4	sh. ton	1,140 - 1,205	1,140 - 1,205	1,140 - 1,205	1,180 - 1,245	-3.3
No. 3, 50-lb rolls	sh. ton	1,045 - 1,090	1,045 - 1,090	1,045 - 1,090	1,085 - 1,130	-3.6
No. 3, 60-lb rolls	sh. ton	985 - 1,015	985 - 1,015	985 - 1,015	1,025 - 1,055	-3.8
No. 4, 50-lb gwd. rolls 78/80 bright	sh. ton	920 - 960	920 - 960	920 - 960	960 - 1,005	-4.3
No. 5, 34-lb roto, rolls	sh. ton	960 - 1,010	960 - 1,010	960 - 1,010	1,010 - 1,050	-4.4
No. 5, 40-lb offset, rolls	sh. ton	815 - 885	815 - 885	815 - 885	875 - 925	-5.6
UNCOATED FREESHEET						
20-lb copy paper, 92 bright	sh. ton	1,070 - 1,120 *	1,070 - 1,120 *	1,070 - 1,120 *	1,100 - 1,130 *	-1.8
20-lb copy paper, 30% PCW, 92 bright	sh. ton	1,130 - 1,180 *	1,130 - 1,180 *	1,130 - 1,180 *	1,160 - 1,190 *	-1.7
50-lb offset rolls, 92 bright	sh. ton	980 - 1,000 *	980 - 1,000 *	980 - 1,000 *	995 - 1,015 *	-1.5
24-lb white wove envelope rolls, 92 bright	sh. ton	1,030 - 1,070 *	1,030 - 1,070 *	1,030 - 1,070 *	1,045 - 1,085 *	-1:4
20-lb forms bond, stock tab	sh. ton	1,055 - 1,095 *	1,055 - 1,095 *	1,055 - 1,095 *	1,070 - 1,110 *	-1.4
50-lb trade book, offset, rolls	sh. ton	1,165 - 1,205 *	1,165 - 1,205 *	1,165 - 1,205 *	1,180 - 1,220 *	-1.2
SPECIALTIES 1						
48-g thermal POS non top coated ³	MSF	18.20	18.20	18.20	19.95	-8.8
40-lb SCK release liner label (2.5 mil)	MSF	10.40	10.40	10.40	10.40	0.0
13- to 16-lb carbonless CB, roll midrange	sh. ton	2,354	2,354	2,354	2,354	0.0

NOTES

- (*) Some discounting below transaction prices. May indicate imported paper at lower price levels. PCW-postconsumer waste,
- 1. Newsprint 48.8-g (30-lb) assessments were discontinued in April 2019.
- 2. Future price increase announced by major producer(s) but not reflected in current data.
- 3. The 48-g is 12.8 lbs.
- 4. Premium sheets are equivalent to No. 2 and Economy sheets are equivalent to No. 3.
- 5. Prices represent printer list prices. Prices for large retail program tampage will be lower.

DISCLAIMER

While the information contained in this report has been obtained from sources believed to be reliable, Fastmarkets RISI does not warrant or guarantee the accuracy and completeness of the information. All prices are best estimates of prices, and are composite prices as opposed to median or average prices.



Market pulp

New Zealand takes 'strange' pulp stance, closing some mills; BCTMP, UKP impact expected

At least three producers idled their market pulp mills in New Zealand after the government ordered all "non-essential" businesses to shut for at least four weeks, effective Mar. 25. The closures should cause tighter supplies of bleached chemithermomechanical (BCTMP) and unbleached softwood kraft (UKP) in Asian markets, industry contacts told Fastmarkets RISI's PPI Pulp & Paper Week.

The government of New Zealand said it went into a so-called "Covid-19 Alert Level 4" at 11:59 pm local time on Mar. 25, when most businesses including three of the four market pulp mills were to close. Unlike the US and most provinces in Canada, the New Zealand government doesn't consider pulp mills as essential, other than ones whose end products are tissue, contacts said. After the government order went into effect, Winstone Pulp, Pan Pac Forest Products, and Oji idled three mills.

The three firms' combined annual capacity is 800,000 tonnes, according to Fastmarkets RISI's World Market Pulp Capacity Report. One pulp mill not closed in New Zealand is Oji's 280,000 tonnes/yr bleached radiata pine (BKP) mill in Kinleith.

Softwood BCTMP hit. Winstone Pulp shut production at its 190,000 tonnes/yr softwood BCTMP pulp mill in Karioi, a company source told P&PW. Winstone Pulp produces Advanced Board and Advanced Board + (AB & AB+) grades of BCTMP.

Pan Pac meantime idled production at its Whirinaki mill at Napier. The mill produces 290,000 tonnes/yr of softwood BCTMP.

The closures will cause a supply shock in Asian BCTMP markets and lead prices to rise, industry contacts claimed.

"Now, with a quarter of world supply gone (it will tighten quickly)," an industry contact said.

West Fraser hikes BCTMP.

Shortly after New Zealand's closures began, West Fraser, the world's largest market BCTMP producer, announced a \$20/ tonne increase on both grades across Asia, sources told *P&PW*.

Industry contacts said that BCTMP prices to China range from \$480-500/tonne net CIF this month (*P&PW*, Oct. 13, p. 1). Hardwood BCTMP typically prices at a \$20 premium to softwood BCTMP, but the delta had narrowed even before the New Zealand shutdowns.

"In BCTMP we already had a larger than average order file (and) we could sell more if we wanted to," said a contact at a BCTMP producer. "In New Zealand it's strange they're picking and choosing which mills can run."

Oji: Tasman shut, Kinleith open. The source was alluding to New Zealand allowing Oji to run the Kinleith BKP mill, but ordering it to shut its 320,000 Tasman UKP mill at Kawerau. The Kinleith mill's BKP is exported to China and other Asian markets to make tissue and toweling products – which are coveted in the wake of Covid-19.

-by bryan.smith@fastmarkets.com

Recovered paper

India, US' second-largest RCP buyers, stops shipments as mill workers at home to combat virus

India, the US' second-largest buyer of recovered paper behind China, has stopped shipments of recovered fiber as mill workers stay home and transportation troubles persist, a situation much like what occurred in China and elsewhere globally, as the coronavirus spreads.

India's Prime Minister Narendra Modi on Mar. 25 directed the country's 1.3 billion citizens who are not employed by "essential" businesses such as police, medicine, grocery, and transportation, to remain home. Mill workers stayed home to attempt to slow the spread of the virus. India is expected to remain in lockdown for 21 days, and plans to open on Apr. 15.

Port workers and truckers, deemed "essential" by the Indian government, reportedly also are homebound to avoid the virus, reports claimed late this week.

The Institute of Scrap Recycling Industries (ISRI) said this week that the Indian government deems "manufacturing units of packaging material for food items, drugs, pharmaceuticals and medical devices" as essential, and allowed to remain open.

"It is not clear if this is packaging made from paper, plastic, metals, or a combination and how much of it is made from recovered materials," ISRI said.

A letter from an ocean carrier shared with Fastmarkets RISI noted that, "Factory/mill workers



US recovered paper exports to India: 2017, 2018 vs 2019

(in tonnes)

Recovered paper grade	2017	2018	2019	YOY % Change: 18 vs 19	YOY % Change: 17 vs 19	January 2020
OCC	1,093,793	1,740,778	1,341,634	-23%	23%	102,786
Deinking High Grades	132,434	152,392	126,829	-17	-4	10,030
Pulp Substitutes	74,353	239,751	420,500	75	466	32,911
News	98,767	106,979	58,785	-45	-40	4,091
Mixed	525,723	1,091,314	1,025,429	-6	95	98,035
Total	1,925,070	3,331,214	2,973,177	-11%	54%	247,853

Source: US Dept of Commerce, Bureau of Census,

are not leaving their homes, and we expect this to have a significant impact on business moving in and out of India."

As a result, US recovered paper orders to India have been "stopped" this week, contacts told Fastmarkets RISI's PPI Pulp & Paper Week.

"I believe most shippers, ourselves included, have stopped all Indian-bound shipments," an exporter said.

Added another: "We have to stop all shipments to India in their tracks, and figure out how to deal with shipments that will arrive there during the next 21 days."

India is the second largest buyer of US recovered fiber, following China, India imported 2,937 million tonnes of US recovered fiber in 2019, off 11% from the 3.331 million tonnes it imported in 2018. While India's buying of US old corrugated containers (OCC) was down 23% at 1.341 million tonnes in 2019 vs 2018, and its imports of mixed paper down 6% at 1.025 million tonnes in 2019, its imports of pulp substitutes soared last year, India imported 75% more pulp substitutes in 2019 vs 2018, at 420,500 tonnes in 2019 vs 239,751 tonnes in 2018.

Several new recycled containerboard machines are

planned in India, as the fiber shortage in China is being partly compensated for by increased containerboard and recycled pulp production in Southeast Asia that can be exported to China, market contacts have been telling Fastmarkets RISI for the last year. China may ban all recovered paper imports in 2021.

In 2020, India has been the biggest buyer of US mixed paper and pulp substitutes, and is the second largest importer of US OCC, behind China.

Indian mills 'panicking.'
With cargoes reportedly stuck in transit, a contact shared a drafted letter from an Indian paper mill group asking Prime Minister Modi to waive rents until the "situation turns to normalcy," the letter stated.

DHL Express India and train services in India also were discontinued during the lockdown starting this week.

"Indian ports are notorious for incredible demurrage and detention charges, which is why mills are panicking and writing to the Prime Minister," an exporter to India said. "Besides the shutdown, there is also some undercurrent of potential drop in Rupee-US dollar exchange, which will negatively impact import

wastepaper prices -- making them much more expensive."

This demand shock comes as US recovered paper to India had been shipping steady in firstquarter 2020, pushing up pricing from yearend 2019, according to P&PW's pricing survey. Pricing to India has increased significantly this year: In March 2020, old corrugated container (OCC) No. 11 to India has increased \$55/ton from December 2019 to \$157-160 CFR, and No. 12 DSOCC by \$60/ton to \$172-175/ton CFR. At yearend 2019, OCC No. 11 to India was \$102-105 CFR, and No. 12 DSOCC was \$112-115/ton CFR.

Last month, contacts reported that prices "rocketed up" to India due to effects of the coronavirus, including increased ocean freight costs, shortage of shipping due to skipped vessels by steamship lines, and aggressive buying by mills.

The price increasing was reported until the third week of March, contacts said.

One contact said it was "not surprising" to see No. 11 OCC to Asia export pricing out of the New York/New Jersey ports inching down from \$112-115/ ton FAS to \$107-110/ton.

A large supplier of recovered paper said this temporary demand drop-off "threatens to soften pricing" for export OCC and mixed paper grades.

Nixing mixed. Export pricing for mixed paper has decreased the last two months, in March and February, mostly due to India's scrutiny and demand decline for this grade, according to Fastmarkets RISI's pricing survey.



India's buying of US mixed paper has become "pack specific," turning away tons from curbside material recovery facilities (MRFs).

South Korea has followed through with its import restrictions, now inspecting 100% of all recovered fiber shipments, not solely mixed paper.

These changes pulled pricing down \$3/ton on an FAS level, according to contacts.

'Unprecedented times.' With India out, China demand soft, and Indonesia entering its onemonth Ramadan starting Apr. 23, exporters are scratching their heads of where to sell to next.

Further, West Coast exporters are not without their challenges this month. Contacts told of vessel shortages at the Port of Oakland in Northern California. Some Northern California suppliers are shipping recovered fiber instead out of the Long Beach port.

Said a large supplier: "Exports have been hampered by the shortage of vessel space, much more so in Oakland than other West Coast ports. The shortage of vessel space in Oakland has also prompted some Northern California suppliers to offer discounts in return for workable bookings," an industry contact said.

The Port of Long Beach, the largest US port for exports of recovered paper, is open and operating. The Port of Oakland also is open, although multiple contacts have reported difficulties shipping out of this port in March. Yet, other contacts also confirmed that they have shipped out of the Oakland port this month.

Exporters have shifted tons and will search for new homes into April, yet doubts remain.

An exporter said: "We are surely in unprecedented times, and (it's) difficult to assess what might be awaiting us even in the near future."

--by mworkman@fastmarkets.com

Recovered paper

US RCP prices show pickup from stocking, supply issue: OCC over \$100, SOP 'on fire'

As market players predicted last year, the low pricing and landfilling in 2019 has led to supply concerns and pricing pickups. In first-quarter 2020, demand for US recovered paper has picked up again after slumping demand last year. Recovered paper pricing has increased this first quarter along with demand, Mill demand has been steady so far this year, with one contact in the US Southwest seeing "a scramble for fiber by domestic mills, and export to Mexico, that is unprecedented." Several contacts told of strong old corrugated container (OCC) demand with increased price premiums this week in the USA, especially in the South.

"The scramble is effecting paper grades up and down the entire food chain -- from mixed paper to hard white. OCC is now selling to domestic mills well in excess of \$110/ton FOB in many markets across the country," a contact said.

In the Northeast, OCC sold for \$85-95/ton, with offers above \$100/ton, one claimed this week.

Fastmarkets RISI's PPI Pulp & Paper Week completes its survey and published US domestic and export recovered paper prices on Apr. 6.

The coronavirus has kept
Americans at home, and shaken
up operations for US waste
management companies. Waste
Management (WM) and Republic
Services, the two largest waste
management companies, have
stopped services in the last week
as a result of the coronavirus.
WM listed nine states on Mar. 20
with affected services, which had
jumped to 25 states by Mar. 26.

Republic Services suspended some recycling services due to the coronavirus.

A contact said: "One key thing to think about here is the supply chain to the mills. Waste paper collection is way down and trucking issues are starting. If this keeps going, it could be significantly worse in the next few weeks."

Puzzled packers. For recycled tissue paper, while seeing a consumer-side spike in demand as Americans buy toilet paper among coronavirus concerns, market players are alarmed about a supply-side shock for sorted office paper (SOP) that is expected to come. One mill contact put the SOP shortage at 50-75% over the next month as workers across the USA continue to work from home during shelter-in-place rules.

Less recovered paper will be collected at offices and schools, contacts said. Additionally,



with printers closed nationwide, as well as casinos, churches, and other places that meet consistently, packers are puzzled.

"Every paper mill in the US and Canada are calling us for extra tonnage that we don't have," a contact said Mar. 26.

If shredding companies cannot shred paper, as one effect, "There would be a shortage of supply (of SOP)," another contact said.

"This is the worst intake I have ever seen in 50 years. So many people are working from home so the shredding customers are all cancelling pickups," an East Coast contact said.

"We reduced our plant hours to six hours per day, laid off workers and sent the salesman and managers on a home sabbatical," a contact said.

SOP prices up and 'on fire?'
Another contact this week cited
SOP offered in the Northeast at
\$70/ton more than P&PW's \$90100/ton FOB seller's dock level on
Mar. 5. In the Southwest, SOP spot
pricing was claimed to be \$45/
ton more than the P&PW level
an Mar. 5, another contact said.
In the Midwest, SOP pricing was
"on fire," another contact said.

If US mills follow China's lead in response to the coronavirus, collections could soon cease, and mills could shut down or slowdown in response. Nine Dragons Paper, one of the largest paper and board manufacturers globally, was forced to slow its mill machines due to the virus, among many Chinese mills. US mills increased recovered paper consumption by 8% and 185,600 tons in February 2020

vs February 2019, as well as increased OCC consumption by 11% and 174,900 tons, according to the American Forest & Paper Association (AF&PA) statistics.

When comparing the first two months of this year to 2019, total recovered paper consumption at US mills is up 5.4% at 5.325 million tons, and for OCC up 7.2% at 3.769 million tons. In February 2020, recovered paper consumption was 2.555 million tons, and OCC consumption at 1.807 million tons.

At the same time, stock for total recovered fiber grades, and OCC, were down from the same month one year ago and month-overmonth: mill inventories for total recovered paper and OCC were both down 1% in February 2020 from the month prior. Compared with February 2019, total recovered paper inventories at US mills were off in February 2020 by 9%, at 679,600 tons, and were down 16% for OCC, at 379,700 tons.

At six days of supply, OCC stock had the fewest days of supply available in February, as old newspapers (41,900 tons), high deinking grades (113,300 tons) and pulp substitutes (45,500 tons) held 13-plus days' worth of supply, according to the AF&PA.

Mixed paper inventory had eight days of supply last month, at 99,100 tons of stock. This is off 7% from January 2020. Consumption of mixed paper in the first two months this year was up 8% at 701,500 tons (compared with the same two months of 2019).

Supply concerns. The data mimics what contacts told Fastmarkets RISI earlier this month: that many containerboard mills had low inventories on-hand. This pushed

up premiums in the Northeast and Midwest, up to as high as \$35 at least, contacts said. At the same time, mills had been running well and buying spot tons, operating higher than the 92.2% rate averaged in 2019.

Also to start this year, generation of recovered fiber, while seasonally low, has not rebounded as typical at this time. In early March, contacts said generation was off 15% in the Midwest, 20-30% in the Northeast, and one mill that handles grocery tons saw its generation of OCC down 18% in January and 32% in February. Another mill contact told *P&PW* that its OCC from retail is on par with last year's generation, while its recovery overall is off 10-20% overall.

OCC stockpiling has occurred. As OCC fell to record low in 2019, to a national average of \$22/ ton, more material was landfilled alongside mixed paper.

--by mworkman@fastmarkets.com

Financial

Moody's outlook sees 5-7% drop in paper/forest op income in 2020-21 due to Covid-19

Consolidated operating income of 24 North American paper and forest companies accounting for almost 50% of the global industry's operating income will decline 5-7% over the 2020-2021 period, Moody's Investor Services said in its Paper, Packaging & Forest Products - Global Outlook issued on Mar. 23. In a second report a few days later, Moody's outlined a dramatic decline in the

Fastmarkets

PPI Pulp & Paper Week

global economy because of the continuing outbreak of Covid-19.

In the Mar. 23 report, Moody's said the overall global outlook "remains negative" as operating income declines, and demand pressures drive prices lower, notably for corrugated and consumer packaging, offset by lower fiber costs.

The North American outlook reflects the 24 companies rated by Moody's and accounts for 50% of the global rated industry.

"Modest operating income growth from North American wood product producers and timberland owners will be offset by lower operating earnings from containerboard, paperboard, tissue, commodity paper and pulp producers," the rating agency said.

Earnings for North American corrugated packaging companies such as International Paper and Packaging Corp of America, and consumer paper packaging companies such as Graphic Packaging "will likely decline with the flow-through of recent price declines," Moody's commented.

North American commodity paper producers such as Domtar and Resolute Forest Products will face both price and volume declines across their commodity paper grades as digital alternatives continue to replace paper.

"Similarly, operating earnings will decline for North American pulp producers, such as Mercer International, as average 2020 prices drop below average 2019 prices," Moody's said.

North American timberland and wood products companies will benefit from a slight rebound

across most wood product prices in 2020 from cyclical lows in 2019, as a result of significant capacity curtailments, according to Moody's. Demand growth will be flat, as both annual housing starts, and renovation and remodeling activity is likely to stagnate after several years of growth, Moody's added.

Moody's said its expectation was that the industry's global operating income will also decline 5-7% over the period, with declining demand and lower paper packaging in both corrugated and consumer packaging, and that commodity paper and market pulp prices will be only partially offset by increasing wood product prices and modestly stronger demand for tissue, specialty paper, and market wood pulp.

Covid-19 effect. The "coronavirus will pressure demand and drive prices lower," the ratings agency added. "The global economic outlook is deteriorating as the outbreak spreads. While logistics disruptions may temporarily slow paper and forest product exports to and from China and other affected areas, such as (South) Korea and Italy, the impact on global demand will likely be far worse than on global production. This will result in oversupply across many regions, which will drive prices for most grades lower."

"E-commerce growth and environmental pressures to replace plastic packaging with paper-based alternatives will be partially offset by right-size packaging. Despite a recent spike of bath tissue and paper towels in reaction to the coronavirus, we expect demand will normalize during the second half of the year and North American tissue earnings will decline as

the ramp up of new capacity causes average prices for the year to fall," Moody's said.

Global shock. Moody's released a new report on its Global Macro Outlook on Mar. 25, expecting an "unprecedented shock to the global economy," due to the Covid-19 pandemic.

The ratings agency said the G-20 nations would experience a hit to their economies in the first half of 2020 before a pickup in 2021.

The report projects "cumulative contraction" over the first and second quarters of 2020 of 5.4% in Germany, 4.5% in Italy, 4.3% in the USA, 3.9% in the UK, and 3.5% in France.

"We have revised our growth forecasts downward for 2020 as the rising economic costs of the coronavirus shock and the policy responses to combat the downturn are becoming clearer," Moody's said. "We now expect G-20 real GDP to contract by 0.5% in 2020, followed by a pickup to 3.2% growth in 2021. In November last year, before the emergence of the coronavirus, we were expecting G-20 economies to grow by 2.6% in 2020."

--by imclaren@fastmarkets.com

Corporate strategy

Temperature checks done at various board, box plants as part of virus safety measures

On a call with CNBC/Bloomberg last week, International Paper (IP) chmn and CEO Mark Sutton said that three IP Italian packaging plant workers were sent home



due to either contracting coronavirus or showing symptoms of it. Sutton said on Mar. 20 that they were "recovering fine."

This week, North American containerboard mills and corrugated packaging plants appeared to be closely checking and monitoring their workers, especially before they start a shift. There were no reports to Fastmarkets RISI's PPI Pulp & Paper Week of containerboard mills or corrugated converting plants that had been shut down for quarantine because a worker was infected or possibly infected.

Most US hospitals are now checking the temperature of incoming workers.

At mills and corrugated plants, contacts told of doing the same this week.

One executive for a large integrated system told of workers being questioned at the door as they go into work to determine if they have any symptoms. If they do, they are sent home, the executive said.

Another integrated executive as well as a converting plant executive said temperatures were being checked on-the-spot of all incoming workers. Anyone with symptoms is sent home and told to quarantine himself or herself for two weeks, one added. Another integrated campany executive told of mill or converting plant workers self-checking their temperatures and if they are higher than 100.3 degrees, they must stay home.

Another told of ordering thermometers and -- "we've got to wait for them because there's a shortage."

--by grudder@fastmarkets.com

Containerboard

New-Indy hires ABB for Catawaba electrical, automation equipment; Klabin delays Puma

New-Indy Containerboard hired ABB to provide "integrated electrical and automation systems and equipment" for its Columbia paper machine rebuild in Catawba, SC, ABB said in a release this week. It's unclear when the rebuild is to be done on machine No. 3 at the mill so that it can produce ultra lightweight unbleached kraft linerboard.

One contact this week said PM 3 was still making coated print paper.

"The new technology and equipment being installed by ABB comprises paper machine and winder machine drive systems, ABB Ability System 800xA Quality Control System, ABB Ability System 800xA Open Control System, L&W Autoline for automated paper testing, as well as process motors and power products equipment," ABB said. "The integration of these systems will enable a single view of all production activities to ensure the highest levels of process efficiency, product quality, power stability and equipment reliability."

• Due to the coronavirus outbreak, **Klabin** this week said it stopped work on its Puma 2 project that includes the installation of a Valmet 450,000 tonnes/yr unbleached kraft linerboard and white top linerboard machine, which will be PM No. 27, at its mill in southern Brazil. "The project is now stopped to reduce the

speed of virus transmission in the region and protect Klabin workers and the cities around Klabin facilities," Klabin pres/CEO Cristiano Teixeira told Fastmarkets RISI's PPI Pulp & Paper Week. "The project erection was ahead of the schedule so far ... (and) we cannot forecast, at this moment, for how long and how much the delay will affect the startup of PM 27."

• Sri Andal Paper Mills is buying a Valmet 200,000 tonnes/ yr containerboard machine to be installed in Tamil Nadu, India, and to start up in firsthalf 2021, Valmet said. Demand for both containerboard and recycled pulp from Southeast Asia including India is on the uptick because of China's fiber shortage. The problem in China has resulted from the country's rules the last two years on recovered paper. Some believe China will ban all imports of recovered paper next year. Three years ago, China imported 25 million tonnes of recovered paper, Valmet said Sri Andal Paper Mills' 4,800-mm-wide machine is to produce recycled linerboard and corrugating medium, and kraft top recycled linerboard in basis weights of 70-300 g/m2. The Valmet delivery will include three OptiFlo Foudrinier headboxes, an OptiPress Linear press section, and an OptiSizer Film size press with a supply system. "With this technologically advanced project, we are setting our footprint in the Indian containerboard segment," said Valmet Dir of India region Varun Jain.

--by <u>arudder@fastmarkets.com</u>



Box demand drop expected

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means that basically the May through September period would see US shipments decline.

At the same time, US cases of the virus have increased from eight on Feb. 1 to more than 82,400, including more than 1,170 deaths, as of Mar. 26, Johns Hopkins University reported.

With the outbreak fast moving in America, it's difficult to estimate how deep the box shipment drop may be and how much a \$2.2 trillion US government stimulus package might do to help consumer spending and the need for corrugated boxes, said Fastmarkets RISI packaging economist Ken Waghorne, who has reported on the North American containerboard and corrugated box market for 37 years.

For certain, Waghorne expects US e-commerce demand to benefit and grow at a faster rate than initially anticipated as people abiding by shelter-in-place rules buy products online to be delivered to their houses to avoid some store trips. But that's not likely to be enough to overtake the decline expected from closed, boarded up, and minimalized business around the USA.

As an indicator, the ISM
Manufacturing PMI for the
US was expected to drop into
the 30%s in March or April,
Waghorne said, as business
executives are expected to see
a harsh downturn. This would
mirror the sort of declines that
were seen in China. The February
PMI was 50.1% in the USA.

The \$2.2 trillion stimulus or emergency relief package is to provide direct payments quickly to 150 million American households, as a way to partly compensate for job losses, the Washington Post reported. The needlest include those filing for unemployment. US unemployment claims totaled a record 3.3 million last week, the Post reported. Unemployment may increase dramatically in the second quarter, from 3.5% in February, because of shutdowns to combat the virus. Federal Reserve Board of St. Louis Pres James Bullard told Bloomberg on Mar. 22. Bullard called the secondquarter shutdown necessary.

"There is going to be a hit but I'm not sure when it will happen and what form it will take," said one executive of a large integrated containerboard/corrugated box company at mid-week. "Right now, we're busier than ever."

Market contacts and US boxmakers told Fastmarkets RISI's PPI Pulp & Paper Week in the last two weeks and P&PW twice reported the last two weeks that market sentiment was that box shipments would grow in a big way in March and likely grow again in April, compared with April 2019 shipments, before hitting a soft patch or biggerthan-expected decline starting in May. These contacts noted that people losing their jobs will reduce buying, and both output and consumer spending will decline.

Yet one boxmaker executive questioned why Amazon and Walmart in the last two weeks committed to hiring a quarter million workers if they believed demand would drop.

For now, again this week, boxmakers told *P&PW* about "booming" business that some had referred to last week as a "surprising surge." The surge was from intense demand for food staples, and tissue, medical, and cleaning products

This week, one converting plant executive told of receiving a call late in the afternoon from a customer who needed boxes by mid-morning the next day. Another told of filling an order in 16-17 hours.

"A lot of people want their boxes in 24 to 48 hours. It's all hands on deck right now. We have to turn stuff around fast. Everything is a rush," another said on Mar. 25. "Some of the food items are still flying off the shelves."

While bars and sit-down restaurants are mostly closed in California, one Southern California box plant player told of some restaurants selling groceries and distillers making hand sanitizers as Purell appeared overrun by demand.

Looking ahead to a possible boom-and-bust-type box market in terms of the overall US economic effect, Waghorne added: "What's the shape of the recovery? Is it V-shaped (sharp decline followed by sharp rise back to its previous peak) or U-shaped (gradual decline and the gradual rise typically over one to two years)?"

He does see a fourth-quarter 2020 rise in box shipments, vs the third-quarter 2020 level, and, looking ahead, 2021 shipment growth of 1.8% vs the 2020 total.



Waghorne's restatement to the 0.4% decrease in 2020 is based on US real GDP declining by 3.4% in the second quarter and another 0.2% decline in the third quarter. The GDP grew at 2.1% in the second half of 2019. For boxes, this negative-GDP would follow a January-through-April rise in actual shipments estimated at more than 2.5% by P&PW.

Waghorne told *P&PW* this week that "every week of shelter-in-place does incredible harm to the consumer segment, and who knows what form the government stimulus will take or when it will begin to show up in the data."

As of Mar. 21, more than 100 million Americans were under order to shelter-inplace, *USA Today* reported.

Waghorne identified 81% of US box shipments by end-use as "essential," according to rules by federal and state governments, 12% probably nonessential, 2% closed already, and a "grey area of 5% that could go either way, depending on how deep into the supply chain authorities look regarding essential sectors."

Waghorne said every week of shelter-in-place directly takes off at least \$40 billion from US real consumer spending, and thus GDP. The indirect effects from this shock are even more difficult to quantify, he said. His expectations are that the shelter-in-place program will last either four or five weeks. If this extends to eight to 10 weeks, then real GDP would likely decline at a 7%-8% pace in the second quarter.

Not all analysts or investors see 2020 as a negative year for US box shipments, compared with 2019. "About 2% (growth for 2020 over 2019's total) is still our number," said one investor this week. "(It's) nearly impossible to calibrate, but this is our best guess based on a ramp in the consumer piece that lasts a couple of months while the smaller industrial piece declines significantly in Q2 then recovers to a flattish rate."

"We assume enough stimulus happens to keep consumer demand for basic goods from collapsing, but clearly this is a risk if we don't get a real fiscal package and incomes essentially evaporate as is happening now," the investor said early this week.

• International Paper (IP) chmn and CEO Mark Sutton told CNBC on a call on Mar. 20 that the "famous center of the grocery store (that) had been in some bit of a decline because of the way we've chosen to eat differently" has had demand that he said "skyrocketed." IP is the largest US boxmaker.

--by <u>arudder@fastmarkets.com</u>

Boxboard sees pick up

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Many market contacts were unavailable in recent weeks, with one source saying 25% of his company's office staff were out last week, and customer visits were replaced by conference calls.

"A month of travel is being wiped out," he said. "But business has remained strong."

"We are surprised how good orders are," the recycled producer source commented last week,

adding the company had its "best shipping day" recently.

"But transportation is more difficult," he added. "The carriers just don't show up."

"February was fine," said a carton converter contact. "We have seen a push in orders for March."

"March was strong the first two weeks, then Covid blew up and it's even stronger," added another recycled producer.

"The center of the supermarket is stronger," he said, referring to paperboard packaged food vs fresh food at the "perimeter" of the store.

"That is where the plastic is," he added.

February decline. Some contacts and market watchers criticized the Fastmarkets RISI PPI Pulp & Paper Week February price decreases on bleached folding and recycled grades as being published "too late" and questioned the size of the declines that were at \$30/ton.

Others verified extended weakness in the fourth quarter as well as the decline in recycled grades -- coated (CRB) and uncoated (URB) - that represented 20-30% of the 2018 price increases of \$100-150/ton. Those increases amounted to a 16-20% overall rise in prices that year.

Solid bleached sulfate (SBS) folding prices climbed \$50/ton or almost 5% in 2018 but receded in early 2019 and again last month to a net increase of \$10/ton over that period. A few contacts said after the February decreases that buyers came calling for even lower



prices, and one carton converter said they were able to knock down some of its higher CRB prices.

"I immediately called the mills for lower prices and they were willing," they said.

"Oh well, I had lower prices than others and now they will have it," said another.

SBS folding producers were mostly resisting any further decline in prices, contacts added.

"Unfortunately a lot of people don't read that it was what already happened," said an SBS supplier about the published decrease. "We've had discounts already. Nobody disagrees that prices had been dropping."

"That doesn't jive with the marketplace," said another converter about the decreases.

Amid the uptick in orders this month, industry contacts expressed Covid-19-related concerns that paperboard mills would be declared as essential businesses by state and provincial authorities, and not have to shut down as part of a lockdown strategy to lessen exposure to the virus.

"I worry about shutting down," said a recycled mill contact. "You have to be ready for everything and anything."

A folding carton contact described putting action plans in place, bringing in different work crews on different days, and using separate breakrooms.

"There is a lot of work going on to keep plants going," he said. "You just never know," said another converter, who emphasized sanitizing his plant, taking prevention measures and providing health insurance for employees.

"No one is sick yet," said another contact, "but it's just a matter of time."

"Orders are great," said another contact, "but we need our people."

Recycled boost. The Covid-19 spread and the stay-at-home measures by cities and states that emerged this month have driven shoppers to supermarkets and created a frenzy of panic buying of toilet paper, tissue, and sanitary paper grades. That also gave a "shot in the arm" to paperboard packaging overall, and in the case of CRB, added demand for tissue boxes, as well as food and other packaged products, a few contacts shared.

"Tissue boxes are still an important part of the CRB market," one of the recycled producers said.

"Dry food is through the roof," added a carton contact.

Another contact said URB was benefiting from the run on toilet paper and demand for paperboard tube and cores.

"Kleenex tissue, rubber gloves, all that comes in CRB," said another.

Kraft grades. He added that the same was true in SBS folding, for pharmaceuticals and frozen food, as well as new products emerging now.

"I've had a large order for test kits," they added, referring to coronavirus test kits that are suddenly being mass-produced.

"You can't get products to market without packaging," they said, noting the ongoing shift of some business from plastic. "Everyone is running full out."

"There will be restocking after all this panic buying," they added.

An SBS cupstock buyer said prices were firm with "no sign of a crack," even with the shutdown of movie theaters, entertainment venues, and sports activity."

"That's a lot of drinks not going into cups," the contact said.

"With everything going on, I am not going to a new supplier over price," the contact added.

Same contacts have described some loosening up of the coated unbleached kraft (CUK) market, due to some slowness in key beverage markets and newer imports.

Conditions did not warrant a price decline in February, and the market appeared tighter with the rise in March packaging demand.

"There is no price push back," said a converter. "The prime market is firm."

Looking ahead. While appreciating the stronger markets in March, mill and converter contacts expressed concerns over the months ahead, with the panic buying -- and hoarding of products -- also likely to impact purchasing later, after supplies run low.



"There is ambiguity over what the marketplace will look like," said one of the recycled producers. "A new story develops every 24 hours."

"Thankfully, there is no passing the virus through paper packaging," he added.

A financial analyst said in early March that assuming overall boxboard demand "remains weak," there is a "reasonable assumption" given what's happening to the US economy, that "there's further downside risk to boxboard prices later this year."

"I can't imagine what the outcome will be," said one converter.

"I don't know where the market will go," said another.

February statistics. US total boxboard production in February declined 7.5% from January and was off 0.5% from a year ago at 1.06 million tons, the American Forest & Paper Association (AF&PA) reported, and through two months at 2.2 million tons was down 1.4% from a year earlier. The full industry operated at 93.7% in the recent month from 94.8% in January and 93.5% a year ago. Year-to-date utilization was 94.3% from 93%.

CUK/gypsum wallboard production in February was down 10.8% from the prior month and off 0.6% from a year ago to 302,700 tons, and year-to-date was up 0.6% to 642,000 tons. Utilization was 89.3% in February from 94.8% in the prior month and 92.7% a year ago, and year-to-date was 91.6% from 91.4%.

CUK shipments in February were down 6.0% from January and 2.3% higher from a year ago to 312,200 tons, and year-to-date were up 1.0% to 644,400 tons. Inventories declined 6.2% from January and up 4.2% from last year to 189,700 tons.

SBS folding production in February was down 6.9% from the prior month and 4.7% higher from a year ago at 162,200 tons, and year-to-date was up 0.9% to 336,500 tons. Folding operated at 88.9% in the month from 93.7% in January and 92.7% a year ago, and year-to-date was 89.2% from 87%. Production for export was up 4.1% from a year to 23,100 tons and year-to-date was up 1.5% to 48,400 tons.

SBS liquid packaging production dropped 17.3% from January and was flat with a year ago at 87,400 tons, and year-to-date was up 1.8% to 193,200 tons. SBS food service output was down 2.9% from January and 7.8% from a year ago to 148,400 tons, and year-to-date was 9.9% lower at 301,300 tons.

Cupstock production decreased 9.4% from January and 11.4% from a year ago to 64,200 tons, and year-to-date was 13.2% lower to 135,100 tons.

Liquid packaging and food service operated at 96.5% in February from 99% a month ago and 94.9% a year ago, and year-to-date was 97.8% from 94.9%.

Total SBS unmade orders in February were flat with January and down 15.2% from a year ago at 433,300 tons. Shipments were down 5.3% from January and up 4.4% from a year ago to 421,600 tons, and year-to-date were up 1.1% to 866,600 tons. Inventories declined 4.1% from January and were 7.5% higher from a year ago to 544,500 tons.

February CRB production declined 5% from the prior month and was up 1.7% from a year ago at 158,100 tons, and year-to-date was 1% higher at 324,500 tons, according to AF&PA figures. CRB operated at 100.2% from 98.6% in January and 100.2% a year ago. Year-to-date was 99.4% from 99%.

Unmade orders were 6.2% higher from January and 22.2% lower from a year ago to 118,300 tons. Shipments were down 10.3% month-to-month and were 16.8% below a year ago at 150,400 tons, and through two months were down 3.7% to 318,100 tons. Inventories declined 2.5% from January and 6.1% from a year ago to 88,500 tons.

URB production was down 3.7% from January and 1.5% higher from a year ago to 189,100 tons, and year-to-date were flat at 385,400 tons. Tube and core output was down 4.1% month-to-month, and 1.3% higher from a year ago to 113,900 tons. URB operated at 97.4% from 94.5% in January and 96.2% a year ago. Year-to-date was 95.9% from 94.7%.

URB unmade orders were 2.9% lower from January and 10.2% from a year ago to 150,600 tons. Shipments were up 1% month-to-month and 4.3% from a year ago to 188,500 tons, and year-to-date were off 0.4% to 375,200 tons. Inventories were down 1.1% from January and 4.7% from a year ago to 89,800 tons.

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 Major packaging industry adviser Mesirow Financial in a 2019 market review said participation by private equity firms continues to shape the sector. "Until relatively recently, publicly-traded strategic buyers would nearly always outbid private equity firms. That no longer seems to be the case," Mesirow commented. "The sector has seen many examples of a company being sold by a family, or divested by a corporation, with the prevailing buyer being a private equity firm willing to pay premium valuations. In addition, whereas private equity firms 5-10 years ago were requiring a 20% internal rate of return. in today's lower overall return environment, firms are content to pay more, accept a lower rate of return, and work to grow the company." Mesirow recently advised Quad/Graphics in its recent sale of its Omaha, NE, folding carton plant to **Graphic** Packaging for \$40 million.

--by imclaren@fastmarkets.com

Print paper demand slows

>>> continued from page 2

Major producers have started to offer discount on rolls," a trader commented.

"We are seeing a \$10 decline here and there, but not across-the-board," another seller stated.

Another contact mentioned that CM and CFS producers, as well as importers, are "all fighting to grab business."

"Perhaps imports will slow as a result of the virus and ports turning away ships. That might help in the cutsize market," the contact noted.

All contacts said that UFS demand is still OK now, but is expected to fall significantly in the second quarter, as schools, restaurants, stores, offices, public departments, and many other businesses or events are closed or suspended due to the outbreak.

"Pricing for paper is still flat. Cutsize demand is likely to fall, but we saw an uptick this month, maybe because everyone got a box of paper before they went home to work," a supplier commented.

"We still will have a reasonable March. We haven't had too many cancellations, but are starting to see order dropoff. We're anticipating that April will be really tough," a local supplier stated.

"Transportation is still normal, but we hear rumors that things will be worse," the contact noted.

Another cutsize paper producer also mentioned that he expects demand to fall dramatically in the coming months.

The "majority of sales is through B2B channels, so even if retailers do well, our business will be impacted," the contact stated.

One paper distributor told of already learning of canceled print runs for retail and services industry into April and May.

"We haven't seen any delays in shipments or manufacturing due to the virus. However, the situation is fluid and I suspect if more restrictions are placed on people movement, manpower to drive the trucks will be an issue." the contact added.

An importer said that UFS prices were stable and demand was OK until last week. "Right now, demand is softening because schools and other places are closed. We are starting to feel it this week," the contact said. "We don't see any problems yet with transportation, but truckers are taking advantage, charging more for extra orders."

Another importer noted that they are facing confusion at some US ports.

"Some terminals have already started implementing the three-day closure of the terminal in a week. Other are ordering importers to return the empty container and pick up the container on the same day," the contact said.

Coated paper demand. Coated paper demand, similar to UFS, is expected to drop sharply, according to contacts.

"The situation is challenging for all producers. There is not an offshore market local producers can move their product to, and the operating rates are so poor already. Temporary curtailments of paper machines are likely to happen," a printer noted.

The contact told of starting to see order delays and job adjustments.

"We have also had a couple of cancellations. We are still printing, but most (advertisements) were pulled out," the printer stated.

One paper supplier heard of cancellations for inserts.



"Our print customers do face problems, cataloguers are wondering what they're going to do. We're not seeing massive cancellations, though. Health care, for example, is doing great, manuals for health care equipment printing is good, too; on the other hand, elementary education is bad because schools are closed. Demand is very uneven right now," the source said.

As with UFS, coated paper contacts said that offshore suppliers faced issues at US ports.

"Some terminals increased their schedule of closure due to shortage of cargo from China and some stopped shipping service from China to North America." one source said.

"Exporters are paying extra to get containers, making imported paper more expensive in the USA now, so many customers are opting to buy locally," another contact stated.

One European exporter told customers in North America about "possible disruptions and delays" from logistics suppliers, as they face new government agency orders and quidelines.

"We assume that Asian paper producers could have some delays, too, especially due to manpower shortage, but we won't see the effects for another 30 days or more, due to the longer lead times from manufacture to delivery in the USA," a paper distributor said.

Mill operations. The largest UFS producer in North America with 35% of the market, Domtar on Mar. 24 said the company was keeping its business running as smoothly as possible.

"Our teams are meeting daily – even hourly – to make sure that our supply chain, manufacturing, transportation, customer service, finance and technology workstreams are steady," Domtar stated.

International Paper (IP) reported that on Mar. 21 one of its employees at its Eastover, SC, mill was confirmed with the virus, but the mill remains operating. IP said the employee will remain in self-isolation for 14 days and co-workers who may have come in contact with the individual are also now in self-quarantine.

"Areas where the employee spent time have been cleaned and disinfected in line with health department protocols," IP said. "The health and safety of our employees are paramount, and we continue practicing personal hygiene, social distancing, site cleaning, and other measures recommended by the CDC (US Centers for Disease Control and Prevention)."

Other UFS paper producers reported to *P&PW* that they were still operating normally.

On the CFS side, No. 1 producer Verso last week reported that its US mills were all operating.

Other CFS and CM producers also told P&PW of normal operations at their North American mills.

In Europe, UPM on Mar. 25 stated that the most recent decisions taken by the UK government to impose widespread restrictions to public life caused a temporary shutdown of its Caledonian mill in Scotland. The mill makes lightweight coated

(LWC) mechanical paper and exports to North America.

"While we have had no reported case of an infection with the coronavirus at the mill, an increasing number of employees have remained absent from work for self-isolation ... (and) we have now decided to interrupt production at our Caledonian mill for the time being,"

UPM said. "Our international network of modern paper mills enables us to deliver the same grades from multiple mills in Europe and North America."

"This mill is currently under plans to resume operations in the middle of April," a US customer told P&PW. "They said they are able to offer products from other mills that have very similar characteristics."

Specialties. P&PW contacts reported unchanged prices for specialty papers.

"Prices for (lightweight) thermal POS did not increase here, as announced by global suppliers, but at least the price decline stopped," a supplier said.

"We are now seeing more people panicking (because of the virus) and trying to ship paper to the USA earlier." one exporter said.

"We expect a short-term spike in orders. March will be higher in demand, but then April will be slower. We should see a 30% decline in receipt paper demand," a supplier said.

The contact noted that fast food restaurants should continue demanding receipt paper, as well as grocery stores.

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"We have not seen a lot of order cancellations, but we are not getting many new orders," the source commented.

"In February, due to everything having been stopped in China, shipments from Asia to the world will drop sharply in March, April, and May. On the other hand, since the Chinese started to resume the production of everything from the very beginning of March, we may expect the export will come back normally with June shipments," an exporter offshore said.

"The point is (that) ... after the outbreak of the coronavirus in North America and Europe, we may see the market being punched by (an) economic recession, with things becoming very bad in 2020, and resuming gradually in 2021," the exporter stated.

- LSC Communications, one of the largest book and magazine printers in the USA, is said to be preparing to file for Ch 11 bankruptcy after trying to restructure its nearly \$1 billion Of debt, according to business news reports. The company would be making the preparations after struggling to raise cash by selling non-core assets.
- American Forest & Paper
 Association (AF&PA) pres/CEO
 Heidi Brock on Mar. 20 highlighted
 statements from the US Postal
 Service (USPS) in response to
 questions about the safety of
 receiving packaging and mail:
 "The Centers for Disease Control
 and Prevention (CDC) and the
 World Health Organization
 (WHO) have provided guidance
 indicating there is no evidence
 Covid-19 is spreading through
 the mail, and WHO has further

stated that the risk of catching the virus from a package that has been moved, traveled and exposed to different conditions and temperatures is low."

- Los Angeles-based Sinclair Printing has winded down operations since Mar. 20 at its commercial, book, and catalog printing facility, due to the Covid-19 coronavirus, a report said this week.
- As schools close during the coronovirus crisis, sales of reading and writing workbooks, flash cards, and activity books have skyrocketed, the New York Times recently reported.
- Willamette Falls Paper said it added Sustainable Forestry Initiative (SFI) chain of custody certification (SFI-01924) to its full line of paper products.
- --by rmercante@fastmarkets.com

Newsprint

Prices, demand hold; PE mills resuming, while Resolute and Rayonier plan for downtime

The Covid-19 outbreak has brought panic, fear, and several unanswered questions to the North American newsprint market, but so far in March, prices and demand seemed to be holding, Fastmarkets RISI's PPI Pulp & Paper Week contacts reported this week.

"This whole coronavirus thing has a huge impact in the market. Customers are panicking (and) fearing that borders will close. There's a lot of unknowns, lots

of bad things can happen," one newsprint supplier said.

Another paper supplier told P&PW that he is more concerned about customers being able to take the orders already placed.

"We are getting orders and have not seen many cancellations so far – but retail insert flyers are already canceling," the source added.

One exporter reported shipments issues to send paper overseas.

"The whole supply chain is facing issues. It's been hard to book or get containers," the contact said.

Prices. Most newsprint contacts, both sellers and buyers, reported unchanged prices for newsprint in March. Newsprint 27.7-lb was holding at \$666/tonne on the East Coast and at \$656/tonne on the West Coast, contacts said this week. Those levels are \$85/tonne, or about 11%, lower than the 27.7-lb pricing a year ago, according to P&PW's survey.

"We are not seeing any pressure on prices, just a lot of uncertainty with many suppliers and buyers shutting down," a producer said.

One buyer noted that there are spot opportunities with prices \$20/tonne less than the market prices.

"Prices will continue to trend downward, but with Covid-19, they remain static for now until the dust settles," the contact stated.

Demand. One large producer affirmed that prices are holding this month, with some customers trying to build inventories, as they fear they cannot



Newsprint statistics – February 2020

(000 tonnes)

NORTH AMERICA	Curren	t month % chg.	Year-to-date % chg.		
	2020	2020/19	2020	2020/19	
Operating rate, % (adj. for idled)	84%	761	85%	80 '	
Shipments to North America	156	-13.8	338	-13.2	
Shipments to USA	127	-14.9	279	-13.4	
Shipments to Canada	29	-9.0	60	-12,5	
Overseas exports	87	23.0	179	3.8	
Imports	0	-86.7	1	-88.5	
Total demand	156	-14.7	339	-14.4	
Mill inventories	260	-13.9%			

Operating rate, not year-over-year percentage change.
 Note: Consumption and user inventory data is no longer available.
 Source: Pulp and Paper Products Council.

receive tonnes in the future if borders close or transportation systems stop or slow down.

One printer told *P&PW* that his company had many orders canceled by their customers over the past couple of weeks due to Covid-19.

However, another buyer mentioned that "paper mills are reporting full order books due to panic pre-buys by publishers."

Through February, North American newsprint demand declined by 14.4% to 339,000 tonnes over a year ago, according to the Pulp and Paper Products Council (PPPC).

Shipments to North America were 13.2% lower in the period, at 338,000 tonnes, while exports increased 3.8% to 179,000 tonnes year-over-year.

Operations. The North
American newsprint mill
operating rate in JanuaryFebruary was reported at 85%,
compared to 80% in the same
period of 2019, according to
PPPC figures. Mill inventories
declined 13.9% to 260,000
tonnes year-over-year.

So far in March, after the Covid-19 outbreak in North America, newsprint mills seem to be operating normally, as the paper production has been classified by most governments as an "essential" business and thus authorized to remain open.

"Our mill workers are still going in. We're operating normally right now, but it's a fluid situation and can change anytime," a producer said.

Uncertainty. "With the situation changing almost by the minute, it is very difficult to forecast really anything at the moment," another producer stated.

"We are taking it day-by-day and focused on our business continuity plan to ensure our employees are safe first and we are able to continue our operations safely," another supplier noted.

Some newsprint suppliers are starting to announce plans to take downtime.

Resolute said this week indirectly related to newsprint that it would "adjust capacity dynamically based on the conditions and rapid evolution of the (coronavirus

outbreak) situation" with "most" of its capacity reduction "to come from the wood products and paper segments."

Resolute is the largest newsprint in North America with 45% of market share and more than two million tonnes of capacity.

Rayonier Advanced Materials on Mar. 25 announced curtailed production at seven Canadian locations, including its newsprint mill in Kapuskasing, ON. It was unclear how long the newsprint downtime might last, but Rayonier said that the curtailments in its different businesses will last at least two weeks and may be extended longer depending on market conditions.

One contact in Canada said that the "government is asking graphic paper producers to temporarily reduce their capacity in order to allow tissue paper and air filter producers to get hold of pulp and woodchips because of the Covid-19 situation."

Paper Excellence update.

Since Feb. 20 when Paper Excellence (PE) advised that its IT systems had been affected by a malware hacking attack, the company's three paper mills in British Columbia have been operating at reduced capacity, as orders could not be planned and manufactured because of the system interruptions in its online software.

On Mar. 23, PE's corporate communications VP Graham Kissack told *P&PW* that the Crofton and Port Alberni paper machines were operating normally, and the Powell River mill would startup "shortly."



"We were told that they (PE) will ... cycle back into full production by May," a buyer stated.

"It might be a little while longer until they're back to 100%," another buyer commented.

PE's share of the North American newsprint market is about 7.5%.

- PE's Kissack confirmed that CEO Brian Baarda stepped down due to personal reasons. The company has created a management committee to replace Baarda and does not have a timeline to hire a replacement.
- North American uncoated mechanical paper prices are also unchanged in March, contacts reported. Sources said that supply is enough and demand is OK, but may fall soon. "SC (supercalendered) seems to be hit the hardest. No price changes in March, but will likely trend downward for the remainder of 2020," a printer commented. "Today, demand is OK, but we don't know about tomorrow," a paper supplier told P&PW earlier this week.

--by rmercante@fastmarkets.com

Tissue

'Unprecedented, hyper-strong' demand still remains, GP recently shipped at 120% of its capacity

Demand for US tissue paper products remained strong this week, with cases of buyers pushing for quick supply to restock their near-empty or empty store shelves, contacts said.

One of North America's major tissue paper producers, Georgia-Pacific (GP), in the week of Mar. 16 ran and shipped out product at 120% of normal capacity, GP official Kelly Ferguson told Fastmarkets RISI's PPI Pulp & Paper Week on Mar. 26.

"We are working hard to maximize the number of deliveries we can load and ship out of our facilities - you can just load and unload so fast," Ferguson said. "We also are working with customers to have direct shipments when possible to reduce distribution time."

Ferguson said that GP over the past couple of weeks has "seen unprecedented demand, specifically in tissue and towel, and we expect to see those trends continue for the time being."

"We have teams working cooperatively and quickly together (category, sales, manufacturing, transportation and supply chain) to deliver as much product as we possibly can. All of our tissue mills ... are doing everything they can to get product to our customers and onto store shelves," Ferguson said.

GP is one of the three Big Brand US tissue product makers and one of the three largest by capacity producers in the USA, along with Procter & Gamble and Kimberly-Clark.

'Hyper-strong' demand.

Another producer at a small tissue paper company told P&PW this week that its demand was "hyper-strong. We can't support all of the demand we have."

In the last two weeks, North American tissue paper companies said they expected strong demand on the consumer/retail business side because of the coronavirus outbreak in the USA. Panic buying of bathroom tissue was reported at various major store chains this month. The companies also expected shelter-in-place rules, workers being sent home from offices, restaurant closures, and the early closure so far of schools and universities would cause a decline in the Away-from-Home (AfH) tissue products business.

"I'm surprised the AfH side hasn't eased up but would guess we'll see that more in April when the irrational buying stops," one leader told P&PW late this week.

The demand surge because of the outbreak and virus also was benefiting independent and small converters throughout the USA this week.

"We're working around the clock," the founder of American Paper Converting was said to have reported to The Columbian newspaper in Washington state. American Paper Converting runs plants in Waodland, WA, and in Virginia.

American Paper Converting reported a tenfold increase in business. As a result, the company increased its workforce by 50% to about 70. These new hires were for temporary positions. About 70% of its business is in AfH products, including to hospitals yet the converter also can make more consumer/retail product if needed.

Memes and tissue. In Miami Gardens, FL, a South Florida Tissue Paper official told WSVN-TV that "toilet paper has definitely gone viral" and



"we never thought we'd see so many memes in social media."

South Florida Tissue Paper makes 120,000 rolls/day of toilet paper and has increased output since the start of the pandemic to 220,000 rolls/day.

"This is nonstop. We keep working and working and working," South Florida Tissue Paper's Juan Corzo was reported as saying.

• A woman gave birth in the bathroom tissue products aisle of a Walmart in Springfield, MO, on Mar. 19, the local KY3-TV reported. Another store customer, a nurse, helped deliver the child. It was not reported if it was a boy or girl or what tissue product the woman was considering or buying.

--by arudder@fastmarkets.com

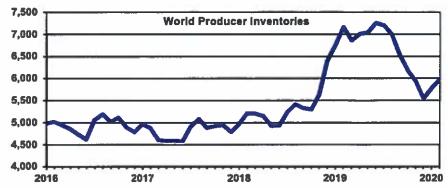
Pulp price increases are out

>>> continued from page 1

by tissue producers, which are running full-bore to churn out consumer tissue/toweling products in a bid to meet robust consumer demand (see related story, p. 18). That's led to a series of spot market purchases in 500 to 2,000 tonne lots, according to producer, buyer, and agent sources.

Increasingly 'weird
environment.' Panic buying of
toilet paper, tissue, and paper
towels along with wipes, hand
soap, and cleaning products
has continued across the USA
over the past month, buoying
demand for benchmark northern
bleached softwood kraft
(NBSK) and several grades

World Market Pulp statistics – February 2020



Note: Statistics represent 80% of capacity, and exclude China, Russia, and Indonesia. *Monthend stocks divided by average daily shipments in the last three months.

Source: Pulp and Paper Products Council.

(000 tonnes)

	February	YTD	YTD % chg
WORLD	2020	2020	2020/19
Shipments	3,798	7,792	4.3
Utilization (shipto-cap.)	83	82	3,0
Shipments by grade			
Bleached softwood	1,836	3,920	0.2
Bleached hardwood	1,797	3,574	8.7
Shipments by destination			
North America	585	1,139	-6.8
W. Europe	996	1,984	0.9
China	1,081	2,364	12.0
Rest of World	1,136	2,305	6.2
	February	January	February
Producer inventories	2020	2020	2019
Days of supply * all grades	42	39	55
Bleached softwood	37	36	41
Bleached hardwood	47	42	71

Pulp inventories of consumers and ports – February 2020

(000 tonnes)

	February	January	December	% chg
	2020	2020	2019	2020/19
European consumers*	201	214r	203	-6.6%
European ports	1,531	1,652	1,779	-21.9%

Source: Utipulp (European consumer inventories for 11 countries), Europulp (inventories at ports for eight countries), * Includes softwood inventories only. Some European consumers stopped releasing hardwood data in August 2015, leaving only softwood available.

of bleached hardwood kraft (BHK), industry sources said.

"Spot markets sound like they're firming and going in that direction (where) momentum certainly seems up," said a contact at a major NBSK producer, noting that larger tissue producers were seeking

tonnes in excess of their regular contract volumes and shopping spot markets where their regular contract suppliers evidently couldn't supply extra pulp. In addition, the demand run-up for market pulp was coming again this week from the top of the supply-chain as tissue makers dealt with pressure from



down the supply chain, and as store chains were actually out on the street seeking quick and additional supply, contacts said.

"It's case-by-case. It depends on the relationship with the customers. If it's about 5% more than their monthly allocation then fine, but if it was (in excess) of the 10% limit on contract volume, then I'd say its spot. I still think we're in this weird environment," the contact with the pulp producer said.

Market participants have used descriptions such as weird and crazy in global pulp markets since the Covid-19 coronavirus first struck China in about the week before the New Year began. Initially, as China began ordering citizens to stay in their homes and paper, board, and tissue mills idled production, the concerns centered on logistical problems, canceled vessels, and dire predictions of eroding downstream demand. This week, concerns about pulp supply mounted, after at least four producers abruptly closed mills due to the pandemic.

Majors hike US NBSK. Against that backdrop, at last three major producers in North America announced a new round of price increases, effective Apr. 1. Domtar, Resolute Forest Products, and West Fraser separately announced new NBSK list prices at \$1,190/ tonne, sources told Fastmarkets RISI's PPI Pulp & Paper Week. None of the firms stated how much their increases would be. but a \$1,190 list price is \$35/ tonne above the three firms' last announced prices of \$1,155/tonne, according to P&PW research.

P&PW reported preliminary March US NBSK effective list prices rose an average \$5/tonne to \$1,130-1,140/tonne. Based on that price, the Domtar, Resolute and West Fraser April list prices would be \$55/tonne increases on NBSK. In other grades, Domtar and Resolute slated southern bleached softwood kraft (SBSK) at \$1,100, and fluff in North America and Europe at a \$1,190/tonne level.

Resolute swings to SBSK.

Resolute hasn't announced SBSK prices since selling its Catawba, SC, mill two years ago, but sources said it's recently swung output at its Calhoun, TN, hardwood mill to split output between SBSK and southern bleached hardwood kraft (SBHK). Calhoun, which sources said typically sells 180,000 tonnes/yr of SBHK to the open market, is now making SBSK as well.

Those contacts said Resolute's swing isn't for the short-term, because producers are garnering better margins making SBSK, a grade whose demand has increased after China began issuing waivers on 5% import tariffs. It's also seen a bounce in demand because of significantly lower prices than NBSK, leading several US buyers to substitute where possible.

Diapers, wipes driving fluff. While panic buying of tissue/ toweling is widely talked about, fluff industry sources say that demand for hygiene products such diapers and disinfectant wipes made from fluff pulp are also seeing stronger consumer demand this year. As P&PW previously reported, fluff prices to China bounced this month to \$580-600 net CIF, and producers have become aggressive at

implementing hikes there despite a weaker overall demand environment (*P&PW*, Mar. 13, p. 1). Producers are also becoming increasingly hawkish in emerging markets such as Middle East/Northern Africa (MENA) countries.

In addition to the Domtar and Resolute fluff hikes, International Paper previously announced two back-to-back \$40/tonne fluff price hikes on February and March business, and while effective list prices haven't gone up nearly as much as announced, sources said it would continue driving up prices until meeting the \$80/tonne increase goal. Rayonier meantime has two \$20/tonne increases on March/April business.

The array of different fluff hike amounts and effective dates has producers implementing increases in various global markets simultaneously, making a grade that's typically less volatile than paper grade pulps more chaotic in price negotiations, with producers like Domtar officially announcing hikes and others quietly implementing increases case-by-case.

"We told them we want \$40. In markets like China, (MENA) and these other markets are net negative. Official or not, we went to those markets and told them we are going after \$40," said a contact at a fluff producer. "That will be what people are going after in April. Freight rates came down, but if you back freight out of that price, there's not a lot of margin. It seems like a steep increase, but we're trying to stay alive too."

Arauco mili closed. Arauco Horcones, a 805,000 tonnes/yr bleached radiata and bleached



eucalyptus kraft (BEK) market pulp mill with two lines in Región del Biobío of Chile, closed on Mar. 25 after at least one worker at the facility became ill with Covid-19.

Sources didn't know when the mill would restart production, but one source hoped for only a few days, adding that when it does resume operations it will likely ramp up only the BKP line. A company source said on Mar. 27 that all workers were safe, but the mill hadn't restarted.

Arauco Horcones is the second mill the firm unexpectedly shut in recent months. The firm idled its Licancel mill in Chile on Dec. 20 after a drought led to unusually low water flow in the Mataquito river. Licancel has capacity to produce 154,000 tonnes/year of unbleached kraft pulp (UKP).

Arauco, Ilim hike China BSK. Meantime, sources said Arauco announced a price increase in China, effective with April orders. The firm announced BKP at \$610 net CFR before end-of-year rebates, up \$20 from March. In BEK, Arauco announced \$505 net, up \$30, and UKP at \$590 net, up \$30.

Also, Ilim Group announced a \$20/tonne price increase on April business for Russian BSK, sources said. A new net or list price wasn't stated, but Ilim typically has a range of prices and delivery points ranging from CFR to main China ports to DAF at the China/Russia border.

Pulp inventories 6 million.
The Paper Products Council
(PPPC) reported worldwide
chemical market pulp producer
inventories for February closed
up three days of supply to 42

days overall. Bleached softwood kraft (BSK) rose one day to 37 days, while bleached hardwood kraft (BHK) shot up five days to 47 days-of-supply. Both of BSK and BHK grades are above what producers and analysts typically consider balanced.

The February three day-ofsupply increase corresponded to a 240,000-tonne increase, bringing stockpiles to roughly 6.025 million tonnes, according to a P&PW poll of industry analysts. Based on historical trends, the February inventories increased much more than the 10-year average rise of 25,000 tonnes, an analyst noted, but with market dynamics changing virtually every week, inventory statistics have become less significant: "Things are changing so fast that... nobody is looking at statistics these days, they are paying attention to their phones."

--by bryan.smith@fastmarkets.com

News briefs

Amazon this week reported workers were sent home with coronavirus from 11 of the company's US fulfillment warehouses, according to Amazon and local media reports on Mar. 26. The company has or had temporarily shut plants in Queens, NY, and Shepherdsville, KY, reports said. Cases of the virus were reported at Amazon facilities, including the ones in New York and Kentucky, in Staten Island, NY, Joliet, IL, Edison, NY, Moreno Valley, CA, Jacksonville, FL, Brownstown, MI, Oklahoma City, OK, Katy, TX, and Wallingford, CT... Walmart recently announced it will be hiring 150,000 associates,

and these include full-time, parttime and temporary positions in distribution and fulfillment centers... Tomato and asparagus farmer Aaron Barcellos said this week that a concern among California farmers is personal protective equipment, or PPE, such as N-95 respirators, Tyvek suits, and other required equipment for applying cropprotection materials. "... you can't find any replacement equipment right now. We've been looking all over the internet and talking to most of our local suppliers, and we can't find anything," said Barcellos of Los Banos, in a state of California release on Mar. 25. Manteca (CA) watermelon farmer Bryan Van Groningen is investigating where to find more PPE before his three-month supply runs out, which could be when farm activities will be busier. "The lack of availability of PPE could hamper production of certain food crops as a result," said Farm **Employers Labor Service COO** Bryan Little... American Forest & Paper Association (AF&PA) said in a press released that "our industry diligently continues to manufacture products to help customers address current challenges related to Covid-19." The AF&PA added that "our industry remains committed to meeting the needs of its customers and the public."... Sonoco has partnered with **Tellus**, a packaging company based in Belle Glade, FL. and owned by Florida Crystals Corp and Sugar Cane Growers Cooperative of Florida, to introduce a 100% U.S. sourced, sugarcane-based fiber bowl for refrigerated, frozen, and prepared foods, the companies said this week. Branded Natrellis, the fiber bowl is dual-ovenable, PFAS-free, and provides an "alternative to





more traditional rigid plastic packages used by the majority of refrigerated and frozen food products on the market," the companies said. "High quality refrigerated, and chilled foods continue to grow as a category. Using this novel technology allows us to produce a natural package made from an annually renewable resource, something that more and more shoppers and brands are looking for today," said Sonoco div VP and general mar for Rigid Paper and Closures in North America Ernest Haynes. Natrellis is to debut as the primary package used by Primal Kitchen for its new line of frozen bowls and skillet meals, which are coming this spring and summer to HyVee, Publix, Natural Grocers, Whole Foods Market and others, the companies said... The American Trucking Associations' advanced seasonally-adjusted (SA) For-Hire Truck Tonnage Index rose 1.8% in February after falling 0.3% in January. "Before any impacts from Covid-19, truck tonnage had a solid month in February," said ATA Chief Economist Bob Costello. "Last month, solid housing starts, high levels of retail sales, and even a modest improvement in manufacturing activity all helped freight volumes... Monadnock Paper Mills and AmerLink Paper Sales, a privately-held sales agency company representing specialty paper and board mills, announced a strategic partnership recently. The partnership's first collaborative project involves Envi PC 100 coated one- and two-sided (C1S & C2S) folding boxboard made with FSC certified 100% postconsumer waste recycled fiber... New York State will not enforce its recently-enacted plastic bag

ban for another two months to May 15, the state announced this week. While the ban went into effect at the beginning of March, the enforcement was delayed due to a lawsuit brought on by New York businesses who argue they had little time to prepare... Mac Papers sold properties for \$23.9 million after its acquisition by Monomoy Capital Partners, a press report said. The Spirit **Realty Capital** investment trust of Dallas acquired offices at 3300 Philips Highway and adjacent undeveloped land for \$7.9 million and a warehouse on Philips Highway for almost \$4.8 million, among the deals, the Jacksonville Daily Record reported. Monomoy, a New York-based private equity firm announced the acquisition Mar. 13. The acquisition price was not disclosed, but the deal was valued at \$240 million, PE Hub reported... American Forest & Paper Association (AF&PA) pres/CEO Heidi Brock said this week that the US Environmental Protection

draft air guidance policy was a "welcome step." "We believe this approach allows for both air permitting compliance while also allowing significant investments to move forward that do not impact air quality," Brock said.

People news

Greif announced the election of PolyOne Corp chmn and pres/ CEO Robert Patterson to the Greif board of directors, effective immediately. "Patterson has extensive financial and global operational experience in manufacturing and distribution businesses with expertise aligned to Greif's end markets," Greif said. He has been leading PolyOne Corporation, a premier provider of specialized polymer materials, services and solutions. since May 2016. Prior to joining PolyOne, Patterson was in leadership roles at Novelis, Inc., an aluminum rolled products manufacturer, and at SPX Corporation, a multi-industry manufacturer and developer.

PPI Puip & Paper Week

Agency's (EPA) issuance of a

"Begin Actual Construction"

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