7030 Ryburn Dr. Millington, TN Phone: (901) 873-5300 Fax: (901) 873-5301 www.gohispeed.com

February 25, 2022

General Recycling

Subject: February vibration survey

Most of the machines surveyed were found to be in good condition with the exception of the following:

QualiTest® uses a four-step rating system for defects.

Class I: Defect is present, but effect on reliability is not clear; no immediate action is required. Continue to normally monitor.

Class II: Defect (s) present that may cause problem in long term (2-6 months). Repair during normal maintenance scheduling. Continue to monitor.

Class III; Defect (s) present that may cause failure in short term (less than 2 months). This should be addressed as soon as practical, with a high maintenance priority. Increase monitoring frequency.

Class IV; Defect (s) present that makes continued reliability unpredictable, and possibility of secondary damage is high. Repairs should be made ASAP. An unscheduled shutdown should be considered for repairs

Hi-Speed **Industrial Service** tests and inspects industrial machinery and equipment and makes recommendations concerning maintenance and repairs based on its experience in the field of industrial repair and maintenance. The information contained herein is provided as an opinion only, not as a guaranty or warranty of the matters discussed herein.

As always, it has been a pleasure to serve General Recycling. If there are any comments or questions, do not hesitate to contact us.

Sincerely,

Kevin W. Maxwell

ISO Certified Vibration Analyst, Category III

Cell: 901-486-4565
Email: kwilliam@gohispeed.com

Defects

Conveyor 11

This unit has had high radial and axial vibration for a while that is likely due to the conveyor drum shaft being bent and the motor base being flexible. Inspect conveyor shaft for excessive run-out soon. Ensure belts and sheaves are aligned properly and not excessively worn. Rated as a **CLASS II** defect.

Cyclone Fan

Outboard (opposite drive end) fan bearing continues to show signs of race defects according to the spectral data. We will continue to monitor this closely. Rated as a **CLASS I** defect for now.

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Abbreviated Last Measurement Summary
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              Database:  nucorja9.rbm
              Station:   Scrap Yard

       MEASUREMENT POINT             OVERALL LEVEL       HFD / VHFD
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       SHREDDER   - SHREDDER                          (24-Feb-22)
                                    OVERALL LEVEL     1K-20KHz
              MOH                    .112 In/Sec       .133 G-s
              MOV                    .080 In/Sec       .249 G-s
              MIV                    .098 In/Sec       .053 G-s
              MIH                    .080 In/Sec       .125 G-s
              MIA                    .086 In/Sec       .166 G-s

       CYCLONE    - CYCLONE                           (24-Feb-22)
                                    OVERALL LEVEL     1K-20KHz
              MOH                    .123 In/Sec       .360 G-s
              MIH                    .140 In/Sec       .072 G-s
              MIA                    .103 In/Sec       .168 G-s
              EIH                    .180 In/Sec       .039 G-s
              EOH                    .171 In/Sec       .022 G-s

       M3         - MAG DRUM                          (24-Feb-22)
                                    OVERALL LEVEL     1K-20KHz
              MOH                    .123 In/Sec       .161 G-s
              MIH                    .085 In/Sec       .103 G-s
              MIA                    .093 In/Sec       .054 G-s
              GIH                    .088 In/Sec       .050 G-s
              GOH                    .097 In/Sec       .051 G-s
              IDB                    .058 In/Sec      .0047 G-s
              ODB                    .066 In/Sec      .0031 G-s

       NUMBER 11  - NUMBER 11                         (24-Feb-22)
                                    OVERALL LEVEL     1K-20KHz
              MOH                    .601 In/Sec       .285 G-s
              MIH                    .777 In/Sec       .307 G-s
              MIA                    .518 In/Sec       .099 G-s
              EIH                    .318 In/Sec       .703 G-s
              EIA                    .328 In/Sec       .879 G-s
              EOH                    .223 In/Sec       .187 G-s
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NAIRCOMP - NEW SEPARATOR NORTH AIR COMP (24-Feb-22)

	OVERALL LEVEL	1K-20KHz
MOH	.075 In/Sec	.170 G-s
MIH	.082 In/Sec	.852 G-s
MIA	.067 In/Sec	.889 G-s
EIH	.114 In/Sec	.525 G-s
EIA	.088 In/Sec	.710 G-s
EOH	.083 In/Sec	.586 G-s

QComp - Quincy Compressor (24-Feb-22)

	OVERALL LEVEL	1 - 20 KHz
MOH	.083 In/Sec	.233 G-s
MIH	.060 In/Sec	.303 G-s
MIA	.090 In/Sec	.297 G-s
EIH	.078 In/Sec	.528 G-s
EIA	.076 In/Sec	.454 G-s
EOH	.098 In/Sec	.536 G-s

Clarification Of Vibration Units:

Acc --> G-s RMS

Vel --> In/Sec PK