

Electronics Recycling Standard V 2.1



- Verification Process
 - Audit Findings
 - Lessons Learned
 - Benefits

Chris G. Webb P.Eng.

EMS (LA), ISO (LA), OHSAS (A), VSP TSM

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WHEN YOU NEED TO BE SURE

SGS

SGS Group

- Founded in 1878
- World's largest management systems registrar and world's largest organization in the field of second and third-party inspection and verification
- SGS has registered and certified over 60,000 companies
- Over 1100 Offices located in 145 countries, 48000 employees

How were we chosen?

SGS submitted a proposal through a competitive bid process regarding the Saskatchewan Waste Electronic Equipment Program.

From there it has been expanded to include the BC program

- ensuring consistent application of the standard
- ensure that processors could be audited once, no matter what provincial program ie shared audit protocol

Processor Evaluation

Electronics Recycling Standard defines the minimum requirements for managing end-of-life electronics (EOLE).

Focus has been on achieving conformance to the Standard.

The recycler evaluation process involves five stages:

- 1) Initial contact with processor, request for company information, procedures and other appropriate documentation.
- 2) Receipt and review of documents from the processor – this includes ranking of processor according to the matrix.

Processor Evaluation - Ranking

Assessment Factor	High (5)	Moderate (3)	Low (1)
Processing Operation Factors			
1. Regulatory Oversight	Little Monitoring or Gov't Reporting	Partial Monitoring or Gov't Reporting	Regular Monitoring or Gov't Reporting
2. Environmental Sensitivity of Materials Processed	High Sensitivity (PCBs, Mercury, Batteries)	Moderate Sensitivity (CRTs, leaded-glass circuit boards)	Low Sensitivity (cables, wires, other components)
3. Processing Method Used	Heat treatment	Mechanical	Manual
4. Years in Operation (company, not just EOLE processing)	Less than 2 years	2 years to 5 years	More than 5 years
5. Processing Volume (by weight)	More than 50% of the material generated from the Primary Recycler	15% to 50% of the material generated from the Primary Recycler	Less than 15% of the material generated from the Primary Recycler
Results from Document Audit			
6. Regulatory Compliance	Regulatory Non-compliance issues identified	Potential regulatory non-compliance issues identified	No compliance issues identified
7. ERS Compliance	Identified deficiencies with no plan for closure	Identified deficiencies with acceptable plan for closure	Identified potential or no deficiencies

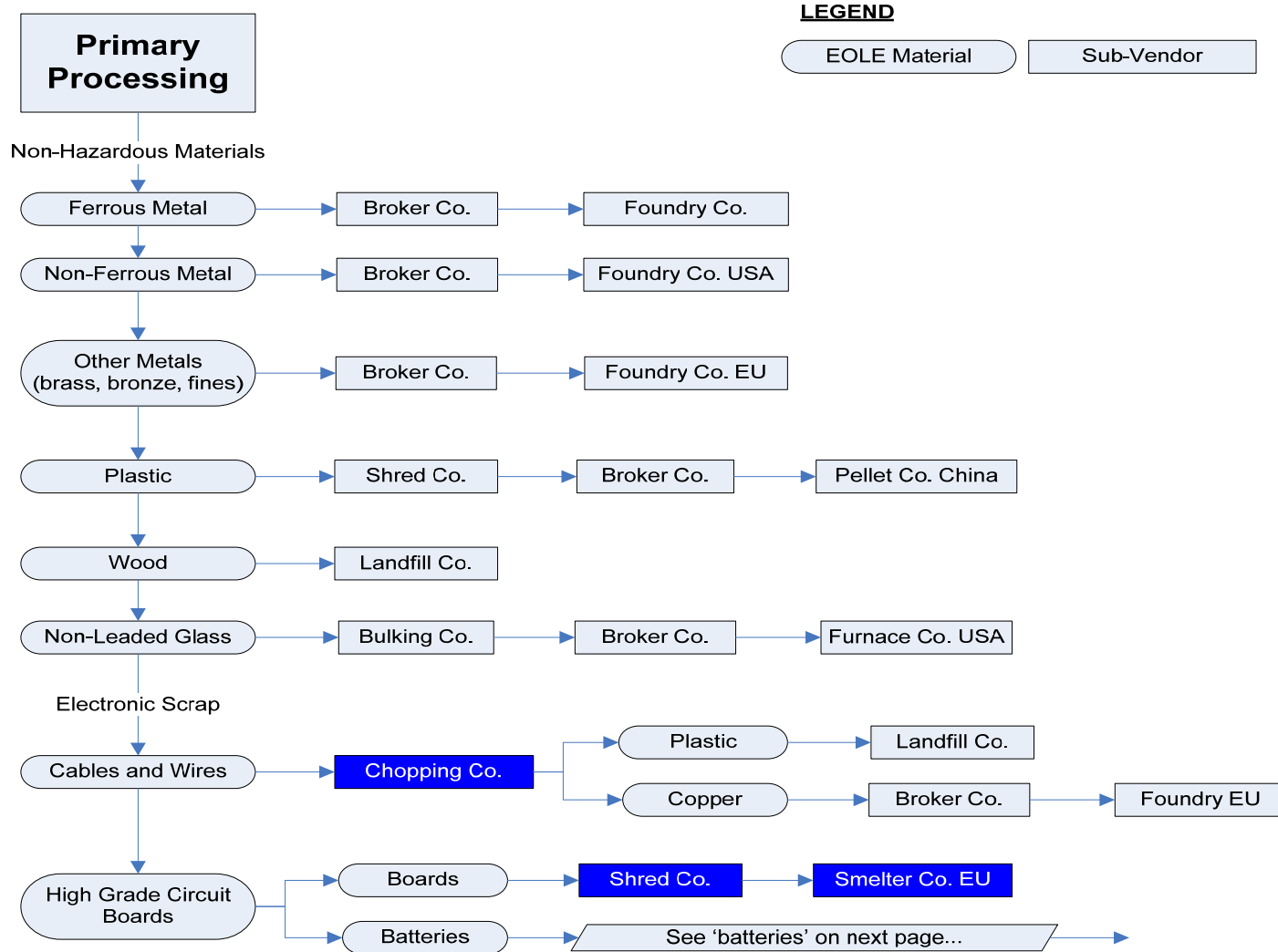
Processor Evaluation - Steps 3 -5

- 3) Scheduling of onsite audit (typically 1 day) including report with non-conformances, if any.

- 4) Follow-up report dealing with resolution of non-conformities and verification to Electronics Recycling Standard.

- 5) Vendor mapping of downstream flow of materials.

Processor/Vendor Mapping



Program Overview (SWEEP and ESABC)

Processors identified to Date

- 31 companies have been identified under SWEEP program
- 28 companies have been identified under ESABC (to date)
 - most have been very open and receptive
 - companies range from small (a few people) to very large
 - some have never been through this type of an audit process
 - important to work together by asking questions

Electronics Recycling Standard

Main Clauses with some Lessons Learned

1) General Requirements of Primary Recyclers

■ Weaknesses

- Maintain all records for a minimum of five years as per ERS 1.9
- Certification of recycling - small quantities as per ERS 1.10
- 60 day notice requirement as per ERS 1.12

■ Strengths

- majority have key procedures in place ie documented management system
- Primary tend to have stronger teams, principles, managers, technical support in-house

Lessons Learned

2) General Requirements of Downstream Processors

■ Weaknesses

- identify and comply with E H&S regulations as per ERS 2.2
- implement and maintain an Emergency Response plan as per ERS 2.3
- provide certificates of recycling for small quantities (typically hazardous wastes) as per 2.4

■ Strengths

- swift ability to develop new procedures as needed
- ability to implement and train to them in a short timeframe

Lessons Learned

3) Occupational Health and Safety

■ Weaknesses

- provide evidence of regular documented health and safety training as per ERS 3.1.1
- provide a documented annual risk assessment as per ERS 3.1.2

■ Strengths

- most processors are truly concerned for employee welfare
- Specific testing regarding lead is generally accepted

■ Future

- pushing your own system “to and beyond compliance”
- addressing potential longer term health issues (mercury)

Lessons Learned

4) Material Separation

■ 5) Mechanical Processing 6) Electronic Scrap Materials

- Huge variety of techniques being used, complex and challenging to ensure adequate protection in place for both environmental and health and safety. Level of procedures is very specific to size of organization, and chosen processing methods.

■ 7) Hazardous Materials

- good recognition of most hazardous materials.

■ 8) Operations using smelting, foundry, and other forms of Heat Treatment, including waste to energy facilities.

- Large variety of operations that are typical of commodity treatment facilities, metal recycling to steel pipe, etc.

Conclusions - Benefits of ERS

- Moving towards a more “common playing field”
- Contributes to overall improvements across the sector
- Aides in identifying “best management practices”
- Adds credibility in marketplace, regulators and business partners
- Encourages better trained staff and contractors and suppliers –reduced risk on spills, exposures and incidents
- Encourages more consistent Documentation of procedures – better access to documents

Conclusions - Benefits of ERS

- Helps reduce liability by identifying and managing risk
- Aids in Succession Planning...when staff leave or retire, knowledge no longer leaves with them...Allows for smoother transition when employees leave and are replaced
- Brings more awareness of roles and responsibilities
- Helps you to look at continual improvement...not maintain status quo



Contact Information

Please feel free to contact me with any questions or concerns.

Chris G. Webb P.Eng.

Business Development Executive & Lead Auditor

SGS Canada Inc.

Direct Line - 647-285-7393

Email : christopher.webb@sgs.com