

e-Stewards® Version 4.0

Overview of changes









Austin Matthews EHS Assistant Program Manager

Welcome from PJR Headquarters 755 W. Big Beaver Rd, Suite 1340 Troy, MI 48084

- Introduction of speaker
- Audience for today's meeting

Agenda:

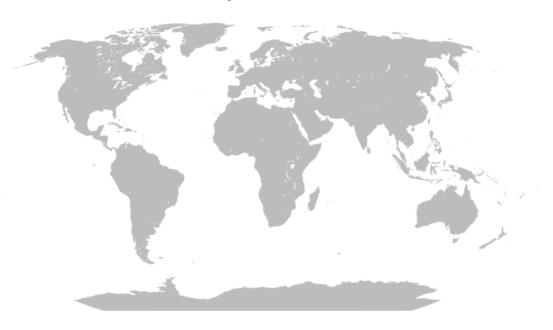
- About PJR
- Benefits and drivers
- Transition information
- Key changes
- Standard overview
- Certification process overview
- Questions





PJR is a leading Registrar

- PJR is one of the leading Registrars in the world
- A few countries where PJR has certified companies to various standards:
 - Australia
 - Brazil
 - European Union
 - Japan
 - India
 - Malaysia
 - Mexico
 - Singapore
 - Thailand
 - United States





PJR is accredited to grant certification for :

- ISO 9001
- ISO 14001
- AS 9100, 9110 & 912<mark>0</mark>
- ISO/TS 16949
- Responsible Recycling (R2)
- RIOS
- ISO 13485
- SQF

- TL 9000
- **OHSAS 18001**
- ISO 45001
- ISO 27001
- ISO 22000
- **HAACP Compliance**
- FSSC 22000
- e-Stewards®



Benefits and drivers

- Commitment to prevention of irresponsible or illegal handling of hazardous waste or e-waste streams, data security and protection, social responsibility, and environmental protection/conservation
- Reduction of environmental, occupational health & safety, data security, and social accountability risks
- Business management drivers, including improving public image
- Advertising of responsible management of electronics and electronic components
- Providing a competitive advantage
- Framework for maintaining compliance with customer and/or regulatory requirements, including the Basel Convention







e-Stewards Version 4.0

- V4.0 was published on February 25th, 2020.
- A copy of the final version of the standard, as well as a copy of the Guidance Document, can be obtained at:

https://e-stewards.org/learn-more/for-recyclers/access-the-standard/purchase-the-standard/

→ Note: V4.0 is free, and requires no end-user agreement, because this version of the standard does not contain the ISO 14001 proprietary language.





Transition to Version 4.0

- The deadline to transition is August 24th, 2021. Any remaining Version 3.1 certificates will be withdrawn and invalidated on this date.
- All audits scheduled to begin on or after January 1, 2021 must be conducted to V4.0.
 - → Note: e-Stewards has announced an extension for conducting audits to V4.0 from August 25, 2020 to January 1, 2021.
 - → The results of audits to V4.0 will not negatively impact a certified organization's certification status to V3.1, if conformance is still demonstrated through August 24, 2021.

NOTE: Transition audits can occur on-site or virtually, if the client is a good candidate for virtual auditing techniques.



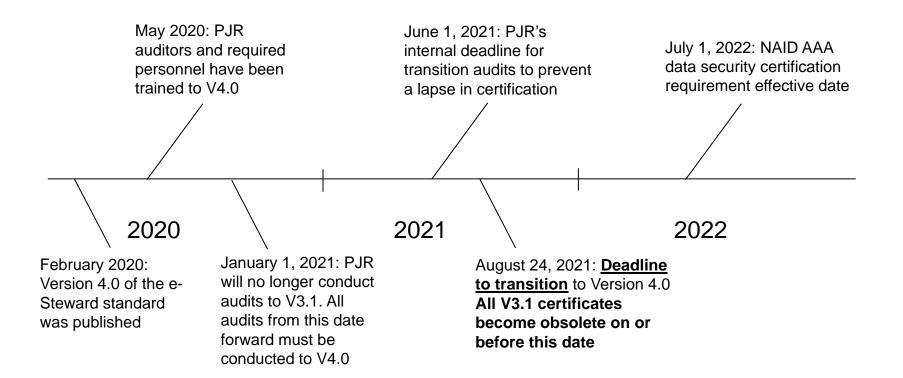
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Transition to Version 4.0 (ctd.)

- PJR issued a Transition Plan, found at: https://www.pjr.com/downloads/e-Stewards-Transition.pdf. This plan was also been emailed to each currently-certified PJR e-Stewards client.
 - → In order to avoid a lapse in certification, <u>PJR recommends a deadline of June 1, 2021</u> by which transition audits should occur. This ensures sufficient time for corrective action response by the client, and certification review and decision-making activities by the CB
- Transition audits can occur during surveillance or recertification audits, based on the client's preference. PJR reserves the right to add audit time to a surveillance audit to adequately cover all transition requirements.



Transition timeline





Key changes in e-Stewards V4.0

- Shorter (due to the removal of the ISO 14001 verbiage) and available for free (available at https://e-stewards.org/learn-more/for-recyclers/access-the-standard/)
- Reportedly easier to understand
- Overall less prescriptive/more flexible, while still retaining rigor in primary areas (controls for human health, exports, and security of data)
- Incorporates new Basel Convention trade rules/recent amendments
- Requires a separate ISO 14001 certification
 - Appendix C specifies audit time calculations to be utilized by CBs
 - Clients can expect audit time increases
- Will require NAID AAA certification effective 7/1/2022 (reduced fees were negotiated with NAID for e-Stewards-certified organizations)



Key changes in e-Stewards V4.0 (ctd.)

- Creation of a Guidance Document (available at https://e-stewards.org/learn-more/for-recyclers/access-the-standard/purchase-the-standard/) to house examples, "how to's," etc.
- Increased number of definitions (such as MOCs, Tolling Operations, precautionary principle, QSCs, etc.)
 - HEW replaces HEE (a subset of MOCs)
- Includes extended producer requirements
- Relaxed inventory requirements for QSCs (can put in lots instead, for example)
- Allows (but regulates) Tolling
- Noise monitoring added





Key changes in e-Stewards V4.0 (ctd.)

- Annual sampling is reduced in some cases
- Outdated battery testing has been made more flexible
- Onsite downstream audits are decreased to every 3 years
- Adds closure plan, financial instrument, and insurance checks
- Appendices on various subjects (Standard implementation, rules for organizations, rules for CBs, and data security requirements, respectively)





e-Stewards® standard overview

Terms & Definitions

- Removal of ISO 14001 terms/definitions (those found in ISO 14001 apply, unless superseded by e-Stewards definitions)
- Terms revised between V3.1 and V4.0:
 - Ancillary Sites
 - Commodity
 - Control
 - Downstream Provider (DP)
 - Electronic Equipment (EE)
 - End Processor
 - Final Disposition
 - Fully Functional/Full Functionality
 - Hazardous Electronic Waste/ Hazardous e-Waste (HEW)
 - Immediate Downstream Provider (IDP)

- Potentially Hazardous Processing Technologies (PHPTs)
- Prison Operation
- Problematic Components or Materials (PCMs)—specifically regarding plastics
- Qualified Auditor
- Recycling
- Recycling Chain
- Repair/Refurbishment
- Repurposing





Terms & Definitions (ctd.)

- New terms in V4.0:
 - Designated Health Provider
 - e-Stewards Processor
 - Electronic Waste
 - Extended Producer Responsibility (EPR)
 - Key Function(s)
 - Life-Cycle Perspective
 - Management
 - Materials of Concern (MOCs)
 - Organization
- Removed terms:
 - Broker
 - Due Diligence
 - End Refurbisher
 - Essential Function(s)
 - Hazardous Electronic Equipment (HEE)

- Precautionary Principle
- Processing
- Qualified Smaller Components (QSCs)
- Stewardship
- Stewardship Management System (SMS)
- Tolling Operations
- Transboundary Movement
- Unusual Equipment
- Waste Management Hierarchy





4 Context of the Organization

4.1 Stewardship Management System

- Specified inclusions for a documented scope
- Requires consideration of the Precautionary Principle, attempts to reduce negative EE lifecycle impacts, adherence to the Waste Management Hierarchy (where possible), and transparent handling of MOCs throughout the Recycling Chain

5 Leadership

5.1 Leadership and Commitment

- Section shortened
- No significant changes to intent





5.2 Stewardship Policy

- Section shortened
- Specified inclusions for a documented policy, including protection from harassment/discrimination, restrictions around MOC transboundary movements and disposal, restrictions regarding Prison Operations, etc.

5.3 Organizational Roles, Responsibilities, and Authority

- Section shortened
- Requires establishment of teams for implementing and improving the SMS, including a Safety team which is to include representation from <u>all</u> levels of the e-Stewards Organization





6 Planning

6.1 Actions to Address Risks and Opportunities

 Must plan and document tasks for addressing and monitoring risks and opportunities

6.1.1 Risk Assessment

- No changes to frequency or scope of assessment
 - Initially and at least every 3 (calendar) years, and in relation to Significant Changes
 - All operations under its Control (including Ancillary Sites)
- Specifies inclusions/inputs for risk assessment(s)
 - Now includes PHPTs utilized for EE processing, and other hazardous substances present
- Qualification(s) not specified





6.1.2 Stewardship Aspects

- Specifies items/concepts for consideration, such as:
 - Life-Cycle Perspective,
 - Precautionary Principle,
 - Waste Management Hierarchy,
 - Aspect severity/frequency,
 - Effectiveness of current operational controls,
 - Significant Changes,
 - Etc.
- Requires documented information (as evidence of criteria and results) and communication (as relevant)





6.1.3 Compliance Obligations

- Section shortened
- No significant changes to intent

6.1.3.1 International Waste Trade Agreements and National Laws

- Section shortened
- MOCs are to be treated as hazardous waste
- e-Steward Organizations must adhere to the Basel Convention's Article 4A (Basel Ban) even if their country has not ratified it

6.1.3.2 Extended Producer Responsibility Programs

- New section
- See definition for term
- Documented information requirements for organizations participating in EPR programs, to be made available upon request





6.1.4 Performance Verification

- New section (within the Standard)
- Requires a documented plan for unannounced Performance Verification Program inspections by e-Stewards, with specified inputs/items for inclusion including:
 - A commitment to cooperate,
 - Assigning primary and back-up contacts due to the unannounced nature of these inspections,
 - Admittance/allowance to inspect within 15 minutes of arrival and verification of credentials,
 - Etc.





6.1.4.1 Report to e-Stewards Database

- Relates to reporting of all EE under/through the Organization's Control to the e-Stewards website (in English)
 - Further detail can be found in Appendix A.6.1.4.1
- Requires an initial report (prior to certification) documenting the period <u>between</u> contracting with a CB <u>and</u> passing the Stage 1 audit (at least 3 months), and by January 31 of each subsequent year (reporting on the previous year)

6.2 Stewardship Objectives and Planning to Achieve Them

- Section shortened
- No significant changes to intent





6.3 Planning for Changes

- New section
- Relates to planning and implementing appropriate action(s) regarding Significant Change(s) to the SMS, including considering requirements for training, communication, monitoring and documentation

6.4 Contingency Planning

 Specifies information to be documented and maintained within contingency planning evidence, including names and contact information for the third party holding the Organization's financial instrument, as well as the third party(ies) with authority to access the site closure funds, etc.





6.4.1 Planning for Site Closure

 No significant changes to the site/inventory description, closure costs/activities schedule, or third party testing/remediation (if applicable) requirements

6.4.2 Establishing Financial Surety to Implement a Site Closure Plan

- Removes the option for a corporate parent to hold the financial instrument
- Provides an exemption from the financial instrument requirement if the e-Steward Organization's clean-up/closure costs total less than \$5,000 USD (evidence is required)





6.4.3 Insurance

- No significant changes
- Removes qualification specifications for the insurance professional/underwriter

7 Support

7.1 Resources

No significant changes

7.2 Competence

- Section shortened
- No changes to intent





7.3 Awareness

No significant changes

7.4 Communication

7.4.1 General

- Section shortened
- No changes to intent

7.4.2 Internal Communication

- Section shortened
- Requires communication without fear of reprisal of relevant SMS information regarding objectives, operational controls, relevant changes, and IH monitoring results





7.4.3 External Communication

- Requires communication of relevant controls, emergency response protocols, and security requirements with contractors and visitors
- Specifies information to be confidentially communicated to upstream customers and the e-Stewards Program Administrator, including:
 - Movement of MOCs under the Organization's Control throughout the Recycling Chain (and relevant site/contact information),
 - Records of shipment for all transfers to an IDP,
 - Sampling of shipping records to each DSP (3 months),
 - Equipment/components for reuse,
 - Consent from Competent Authorities (where applicable),
 - Etc.





7.5 Documented Information

7.5.1 General

- Section shortened
- Allows for Organizations to combine or separate documentation requirements as they deem fit to meet documentation information requirements in the Standard
- Exceptions (must be separated and maintained as individual documents to ensure easy/prompt access):
 - Closure Plan,
 - Emergency Preparedness and Response Plan, and
 - Downstream Disposition Chart

7.5.2 Creating and Updating

- Section shortened
- Requires documentation of changes and revision status





7.5.3 Control of Documented Information

- Section shortened
- Requires maintenance of Standard-required records for at least 5 years, unless a longer retention period is specified
 - Example: worker exposure records (required to be maintained for the length of employment + 30 years)

8 Operation

8.1 Operational Planning and Control

- Section shortened
- Hierarchy of Controls to be utilized (where applicable)





8.2 Emergency Preparedness and Response

- Section shortened
- No changes to intent
- Requires annual drills for relevant emergencies

8.3 Industrial Hygiene Program

- To address hazards of airborne, ergonomic, noise, and physical natures
- Requires prevention of hazard migration





8.3.1 Potentially Hazardous Processing Technologies (PHPTs)

- Specifies additional inclusions to the Industrial Hygiene program for Organizations using at least one PHPT, such as:
 - Testing and monitoring protocols, with IH testing overseen by a Certified Industrial Hygienist or Equivalent and the use of an ISO 17025- or nationally-accredited lab,
 - Noise monitoring in areas of excessive noise exposure, such as balers and shredders,
 - Monitoring of hazards specifically listed in Appendix A.8.3.1,
 - Initial IH testing in specified areas prior to Stage 1 and again 1 year after Stage 2,
 - Retesting no more than 3 months after mitigation, Significant Change(s), etc.,
 - Hazard testing for A.8.3.1 hazards per Table 1 specified frequency(ies),
 - Evaluation of results by a Certified Industrial Hygienist/Equivalent and/or knowledgeable physician, including taking appropriate/recommended action,
 - Review results and program by a Designated Health Provider, and taking appropriate/recommended action,
 - Implementation of biological monitoring (in certain circumstances),
 - Implementation of a medical surveillance program (if necessary), and
 - A written confidentiality agreement with the Designated Health Provider





8.4 Responsible Management of Electronic Equipment

8.4.1 Planning for the Management of Electronic Equipment

 Specifies topics/information to be determined and planned by the Organization, with adequate documented information required as evidence of both determination and implementation

8.4.2 Processing Controls and Restrictions

- Requirements for operational controls for the processing of EE (including MOCs)
- Table 2: Items Restricted from Mechanical Processing (no changes to the contents/types), unless the Organization is using closed-system technology(ies) for Processing
- Less prescriptive
- No significant changes to the intent



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e-Stewards® standard overview (ctd.)

8.4.3 Packaging, Storage, and Transportation

- Requirements for controls for the EE under its Control, including:
 - Not storing MOCs for more than 1 year after receipt (except in extenuating circumstances, in which case evidence is required and the maximum storage period is extended to up to 2 years),
 - The addition of adequate vehicle/driver safety records to transporter/carrier criteria,
 - Stacking limits of no more than 2 Gaylords or super-sacks,
 - Etc.

8.4.4 Tolling Operations

- New section
- Regulates tolling processes, including communication expectations, contract stipulations, annulment of tolling contracts if violations are identified, etc.
- Documented information is required as evidence



8.4.5 Prison Operations

 Not permitted, unless the Organization has obtained written approval from the e-Stewards Program Administrator and meets specified criteria

8.5 Reuse Refurbishment of Electronic Equipment

- No changes to the intent
- Prohibits the sale/transfer/donation of non-sanitized EE unless to a NAID AAA-certified IDP (except in Tolling Operations or where nonsanitized EE is sent back to its original owner)
- Refurbishment and/or repair can only be outsourced to IDPs (except for ink/toner remanufacturing, which can be outsourced one tier beyond the IDP)
- Direct Reuse EE must be found Fully Functional (except shipments to the IDP for refurbishment and/or repair)





8.5.1 Test Electronic Equipment and Ensure Full Functionality & Data Sanitization

- No significant changes to the intent
- Specifies testing requirements (some changes in this section, including battery testing criteria)
- Table 3 constitutes exceptions to Full Functionality testing
 - Donations/sales of unusual equipment (used) is capped at 1% of the Organizations annual total units sold and donated
 - Untested units sold/donated to workers is removed

8.5.2 Record Identifying Information for Each item of Electronic Equipment

- Specifies identification criteria/inclusions
- Simplifies inventory requirements for QSCs
 - For example: Allows for the Organization to put QSCs in lots instead of labeling/identifying each individual item



8.5.2.1 Shipping Documentation

- Specifies minimum information to be recorded for all sales/transfers made accessible without the need for unpacking
- Appendix A.8.7 Declaration (or equivalent) to be used for applicable Transboundary shipments
- Required accessibility/availability of identifying information for all shipments (other than QSCs), such as itemized packing lists, an internet link kept active, etc.

8.5.3 Verify Direct Reuse Markets

- Section shortened
- Less prescriptive
- If evidence that shipments were tested Fully Functional <u>and</u> sold for 3x the scrap rate (or more) is maintained, buyer information is not required





- 8.6 Restrictions on Materials Recovery and Final Disposition
- **8.6.1** Restrictions on Materials Recovery and Final Disposition of MOCs
- Specifies management criteria for MOCs, referencing Appendix A.8.6.1
- Requires written proof/justification meeting specified criteria be provided to the CB and the e-Stewards Program Administrator <u>before</u> using a conditionally-allowable option

8.6.2 Alternative Uses and Processes

- Specifies approval request inclusions and other documentation requirements
- Requires written approval from the e-Stewards Program
 Administrator and appropriate downstream due diligence <u>before</u> utilizing an alternative process/Processor





8.7 Control of Transboundary Movement

- Whole EE is to be treated as HEW, unless the shipment provides documented evidence proving otherwise
- Written notification and Competent Authority consent is required <u>prior</u> to MOC Transboundary Movement when countries involved are <u>not</u> Basel Convention parties or covered by relevant multilateral trade agreements

8.7.1 Exemptions from Transboundary Movement Controls for MOCs

 Specifies exceptions to 8.7 (such as new parts/devices purchased under warranty, cleaned CRT cullet or glass approved as feedstock, etc.)





8.7.2 Transboundary Movement of Used Electronic Equipment for Repair/Refurbishment

 Labelling/declaration requirements per 8.5.2.1 (references Appendix A.8.7.2) for any EE/component exports to IDPs for refurbishment and/or repair

8.7.3 Transboundary Movement of used Electronic Equipment for Direct Reuse

- EE exported for Direct Reuse must be Fully Functional <u>and</u> not be Recycled/Finally Disposed (has an established resale market, etc.)
- Labelling/declaration requirements per 8.5.2.1 (references Appendix A.8.7.3)





8.8 Downstream Accountability

- Adds requirement to re-evaluate a Downstream Processor upon Significant Change(s) within a timely manner
- Section still applies, even if EE is directed shipped from the customer to the IDP (instead of first to the Organization)

8.8.1 Downstream Disposition Chart

- No significant changes
- Organization cannot utilize any Downstream Processor within their Recycling Chain that has lost an e-Stewards certificate in response to a Critical Non-Conformity until the certificate is re-instated

8.8.2 Downstream Due Diligence

 Requires attainment of support documentation and approval of Downstream Providers and Intermediaries within the entire Recycling Chain according to 8.8.2.1-8.8.2.6



8.8.2.1 Processing Capability Evaluations

 Specifies initial (prior to shipment) and subsequent annual evaluation criteria, with additional verifications for DPs not certified to e-Stewards

8.8.2.2 Desk Audits

 Specifies initial (prior to shipment) and subsequent annual evaluation criteria for DPs (except Final Disposal facilities)

8.8.2.3 Onsite Audits of Immediate Downstream Providers

- Not required if the IDP is e-Stewards certified, a Final Disposal facility, or is an End Processor (licensed/permitted and located in an OECD country)
- Requires initial (prior to shipment) on-site audits, to be repeated every 3 years (relaxed from every 2 years) and upon Significant Change
- Now includes review of closure plans and financial surety for the IDP and their Recycling Chain





8.8.2.4 Agreements and Control Systems

- Requires a written contract/agreement (or equivalent control) containing specified information for all HEW and PCM IDPs <u>if</u> they are not e-Stewards-certified, a Final Disposal Facility, or an End Processor (in an OECD country)
- Further requires each DP (beyond an IDP) to implement and meet
 8.8.2.4b requirements throughout the Recycling Chain

8.8.2.5 HEW Transportation Companies

No significant changes

8.8.2.6 Records of Transfer

- Specifies Shipping Record retention
- Annual sampling of shipments between each IDP and the next none-Stewards DP(s)





8.9 Data Security

- References Appendix D for Organizations not yet certified to NAID AAA (required by 7/1/2022)
 - After NAID AAA certification is obtained, or after this deadline (whichever occurs sooner), Appendix D will no longer apply and the NAID AAA certification will satisfy all Data Security requirements for the Organization

9 Performance evaluation

9.1 Monitoring, Measurement, Analysis, and Evaluation

9.1.1 General

- Section shortened and less prescriptive
- No changes to intent





9.1.2 Evaluations of Compliance

- Section shortened and less prescriptive
- Frequency minimum is identified as annual

9.1.3 Facility Inspections

No significant changes

9.1.4 Electronic Equipment Flow Monitoring

- Section shortened and less prescriptive
- Requires corrective action(s) if the Material Balance Accounting (MBA) has a final discrepancy higher than 5%

9.2 Internal Audits

- Section shortened and less prescriptive
- No significant changes





9.3 Management Review

- Section shortened and less prescriptive
- Specifies required inputs, recording of action results, and requires documented information as evidence

10 Improvement

- Section shortened and less prescriptive
- No significant changes to intent



Appendix A

 Additional details and criteria for implementation of the standard, such as annual e-Stewards Database reporting, PHPT Hazard Testing Requirements table, Materials Recovery and Final Disposition Table, Transboundary Shipment Declarations, etc.

Appendix B

- Administrative criteria for e-Stewards Organizations, such as eligibility details, scope of certification requirements (related to Ancillary sites, multi-sites, parent companies, subsidiaries, etc.), applications and contracts, logo usage, Critical Non-Conformities, PV inspections, etc.
- Requires a new License Agreement if the Organization is purchased by another company/entity or there is a similar change in ownership
- Certified Organizations are required to notify their CB <u>and</u> the e-Stewards Program Administrator of Significant Changes affecting conformity to the Standard <u>within</u> 15 business days (unless required sooner by the CB)





Appendix C

- Administrative criteria for Certification Bodies (CBs) and Accreditation Bodies (ABs)
- Specifies audit time calculations
 - Note: Audit time is now calculated separately and identically to ISO 14001, so clients should expect an overall increase in audit time

Appendix D

- Specifies data security criteria, such as adherence to applicable regulatory requirements, communication of risks, security processes, methods for sanitization (and verification of effectiveness), and controls for security breaches/related incidents
- Appendix D applies in lieu of NAID AAA Certification, prior to 7/1/2022 for e-Stewards organizations
 - After NAID AAA certification is obtained, or after this deadline (whichever occurs sooner), Appendix D will no longer apply and the NAID AAA certification will satisfy all Data Security requirements for the Organization



Certification steps for new registrations

- Obtain a copy of the Standard (available at https://e-stewards.org/learn-more/for-recyclers/access-the-standard/purchase-the-standard/)
- Establish SMS documentation to meet e-Stewards® requirements
- Training to SMS requirements
- Implement SMS requirements
 - Conduct an internal audit(s) of the system
 - Conduct a compliance evaluation
 - Conduct a system review (including the outputs of the internal audit as inputs)
- Contract with a Certification Body (CB), such as PJR
- Complete Stage 1 and Stage 2 audits, and address any resulting nonconformances (NCRs)
 - → Certification issuance







Certification Process

The registration audit consists of two stages:

- Stage 1:
 - On-site document review of the SMS (may be required to be submitted to PJR prior to Stage 1)
 - Evaluates the readiness of your organization to move to Stage 2
- Stage 2:
 - Scheduled 30 to 60 days after the Stage 1 audit
 - On-site audit of your entire SMS
 - Any nonconformities will need to be resolved prior to certificate issuance



Certification Requirements

- Surveillance audits
 - Scheduled at either six or twelve month intervals depending on the contract
 - Partial system audit



- Re-certification audit
 - On-site audit conducted prior to the third anniversary of the initial certification
 - Surveillance visits will then continue, as before, on a 3-year cycle



Please type any questions you may have.







For additional technical information, please contact Stacey DeSantis or myself using the below contact information:

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