



GREEN AMERICA
**CLEAN ELECTRONICS
PRODUCTION NETWORK**
A project of the Center for Sustainability Solutions

Joint Chemical Safety Committee Guidance V1.0

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1. INTRODUCTION

1.1 CONTEXT AND PURPOSE OF THIS GUIDANCE

A Joint Chemical Safety Committee (hereafter referred to as the Joint Committee) is an important communication link between workers and management. Active management involvement creates and maintains interest in safety and health, as well as establishes avenues for engaging workers. The Joint Committee is a critical piece of a comprehensive chemical management program.

Worker participation on an equal basis in these Committees ensures that those who have the most knowledge of workplace chemical hazards and are the most impacted by these hazards are involved in decision-making processes in the workplace.

This Guidance covers the key elements and considerations for developing and operating successful Joint Committees to effectively address chemical safety concerns in facilities. For facilities that already have a joint health and safety committee, this Guidance will support its efforts on chemical safety and/or the formation of a subcommittee or additional committee on chemical safety.

This Guidance was developed by the Clean Electronics Production Network (CEPN) to support signatories of the Towards Zero Exposure Program to strengthen chemical management safety systems in facilities such that workers are consulted, informed, and able to actively participate in protecting their safety and health. However, this Guidance is broadly applicable to any facility using process chemicals.

1.2 IMPORTANCE OF A JOINT COMMITTEE

Joint Committees create opportunities for workers to engage in promoting workplace safety related to chemical management. Creating a Joint Committee can lead to strong governance systems that protect the health of workers and ensure workers are consulted, informed, and actively participating in their protection.

As stated by [IndustriALL Global Union](#) ***“It is not possible to overestimate the importance of Joint Committees. They provide a right to participate in occupational health and safety decision-making by workers. They make possible the achievement of ‘internal responsibility,’ which means that management and workers have the capacity and responsibility together to identify and solve occupational health and safety problems without relying on an outside agency.”***

In some countries, the law allows for freedom of association (FOA) collective bargaining agreements (CBA), and the formation of occupational safety and health committees (e.g., International Labor Organization Occupational Safety and Health Convention, 1981, No. 155 and 1985, No. 161).

Successful Joint Chemical Safety Committees Have:

- Strong management commitment
- Robust worker involvement
- Continuous training and capacity building
- Equal balance between workers and management

1.3 TARGET AUDIENCE OF GUIDANCE

The Guidance is for line managers, supervisors, and workers as they work together to either create a new Joint Worker Management Committee or improve an existing Joint Committee to focus on safety and health in chemical management.



2. PURPOSE AND RESPONSIBILITIES OF THE COMMITTEE

2.1 PURPOSE

The Joint Committee is a critical part of a comprehensive chemical management program and provides workers a voice in their own chemical safety and health.

2.2 RESPONSIBILITIES AND ACTIVITIES

The Joint Committee is a workplace team that:

- Facilitates communication and collaboration between workers and management to address worker chemical safety issues.
- Raises awareness of chemical safety and health issues in the workplace.
- Identifies chemical hazards and recommends measures to mitigate risks.
- Promote a healthy and safe environment.

To fulfill its responsibilities, the Joint Committee should:

- Conduct at least quarterly inspections of all chemical work areas.
- Be trained and knowledgeable on the chemicals used at the facilities and their associated hazards.
- Review job hazard analyses related to handling, use, and storage of chemicals.

- Review hazard and incident reports and investigate worker complaints to develop proactive prevention measures.
- Work with facility management to limit exposure to chemicals by using the hierarchy of controls, with chemical elimination and substitution as the highest priority, followed by engineering controls, administrative controls, and personal protective equipment (PPE), in order of priority.
- Monitor that proposed chemical hazard controls are implemented and are effective in reducing/eliminating the identified hazard.
- Review medical surveillance program and provide recommendations to management.

2.3 DEMONSTRATING MANAGEMENT COMMITMENT

Management must provide adequate support to ensure the success of the Joint Committee, including suitable meeting venues and facilities, financial resources to conduct necessary functions, and the authority to advance recommendations.

Management must have written policies that:

- **Workers can participate in the Committee without fear of retaliation**
- **Committee members meet and train on paid time**
- **Management will support committee decisions**

Successful Joint Committees:

- Demonstrate management commitment
- Communicate effectively
- Have policies workers can participate without fear of retaliation
- Allow members to do Committee work and training on paid time
- Assign responsibility addressing issues to individuals with relevant authority and resources
- Ensure that workers and management are trained

Successful Joint Committee Elements Include:

- Measurable and actionable annual goals
- Common set of agreed upon ground rules
- Clearly defined roles and responsibilities
- Regular meeting frequency
- Meeting agendas that ensure equitable participation
- Meeting notes recorded and shared

3. ACHIEVING BALANCED MEMBERSHIP

3.1 JOINT COMMITTEE MEMBERSHIP

The Joint Committee should include an **equal number of representatives of workers and management**.

Members chosen should have the broadest contact with areas and operations of high chemical risk and with large numbers of workers. To the extent practicable, all areas of the workplace (different types of lines and production areas) should be represented.

Given the limited number of people who can be on the Committee, it is important that they be chosen carefully. **The most important criteria are interest and concern about workplace chemical safety and health.**

Priority may be given to workers with:

- Relevant work experience
- Varied work responsibilities
- Involvement in most hazardous work
- Good communication skills
- Safety and health knowledge and/or experience

3.2 RECRUITMENT

To recruit members, managers need to demonstrate to workers that they are fully committed to the success of the Joint Committee. Recruitment should

be done at the manager-level and worker-level separately.

Worker volunteers can be recruited via newsletters, posters, memos, or personal encouragement. **Worker members must be democratically elected by workers, or selected by workers or worker representatives, without management interference.** Which workers will serve on the committee should be determined in a manner consistent with national labor law.

It is critical that the Joint Committee non-managerial workers are democratically elected by workers, or selected by workers or worker representatives, without management interference in either case.

Membership for Committees Can Include:

- Process safety engineers
- Line managers and supervisors
- Workers
- Industrial hygienists
- Safety and health experts
- Representatives from each work shift and major departments, especially those that handle chemicals (e.g., maintenance and shipping/receiving department)

Committee Size Depends On:

- Size of the facility
- Quantities of chemicals stored and used
- Toxicity and flammability of those chemicals
- Number of employees
- Different unions or worker groups at the site
- Number of shifts and departments

The Joint Committee should have an equal number of worker and management representatives.

Achieving a Good Balance in Membership Composition



3.3 JOINT COMMITTEE OFFICER ROLES

The following are some of the key roles and responsibilities for the Joint Committee (duties may depend on facility needs):

- **Co-Chairs (one worker and one management representative, each nominated by their peers):** Responsible for conducting meetings, arranging agenda and program, preparing agenda for next meeting, and reviewing previous meeting minutes. These positions are voted in by the general members.
- **Secretary:** Responsible for recording meeting minutes, distributing minutes, and reporting status of recommendations.

Positions should be rotated every 1-2 years.



3.4 JOINT COMMITTEE MEMBERS ROLE

Members commit to:

- Actively participating in Committee meetings and contributing ideas and suggestions for improvements.
- Taking on tasks and responsibilities.
- Participating in training to gain knowledge.
- Promoting the Joint Committee's mission and goals by actively communicating to others on the site.
- Reporting unsafe conditions.
- Serve as liaisons to those not on the Committee.

Joint Committee member expertise can always be improved through experience, committee training, and self-education.

4. DEVELOPING AN EFFECTIVE COMMITTEE CHARTER

Joint Committee members (management and workers) should jointly create a charter that provides a clear framework for the operation of the Committee, ensuring that its members work together effectively. The charter should also lay out the mission and goals of the committee as well as an inclusive vision of management commitment and avenues for worker engagement.

Components of Joint Committee Charter

A Committee charter should include, at a minimum, the following elements:

- Mission statement, goal(s), and objective(s)
- Structure, membership, and roles
- Responsibilities, activities, and extent of authority
- Meetings
- Resources needed
- Decision-making process
- Reporting
- Effectiveness evaluation

An example Joint Committee Charter template is provided in Appendix A.

Each of the charter elements is described briefly below, and where appropriate, described in more detail in specific referenced sections of this Guidance.

For facilities that already have joint health and safety committees with charters, this section can be adapted to incorporate chemical safety into an existing charter.

Mission, Goals, and Objectives

A unifying mission allows members of the Joint Committee to work together for a common purpose. Once the Joint Committee's mission and purpose are defined, the committee should

determine specific goals that are achievable, relevant, and time-bound (short or long term), as well as strategies for meeting those goals.

Structure, Membership and Roles

The structure, officers, balance and number of management and worker representatives, length of service and election procedures should be outlined (*see Section 3*).

The charter should also define the role of the co-chairs, secretary and all participants, including managers, line supervisors, and workers (*see Section 3*).

Responsibilities, Activities and Extent of Authority

The charter should list the authority and powers that are needed to effectively carry out the Joint Committee's mission and explicitly state top management's formal approval of the Joint Committee's statement of purpose, responsibilities, and authority. In addition, it is helpful to outline the key activities and responsibilities of the Committee (*see Section 2*).

Meetings

The frequency, duration, location, and times of meetings should be specified (*see Section 5.1*).



Resources Needed

The charter should list the resources and reference material that management will provide to support the Joint Committee's activities and findings. Examples of these resources include reports of chemical-related problems on the shop floor, data collected on occupational chemical safety and health metrics, chemical inventories, safety data sheets, etc. **(see Section 5.5).**

Decision Making Process

The process of decision-making is a key element in determining Joint Committee solidarity and developing a spirit of cooperation necessary for it to operate effectively.

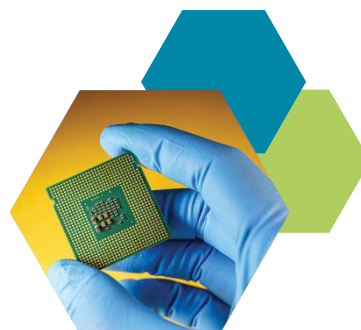
The Committee should strive for consensus when making decisions. Each member must be allowed to share their arguments and have them discussed by the Joint Committee members to reach consensus. In the absence of consensus, however, there must be steps for how decisions will be made. Each Joint Committee member must have an equal vote, such that workers have an effective voice.

Communications/Reporting

The Committee's reporting requirements should be clearly defined, including the recipients, format, and frequency of reports **(see Section 5.4).**

Effectiveness Evaluation

The charter should include provisions for regular review and evaluation of the committee's effectiveness, including review of annual goals and critical success factors as well as identification of any issues or areas for improvement **(see Section 8).**





5. JOINT COMMITTEE OPERATIONS AND ACTIVITIES

5.1 MEETING TIMES AND FREQUENCY

Joint Committees should meet at least monthly. However, it may be necessary to meet more often, especially when a new Committee is formed, an imminent dangerous situation arises, or a new chemical safety and health problem is discovered. A Joint Committee should meet on a regular basis to maintain its drive and be perceived as effective.

Meetings should be held during the day with provisions made to compensate non-day shift workers who serve on the Joint Committee. The selected time should be the same for each meeting to promote attendance and must be covered by paid time.

5.2 AGENDAS

Setting an agenda prior to each meeting ensures equitable participation. Co-chairs are responsible for setting agendas and providing them to Joint Committee members at least a week in advance of the meeting.

Agendas Should Be:

- Shared at least one week prior to the Committee meeting so that members have a chance to provide input for the meeting. Approved by the Committee at the beginning of the meeting.
- Focused on the goals for the meeting and the Committee overall.
- Clear about the amount of time to be spent on each topic and the person who will lead each topic.
- Concluded with a review of the agenda, any action items, and possible agenda topics for the next meeting.

5.3 KEEPING MINUTES

Keeping Joint Committee meeting minutes creates a permanent record of Committee activities, including recommendations for corrective actions, decisions made, commitments made and by whom, and work in progress.

The Secretary must keep accurate and complete Joint Committee meeting minutes. Minutes should be shared with Joint Committee members as soon as possible so that they have a chance to review the minutes and understand what action items need to be implemented. Approving meeting minutes should be included in the next meeting agenda.

Sample Agenda Topics

1. Welcome and roll call
2. Approval of agenda (if needed, identify items to add to agenda)
3. Approval of previous meeting minutes
4. Review of outstanding action items from previous meetings
5. Review and discussion of recent chemical hazard reports, chemical-incident reports, and chemical safety concerns /inspections
6. Review of updates on chemical management procedures/processes /training
7. Committee action items and recommendations
8. Items for next agenda
9. Adjourn

Meeting Minutes Should Include (at a minimum):

- Date/time of meeting
- Committee members in attendance
- Important discussions shared and by whom
- Decisions made
- Action items (include due date, and responsible person if available)



5.4 REPORTING EFFECTIVELY

The Joint Committee must communicate their activities and decisions for accountability to the entire workforce. **Meeting minutes, information regarding inspection results, annual reports, and new procedures or forms developed by the Joint Committee can be shared with workers through meetings, newsletters, and memos.** Management members of the Committee should be responsible for sharing this information with other managers. The Joint Committee can also decide whether meetings are open or closed to the public and invite others to come to meetings to listen and make comments. The Joint Committee may also choose to livestream and/or record meetings for outside viewing.

An effective Joint Committee interacts frequently with workers. Although the Joint Committee is comprised of workers with specific chemical safety and health responsibilities, the interests and efforts of the entire workforce are necessary to achieve a successful chemical safety and health program. When the workers are involved and informed, they can participate in the chemical safety and health program as active partners.

5.5 RESOURCES

For a Joint Committee to effectively carry out its work, they need to have access to resources such as:

- Inventory of chemicals used at the facility and their associated hazards (see Appendix B for an example Chemical Inventory template).
- Safety data sheets for all the chemicals used at the facility to identify hazardous substances and support substituting with safer alternatives.



- Chemical hazard identification reports and chemical incidents reports, as well as the procedures for workers to report chemical hazards and incidents.
- Facility specific training materials for workers on chemical safety.
- Job Hazard Analysis (JHA) process for chemicals, production processes, work procedures, equipment, and machinery in use on-site, as well as the process for revising JHAs when there is a change in chemicals, equipment/machinery, work procedures, or processes.
- Standard Operating Procedures (SOPs) for safe chemical handling.

In addition, members of the Committee should:

- Be given sufficient time to attend meetings, conduct inspections, investigate hazard, and incidents, etc.
- Receive training in chemical safety, including the identification of hazards, assessment of risks, and selection of appropriate measures.
- Be able to request specific equipment to conduct inspections, such as personal protective equipment, gas detectors, or testing kits.
- Have access to tools for effective communication between members and to the entire workforce.
- Have access, if needed, to external expertise in areas such as toxicology, industrial hygiene, or engineering to help identify and manage chemical hazards.

Lastly, the committee must have support from management to ensure that its recommendations are acted upon, and that it has the necessary resources and authority to carry out its work effectively.



6. CHEMICAL HAZARD IDENTIFICATION AND INCIDENT REPORTING

The Joint Committee must have formal and informal methods for identifying and reporting chemical hazards and incidents, such as:

- Quarterly inspection team which includes management and worker representatives and follows a standard procedure for identifying and documenting chemical safety and health hazards.
- Procedures and reporting forms for chemical hazard identification and incidents.
- Procedures for investigating workplace chemical hazards and incidents.
- Method for collecting and reviewing employees' safety-related suggestions and reports of hazards.

Chemical hazard identification and incident reporting procedures and forms must be easily accessible to all workers and include the option for confidentiality to protect workers from retaliation. Assuring workers a retaliation-free atmosphere communicates to the workforce that the overall chemical safety and health

program cannot be effective without worker awareness, engagement, and participation.

Reporting procedures and forms should be annually reviewed by the Joint Committee. If these procedures and forms are not available, the Committee should advocate that they are developed by the appropriate staff. **There must include a clear process for protecting workers from retaliation for reporting on workplace chemical hazards and incidents, including a mechanism for anonymous complaints and reports.**

It is important to widely publicize this information in the workplace. In addition, a direct line of communication should be established between any of the company's safety and health professionals and the Joint Committee to ensure that the committee stays informed about the results of any sampling and the methods used to reduce exposures.

Chemical Hazard Identification Should Include:

- Description of the hazard, including operating or maintenance step in which hazard occurs
- Location of the hazard
- Chemical product involved and associated risks
- Individual(s) who may be affected by the hazard
- What has been done to control hazard
- Corrective actions taken or to be taken and who is responsible
- Residual risk following corrective action
- Other workers involved
- Video and/or 360-degree photographs of the scene
- **An example Chemical Hazard Reporting form is provided in Appendix C.**

Chemical Incident Reports Should Include:

- Type of incident (injury, near miss, property damage)
- Date and time of incident
- Name of affected individual(s)
- Chemical(s) in use
- Narrative description of the incident, including the sequence of events and results of the incident
- Injuries, if any
- Treatments required, if any
- Witness name(s), statements and other workers involved
- Video and/or 360-degree photographs of the scene

7. EDUCATION & TRAINING FOR COMMITTEE MEMBERS

Training is critical for the success of the Joint Committee. New members should receive comprehensive training on the role of the committee, basic chemical management, and their specific roles and responsibilities. Annual refresher training should be provided to all members to update them on any new developments or changes and to ensure that they are equipped to carry out their responsibilities effectively.

New Members

When new members join the Joint Committee, they should receive training on the role of the committee, how it should operate, and how to report and resolve chemical safety and health problems. This training should include an overview of the chemicals stored and used at the site, emergency plans, access to safety data sheets (SDSs), basic chemical hazard communication, hierarchy of controls, PPE, and other basic chemical management training. The new members should also receive information about their specific roles and responsibilities on the committee.

As the committee works on specific chemical management issues, training should be provided to educate workers at a greater technical level about the potential risks associated with those issues. This training should be tailored to the specific issue and should cover the necessary technical information.

Refreshers for All Members

Annual training should be provided to all members of the Joint Committee to ensure they are kept abreast of new occupational health research that could affect workers, as well as any new regulations, company policies, and injury and illness records that could affect the committee's

work. This is also an opportunity to highlight the accomplishments of the committee over the previous year.

The annual training should go beyond the basic chemical management training that all members received when they joined the committee, focusing on additional chemical management and safety and health training that is relevant to the specific issues the committee is working on. This training should be tailored to the specific needs of the committee members and should be designed to update them on any new developments or changes in the field of chemical management.

A key role of the Joint Committee is to determine the training and education needed by both workers and management.

Training that is jointly sponsored by workers and management has more credibility to workers. Joint Committee input can also help tailor training to the needs of workers, including ensuring that the curriculum and materials are appropriate for the level of literacy and technical understanding of the training participant.

If there is not an established workplace training program, it is important that the Joint Committee determine the training and education that is currently needed by the workforce (workers and management).





8. MONITORING EFFECTIVENESS

8.1 GOALS AND SUCCESS FACTORS

Joint Committee members should develop annual goals and associated success factors to evaluate progress against the goals for each year. The Joint Committee should revisit these goals every 3-6 months to ensure they are still working toward them.

At the end of every year, the Committee should conduct an annual review of effectiveness including an evaluation of the identified goals and success factors, as well as discussions on achievements and shortcomings, and what could be improved the next year.

Developing, retaining, and analyzing hard evidence and data — in the form of meeting minutes, responses to workplace complaints, regular inspections and audits conducted by the Joint Committee, and evidence of follow-up on Joint Committee recommendations — can be important proof of the Joint Committee’s effectiveness. The Joint Committee should track the number of problems addressed, percent were closed, and whether they were solved to the satisfaction of the workers who raised them.

A workable process of self-assessment requires shared understanding of expectations, tools to measure work in concrete ways, and established communication to allow issues to be communicated openly without blame and judgment. A high degree of trust and a belief in mutual support among members is essential for the process to work well.

A sample checklist for evaluating the effectiveness of the Joint Committee is provided in Appendix D.

8.2 EXTERNAL EVALUATION

The annual evaluation should include collecting feedback from workers who are not part of the Joint Committee. This feedback can be solicited in simple discussions, focus groups led by their peers, or anonymously via a comments box or worker survey.

Indicators for Effectiveness:

- Chemical safety meetings
- Chemical safety education and training delivered
- Chemical hazards identified and risks assessed and controlled
- Inspections and corrective actions taken
- Recommendations made to management
- Worker perception surveys on safety data sheets (SDS)
- Number, location, and severity of worker injuries and illnesses related to chemical hazard exposure Incidents resulting in lost time or restricted duty

Types of Information for Evaluations:

- Joint Committee Charter
- Reports of the meetings
- Training records for Committee members
- Written recommendations made by Committee to management and management responses
- Workplace inspection reports
- Incident investigations, corrective actions, near misses
- Notes from discussions with Committee members and workers

Source: WorkSafeBC
(<https://www.worksafebc.com/en/resources/health-safety/checklist/jhsc-evaluation-tool?lang=en>)



APPENDIX A: EXAMPLE CHARTER TEMPLATE

Joint Chemical Safety Committee Charter <i>TEMPLATE EXAMPLE</i>	
Co-Chairs	<i>[insert names/ position title]</i>
Date Initially Approved by Joint Committee	<i>[insert date]</i>
Most Recent Review by Joint Committee	<i>[insert date]</i>
MISSION, GOALS, AND OBJECTIVES	<i>[Insert mission, goals and objectives of the Committee]</i>
STRUCTURE, MEMBERSHIP AND ROLES	<i>[Insert roles of Co-Chairs, Secretary and Committee members, management, and other positions; balance of management and worker representatives, length of service and election procedures]</i>
RESPONSIBILITIES, ACTIVITIES AND EXTENT OF AUTHORITY	<i>[Insert activities, responsibilities and authority of the Committee; management support of the Committee]</i>

MEETINGS	<i>[Frequency, duration, location and times of meetings]</i>
RESOURCES NEEDED	<i>[Insert list of resources and references that are needed for the Committee to do its work]</i>
DECISION MAKING PROCESS	<i>[Insert decision making process, voting procedures, quorum]</i>
COMMUNICATIONS/REPORTING	<i>[Insert description of how the Committee communicates, and to whom, meeting decisions, meeting summaries/reporting – including status update/action items/who is responsible, actions taken]</i>
EFFECTIVENESS EVALUATION	<i>[Insert list of annual goals and critical success factors to evaluate the Committee’s effectiveness]</i>



APPENDIX B: CHEMICAL INVENTORY TEMPLATE

This template provides facilities with an easy way to inventory and access chemical safety information.¹ For a more detailed process chemical data collection tool, see CEPN's Process Chemical Data Collection (PCDC Tool).

Chemical Inventory Worksheet Template								
Facility Name:					Inventory Completed By:			
Safety Data Sheet (SDS) ² Location					Date:			
Chemical Product Name	Receipt Date	Expiration Date	Number of Containers	Total Amount	Container Type	Manufacturer	GHS Classification of Chemicals ³	Notes

Note: Information on each chemical product's GHS hazard classification can be found in Section 2 of its Safety Data Sheet.

¹ Adapted from: New York State Department of Environmental Conservation https://www.dec.ny.gov/docs/materials_minerals_pdf/cheminventory.pdf

² Safety Data Sheet: <https://chemicalsafety.com/sds-search/>

³ Globally Harmonized System (GHS) Classification <https://unece.org/about-ghs>



APPENDIX C: EXAMPLE CHEMICAL HAZARD IDENTIFICATION REPORTING FORM

Chemical Hazard Identification Reporting <i>Template Example</i>	
Site/Facility:	
Completed by:	
Job Description:	
Phone Number:	
Names of others in attendance during the chemical hazard identification:	
Date and Time:	
Describe the Hazard	
Attach Picture or video (if available):	
Operating or maintenance procedure or step in which hazard occurs (if applicable)	
What is the hazard (i.e. name of chemical product(s)?)	
Where is the hazard located?	
What are the risks associated with the hazard?	
People/person who may be affected by the hazard?	
Are safety materials data sheets readily available and accessible for the chemical(s) in question?	

<p>What has already been done to control the hazard? (Note: leave this section blank if nothing has been done)</p>	
<p>Initial risk rating:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Low (chemical exposure/release would not result in an employee injury or discomfort) <input type="checkbox"/> Moderate (chemical exposure may result in employee discomfort or workplace odors) <input type="checkbox"/> High (chemical exposure may require medical treatment) <input type="checkbox"/> Critical (chemical exposure may result in permanent loss of function/disability) <input type="checkbox"/> Catastrophic (chemical exposure may result in loss of life) <p><i>(Note: Immediate action needs to be taken if the initial risk rating for the hazard is higher than “low”)</i></p>	
<p>Have there been previous injuries or near misses as a result of the hazard? (Yes/No)</p> <p>If yes, please describe and include date of injury/near miss.</p>	
<p>Corrective Actions Taken or Will be Taken</p>	
<p>What further action needs to be taken? (e.g. modification of equipment/engineering controls to prevent chemical release/exposure, review and modification of applicable operating or maintenance procedures and or administrative controls to abate the identified hazard)</p>	
<p>Responsible individual for ensuring appropriate corrective actions are initiated and completed?</p>	
<p>Projected Completion Date / Completion Date:</p>	
<p>Residual risk rating:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High <input type="checkbox"/> Critical <input type="checkbox"/> Catastrophic <p><i>(Note: residual risk rating should be “low” after implementation of corrective actions. If this is not the case, a more effective way to control the hazard should be implemented)</i></p>	
<p>Completed by (Name and Role):</p>	<p>Signature:</p>



APPENDIX D: JOINT COMMITTEE EVALUATION CHECKLIST EXAMPLE

Structure and Representation of Committee

- Composed of equal numbers of management and worker representatives.
- Worker representatives are democratically elected by workers, selected by workers or worker representatives, without management interference in either case.
- Members elect the Committee co-chairs (one from management and one from workers).
- Members are paid their regular wages during Committee training and meetings.
- Members serve on the Committee for at least one year, and terms of service are staggered so that experienced members are always on the Committee.
- Reasonable efforts made to ensure that Committee representatives represent the facility's major work activities.

Membership Roles and Responsibilities

- Members understand the purpose of the Committee and how it functions.
- Committee Charter is complete and current
- Annual goals and success factors are reviewed regularly
- Members have access to applicable resources as well as occupational safety and health rules.
- Members have received chemical safety training when first joining the Committee, as well as an annual refresher.

Meetings and Communicating

- Committee meets at least monthly, and meetings follow a written agenda.
- Agenda shared with members at least one week prior to the meeting.
- Meeting minutes, including reports, evaluations, and recommendations, as well as other materials generated by the Committee are available to all workers.

Chemical Hazard Identification and Incident and Reporting

- Committee has formal and informal methods for collecting employees' chemical safety-related suggestions and reports of hazards, with the option for confidentiality.
- Committee reviews submitted chemical hazard identification and incident report
- Committee's quarterly inspection team:
 - Includes management and worker representatives.
 - Follows a standard procedure for identifying chemical safety and health hazards during its inspections.
 - Documents the location and identity of workplace hazards.
- Committee has a procedure for investigating workplace hazards and incidents.





APPENDIX E: ADDITIONAL RESOURCES AND LINKS

Chemical Database and Toolboxes (Handling, Labeling, and Exposure)

- **Chemical Hazard and Alternatives Toolbox (ChemHAT):** <https://chemhat.org>
The Chemical Hazard and Alternatives Toolbox (ChemHAT) is a user-friendly internet database that provides information that can be used to protect ourselves, our families, and our co-workers against harm that chemicals can cause. ChemHAT allows users to look up chemicals by their chemical name or CAS (Chemical Abstracts Services registration) number and provides users with safer alternatives.
- **Global Harmonized System (GHS):** <https://unece.org/about-ghs>
The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) addresses classification of chemicals by types of hazards and proposes harmonized hazard communication elements, including labels and safety data sheets. GHS aims at protecting human health and the environment by providing a basis of harmonization rules and regulations on chemical handling, transport, and use at the national, regional, and global level.
- **International Chemical Safety Cards (ICSCs):**
https://www.ilo.org/safework/info/publications/WCMS_113134/lang--en/index.htm
The International Chemical Safety Cards (ICSCs) are data sheets that provide essential safety and health information to workers and those responsible for occupational safety and health. The International Labour Organization (ILO), World Health Organization (WHO), and European commission work collaboratively to ensure the promotion of chemical safety in the workplace.
- **International Uniform Chemical Information Database (IUCLID):**
<https://www.oecd.org/chemicalsafety/customisation-opportunities-of-iuclid-for-the-management-of-chemical-data-2nd-edition-e1199efc-en.htm>
IUCLID is a software application designed to record, store, maintain and exchange data on the intrinsic and hazard properties of chemical substances or mixtures, as well as the uses of these substances and the associated exposure levels. It is a key software application for both regulatory bodies and the chemical industry where it is used in the implementation of various regulatory programmes.
- **IOMC Toolbox for Decision Making in Chemicals Management:** <https://iomctoolbox.org>
The IOMC Internet-based Toolbox for Decision Making in Chemicals Management (IOMC Toolbox) is a problem-solving tool that helps countries address identified national problem(s) or objectives in the most appropriate and efficient manner. The IOMC Toolbox identifies cost-effective solutions to national chemicals management issues.
- **Safety Data Sheet (SDS) Search:** <https://chemicalsafety.com/sds-search/>
Chemical Safety's Environmental Management Systems (EMS) is a comprehensive, user-friendly, and functional software that provides employees, facilities, and environmental management with a Safety Data Sheet (SDS) Search tool that provides the user with chemical information from manufacturers. This free database is widely accessible and contains over 1 million records.

Chemical Safety Resources

- **International Labour Organization Basics of Chemical Safety:**
<https://www.ilo.org/legacy/english/protection/safework/cis/products/safetytm/toc.htm>

The International Labour Organization is a U.N. agency that brings together governments, employers, and workers of 187 Member States to set labour standards and provide direction on the development of programmes and policies that promote decent work. The Basics of Chemical Safety detailed by the ILO contains information related to toxicology, major hazard chemicals, chemical transport, storage, identification, classification, labelling, and glossary and abbreviations.

- **Internationally Peer Reviewed Chemical Safety Information:** <https://www.inchem.org/>
IPCS INCHEM is an invaluable tool for those concerned with chemical safety and the sound management of chemicals. Produced through cooperation between the International Programme on Chemical Safety (IPCS) and the Canadian Centre for Occupational Health and Safety (CCOHS); IPCS INCHEM directly responds to one of the Intergovernmental Forum on Chemical Safety (IFCS) priority actions to consolidate current, internationally peer-reviewed chemical safety-related publications and database records from international bodies, for public access.
- **Pharos (provides hazard, use, and exposure information):** <https://pharosproject.net>
Pharos is a project of Healthy Building Network, a nonprofit founded in 2000 whose mission is to advance human and environmental health by improving hazardous chemical transparency and inspiring product innovation. Pharos provides resources to assess human and environmental health hazards of chemicals and building materials, plus tools to collaborate to find safer alternatives.

Worker Safety and Health Resources

- **IndustriALL Global Union:** <https://www.industriall-union.org>
IndustriALL Global Union represents 50 million workers in 140 countries in the mining, energy and manufacturing sectors and is a force in global solidarity taking up the fight for better working conditions and trade union rights around the world. IndustriALL challenges the power of multinational companies and negotiates with them on a global level.
- **International Commission on Occupational Health:** <https://www.icohweb.org/site/homepage.asp>
The International Commission on Occupational Health (ICOH) is an international non-governmental professional society whose aims are to foster the scientific progress, knowledge and development of occupational health and safety in all its aspects. ICOH operates in consideration of the overriding importance of permanent training and education of experts in order to face the rapidly changing world of work, and the need to develop occupational health services throughout the world.
- **Launching and Building Effective Joint Health and Safety Committees (International Union, United Auto Workers):** https://www.osha.gov/sites/default/files/2018-12/fy11_sh-22230-11_HandSCommitteeManual.pdf
Launching and Building Effective Joint Health and Safety Committees is a manual that details information on how to develop an effective committee charter and operating plan, maintain effectiveness through committee phases, conduct effective walkarounds and inspections, and develop a one-year action plan. In addition to providing the user with a step-by-step manual, additional references and handouts are provided to ensure the user has access to the right information.
- **Organisation of the Environment, Health and Safety Programme (OECD) Chemical Risk Assessment:** <https://www.oecd.org/chemicalsafety/risk-assessment/>
OECD assists countries in developing and harmonizing methods for assessing risk to human health and the environment, including methodologies for hazard and exposure assessment. OECD provides the user a risk assessment template, harmonized templates, toxicological data, and access to hazard and exposure assessment tools.



APPENDIX F: LITERATURE REVIEWED

- Fleming, M, and Fisher, B. “Hazard Recognition: Bridging Knowledge and Competency for Process and Occupational Safety.” *Prof. Safety* 62 (2017): 52–61.
- Haas, J. Industrial Hygiene ABCs. *Professional Safety*. 2005 March. Available at: <https://aeasseincludesspp.org/professionalsafety/pastissues/050/03/030305as.pdf>. (Accessed February 16, 2023)
- Hansen, M. Management Systems: Integrating safety, health, environmental and quality programs. *Professional Safety*. 2006. Available at: <https://aeasseincludesspp.org/professionalsafety/pastissues/051/10/031006AS.pdf> (Accessed February 16, 2023)
- Lawson, R. “Safety Teams Transforming Safety Committees to Improve Results.” *Prof. Safety* 60 (2015): 26–29.
- Mahan B, Maclin R, Ruttenberg R, Mundy K, Frazee T, Schwartzkopf R, Morawetz J. Labor-Management Cooperation in Illinois: How a Joint Union Company Team Is Improving Facility Safety. *New Solut.* 2018 Aug;28(2):227-239. doi: 10.1177/1048291118759303. Epub 2018 Feb 21. PMID: 29464991; PMCID: PMC6802280.
- Morse T, Bracker A, Warren N, Goyzueta J, Cook M. Characteristics of effective health and safety committees: survey results. *Am J Ind Med.* 2013 Feb;56(2):163-79. doi: 10.1002/ajim.22096. Epub 2012 Aug 6. PMID: 22886771.
- Mullins, R. , Blair, E., and Dunlap, E. “Management Leadership: Improving Employee Safety Engagement.” *Prof. Safety* 64 (2019): 36–42.
- Nichol K, Kudla I, Robson L, Hon CY, Eriksson J, Holness DL. The development and testing of a tool to assess joint health and safety committee functioning and effectiveness. *Am J Ind Med.* 2017 Apr;60(4):368-376. doi: 10.1002/ajim.22703. Epub 2017 Feb 28. PMID: 28244610.
- O’Grady, J. Joint Health and Safety Committees: Finding a Balance. *Injury and the New World of Work*, 2000; Chapter Eight: 162-97.
- Robotham, G. Safety Training that Works. American Society of Safety Engineers. 2002 May. Available at: <https://aeasseincludesspp.org/professionalsafety/pastissues/046/05/043233dv.pdf> (Accessed February 16, 2023)
- Story, J., and Kight, J. “Employee Participation Programs: A Multielement Approach.” *Prof. Safety* 64 (2019): 20–28. Available at: https://aeasseincludesspp.org/professionalsafety/pastissues/064/12/F1Sto_1219.pdf (Accessed February 16, 2023)
- Taksa, L. (2009). Intended or Unintended Consequences? A Critical Reappraisal of the Safety First Movement and its Non-Union Safety Committees. *Economic and Industrial Democracy*, 30(1), 9–36. <https://doi.org/10.1177/0143831X08099432>
- Williams, J. “Employee Engagement Improving Participation In Safety.” *Prof. Safety* 53 (2008): No Page Specified.
- WorkSafeBC. Handbook for Joint Health and Safety Committees. 2020. Available at: <https://www.worksafebc.com/resources/health-safety/books-guides/handbook-for-joint-health-and-safety-committees-bk160?lang=en&direct> (Accessed February 16, 2023)
- Yassi, A. The Effectiveness of Joint Health and Safety Committees; A Systematic Review. *Focus on Tomorrow*. WorkSafeBC. 2012 Feb Available at: <https://www.worksafebc.com/en/resources/about-us/research/the-effectiveness-of-joint-health-and-safety-committees-a-systematic-review?lang=en&direct> (Accessed February 16, 2023)
- Yassi A, Lockhart K, Sykes M, Buck B, Stime B, Spiegel JM. Effectiveness of joint health and safety committees: a realist review. *Am J Ind Med.* 2013 Apr;56(4):424-38. doi: 10.1002/ajim.22143. Epub 2012 Nov 28. PMID: 23192461.



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