



**SARNIA REFINERY**

**USE OF DANGER TAGS AND BARRIER TAPE**

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Document Owner: Manager, EH&S

Document Contact: Safety Advisor

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**STANDARD**

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**SCOPE AND PURPOSE**

This Standard provides the tagging and barrier taping requirements for identifying area or equipment hazards. This standard also prescribes the tag requirements associated with Hazardous Energy Control.

**ROLES AND RESPONSIBILITIES**

**Employees and Contractors** are accountable to this Standard and to follow operating procedures and work practices.

**Refinery Leaders** are accountable to ensure compliance to this Standard

**Refinery Vice President** is accountable to approve, maintain and ensure compliance to this standard.

**REFERENCES**

[Hazardous Energy Control Manual](#)

[Asbestos Control Standard](#)

**EXCEPTIONS**

One identified exception to this Standard occurs during radiography work. Additional steps to manage risk associated with this work are outlined in the 'Suncor Radiography' Procedure.

There will be no other exceptions to this Standard without the written permission of the VP, Sarnia Refinery. Approval will be considered only after completion of a formal risk assessment. Our Management of Change process will be employed to document mitigating actions, assign accountabilities and track the abnormal condition. The Management of Change document must be reviewed and approved by the VP, Sarnia Refinery before permission is granted.

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## RISK CONTROLS

### 1. Tags

There are eight (8) types of Tag applications used at Sarnia Refinery:

- Hazardous Service Tags: Yellow with Black Print -"Caution".
- Break Here Tags: Pink with Black Print- "Break Here"
- Energy Isolation Device Tags: Red and Black "Danger - Do Not Operate"
- Information Tags: Red, White and Black - "Danger - Important Information"
- Blanks in Safe Position Tags: Fluorescent Green - "Blanks in Safe Position"
- Zero Electrical Energy Verification Tags: Orange with Black Print – " Zero Electrical Energy Verification"
- Energy Isolation Device Test Tags: Purple with black stripes – "Test in Progress"
- Scaffold Tags: Red, Yellow or Green

**Hazardous Service Tags** provide a layer of protection intended to alert a worker of any equipment being removed from a Unit or Offsite area which has been in a Hazardous Service. This tag will identify handling precautions required while making repairs.

**Break Here Tags** are applied to the initial break points for each system within an executed Energy Isolation Plan. These tags identify to the worker where it is safe to perform the initial system disconnect within the Energy Isolation boundaries.

**Energy Isolation Device Tags** are used exclusively for identifying Energy Isolation Devices being controlled as part of Hazardous Energy Control standard. These tags shall not be used for any other purpose.

**Information Tags** provide a layer of protection intended to alert workers of hazardous or abnormal conditions in an area and to identify limited or restricted access conditions. When used in conjunction with Barrier tape, all sections of tape erected must have information tags affixed to the tape. There shall be an information tag installed at each quadrant. The tags will contain the following information:

- Name of person hanging the tag and their trade
- Reason for the tape being erected
- Date of tape installation

**Blanks in Safe Position Tags** are applied to the Lockable Device (Lock Ring) once all related blanks are installed in the "safe" position. Blanks cannot be removed while this tag is in place on the lock ring.

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**Energy Isolation Device Test Tags** are used to identify that a piece of equipment/system is undergoing a test (such as performing a rotation check on a motor).

**Zero Electrical Energy Verification Tags** are required for all electrical isolations for equipment over 30V. The tag is applied to the isolation points which will provide confirmation that voltage is removed.

**Scaffold Tags** follow the same tagging procedure common in the Chemical Valley. A red tag means don't use the scaffold under any circumstances. Yellow means use the scaffold with caution and with the identified precautions listed on the tag. Green means the scaffold is safe to use.

## 2. Yellow Tape (Caution)

Yellow caution tape will be used to restrict access to an area. The information tag must be checked prior to entering the taped off area to determine the risks of entering. Caution must be exercised while within the taped off area.

Refinery Standard 'Asbestos on Construction Projects, Buildings & Repair Operations' provides specific management controls for areas identified as having (or potential for having) asbestos.

## 3. Red Tape (Potential Danger)

Red tape will be used to restrict access to areas. Red tape identifies that there is potential danger and unless you are assigned to specifically be within the taped off area boundaries, **DO NOT ENTER**.

Some examples of red taped areas are:

- Where there may be the possibility of exposure to H<sub>2</sub>S or other toxic gases.
- Where overhead lifting is in progress.
- Where permanent guards or barriers have been temporarily removed
- Where an inherent danger exists.

### **NOTE**

**NO ACCESS** will be allowed into or through a red taped area without the permission of the person who has erected the tape or the operator in the unit in which the tape is erected.

## 4. Green Tape (Breathing Air Required)

Green tape will be used to identify areas where breathing air equipment is required and these areas will be restricted to only those people who are wearing self-contained breathing apparatus.

## 5. Orange Tape (HF Acid Caution)

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Orange tape will be used to identify areas where HF Acid may be present. Orange tape identifies that there is potential danger and unless you are assigned to specifically be within the taped off area boundaries, **DO NOT ENTER**.

## 6. Asbestos Tape ( Asbestos Warning Tape)

For Type 1 operations, the immediate work area shall be cordoned off using asbestos warning tape; and

For Type 2 and Type 3 outdoor operations:

- Where the work area is enclosed by  $\geq 6'$  walls that extend  $\geq 3'$  above the disturbed ACM and/or a constructed enclosure that includes a ceiling, the work area shall be cordoned off a minimum of 30' in all directions;
- Where the work area is not enclosed by  $\geq 6'$  walls that extend  $\geq 3'$  above the disturbed ACM or a constructed enclosure that includes a ceiling, the work area shall be cordoned off a minimum of 50' in all directions.

## 7. General

When erecting tape, careful consideration must be made to ensure that ALL possible access points to the restricted area have been identified and adequately controlled, particularly, when involved with restrictions at elevation or multi-level areas. The individuals who are responsible for erecting the tape are also responsible to tag the tape.

Taping will remain in place as long as the hazard exists. Operations are responsible to renew or upgrade taping that will remain in an area for an extended period of time.


Taping of an area where an inherent danger may exist or in situations where very large area restrictions apply, taping barriers may require additional management controls. The pre-job Risk Assessment will identify these controls, which could include (but are not limited to):

- A review of outstanding work permits in the immediate area.
- An announcement over all applicable radio channels and Refinery PA.
- Requesting assistance from Operations to ensure the restricted area is clear.
- Use of additional perimeter signs, barricades and/or warning lights.
- Use of additional personnel to assist to secure the restricted area perimeter
- Scheduling the task to be done when there are fewer personnel in the area. (i.e. Lunch, coffee breaks or backshift)

**Work MAY NOT PROCEED until adequate isolation of potential hazards have been confirmed and risk controls are in place.**

Upon completion of the work or if the hazard has been removed within the taped area, the tape will be removed. Removal is to be thorough with no tape whatsoever left on any of the plant facilities used to support the taped off area.

**END OF STANDARD**

		<b><u>REVISION LOG</u></b>	
<b>Date</b> MM/DD/YYYY	<b>Revision</b>	<b>Section</b>	<b>Comment</b>
07/25/2009	Original		Transferred into "Standard" template. Revision #Original. Replaces S.O. #1.010 and S.O. 2.051.
04/14/11	1		Revised Standard to include the new tag requirements in the Hazardous Energy Control Standard and to add existing scaffold tag requirements.
04/18/2011	2	Risk Controls	Number of Tag applications updated from 4 to 6. Colour for "Blanks in Safe Position Tags" updated to read "Fluorescent Green" NOT Yellow and White
06/26/2012	3	All	Updated format, but content was NOT changed
07/25/2013	-	Header	Document Owner & Contact Updated, but NO content changed. (L. Lebert)
06/16/2017	4	Risk Controls	Added Break Here Tags. (T. Richard) Added Asbestos Tape (T. Richard) E-sign page lost due to correction of the review date.
10/23/2019	5		Added Zero Electrical Energy Verification tags. (T. Armstrong)
01/30/2020	-	-	E-Sign Page lost due to formatting B. Basso

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