



**TABLE OF CONTENTS**

<b>1</b>	<b>PURPOSE</b> .....	<b>3</b>
<b>2</b>	<b>SCOPE</b> .....	<b>3</b>
<b>3</b>	<b>HAZARDS TO MITIGATE</b> .....	<b>3</b>
3.1	Addressing Risk.....	3
3.2	Risk Assessment.....	4
3.2.1	MRA – Model Risk Assessment.....	4
3.2.2	TRAC – Task Risk Assessment Checklist.....	4
3.2.3	TJSA – Team Job Safety Analysis.....	4
3.2.4	Table 1: Minimum Required Approvals in a TJSA.....	5
<b>4</b>	<b>RELEVANT DOCUMENTS</b> .....	<b>5</b>
4.1	Acronyms.....	5
4.2	Definitions.....	6
<b>5</b>	<b>SPECIFIC ROLES AND RESPONSIBILITIES</b> .....	<b>9</b>
5.1	Issuer (Issuing Authority).....	9
5.2	Receiver (Performing Authority).....	9
5.3	Worker (Workgroup Member).....	9
<b>6</b>	<b>PROCEDURE</b> .....	<b>9</b>
6.1	Permit.....	9
6.1.1	Exclusions (Zone 0) (Still under development).....	11
6.2	WAN – Work Activity Notification.....	11
6.3	Mandatory Requirements.....	12
6.4	Duration.....	12
6.5	Form Completion.....	13
6.6	Verbal Agreement.....	13
6.7	Field Level Hazard Assessment.....	13
6.8	Extension and Transfer.....	13
6.9	Suspension of a Permit.....	13
6.10	Cancellation of a Permit.....	14
6.11	Distribution.....	14
6.11.1	Emergency Conditions Requiring Immediate Work.....	14
<b>7</b>	<b>HOT WORK</b> .....	<b>14</b>
7.1	Permit Requirements for Hot Work.....	14
7.2	Camera Use.....	15
7.3	Vehicle Entry into a Hazardous Location.....	15
<b>8</b>	<b>APPENDICES</b> .....	<b>16</b>
8.1	Appendix A – Work Permits.....	16
8.2	Appendix B – ISSoW Workflow Process.....	17
8.3	Appendix C – Basic Path to Determine Permitting Process Map.....	18
8.4	Appendix D – Confined Space Entry Permitting Process Map.....	20
8.5	Appendix E – Excavation Permitting Process Map.....	21
8.6	Appendix F – Surmont CPF Permitting Map.....	22
8.7	Appendix G – Well Work Process Map.....	24
<b>9</b>	<b>REVISION RECORD</b> .....	<b>27</b>
<b>10</b>	<b>DEVIATION</b> .....	<b>27</b>

## 1 Purpose

This document outlines how Surmont controls work activities ranging from routine activities using the Work Activity Notification (WAN), Model Risk Assessment (MRA), Task Risk Assessment Checklist (TRAC) and Permit, through to activities requiring a Team Job Safety Analysis (TJSA) and Permit<sup>1</sup>.

Details and specific functionality are recorded in the Surmont ISSoW Reference Manual.

This procedure is an addition to the Canada Pre-Job Hazard Assessment (PJHA), document number 387<sup>2</sup>.

Following Alberta OH&S (Occupational Health and Safety), anyone has the right to stop the work if they believe the work is unsafe or the terms of the permit are not being met.

## 2 Scope

This procedure applies to activities relating to the Risk Management Program, isolation management and controlling work activity at Surmont. It applies to process equipment which is owned or operated by CPC Operations Department within the ring road, pipelines, pipeline corridors, and Well pads.

For areas outside the Operating zone, the CPC representative in charge of the work shall be responsible for permitting (ISSOW or PJHA), refer to [Section 6.1.1](#). The Operations Department may also include other areas for permitting (*example: SIMOPS activity on a lease under construction, any ground disturbance work*). The intent is to effectively manage work.

Operational Areas requiring permitting refer to [Appendix F – Surmont CPF Permitting Map](#).

This procedure applies to all personnel engaged in these activities and includes staff, full time equivalent and contractor personnel.

## 3 Hazards to Mitigate

The ISSoW system provides a framework for the management and control of work activities, typically from receipt of the work order through planning, risk management, isolation, work authorization, work completion, and de-isolation/re-commissioning. The user is responsible to recognize and input details (including hazards) into ISSoW.

Follow the Risk Management Program when evaluating risk. Consider the work activity hazards as well as hazards from the equipment.

### 3.1 Addressing Risk

All activities (either WAN or Permitted activities) shall be supported by a risk assessment that identifies hazards and controls the risk of completing the task to ALARP (As Low As Reasonably Practical).

All personnel involved in risk ranking shall follow the current CPC Risk Management Program<sup>3</sup>.

Each successive risk level shall include a participant from the lower level(s).<sup>4</sup> This serves to:

- Ensure that no risk is immediately elevated to the highest levels for sign off without supervisory knowledge;

<sup>1</sup> Types of Work Activity permits include: General, Excavation, Hot Work, Confined Space, Electrical.

<sup>2</sup> See [Relevant Documents](#).

<sup>3</sup> See [Relevant Documents](#).

<sup>4</sup> Example: if risk ranked at an 8, then a Supervisor (sign off level of a 5/6) and a Work Group member (sign off level of a 1-4) must also sign as well as the Manager (risk level of an 8-10).

- Ensure that no risk level is signed off by higher levels without a Workgroup member acceptance.<sup>5</sup>

## 3.2 Risk Assessment

ISSoW uses the following three main methods to address risk: Model Risk Assessments (MRA), Task Risk Assessment Checklist (TRAC), and Team Job Safety Analysis (TJSA).

### 3.2.1 MRA – Model Risk Assessment

Only trades who have developed MRAs may use this with an associated Work Activity Notification (WAN). Primarily these are low risk activities that the Trade is trained/certified in completing and, through normal Trade safe work practices, has a reduced residual risk.

### 3.2.2 TRAC – Task Risk Assessment Checklist

Primarily these are also low risk after additional mitigations are considered and the residual risk level is 4 or less.

TRACs may only be used with Permits.

Although the risk level has been determined by a single person, multiple people (typically within the same trade) may sign onto the permit.

It is the responsibility of the Part B person as well as the Permit Authorizer to review the risk assessment and approve/reject.

### 3.2.3 TJSA – Team Job Safety Analysis

Primarily these are used for, but not limited to: higher risk work activities, confined space activities, working on and isolation of UPS systems, working on live low voltage and live high voltage systems, excavations, high voltage electrical switching, abnormal operations / MOC issues, Hot Work, welding / Hot Tapping on Live Equipment, work over water, hot work in classified areas, and multiple disciplines working on the same job.

TJSAs may only be used with Permits.

TJSAs are risk ranked (pre-mitigation as well as residual risk level). Level of sign-off is based on the residual risk ranking and following the Risk Management Program<sup>6</sup>.

It is the responsibility of the Team Lead to ensure the risk and hazards are provided to participants for review and is appropriately authorized based on the maximum residual risk factor. It is the responsibility of the Part B person as well as the Permit Authorizer to review the risk assessment and approve/reject.

The following figure identifies minimum required approvers for any TJSA. This means they are required to approve the TJSA.

<sup>5</sup> Occupational Health and Safety Code, Part 2, Section 8(1) "An employer must involve affected workers in the hazard assessment and the control or elimination of hazards identified".

<sup>6</sup> See Relevant Documents.

3.2.4 Table 1: Minimum Required Approvals in a TJSA

	Requester	CPC Health & Safety	CPC Engineering	CPC Supervisor	CPC Emergency Response Team	Ground Disturbance Team
Hot Work in Classified Areas	X	X		X		
Work Over Water	X	X		X		
Confined Space	X	X			X	
Live Electrical Work	X			X		
Hot Tap	X	X	X	X		
Critical Lift	X	X		X		
Excavation	X					X
Abnormal Operations / MOC	X			X		

\* Always review the most current procedures that are applicable to the work scope. This table holds the minimum required approvers in the TJSA. Including them as participants is not enough; they must approve.

4 Relevant Documents

This procedure is a Surmont site specific procedure. The requirements listed in the Pre-Job Hazard Assessment (PJHA) procedure must also be followed, as well as the requirements listed in this site-specific procedure. For greater understanding of ISSoW, look to the site specific Surmont ISSoW Reference Manual or contact the ISSoW Specialist.

- Pre-Job Hazard Assessment (PJHA) (ALL-HSE-PRC-387);
- Risk Management Program (ALL-HSE-PRC-127);
- Surmont ISSoW Reference Manual;
- Gas Detection Procedure (ALL-HSE-PRC-170);
- Confined Space Entry Procedure (ALL-HSE-PRC-165);
- Hot Work Procedure (ALL-HSE-PRC-175);
- Engineering Information Portal area classification drawings;
  - Area Classification Drawings (example: 156000-46-ACD-00-001-1);
  - Electrical Area Classification drawings (example: SUR2-C02-00-000-EAC-1000-001);

4.1 Acronyms

ALARP	As Low As Reasonably Practical
BU	Business Unit
Cc	Carbon copy
CFT	Critical function Testing
CPC	ConocoPhillips Canada
CSE	Confined Space Entry
ERT	Emergency Response Team
FIC	Field Information Center
FIC	Field Information Center
FLHA	Field Level Hazard Assessment
FTE	Full Time Equivalent
FWKO	Free Water Knock Out
HSE	Health, Safety, and Environment
IS	Intrinsically Safe
ISSoW	Integrated System of Safe Work

LSR	Life Saving Rule
MOC	Management of Change
MPB	Multi-purpose Building
MRA	Model Risk Assessment
MSDS	Material Safety Data Sheets
OH&S	Occupational Health and Safety
PJHA	Pre-Job Hazard Assessment
PTW	Permit to Work
SDS	Safety Data Sheets
SIMOPS	Simultaneous Operations
SOP	Safe Operating Practise
SRR	Surmont Regional Residence
SSOP	Site Specific Operating Practise or Procedure
STARRT	Safety Task Analysis Risk Reduction Talk
TJSA	Team Job Safety Analysis
TRAC	Task Risk Assessment Checklist
UPS	Uninterruptible Power Source
WAN	Work Activity Notification

## 4.2 Definitions

Area Operator	Member of the Operations department who is in physically control of process equipment.
Abnormal Operations	Operating conditions that are not considered regular Operations.
Activity Issuing Authority	Person(s) who issue Permits and WANs to areas outside of Operations Department's direct control.
Asset Integrity	Member(s) of the AI department who is specially trained.
Bitumen Treatment	A process area that completes initial separation of bitumen and water.
Cancel or Cancelled	Referring to a permit status, when the permit may no longer be electronically issued or copied. This status prevents the ability to 'copy' the document.
Classified Areas or Hazardous Areas or Hazardous Locations	Locations as specified under Canadian Electrical Code.
Close or Closed	Referring to a permit status, when the permit may no longer be issued it is electronically prevented from being issued by changing the status to closed. This does not impact the ability to 'copy' the permit.
Completions	A formal group that is responsible for Well completion.
Confined Space	An area defined in and determined by Confined Space procedure.
Confined Space Entry	Procedurally defined area that normally includes: entering a space that is not built for continuous human occupancy and may have conditions hazardous to health. See the Confined Space procedure for a current definition.
Confined Space Permit	Method of controlling work activity within a procedurally defined area. See Confined Space procedure. This is not a Work Activity Permit.
Construction	A formal group that is responsible for construction activity.
Control Room Operator	Member of the Operations department who is in electronically control of process equipment through a computer system.
Coordinator	Supervisory level whose direct reports are contractors.
Coordinator	Person that is assigned to fulfill a CPC Operations role overlooking contractor persons.
Critical Lift	As defined in the electrical work SOP.
Drilling	A formal group that is responsible for drilling wells.

Electrical Permit	Work activities that have a primary hazard that is neither Hot Work nor General. <i>Example: connecting 600 volt electrical circuits to a motor.</i>
Emergency Response Team	A department that is specially trained with focus on handling emergency situations.
Engineering	A department or person in a department that is specially trained with focus on equipment design and re-design.
Excavation Permit	Method of controlling work activity when disturbing ground. This permit serves to ensure the documentation is completed prior to ground disturbance. This is not a Work Activity Permit.
Facility	Primarily referring to process areas, but may include non-process areas.
Field Information Center	Building where permits are electronically issued from.
General Permit	Work activities that have a primary hazard that is neither Hot Work nor Electrical. <i>Example: use of a wrench to tighten a nut.</i>
Ground Disturbance and Ground Disturbance Supervisor(s)	A formal CPC team that specializes in ground disturbance (excavation work and any work that negatively impacts the ground or facilities within). For a formal definition, see the Ground Disturbance procedure.
Health and Safety	A department or department member that is specially trained with focus on health and safety issues.
Hot Tapping on Live Equipment (or Hot Tap)	A method that is defined by procedure, typically welding on a valve and nipple to an in-service process line, then drilling out the inside the nipple to allow a new tie-in to the line without shutting down the line.
Hot Work	Activity that is defined by procedure, typically ignition source potential in a area that has the potential to contain ignitable fumes.
Hot Work Permit	Work activities that have a primary hazard that is neither General nor Electrical. Refer to local Hot Work Procedures. <i>Example: welding in a classified building.</i>
ISSoW Specialist	A person(s) with specified responsibilities of maintaining Surmont's ISSoW program.
Issued by (Issuing Authority)	The signatory line is the person responsible for that area. Electronically, this is the person who issues the document.
Live Electrical Work	As defined in the electrical work SOP
Minimum Requirements	A corporately mandated formalized set of precautions that shall be followed.
MRA	A formal document that outlines activity, hazards, control measures and risk ranking allowed to be performed under the associated WAN.
Operations Department	Process equipment and lands that under control of the Operations group.
Own Trade	An isolation by individual workers as defined under Alberta OH&S.
Part A	The first part of a work permit, completed by someone who has Part A access (normally a Permit Requester).
Part B	The second part of a work permit, completed by someone who has Part B access (normally an Area Operator).
Permit Authorizer	Person who authorizes the work to proceed (normally an Area Shift Supervisor).
Permit(s)	May refer to both actual permits and to WANs. A Permit is a legal document that outlines the conditions work may proceed. The Permit authorizes work to proceed.
Permitted	Work activities which require a Permit before starting work.
Process Isolations	The closing or opening of valves to establish zero energy.
Receiver	Person who accepts responsibility for the permit and signs on the permit as Performing Authority.

<b>Receiver (Performing Authority)</b>	The signatory and electronically is the person who receives the permit and agrees to follow the requirements of the permit.
<b>Remote Areas</b>	Places that are geographically separated from normal access routes. Often these areas have winter access roads but do not have summer access roads.
<b>Remote Operation(s)</b>	A CPC Operations team that is responsible for activity in their Operational areas or on their process equipment.
<b>Requester</b>	Person who initiates Permits or WANS.
<b>Risk Assessment</b>	A document that (at a minimum) outlines expected hazards, control measures, and residual risk ranking.
<b>Risk Management Program</b>	ConocoPhillips Canada's document on how to manage risk.
<b>Safety Watch</b>	Person who acts to initiate emergency response. <i>Examples: safety watch for a confined space entry monitors the atmosphere, ensures persons entering or exiting the space are recorded, and alerts individuals of alarm conditions. Another type of safety watch (fire watch) acts to ensure that if a fire breaks out, the others are alerted and so they can get out of harm's way.</i>
<b>Shift</b>	Refers to Operations Department rotational shift (12 hrs. day shift or 12 hrs. night shift. Usually starting at 07:00 or at 19:00.
<b>Site Checker</b>	Person who completes the initial atmospheric testing.
<b>Superintendent</b>	Person that is assigned to fulfill a CPC Operations role overlooking CPC employees.
<b>Supervisor</b>	Person that is assigned to fulfill a CPC Operations role overlooking CPC employees.
<b>Surmont</b>	Part of the Canadian Oil Sands business unit, Surmont is the main property associated with CPC Oil Sands BU.
<b>Surmont ISSoW Reference Manual</b>	The written instructions for how ISSoW is set up and to be used within the Oil Sands BU.
<b>Team Lead</b>	Person who initiated or currently editing a TJSA.
<b>TJSA</b>	A multi-person completed more formal risk assessment that may be attached to a Permit.
<b>TRAC</b>	A single person completed more formal risk assessment that may be attached to a Permit.
<b>Trade</b>	A worker with specialized skill or training.
<b>Work Activity Notification</b>	Authorization to work as restricted in the MRA, that does not require the same level of scrutiny as a full Permit.
<b>Work Activity Permit(s)</b>	Authorization to work on equipment: usually a General, Hot Work, or Electrical permit.
<b>Worker or Work Group Member</b>	Member of the workgroup team who is performing the activity outlined on the permit.
<b>Zone 0</b>	Those areas outside operational areas that may require permits issued to them by designated CPC Supervisor(s) or Coordinator(s) that are responsible for directing those activities, not Operations.



## 5 Specific Roles and Responsibilities

### 5.1 Issuer (Issuing Authority)

This is the owner/operator of the equipment/area (normally an Area Operator). Although the permit must be electronically issued, the document is considered issued after the owner/operator has signed the permit. They sign on the 'Issued by (Issuing Authority)' to be completed at the work location.<sup>7</sup> When a different Area Operator is on shift and work is ongoing, the new Operator must sign as the Issuer for work to continue.

On re-issue, they sign under 'Area Operator' column of the 'Permit Re-issue' attachment page.

### 5.2 Receiver (Performing Authority)

This is the person who is electronically issued the permit. On first issue, they sign the associated line 'Accepted by (Performing Authority)', which signifies acceptance and responsibility to follow the permit and associated risk assessment.

On re-issue, they sign under 'Acceptor' column of the 'Permit Re-issue' attachment page and are required to sign on each shift that the work is to take place.

The Receiver is present at the work location for the duration of the activities covered by the Permit. If receiver must leave activity area, the permit must be re-issued to a designated activity lead remaining at activity site. To avoid work stoppage, have new receiver take permit and badge number to Field Information Center (FIC) and re-issue to that individual.

### 5.3 Worker (Workgroup Member)

Worker(s) shall sign onto the 'Permit Sign On' sheet daily. Their signature signifies they understand and will abide by the Permit, Risk Assessment, and associated documentation. The Receiver, who has already signed to receive the permit, does not need to sign as a Worker.

## 6 Procedure

Anyone has the right to stop the work if they believe the work is unsafe or the terms of the permit are not being met.

### 6.1 Permit

All permitted activities shall be completed under a written Permit or WAN and must:

- a) Define the scope of the work.
- b) Project, shutdown, and outage work should be segmented into manageable sized jobs defined by unique functions. *Note: The intent is to permit the greater job scope and provide clarity of all the activities within a well-defined TJSA. However, activities that are of high risk shall have separate permit(s).*
- c) Record hazards and associated mitigation measures on the associated Risk Assessment (TRAC, TJSA) and as per the Risk Management Program.
- d) Identify hazardous locations and minimum clearance distances and attach any additional documentation required (*examples: fall protection rescue plan, working near or over live systems, atmospheric gas monitoring log, SDS, confined space entry logs*).

<sup>7</sup> The only exceptions shall be: routine, repetitive work done under a WAN, Ground Disturbance and Remote Operations offsite locations that have received approval by either the Plant or Field Superintendent and the Technical Services Superintendent.

- e) Determine the type and frequency of atmospheric testing and record the requirements and results of the testing, if required by other procedures. The person taking the initial gas recordings sign onto the permit as the Site Checker. Refer to: Gas Detection Procedure (ALL-HSE-PRC-170).
- f) Designate watch personnel required as per procedures. When used for an activity, watch personnel are required to sign on to their own permit.<sup>8</sup>
- g) For work inside the Confined Space, typically outside contractors are utilized to do the initial gas testing (downgrading) as well as safety watch. The initial gas test (downgrade) shall be listed on the Confined Space Entry (CSE) permit as an activity which the worker will sign onto before entering. Other workers entering shall have their own work activity permits linked into the CSE permit. Appendix D – Confined Space Entry Permitting Process Map.
- h) The CSE permit is issued to the safety watch and the area operator will sign as 'Issued By';
- i) The safety watch signs as 'Radio Activation Received By' and are to notify the Emergency Response Team when work is ready to commence;
- j) For Confined Space Entry work, typically outside contractors are utilized to do the atmospheric testing as well as safety watch. All activities, other than entering the vessel to do the atmospheric testing, shall be on activity work permit(s) linked to the CSE as well as the Isolation Certificate (if applicable). Include the atmospheric testing within the space (typically referred to as 'downgrading') on the CSE permit as an activity, which the worker is to sign on to.
  - I. If required again within the expiry time limit, the permit shall be put into 'Awaiting re-issue': the person returning the permit shall sign the 'Permit Returned for RE-ISSUE' box;
  - II. The safety watch signs as 'Radio Activation Received By' and are to notify the Emergency Response Team (ERT) when work is ready to commence;
  - III. Confined Spaces on equipment that utilize nuclear gauges, specifically Area 2 Free Water knock-Out (FWKO) and Treaters (and future equipment), should specifically recognize the radiation safety components of the CSE Safe Operating Practise (SOP), section 4.5.1, CSE checklist and hazards associated with radiation safety. Refer to 4.19.3 *Confined Space Entry* for more detailed information regarding CSE.
- k) Risk Assessments: Key processes from procedures that apply to the work and any related information shall be included, reviewed and understood.
- l) Drilling and Completions activities are typically turned over through a Well hand over package, or an ISSoW permit. See: Appendix G – Well Work Process Map.
- m) SIMOPS Access Permit may be required from the SIMOPS team if SIMOPS area has been determined.
- n) Identify and discuss among Issuer, Receiver, and Worker(s) the hazards and potential hazards that may be encountered and the methods to be used to control or eliminate them.
- o) Work shall not start until the permit is signed by the Issuer at the work activity.<sup>9</sup> Refer to Section 6.6 Verbal Agreements for remote offsite activities.
- p) Normally, Work Activity Permits are electronically issued from the Field Information Center (FIC). However, this electronic issue may also happen from any CPC computer. Some groups which often issue permits outside of the FIC are: Ground Disturbance, SIMOPS, Remote Operations and Construction Management Team.

<sup>8</sup> Example: For a CSE, the Safety Watch is issued a work activity permit to perform the duties of Safety Watch. They do not need to sign onto work activity permits for work inside the space. Persons entering space, shall sign on to the CSE permit as well as their own work activity permit.

<sup>9</sup> The only exceptions shall be: routine, repetitive work done under a WAN, Ground Disturbance and Remote Operations offsite locations that have received approval by either the applicable area Superintendent and the Technical Services Superintendent.

- q) At the work location, complete a written field level hazard assessment<sup>10</sup> then proceed with work per conditions of the Permit. **Note:** *The hazards and the requirements must also be communicated to workers who join the work crew after the initial pre-job meeting. They must also sign the permit before starting work.*
- r) Stop work if conditions under which the Permit was issued or job scope change.
- s) After the work is complete or at the end of day (whichever comes first), the Issuer (Area Operator) shall be notified.<sup>11</sup>
- t) It is an expectation that permits are signed whenever they are returned:
  - I. If required again within the expiry time limit, the permit shall be put into 'Awaiting re-issue': the person returning the permit shall sign the 'Permit Returned for RE-ISSUE' box;<sup>12</sup>
  - II. If the permit is to be closed: person returning the permit shall sign 'Returned by (Performing Authority)' signatory line, and the Issuer (Area Operator) shall sign on the 'Received by (Issuing Authority)' signatory line.

### 6.1.1 Exclusions (Zone 0) (Still under development)

Zone 0 is defined as those areas outside operational areas. Activities in these areas may require permits issued to them by a designated CPC Supervisor(s) or Coordinator(s) that are responsible for directing those activities as well as the Activity Issuing Authority. Please see the PTW Coordinator or ISSoW Specialist for more information.

## 6.2 WAN – Work Activity Notification

WAN is only used in conjunction with a single MRA. Permit Requestor shall be responsible for developing and submitting WAN requests. Shift Supervisor (or delegate) is responsible for approving/rejecting WAN requests.

Working under a WAN:

- A WAN is a version of a permit that is used to notify Operations of a routine work activity (typically scheduled work);
- May not use Process Isolations and may not use *For Issue Isolation Certificates* as there is no electronic space to record Isolation Certificate number;<sup>13</sup>
- Must be taking place within the confines of the Surmont property for work that does not require the issue of a formal Permit;
- Critical Function Testing (CFT) preventative maintenance activities that are risk ranked medium (5 or 6) shall be controlled under a permit (not a WAN) and appropriate risk assessment;
- Is solely for CPC employees and FTE contractors.<sup>14</sup>

WANs are subject to the following conditions of issue:

- Only for work activities fully covered under a Model Risk Assessment;
- Only to be used by CPC employees or FTE;

<sup>10</sup> Examples include: CPC Hazard Review Card (CPC-ALL-HSE-FRM-2109), site specific ISSoW Field Level Hazard Assessment (OLS-HSE-FRM-2142), ISSoW Low Risk Hot Work FLHA (OLS-HSE-FRM-2141) or approved contractor provided method.

<sup>11</sup> Permits cannot be left open for longer than 30 days. Due to this expiration, these permits may not be signed by either the Issuer or the Performing Authority. It shall be noted on the permit why it was not signed but electronically closed.

<sup>12</sup> WANs do not have a 'returned for re-issue box'. Instead, they shall be returned to the issuing office.

<sup>13</sup> Own Trade isolation may occur in some circumstances if allowed under the Model Risk Assessment, however, work which requires a For Issue isolation certificates is not allowed under a WAN as there is no place to link in the isolation certificate to the WAN.

<sup>14</sup> Regular contractors, directed by CPC Maintenance and Operations Services to provide services on Brownfield Operations owned equipment, may be considered for MRA. However, Greenfield or project contractors brought in for temporary work may not use the WAN (even if the temporary work falls within the MRA).

- Issued from a FIC;<sup>15</sup>
- WANs do not have a 'returned for re-issue box'. Instead, they shall be returned (for storage and electronic status update) to the originating FIC at the end of each working day;<sup>16</sup>
- May be re-issued within the maximum 30-day period and in accordance with the revision period;<sup>17</sup>
- WANs (for work in non-process areas) are only to be authorized by a CPC Supervisor (or delegate) as they are the Activity Issuing Authority;
- WANs (for work in process areas) will be issued by the Issuing Authority and signed by either the Operations Shift Supervisor or Area Operator;
- WANs in process areas **are not** to be authorized by Permit (PTW) Coordinators as they do not direct or manage any work activities, with the following exceptions:
  - Routine, repetitive activities surrounding the Field Information Center (FIC's) or in Zone 0 that have received approval by either: Plant Superintendent, Field Superintendent, or Site Services Superintendent and the Technical Services Superintendent may be approved by PTW Coordinators.

### 6.3 Mandatory Requirements

- All WAN and Permit activities require some type of approved written field level hazard assessment<sup>18</sup> at the work location and in accordance to the Pre-Job Hazard Assessment (PJHA)<sup>19</sup> procedure;
- All field level hazard assessments must, at a minimum, meet the same requirements as per CPC policy<sup>20</sup>. If unsure, contact local CPC HSE representative;
- Work shall stop if the scope of work changes. A new permit/risk assessment shall be completed;
- **It is not acceptable to hand write on the work permit or the risk assessment.** The exceptions being: signatory lines, when cross referencing other permits, when linking to an external document that cannot be linked into ISSoW, and when the information does not print out on paper but has been marked electronically in ISSoW.

### 6.4 Duration

Most work activity Permits and WANs are issued for the duration of a 12-hour shift and shall not extend beyond the Issuer's on shift time. This is to ensure oncoming Operations crews are alerted to work in their areas. For ongoing work past the shift, refer to Section: 6.8 Extension and Transfer.

SIMOPS, Ground Disturbance and Remote Operation permits may be issued for the duration that the CPC supervisor and Permit Receiver remain on-rotation, and in accordance with the PJHA procedure. Ground Disturbance and Remote Operations permits are often issued over extended periods to cover work in remote areas where daily issuing is less efficient.

Other permits may also be issued for extended durations so long as the Technical Services Superintendent (and applicable area Superintendent) agree.

Open-ended permits are not allowed.

<sup>15</sup> WANs are not for Remote Operations or Excavation work, so these groups do not issue WANs.

<sup>16</sup> Remote work at the remote sites shall return the Permit at the earliest convenient opportunity as it's not always practical to return during the working day.

<sup>17</sup> See Relevant Documents.

<sup>18</sup> *Examples: CPC's Hazard Assessment, FLHA cards, STARRT cards, and Step Back 5X5.*

<sup>19</sup> See Relevant Documents.

<sup>20</sup> See Relevant Documents.

## 6.5 Form Completion

ISSoW will not allow the permit to proceed until mandatory fields are filled out.

Information recorded shall meet the Life Saving Rules (LSR) Minimum Requirements<sup>21</sup>. Refer to the most up-to-date Minimum Requirements. Appendix A – Work Permits is the September, 2013 version.

## 6.6 Verbal Agreement

Surmont shall not use verbal agreements for permitting activities with the following exceptions:

CPC Ground Disturbance Supervisors and Remote Field Operators as the Activity Issuing Authority may:

- Complete and discuss the Permit details and requirements of the activity. Then authorize work to proceed with the Permit Receiver on the phone with a follow-up email recording the conversation;
- Confirm check-in times and emergency response procedures;
- Establish the duration of the verbal agreement until the Activity Issuing Authority can make it out to sign the permit at the work activity location;
- Have Permit Receiver pick up Permit at nearest FIC;
- The Permit Receiver must contact the Permit Issuer or designate once the job has been completed.

## 6.7 Field Level Hazard Assessment

FLHA are completed each day a permit is issued and must be updated with changing conditions and after an emergency muster.

FLHA are also to be completed when work happens in different areas under the same permit. *For example: a vacuum truck would complete an FLHA when working at one Well pad, and complete a second FLHA at the second Well pad.*

## 6.8 Extension and Transfer

Permits may be extended at Operations discretion beyond the normal working day. To avoid work stoppage on critical activities or 24-hour operations, when near of a Field Information Center, it is acceptable to have the new shift permit receiver take the permit number and their badge to FIC for re-issue without removing the permit from the work activity or if in remote areas radio in their permit and badge numbers for electronic re-issue.

Issued copy **must be** signed by both the incoming shift Issuer and Receiver.

Permits **may not** be transferred. Instead, follow the re-issue method. The permit must be electronically re-issued (which allows ISSoW to track who last received the Permit).

## 6.9 Suspension of a Permit

Suspend work if an emergency alarm is activated and report to the nearest safe muster station.

After an alarm condition, the atmosphere shall be re-tested and recorded on an attachment to the permit, if applicable.

If work is not resumed within one hour of the alarm, the original permit must be suspended and re-issued.

<sup>21</sup> See current ConocoPhillips Life Saving Rules, Work with a valid work permit when required.

Site alarms are tested weekly. Permits do not become suspended during site alarm testing.

## 6.10 Cancellation of a Permit

Cancellation of a permit is different from suspending a permit. 'Cancel' button in ISSoW prevents further copying of the permit. Usually permits are cancelled to freeze the permit conditions and prevent work from continuing under the permit. *For example: if a person is injured the permit should be cancelled. Likewise, if an isolation is broken, then the permit should be cancelled.*

## 6.11 Distribution

Normally only one original copy of the permit is normally printed, issued and signed and shall remain at the worksite or is readily available at the worksite.

Sometimes work activities involve multiple parties, *for example: trucking fluids from the condensate stations to the blowdown pond*, where it is physically difficult for each party to have the original issued permit. In these instances, the work supervisor holds the issued copy (permit signed in wet ink) and each participant signs onto the issued copy. **Reference copies of the permit and risk assessment shall be distributed with each participant.** *For example: each truck driver may carry a 'For Reference' copy.* Another option is copying the original permit to use as a template to make a new permit altogether for other parties to receive as their own.

### 6.11.1 Emergency Conditions Requiring Immediate Work

For Surmont, this refers to Area Operators and ERT who are responding to an emergency do not require written permits. Other teams brought in to help address emergencies shall be permitted at the discretion of the respective area Superintendent.

## 7 Hot Work

### 7.1 Permit Requirements for Hot Work

Hot Work Permits shall be utilized for hot work (*examples: open flame, welding, grinding, cutting, torching, non-intrinsic power tools, combo units, arcing or sparking activities*) that introduces an ignition source **regardless** of where the work is taking place within the Facility. Atmospheric testing with aspirated continuous monitor is required in Hazardous Locations.

Personal monitors (non-aspirated continuous) are adequate when not in Hazardous Location. Area Operators may, at their own judgment, determine otherwise and require aspirated continuous monitors.

Other hot work activities (*examples: camera use, laptops, vehicle entry, non-intrinsically safe diagnostic equipment (All hand-held testing meters), opening transmitters*) may have potential to introduce ignition sources. Surmont will use a General Permit or Electrical Permit instead of the Hot Work Permit and:

- If the work activity is within a Hazardous Location or a Classified Area, a red coloured card<sup>22</sup> shall be used to record atmospheric conditions prior to starting work. Personal non-aspirated continuous monitors are required at a minimum. Area Operators may, at their own judgment, determine otherwise and require aspirated continuous monitors;
- If the work activity is not within a Hazardous Location or a Classified Area (*example: there is no possible source of gas vapours*), no atmospheric testing recorded on paper is required.

<sup>22</sup> Some type of written record of the monitoring is required. It would also be acceptable to use a white CPC FLHA or a continuous atmospheric monitoring sheet.

'Gas Detector Required' checkbox (on WAN) signifies if an aspirated continuous monitor is required.

Gas Detector Required	<input checked="" type="checkbox"/>
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On Permits, there are 3 checkbox options.

H2S Monitor required	<input checked="" type="checkbox"/>
Pre-Start Gas Test Required	<input checked="" type="checkbox"/>
Continuous Gas Monitoring Required	<input checked="" type="checkbox"/>

- 'H2S Monitor required' refers to personal monitors. At Surmont, wearing personal monitors is a site requirement. Therefore, this checkbox may or may not be marked.
- 'Pre-Start Gas Test Required' refers to either personal or aspirated continuous monitors for the initial testing prior to starting work.
- 'Continuous Gas Monitoring Required' refers to aspirated continuous monitor is required.

## 7.2 Camera Use

The user still is always required to sign into the corresponding FIC, and radio the Area Operator and Control Room Operator prior to using the camera.

When using a camera in a Hazardous Location, a General Permit will be issued following the same precautions (red card) as noted previously. *Example: Asset Integrity is taking pictures of the vessel name plate in Bitumen Treatment would require a General Permit and red FLHA with a personal monitor.*

- If the camera is being used outside of a Hazardous Location and no other work is being performed along with the camera, then no permit shall be issued. *Example: Asset Integrity is taking pictures of the back of the steam generators would not require a permit.*

## 7.3 Vehicle Entry into a Hazardous Location

Short term vehicle entry (*example: delivery*) into a Hazardous Location may proceed under a WAN, General Permit, or Electrical Permit and record atmospheric testing results (*example: red card*). Alternatively, a Hot Work Permit may also be used.

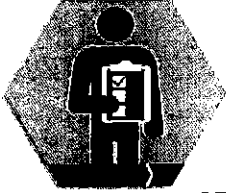
Continuous vehicle entry (*example: loading a vacuum truck*) into a Hazardous Location may only proceed under a Hot Work Permit and with continuous monitoring.

Prior to entry, contact the Area Operator to gain permission and have them sign onto the permit. The area being entered shall be walked and atmospheric testing completed (and recorded) prior to vehicle entry.<sup>23</sup> This is to ensure the atmosphere is free from combustible gas. Results shall be recorded on the red card or the attached atmospheric testing record.

<sup>23</sup> The area is walked and tested first to ensure an explosive atmosphere does not exist.

## 8 Appendices

### 8.1 Appendix A – Work Permits



**Work with a valid work permit when required.**

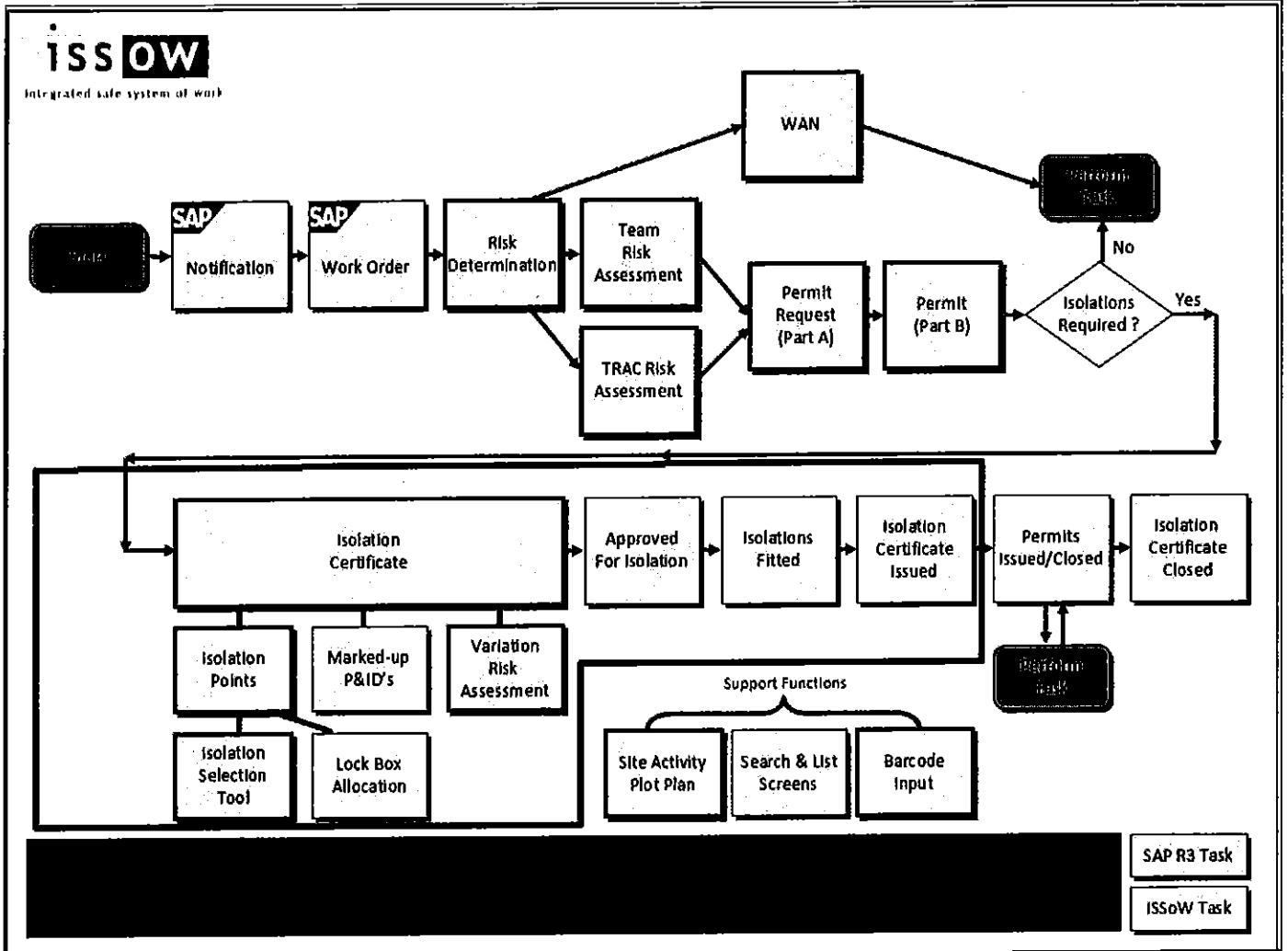
Working with a valid work permit is required, but a permit alone does not make the job safe. Before a work permit can be issued, the following minimum requirements must be met:

- All those who are involved in the work permitting process have been trained and proven competent in their roles and responsibilities.
- The scope of work has been well defined for the specific work location.
- Any change in the scope of work is accounted for by stopping the work, reassessing the risk, and reviewing/revising the permit, as appropriate.
- The permit issuer and responsible persons have identified any interactions with other work permits, work tasks, and/or simultaneous operations and these are cross-referenced on the permit.
- All hazards, including Line of Fire, have been identified and assessed; risks have been mitigated; and the necessary controls have been put in place.
- Changing hazards have been considered, and workers have been trained to recognize changes.
- Responsible persons have validated hazards mitigation and permit requirements at the work site prior to the start of work.
- All required signatures for the permit have been obtained from the designated responsible persons.
- Responsible persons have verified the integrity of any isolation required for the work to proceed.
- The scope of work, permit conditions, and risk assessment have been communicated to all persons involved prior to the start of work as well as to those persons who come to the work site after work has started.
- Required atmospheric testing has been completed; results have been evaluated and documented; and repeat or continuous testing requirements are part of the permit conditions.
- For ongoing work, handover discussions are conducted between responsible persons of each shift, and the work permit is revalidated, as appropriate.

**For further guidance, see local procedures on work permits.**



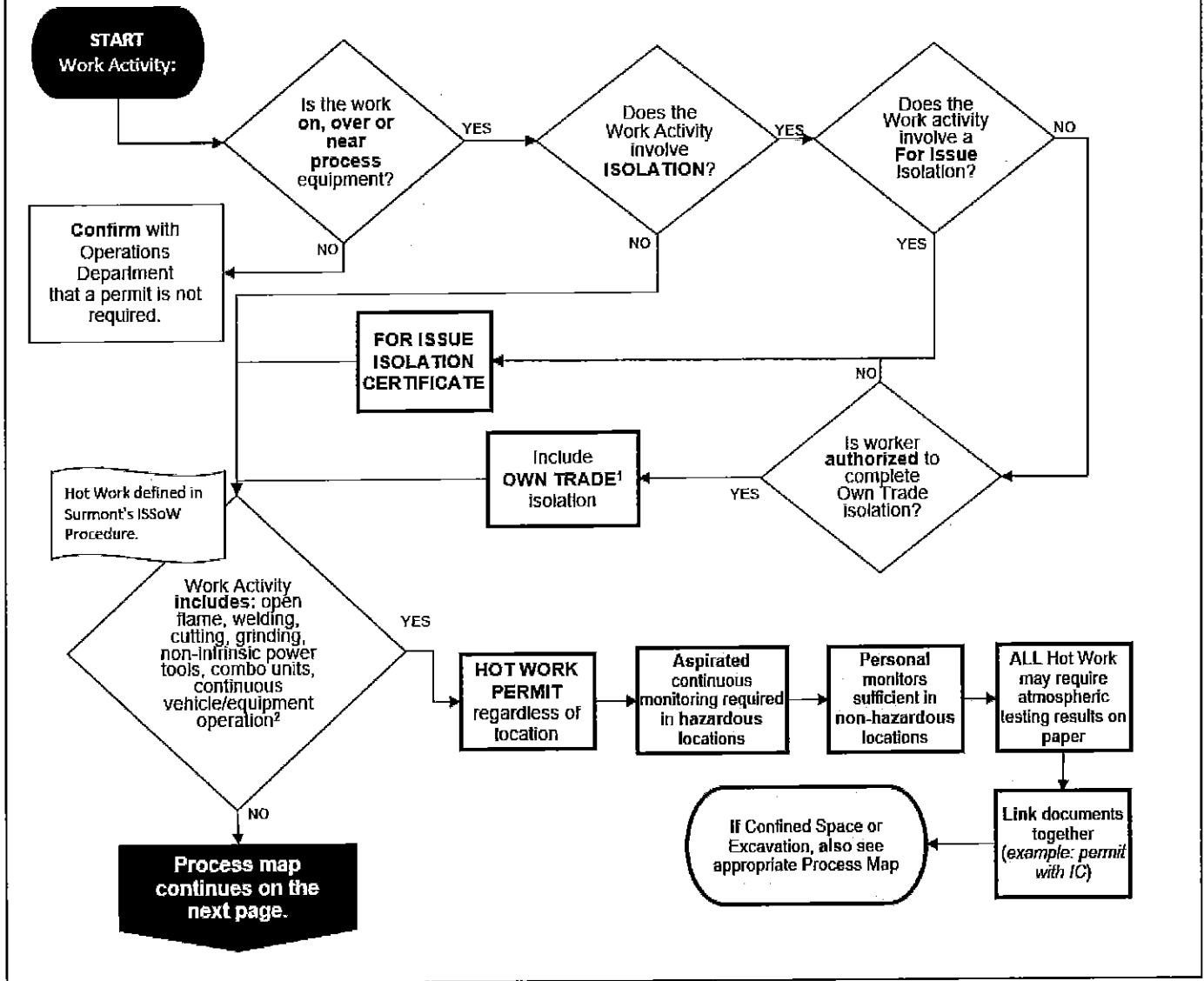
8.2 Appendix B – ISSoW Workflow Process



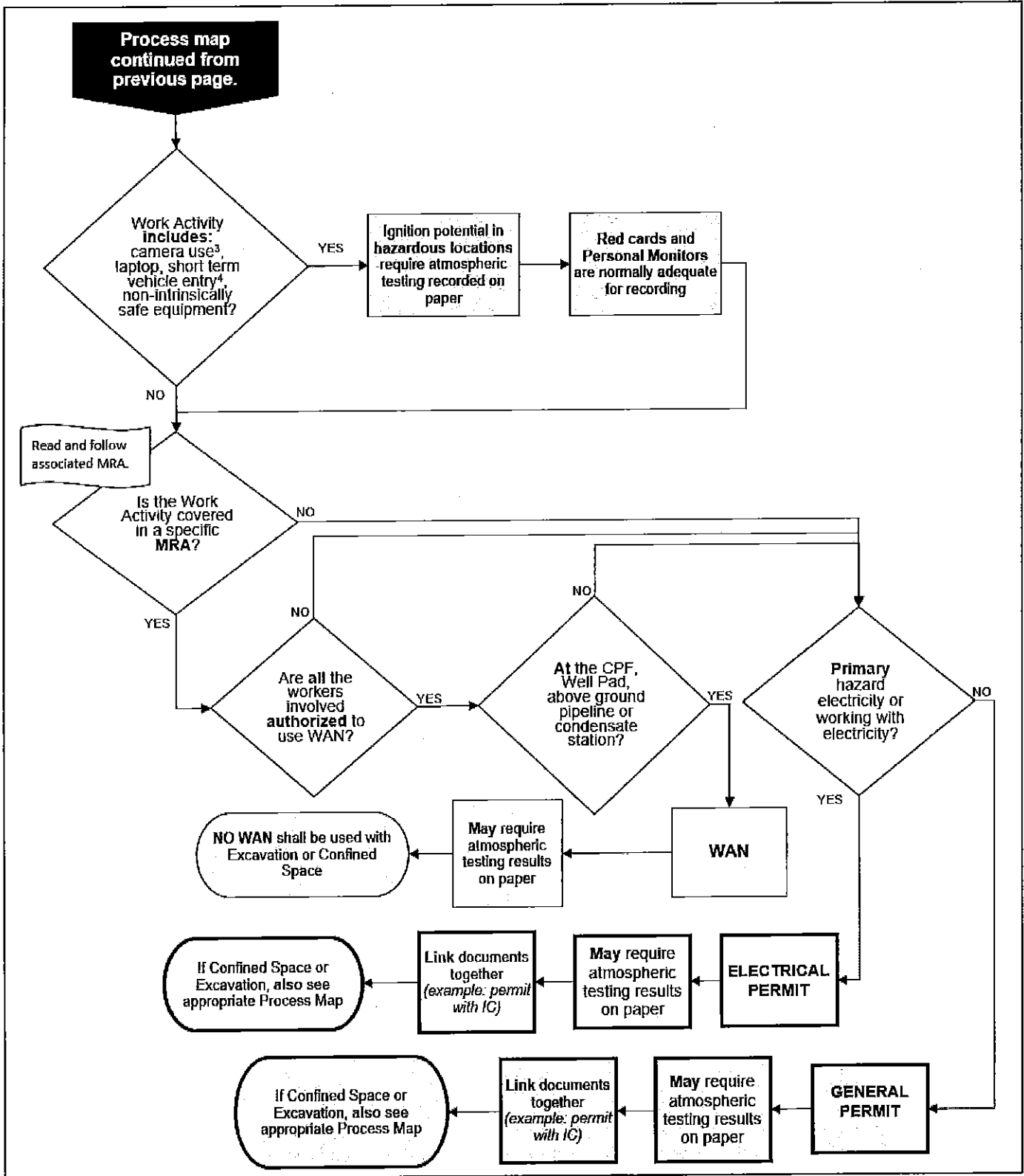
### 8.3 Appendix C – Basic Path to Determine Permitting Process Map

This process map is **NOT** all inclusive, but should cover many situations.

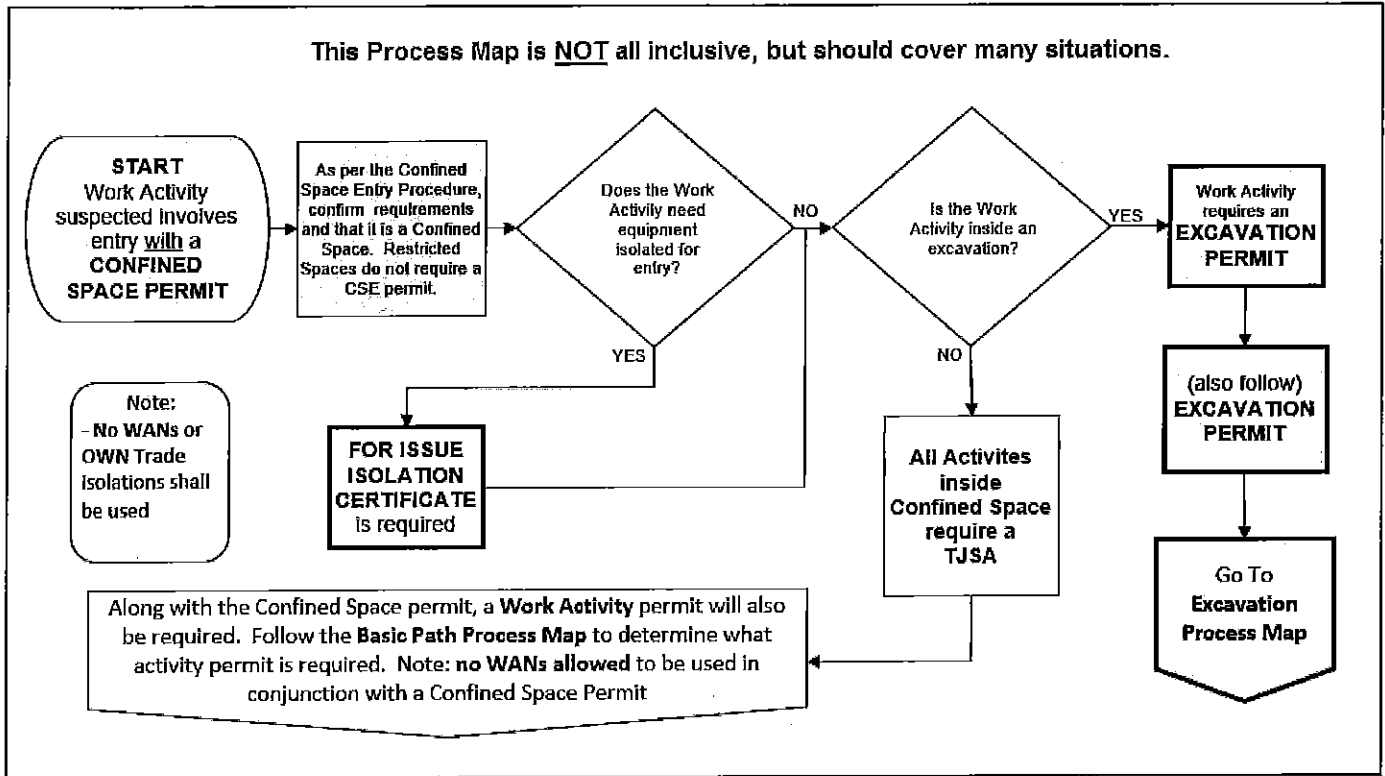
- ALL work requires FLHA.
- All Ignition potential work near live gas sources or in Hazardous Locations require atmospheric testing recorded on paper.
- <sup>1</sup> Work that involves locking onto an Isolation 'For Issue' lockbox is NOT Own Trade.
- <sup>2</sup> Continuous vehicle/equipment operation means the vehicle/equipment has the engine running for the duration of the work activity.  
*Examples: vacuum truck loading, fuel truck delivering fuel.*
- <sup>3</sup> Using a camera in non-hazardous locations is a non-permitted activity. Sign into the appropriate FIC, contact with Area Operator and Control Room Operator mandatory prior to camera use.
- <sup>4</sup> Short term vehicle entry is when the vehicle/equipment will not be running for the work activity. (*Example: delivery of materials to a process building.*)



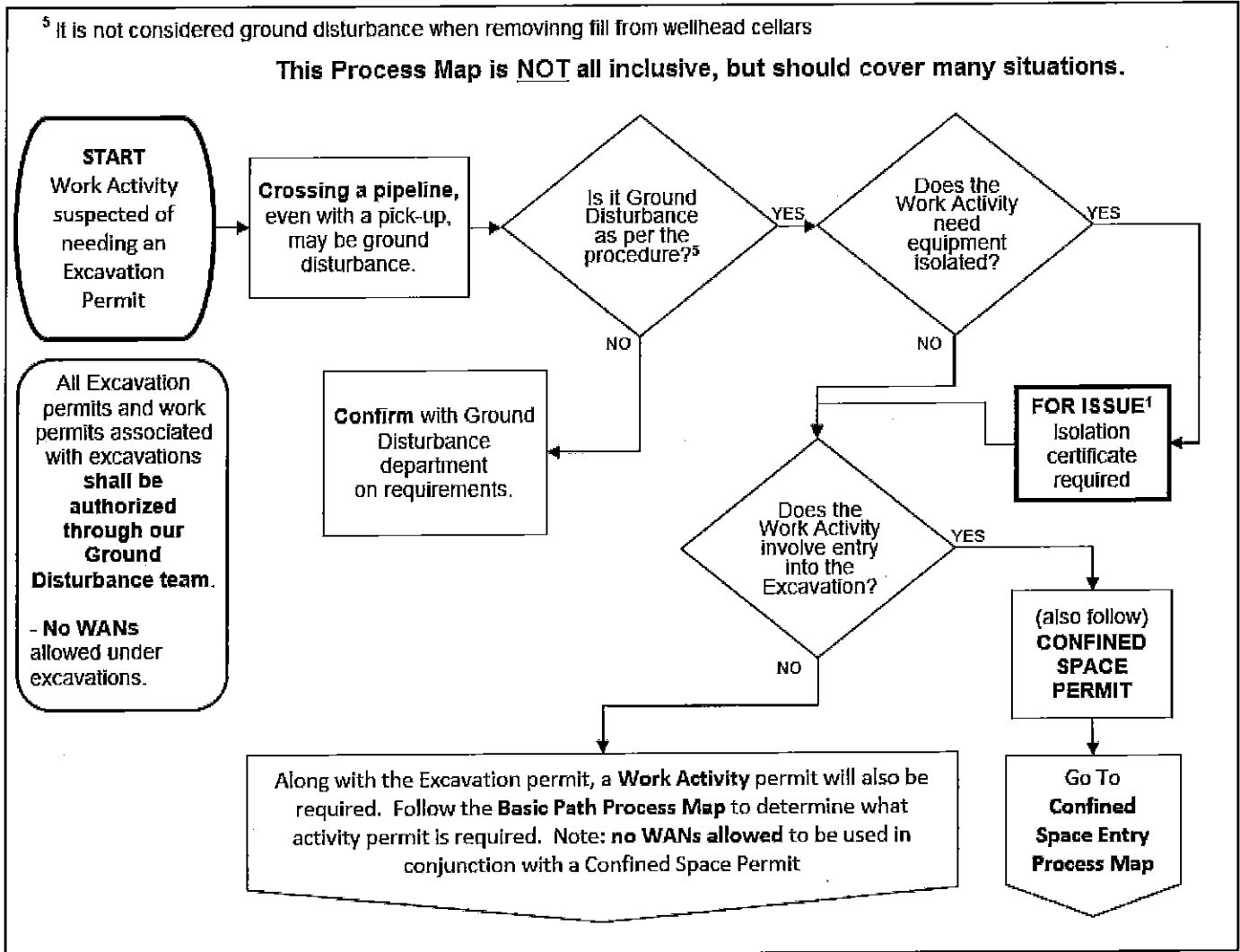
Continuation of Basic Path to Determine Permitting Process Map



### 8.4 Appendix D – Confined Space Entry Permitting Process Map

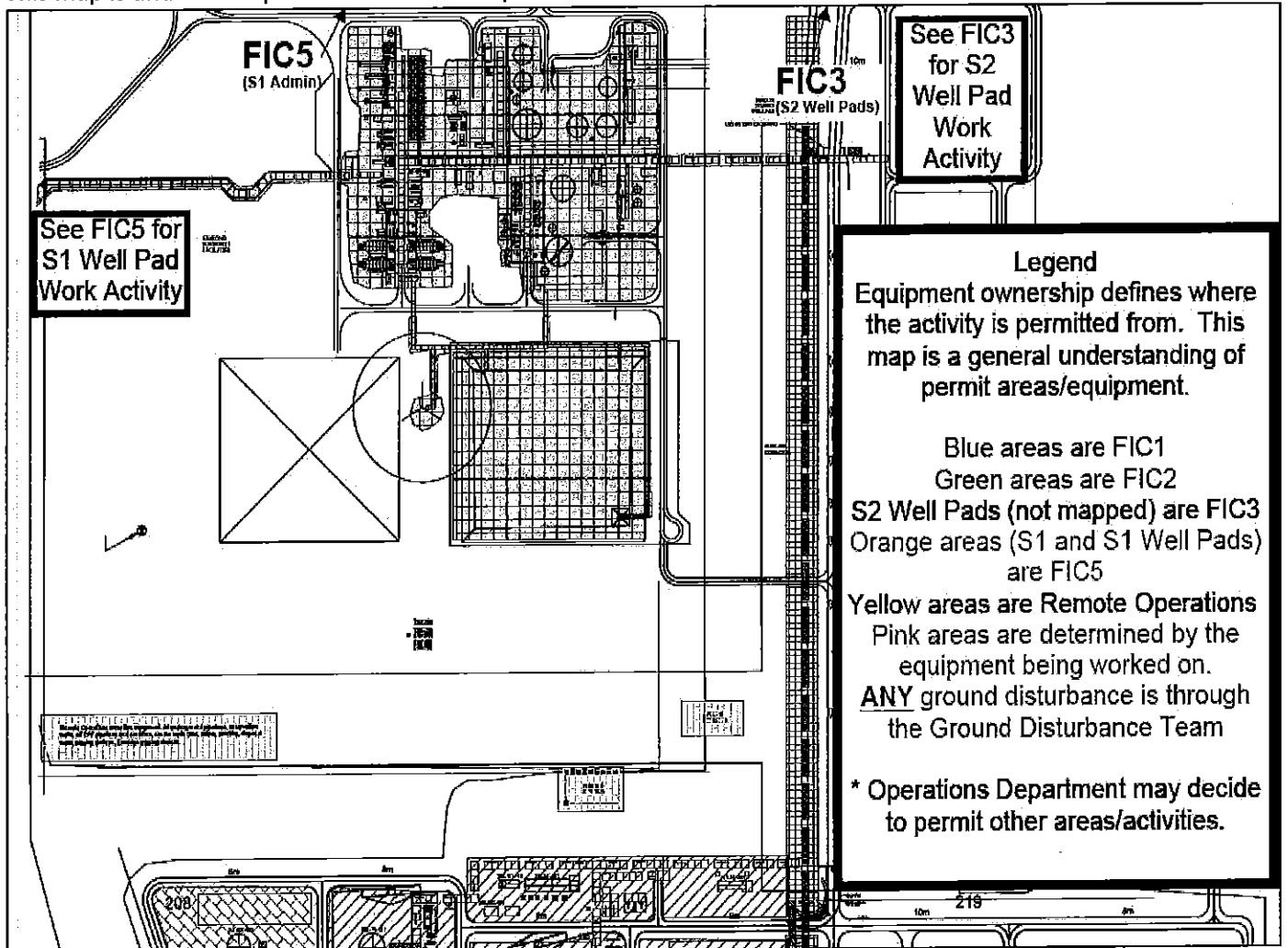


### 8.5 Appendix E – Excavation Permitting Process Map

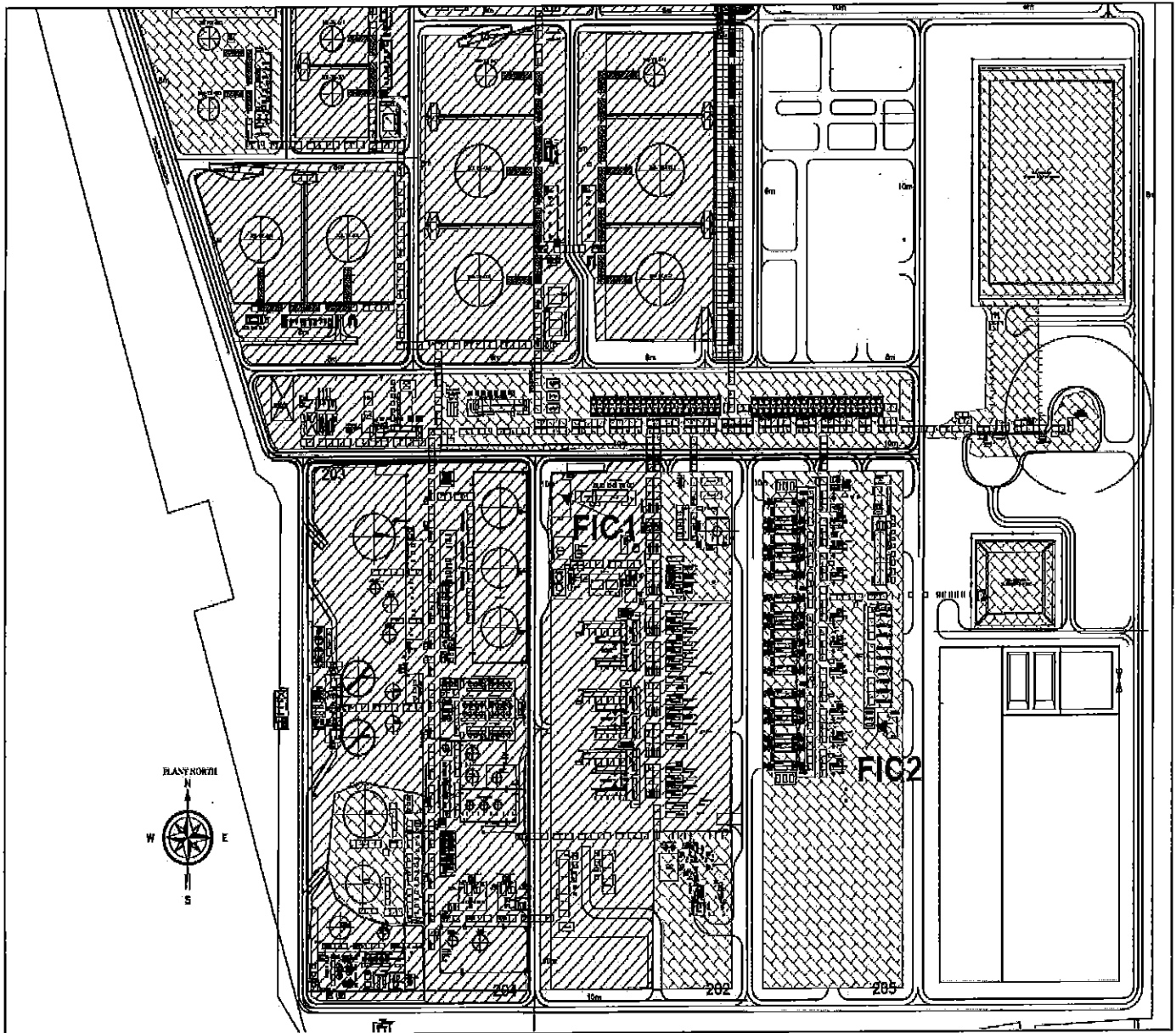


### 8.6 Appendix F – Surmont CPF Permitting Map

This map is under development and will be fully defined after the exclusion zones are defined.

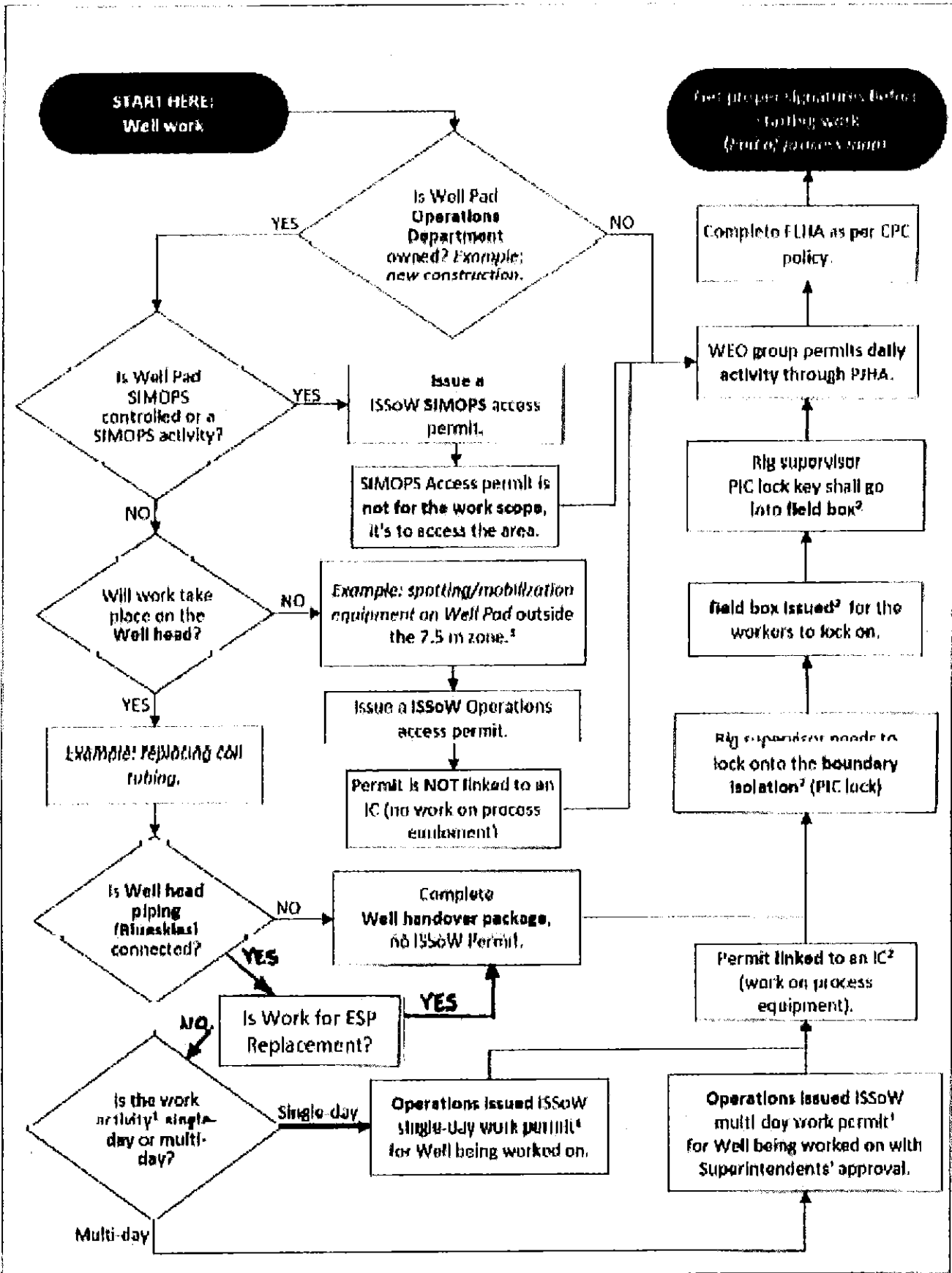


Continuation of Surrmont CPF Permitting Map



## 8.7 Appendix G – Well Work Process Map





**Continuation of Well Work Process Map**

**Permitting Examples:**

**Scenario #1 Well is handed over**

*Example: WP Operations Supervisor hands over well to Well Site Supervisor*

- o Forms required are Handover and Working Near or Over Live Documents.
- o No ISSoW Permit required
- o Well work is permitted through WEO (PJHA process)

**Scenario #2 Spotting equipment outside of the 7.5m zone**

*Example: Spotting Equipment (7.5m away), No work on Well*

- o ISSoW Operations Access Permit NOT linked to an IC
- o Re-issued every shift (Options as per ISSoW Procedure, sections: "Duration" and "Extension and Transfer")

**Scenario #3 Work on the well with BlueSky's attached**

*Example: Coil and Rigless Work*

- o ISSoW Operations Issued Single-day or Multi-day work permit
- o TISA Includes live system
- o IC Attached
- o Well work is permitted through WEO (PJHA process)

**Well Work Permitting Process Flow Definitions and Q&A**

	<sup>1</sup> Single/Multiday work permit is authorization to perform services on the well. Permit covers condition/hazards of surface equipment. WEO group is responsible for permitting Well work and related activities.
	<sup>2</sup> If applicable, isolation protects Well workers from process/electrical energy coming back from the CPF.
	<sup>3</sup> Work within the 7.5m zone may require additional paperwork [examples: Working near or Over Live Systems (OLS-HSE-PRC-5049), Lifting Device and Rigging (CPC-ALL-HSE-PRC-SOP-178)]
A	ISSoW SIMOPS Access Permit - This is a permit that is issued by the SIMOPS coordinator for access to a SIMOPS controlled pad.
B	ISSoW Operations Access Permit - This permit is a permit issued by operations for the access to the pad for spotting, mobilization, de-mobilization of wellwork equipment outside the 7.5 m zone (Working Near Live Equipment Form is not required as this only allows work outside the classified 7.5 m zone). This is made by the CPC Well Coordinator.
C	Well Hand Over Package - This includes the well handover form, working near live equipment form. No ISSoW permit in this package.
D	ISSoW Multiday work Permit - a work permit that is authorization to perform well work activities that will be ongoing for more than one day. Permit covers condition/hazards of surface equipment. WEO group is responsible and accountable for permitting any other work that is required using the PJHA permitting system. A working near live equipment form has to be included with this permit. This permit has to be approved by the Tech and Field Superintendents. The multiday permit approvals emails must be physically attached to the permit package.

## 9 Revision Record

Records must be retained in accordance with ConocoPhillips' Document Retention Schedule.

Page #	Revisions	Previous Information	Risk Assessment
24 of 26	Section 8.7 Appendix G – Well Work Process Map will require an extra box entered	N/A	N/A

## 10 Deviation

Procedure and log is kept and maintained by Operating Integrity.