



# Petroleum & Flammable Material Pipeline Licence



CENTRAL ENFORCEMENT DEPARTMENT



# Scope

- Background
- Scope of Licensing
- Implementation



Piping rack along Sakra Avenue



# Background

- Before 1 Sep 13, no legislations on P&FM pipeline
  - Most industries adopt SS512:2005-Code of Practice for design, construction & operation of pipeline service corridors
- Need to ensure safe construction and operations
  - Design, construction & operations
  - Fire safety requirements
  - Proper Emergency Response procedures
  - Maintenance regime
  - Earthwork management in vicinity of P&FM pipeline



# Background

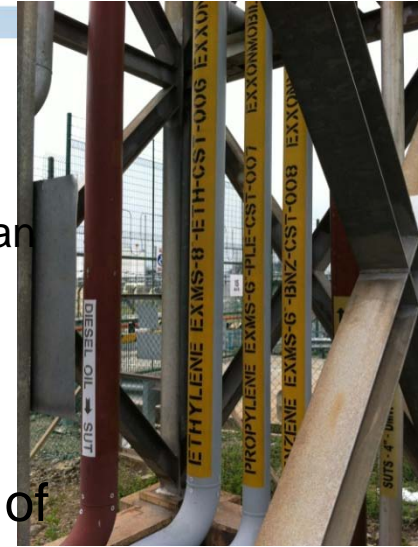
- SCDF had many dialogues with the industries:
  - SUT, SOXAL, Shell, SRC, PCS, Pipenet, ExxonMobil, Vopak, JTC
  - SCIC on 24 Sep 12, 12 Mar 13 and 18 Oct 13
  
- Discussed on the issue:
  - Licensee :
    - ◆ pipeline corridor owner and
    - ◆ pipeline owner
  - Licence fee



# Background (Pros and Cons)

## ■ Pipelines Corridors Owner

- Holistic knowledge of all pipelines in corridor area
  - ◆ QRA, Plans Approval, Fire Safety Cert, Emergency Response Plan
  - ◆ Maintenance regime of pipelines
- Critical activity owner (pipelines & piperacks)
  - ◆ One point of contact
- Speedy response (accessibility to site and identification of actual owner for the leak)

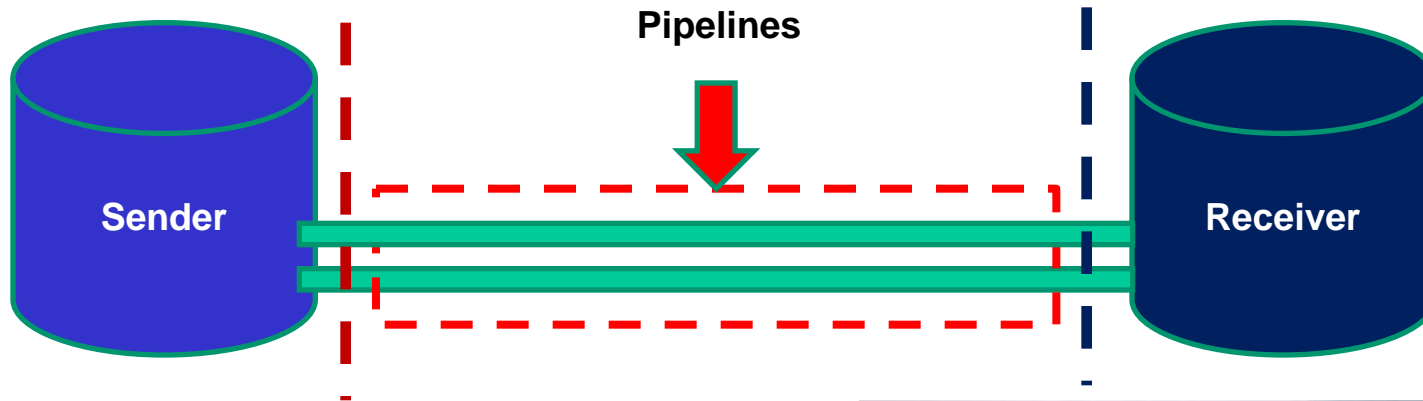


## ■ Pipelines Owner

- Expert on pipelines integrity & isolation arrangements
  - ◆ Design, Construction and Operation
- Control of safe operation
- A single licensee



# Background

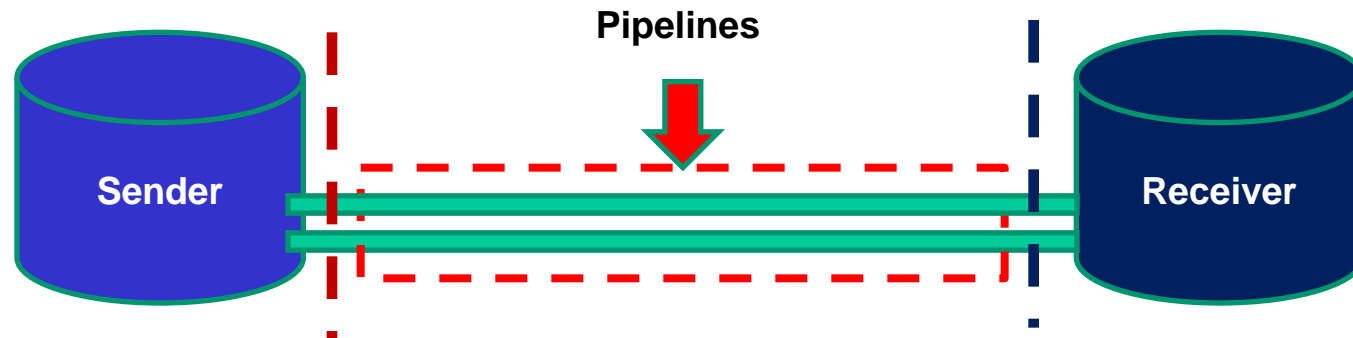


## ■ Regularise “Pipelines”



- Construction of pipelines outside premises boundaries
- At common pipeline corridor / piperack

# Background



- A circular sent out on 30 Nov 2010 to inform industries on the pipeline requirements
- For construction of pipeline outside premises boundaries, the following documents are required:
  - QRA submission
    - ◆ Evaluation and approval by HAZMAT Dept
  - Plan submission
    - ◆ Design, construction and operation pipeline complied with SS 512 and approval by Fire Safety Shelter Dept

# Fire Safety Act

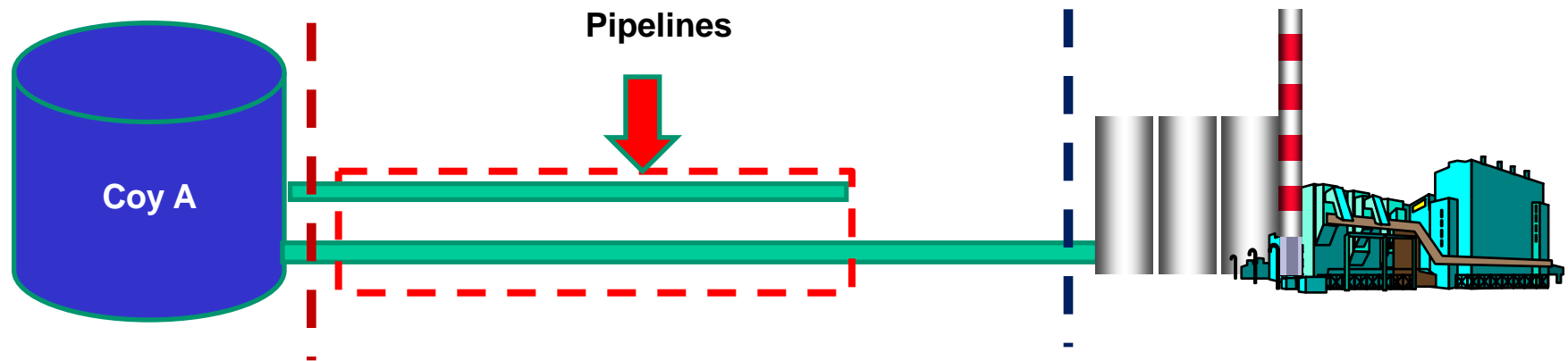
- “pipeline owner”, in relation to any section of a relevant pipeline, means —
  - (a) a person who owns or leases the piperack or pipetrack and manages that section of the relevant pipeline; or
  - (b) if paragraph (a) does not apply, a person who owns or leases that section of the relevant pipeline and uses that section of the relevant pipeline for the conveyance of any class of petroleum or any flammable material





# Scope of Licensing

- To license Pipelines Corridors Owner
- For segment outside corridor, to license Pipelines Owner



# Fire Safety (P&FM) Regulations

- “pipeline user”, in relation to a section of a licensed pipeline, means a person, not being the pipeline licensee

## Shared Responsibilities

- (a) who owns or leases that section of the licensed pipeline; and
- (b) who uses that section of the licensed pipeline for the conveyance of any class of petroleum or any flammable material



# Scope of Licensing

## ■ Responsibilities of Licensee:

- Records on use and maintenance of licensed pipeline (29A)
- General precautions (29B)
- Protection, inspection and maintenance of licensed pipelines (29C)
- Fire protection, detection and mitigation measures (29D)
- Company Emergency Response Team (29E)
- Security measures (29F)
- Emergency Response Plan (29G)



# Scope of Licensing

## ■ Duties of pipeline user

- **29H.** —(1) The pipeline user of a licensed pipeline shall, upon request of the Commissioner, render reasonable and necessary assistance to enable the pipeline licensee for the licensed pipeline to carry out its duties under the Act, to prevent or mitigate leakage or spillage of petroleum or flammable materials conveyed through the licensed pipeline or to control or extinguish any fire or related emergency which may affect the vicinity of the licensed pipeline.
- (2) The assistance required under paragraph (1) may include any or all of the following:



# Scope of Licensing

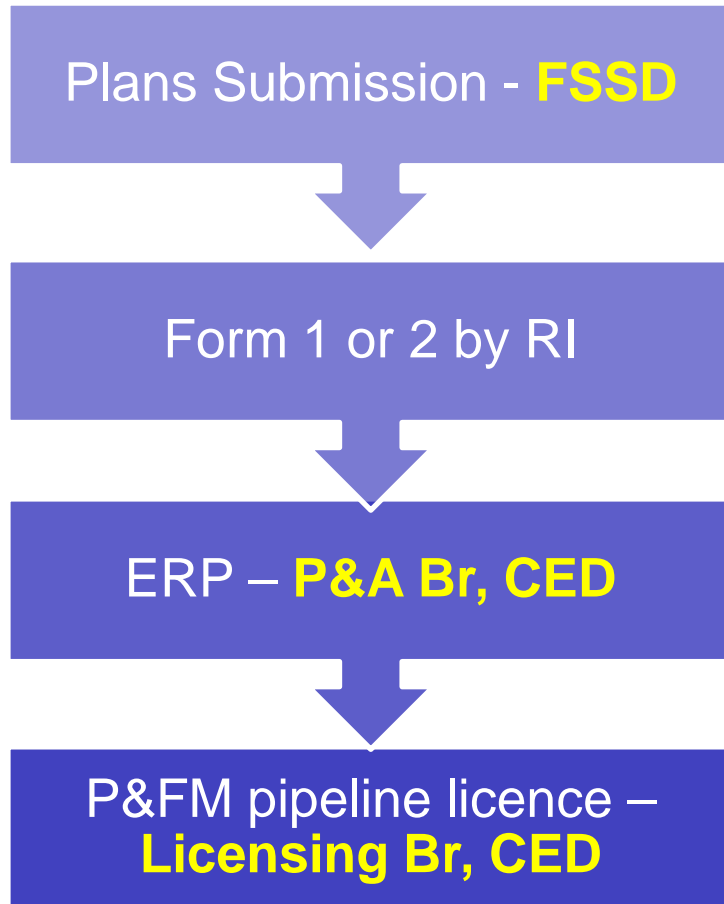
## ■ Duties of pipeline user

- (a) the provision of any information necessary to plan and implement preventive measures or for operational action;
- (b) the isolation of pipeline valves under the control of the pipeline user of the licensed pipeline to prevent leakage or spillage of petroleum or flammable materials conveyed through the licensed pipeline;
- (c) the suspension of use of the licensed pipeline by the pipeline user to enable maintenance and repairs to the licensed pipeline reasonably required for the purposes of fire safety.”



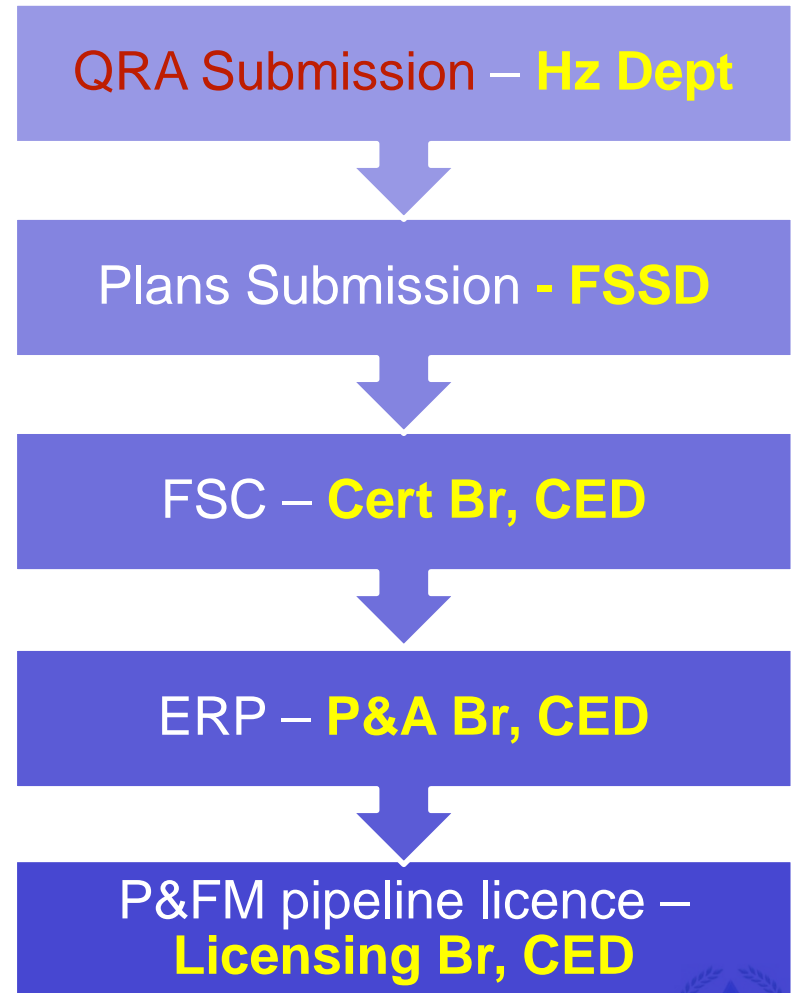
# Application Workflow

## Existing P&FM Pipelines



Note: QRA required if incident occurred or new additional works involved.

## New P&FM Pipelines



# Workflow for Existing Pipeline

To provide hard & soft copy of:

- 1) Plan Submission
- 2) Written Directions from FSSD
- 3) Form 1 or 2 by RI
- 4) Manufacturer Test Report / Letter
- 5) Thickness Test Report endorsed by P.E.
- 6) Emergency Response Plan
- 7) Templates of Details
- 8) Maintenance Report (kept by owner)

Submission of Licence Application

Applicant to come to HQSCDF

Create File for Applicant

Licence No.

Reference No.

Check

Documents in order

Payment

Credit Card / Nets or Cheque

A copy of receipt will be generated for each license using reference no. and license no.



# Workflow for Existing Pipeline

Processing Officer Process

Conduct Site Inspection

Approving Officer Process

Issue License

Licence sent out to Applicant



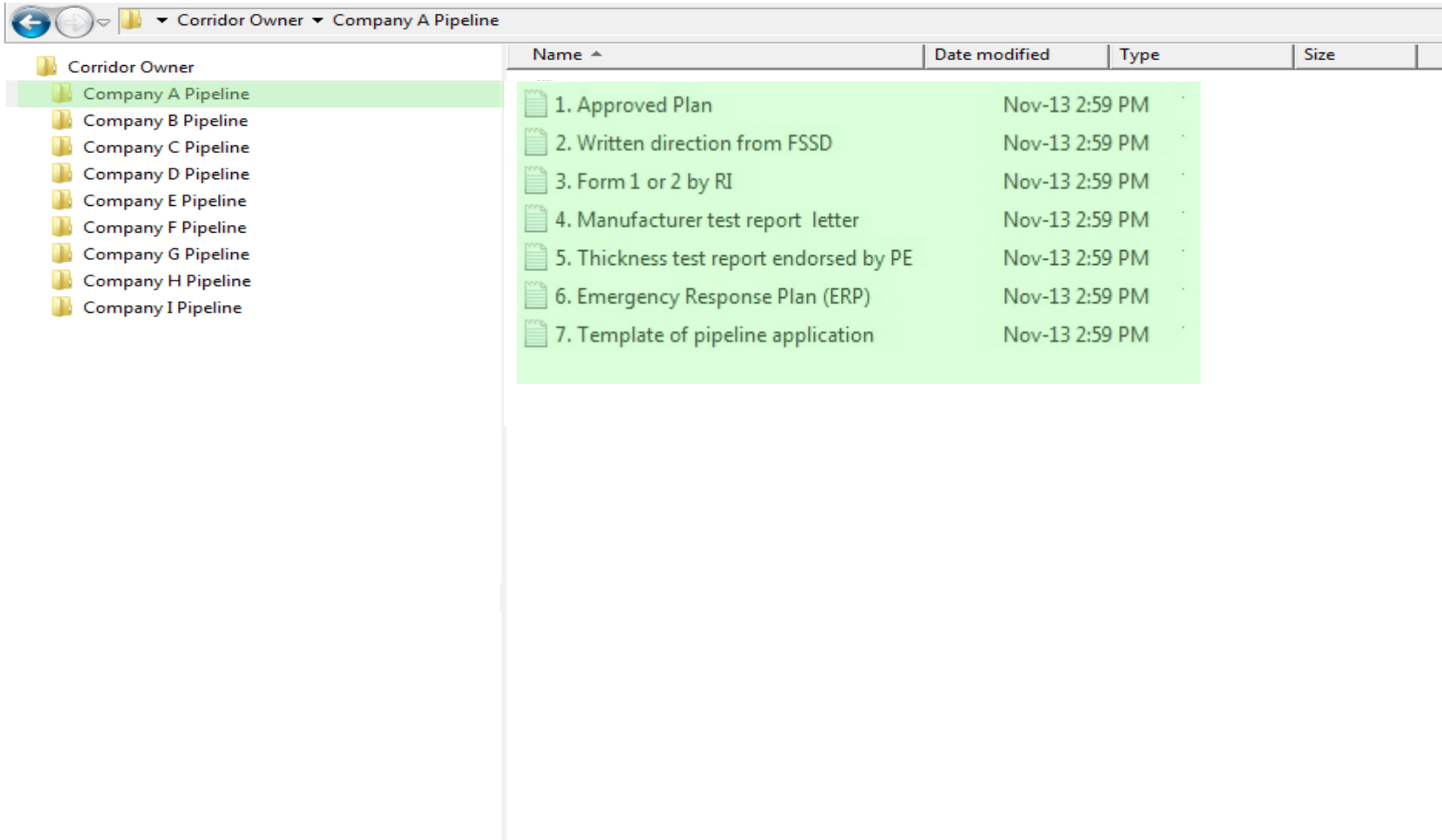


# Pipeline Licence Application

- Documents to be submitted (soft and hard copies)
  - 1) Approved Plans
  - 2) Written direction from FSSD
  - 3) Form 1 or 2 by RI
  - 4) Manufacturer test report / letter
  - 5) Thickness test report endorsed by PE
  - 6) ERP
  - 7) Template of pipeline application



# Pipeline Licence Application



The screenshot shows a file explorer window with the address bar set to "Corridor Owner > Company A Pipeline". The left pane displays a tree view of folders under "Corridor Owner", with "Company A Pipeline" selected. The right pane shows a table of files within "Company A Pipeline".

Name ^	Date modified	Type	Size
1. Approved Plan	Nov-13 2:59 PM		
2. Written direction from FSSD	Nov-13 2:59 PM		
3. Form 1 or 2 by RI	Nov-13 2:59 PM		
4. Manufacturer test report letter	Nov-13 2:59 PM		
5. Thickness test report endorsed by PE	Nov-13 2:59 PM		
6. Emergency Response Plan (ERP)	Nov-13 2:59 PM		
7. Template of pipeline application	Nov-13 2:59 PM		



# Template in Excel Format

The screenshot displays the Microsoft Excel interface with a form template titled "Pipeline Application Details.xlsx". The form is structured as follows:

- 1 Applicant Details**
  - 2 Name (max 70 characters) \*
  - 3 NRIC (max 9 characters) \*
  - 4 Profession (max 70 characters)
- 5 Company Details \***
  - 6 Name (max 70 characters) \*
  - 7 UEN (max 11 characters) \*
- 8 Company Address \***
  - 9 Block Number (max 10 characters) \*
  - 10 Street Name (max 250 characters) \*
  - 11 Level Number (max 10 characters) \*
  - 12 Unit (max 10 characters) \*
  - 13 Building Name (max 250 characters) \*
  - 14 Postal Code (max 6 characters) \*
  - 15 Location (max 250 characters) \*
- 16 Company Contact \***
  - 17 Email Address (max 100 characters) \*
  - 18 Telephone Number (max 8 characters) \*
  - 19 Ext Number (max 6 characters)
  - 20 Fax Number (max 8 characters)
  - 21 Mobile Number (max 8 characters)
  - 22 Hot line (earthwork) (max 8 characters) \*
- 23 Applicant Address \***
  - 24 Block Number (max 10 characters) \*
  - 25 Street Name (max 250 characters) \*

The Excel ribbon shows the "Home" tab with various formatting options. The status bar at the bottom indicates "Count: 22" and "100%". The taskbar shows the Start button and several open applications including "4 Mic...", "3 Int...", "Pipeline", and "Micros...". The system clock shows "11:36 AM".



# Scope of Licensing

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- Licence fees based on cost recovery
  - Based on cost for processing and inspection
  - Licence validity for one year
  - \$350 per year



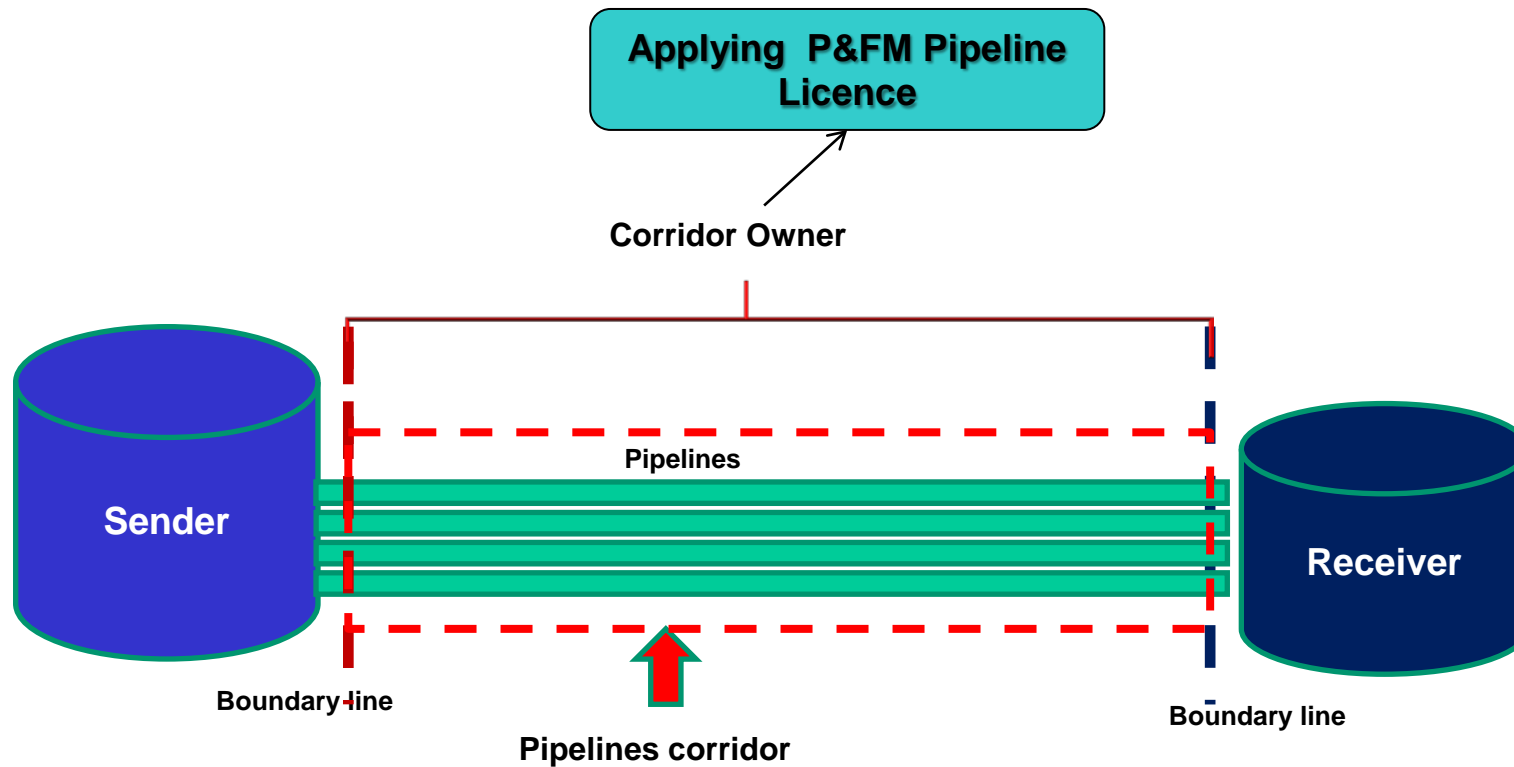
# Implementation

- Amendment of P&FM Regulations gazetted on 1 Sep 2013
- Plan submission with FSSD early
- Target to receive pipeline licence application on 1 Dec 13
  - Preferably for corridor owner to come in for licence application with pipeline owner, for pipelines involving both
- Implementation time
  - 1 Mar 2014



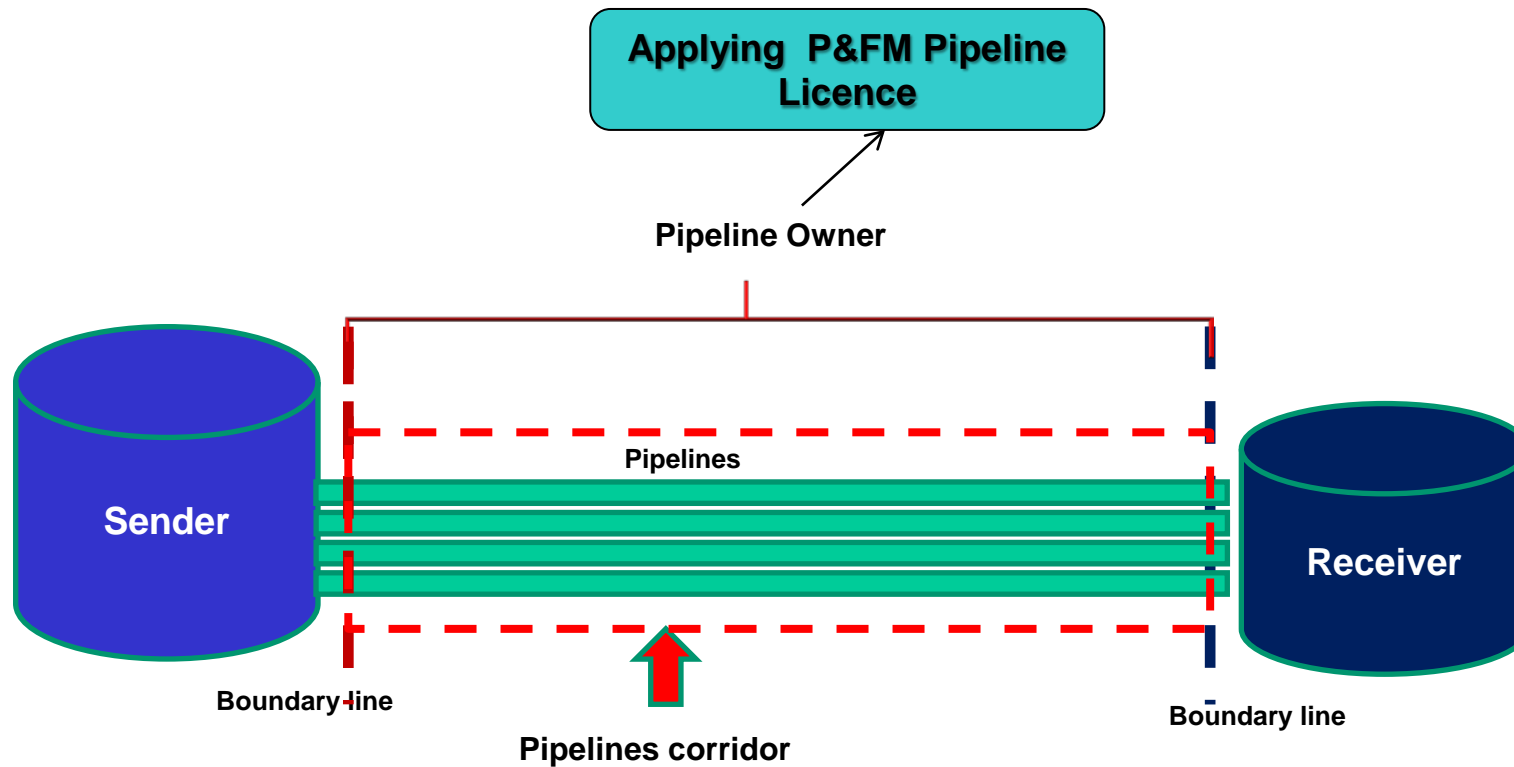
# Scope of Licensing

- To licence Pipelines Corridors Owner



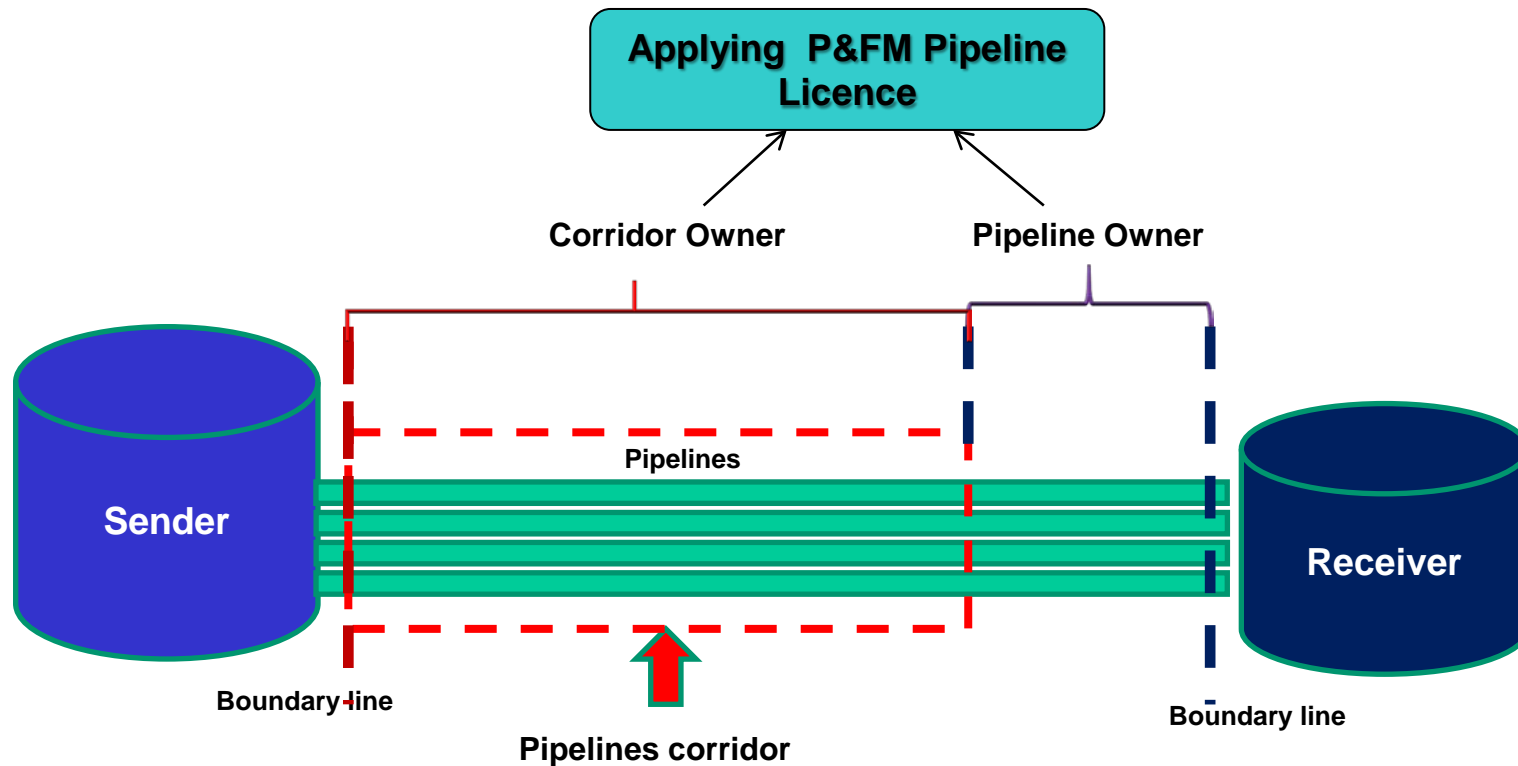
# Scope of Licensing

- To licence Pipelines Owner



# Scope of Licensing

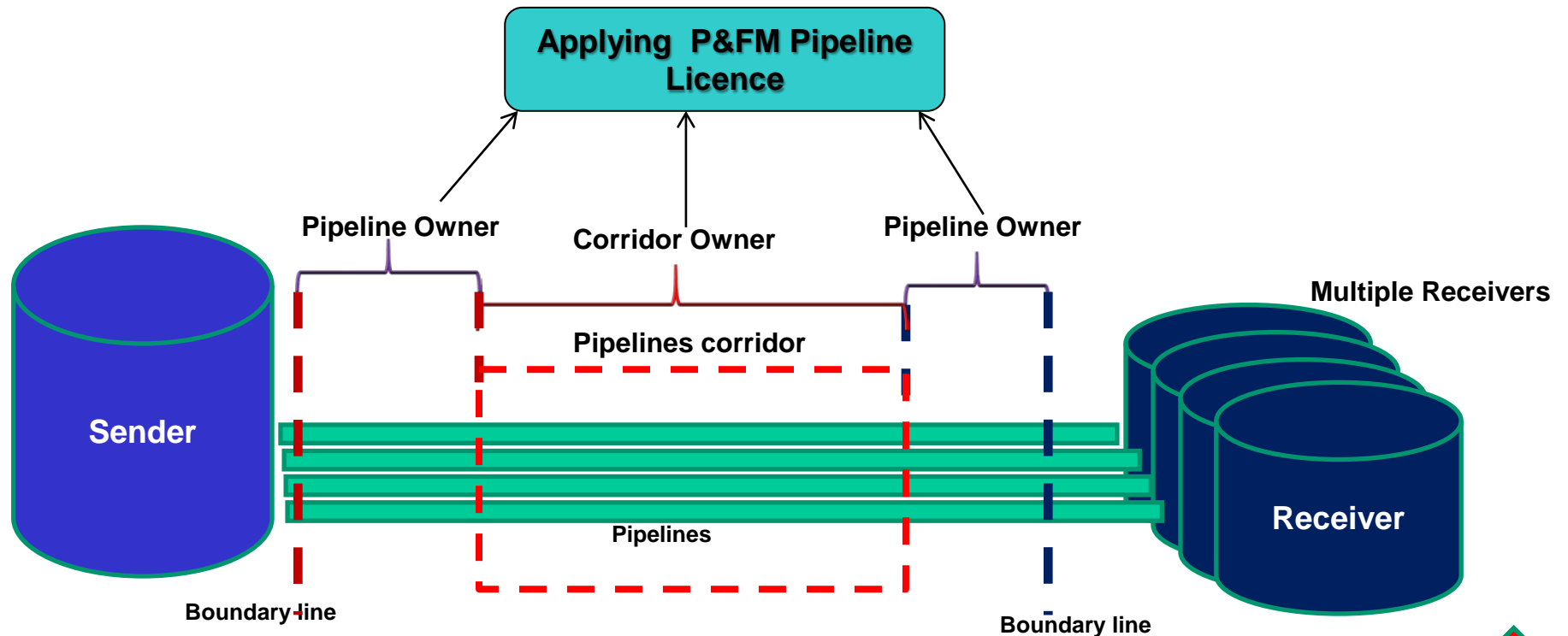
- To license Pipelines Corridors Owner
- For segment outside corridor, to license Pipelines Owner





# Scope of Licensing

- To license Pipelines Corridors Owner
- For segment outside corridor, to license Pipelines Owner



# Purchase of FSA/ Regs

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Toppan Printing  
Ms Parmes @  
68463894



# Pipelines Enquiry:

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## ■ QRA (HAZMAT Dept)

◆ Email: [ng\\_huan\\_chao@scdf.gov.sg](mailto:ng_huan_chao@scdf.gov.sg)

◆ Tel: 68483323

## ■ Plan submission (FSSD)

◆ Email: [han\\_fook\\_kuang@scdf.gov.sg](mailto:han_fook_kuang@scdf.gov.sg)

◆ Tel: 68481467

## ■ FSA / FS Regulations (CED)

◆ Email: [lo\\_wai\\_mun@scdf.gov.sg](mailto:lo_wai_mun@scdf.gov.sg)

◆ Tel: 68481431



# Pipelines Enquiry:

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## ■ ERP / CERT

◆ Email: [ng\\_wee\\_boon@scdf.gov.sg](mailto:ng_wee_boon@scdf.gov.sg)

◆ Tel: 68483326

## ■ Pipelines Licence Application

◆ Email: [alice\\_seto@scdf.gov.sg](mailto:alice_seto@scdf.gov.sg)

◆ Te: 68481485



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Thank you

