

## ESF 10 INCIDENT ANNEX A

# PIPELINE EMERGENCY RESPONSE FOR CHEMICAL AND PETROLEUM PIPELINES EXCEPT NATURAL GAS

### **Primary Agency**

#### **Environmental & Public Protection Cabinet (EPPC), Department for Environmental Protection (DEP)**

*Primary state coordination for incidents involving chemical and petroleum pipelines, excluding natural gas, natural gas liquids, liquefied natural gas, synthetic gas, or mixtures thereof.*

Note: If organizational names change, the successor agency to DEP assumes these duties.

### **Supporting Agencies**

- Office of the State Fire Marshal
- KY Department of Military Affairs – Division of Emergency Management (KyEM)
- Kentucky Army & Air National Guard
- Kentucky Community Crisis Response Board (KCCRB)
- KY Transportation Cabinet – Division of Highways (KYTC)
- **Justice & Public Safety Cabinet (JPSC)** – Kentucky State Police (KSP)
- JPSC – Department of Motor Vehicle Enforcement (*or successor function within KSP*)
- Cabinet for Health & Family Services – Department for Public Health (DPH)
- Department of Agriculture
- Kentucky Office of Homeland Security (KOHS)
- American Red Cross (ARC)

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### **Purpose**

Provide a coordinated framework for local, state, federal, and responsible-party actions to protect life, property, and the environment from **actual or threatened releases** involving **chemical or petroleum pipelines** (non-natural gas).

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### **Situation & Assumptions**

#### **Situation**

- Hazardous-material pipelines (industrial chemicals; petroleum products) cross all regions of the Commonwealth. Line diameter/length vary by **local distribution** vs. **interstate transmission**.

## Assumptions

- Pipeline releases create **specialized hazards** requiring procedures matched to the product and phase (liquid/vapor).
  - Petroleum liquids (crude oil, diesel, kerosene, gasoline, jet fuel, heating/fuel oil) can evolve **vapors heavier than air**; vapors may **migrate to ignition sources and flash back**.
  - **Crude oil may contain hydrogen sulfide (H<sub>2</sub>S)**; it is highly toxic, and olfactory fatigue makes odor unreliable—**do not enter** without appropriate detection and PPE.
  - The pipeline operator will dispatch **trained, equipped company responders**; local/state efforts must coordinate with them.
  - Liquid releases can contaminate **soil, surface water, groundwater, and sewers**; establish **containment** early to aid recovery and reduce impacts.
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## **Concept of Operations (Summary)**

- All operations use **ICS under NIMS**. Establish an **ICP** and, at minimum, an **Incident Commander (IC)**, **Safety Officer (SO)**, and **Operations Section Chief (OSC)**.
  - Implement **hot/warm/cold zones**, control access, and start a **Site Safety Plan/HASP**.
  - Transition to **Unified Command (UC)** when multiple authorities (DEP/KSP/KYTTC/local fire/HazMat/operator, etc.) have jurisdictional roles.
  - Use **EOC/ESF-10** for resource ordering, public information (via ESF-15/JIC), and state/federal coordination.
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## **Immediate Actions – Local Responders (Quick Checklist)**

### **Upon dispatch / en route**

- Obtain product, pressure, and line ownership (if known).
- Approach **uphill/upwind**, identify wind with meters/flags.
- Stage away from vapor cloud/low areas; **do not** drive into visible vapors.

### **On scene**

- **Size-up:** product, phase, leak indicators, weather, topography, exposures, waterways, ignition sources.
  - Establish **ICS**; assign **SO**; set **control zones**; begin **air monitoring** (LEL/O<sub>2</sub>/H<sub>2</sub>S/CO; PID/FID as appropriate).
  - **Eliminate ignition sources:** engines, non-intrinsically safe devices, pilot lights, smoking, line power where feasible/safe.
  - **Do not** extinguish the **primary pipeline fire** (it may be controlling the release). You may control **perimeter/secondary fires** if safe.
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- Issue **protective actions** (evacuation/shelter-in-place) with ESF-2/ESF-13 support; avoid doorbells/telephones in **flammable gas** atmospheres—use knock-and-announce/PA.
- **Notify immediately:**
  - **KyEM Duty Officer:** 1-800-255-2587
  - **DEP Emergency Response Hotline:** 1-800-928-2380
  - **Pipeline operator** (from markers/dispatch database) – provide: name/title, call-back numbers, precise location (GPS if possible), staging/meet point.
  - **Railroad** if tracks traverse the area—request temporary traffic hold.
- Coordinate early with **operator reps**; verify identity on arrival; integrate into UC.
- Protect **waterways & storm/sewer inlets**; request **KYTC/public works** for sand/booms/temporary diking as directed by DEP/UC.
- Begin **public information** coordination via PIO/JIC; maintain one-voice messaging.

### Safety Notes

- Avoid **low-lying areas** where heavier-than-air vapors pool.
- Assume **H<sub>2</sub>S** with crude releases; monitor continuously; select PPE accordingly.
- No entry into hot zone without proper **HAZWOPER level, detection, and PPE**.

### *Roles & Responsibilities*

#### Local Responders & Agencies

- **Contact & integrate operator**; maintain liaison until arrival/ID.
- **Scene safety & control:** zones, isolation distances, ignition control, traffic/perimeter.
- **Protective actions:** evacuation/shelter-in-place; special procedures for flammable gas.
- **Notifications:** KyEM, DEP, railroad(s), local EOC/ESF-10.
- **Medical care & triage;** move non-responders **upwind/upgrade**.
- **Fire control:** do not extinguish primary impingement on the pipeline; manage exposures/perimeter as conditions allow per SO/OSC.
- **Environmental protection:** initial diversion/containment consistent with DEP direction.
- **Documentation:** times, meter readings, photos, protective actions, costs.

#### State Agencies

##### Primary – DEP (EPPC)

- Lead **environmental coordination:** containment, cleanup, waste management; protect air/water/land.
- Assign duties among state agencies; oversee **contracting/technical support** for environmental objectives.
- Establish techniques for **containment/removal/disposal**; identify and stage specialized equipment.
- Provide a **24/7 SEOC coordinator**; integrate with UC and local EOC.

**Office of the State Fire Marshal**

- Technical guidance on **fire/explosion hazards**; coordinate suppression support with IC/OSC.
- Provide **24/7 SEOC** representation as needed.

**Division of Emergency Management (KyEM)**

- Activate **SEOC** as needed; request agency coordinators.
- **Area Managers** serve as on-scene/state liaison and support resource coordination.
- Notify Governor if major population impact is likely.
- Liaison with **KY National Guard**; notify **FEMA Region IV** when federal support may be required.
- Provide **PIO/JIC support** and coordinate state public information.
- Notify **KOHS** for suspected/confirmed terrorism links.

**Kentucky Army & Air National Guard**

- Provide **security/manpower, emergency comms**, and SEOC liaison as requested.

**KCCRB**

- Behavioral health support for **survivors, community, and responders**; SEOC liaison as needed.

**KYTC – Division of Highways**

- Coordinate **road closures/detours** with KSP/IC; deploy **intrinsically safe** traffic control devices.
- Under DEP direction, assist with **diversions/cofferdams/temporary works** to protect waters.
- Provide 24/7 SEOC coordination as needed.

**JPSC – Kentucky State Police**

- Coordinate closures/traffic and **perimeter control**, evidence protection.
- Support **warnings/evacuations**; provide SEOC liaison.

**JPSC – Department of Motor Vehicle Enforcement** *(or successor function)*

- Security & **traffic control**; assist warnings/evacuations.

**Cabinet for Health & Family Services – DPH**

- Coordinate **medical resources**; technical guidance on **protective actions** and public health advisories.
- Provide **24/7 SEOC** coordination as needed.

**Department of Agriculture**

- Protective actions for **animal health**; technical guidance on impacts; coordinate treatment/disposition for affected livestock/wildlife.

### Kentucky Office of Homeland Security

- Assistance/support to responding agencies; **federal coordination** for terrorism-related events.

### Volunteer Organizations

#### American Red Cross

- When requested/accepted, provide **shelter, feeding, mass care, and responder support**.
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### **Planning & Safety**

- **ICS/NIMS forms and IAP**: produce a written IAP for multi-operational-period or multi-agency response (ICS-202/203/204/205/206/208/215/215A).
  - **Site Safety Plan/HASP** (written): hazards, monitoring plan, PPE, zone maps, decon, medical surveillance, evacuation routes, receiving facility capabilities.
  - **Air/Atmospheric Monitoring**: LEL/O<sub>2</sub>/H<sub>2</sub>S/CO minimum; PIDs/FIDs/FTIR as available.
  - **Water Protection**: deploy booms/underflow dams per DEP; track **waste streams** and manifests.
  - **Evidence Preservation**: coordinate with KSP/LE; maintain chain of custody where appropriate.
  - **Public Information**: establish **PIO/JIC** and unify messaging with operator and agencies.
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### **Communications & Notifications (Key Numbers)**

- **KyEM Duty Officer: 1-800-255-2587**
  - **DEP Emergency Response Hotline: 1-800-928-2380**
  - **Pipeline Operator**: *from nearest marker/dispatch resource; provide GPS, safe meet point*
  - **Railroad Dispatch**: *if tracks traverse the impact area*
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### **Demobilization & After-Action**

- Confirm cleanup endpoints with **DEP** (and EPA/USCG if federalized).
  - Ensure equipment **decon/rehab**, finalize **waste profiling/manifests**, and complete responder **medical monitoring** as indicated.
  - KyEM will facilitate an **After-Action Report/Improvement Plan** within **30 days**; update this Annex/SOPs accordingly.
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**References**

- **KRS 224.10-100; KRS 224.01**
- **OSHA 29 CFR 1910.120 (HAZWOPER)**
- **CERCLA/SARA/EPCRA; Clean Water Act / Oil Pollution Act; National Contingency Plan (40 CFR 300)**
- **National Response Framework; NIMS**

