



# OREGON STATE FIRE MARSHAL **2022 CR2K ANNUAL SUMMARY**

November 2023



### MISSION

Protect people, property, and the environment from fire and hazardous materials.

### VALUES

#### Integrity

We believe in being honest, fair, and doing the right thing in everything we do.

#### Dedication

We are committed to performing our work the best we can in support of our mission, customers, stakeholders, public, and each other.

#### Leadership

We are committed to be a leader in the Oregon fire service, lead our organization, and lead ourselves as individuals in our day-to-day work.

#### Partnership

We believe our success and the success of others depends on collaboration with our stakeholders.

#### Service to Others

We believe that serving others is a cornerstone of our mission, our day-to-day work, and is all inclusive.

Statutory Authority  
Oregon Revised Statute:  
Chapter 453



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## COMMUNITY RIGHT TO KNOW

### EXECUTIVE SUMMARY

The Oregon Community Right to Know and Protection Act (ORS 453.307 to ORS 453.520) requires employers in Oregon that possess certain quantities of hazardous substances to submit an annual report to the Oregon State Fire Marshal's Office, Community Right to Know (CR2K) program. This law also requires emergency responders to report to OSFM incidents involving the release, or threatened release, of hazardous substances.

A hazardous substance is defined as a substance for which the Oregon Occupational Safety and Health Administration (OR OSHA) requires the manufacturer to develop a Safety Data Sheet.

The reportable quantity thresholds for most substances are:

- 500 pounds of a solid
- 500 gallons of a liquid
- 500 cubic feet of a vaporous gas
- 500 gallons of a liquefied or cryogenic gas

For highly toxic substances or explosives, the thresholds are:

- 5 gallons of a liquid
- 10 pounds of a solid
- 20 cubic feet of gas

Extremely hazardous substances (EHS) designated by the Environmental Protection Agency are reportable at the specific threshold planning quantity established for each substance. Radioactive substances that are not within a sealed source are reportable at any quantity (OAR 837-085-0070 (2) (a)).

The reportable quantity threshold for gasoline and diesel in underground storage tanks at retail gasoline service stations is 75,000 gallons and 100,000 gallons respectively.

The reports, which are submitted in the online reporting system CHS Manager, are frequently reviewed, and validated. Types of validation include contacting facilities for clarification of submitted data, reviewing quality control queries, and conducting in-person and phone audits to confirm and assist with compliance. A hazardous substance information hotline and an online help desk are available to facilities for assistance with submitting their information.

The public has access to all non-confidential information reported by facilities and are also able to obtain information about hazardous substance incidents. Fire agencies, hazardous material response teams, law enforcement, emergency planners, health officials, and local and state agencies also have access to this information. The data helps these partners make informed decisions when taking steps to protect life, property, and the environment from a hazardous materials incident.



For more information, please visit our CR2K website or call the Hazardous Substance Information Hotline at 503-378-6835 or 1-800-454-6125. To request or obtain hazardous substance information collected by CR2K, please visit <https://www.oregon.gov/osfm/industry/Pages/CR2K.aspx>, or e-mail [OSFM.Cr2K@osfm.oregon.gov](mailto:OSFM.Cr2K@osfm.oregon.gov).



## HAZARDOUS SUBSTANCE STORAGE – FACILITIES REPORTING

### Reporting Frequency by North American Industry Classification System (NAICS) Code

This table lists the top ten specific industry classifications with the most facilities reporting in 2022.

NAICS	Description	Facility Count
517312	Wireless Telecommunications Carriers (except Satellite)	2,933
921190	Other General Government Support	776
221122	Electric Power Distribution	522
424710	Petroleum Bulk Stations and Terminals	328
441310	Automotive Parts and Accessories Stores	282
811111	General Automotive Repair	241
611110	Elementary and Secondary Schools	231
447110	Gasoline Stations with Convenience Stores	231
517311	Wired Telecommunications Carriers	217
221310	Water Supply and Irrigation Systems	198





## HAZARDOUS SUBSTANCE STORAGE – HAZARD CLASS REPORTING FREQUENCY

Facilities reporting substances to CR2K must also report the physical and health hazards associated with the substance. The hazards used for reporting are those adopted by the U.S. Environmental Protection Agency (EPA) from the Occupational Safety and Health Administration's (OSHA) Hazard Communication Standard (HCS) (29 CFR 1910.1200). Several custom codes used only by the Oregon Community Right to Know program are also used. Facilities must identify all applicable hazards utilizing the substance's safety data sheet (SDS). Many substances have multiple hazards. This table shows how many times each hazard was reported for the 2022 reporting period.

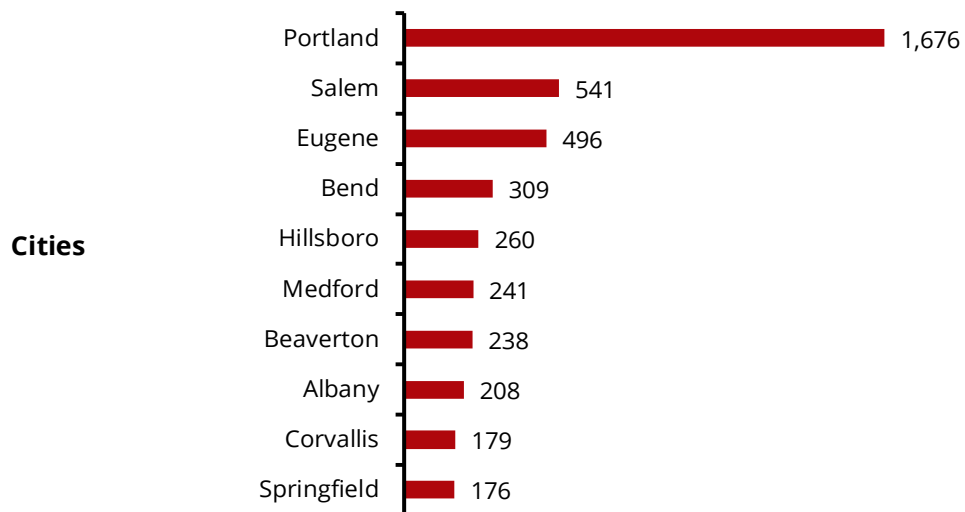
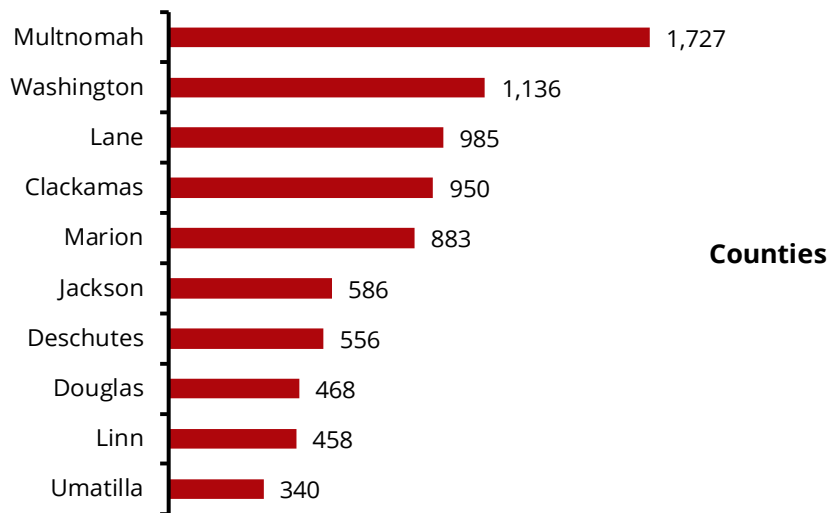


Hazard	Number of Times Reported
Serious Eye Damage or Eye Irritation	22,698
Skin corrosion or irritation	21,691
Acute Toxicity	14,528
Respiratory or Skin Sensitization	13,223
Flammable	13,121
Specific Target Organ Toxicity	10,737
Carcinogenicity	10,402
Gas under Pressure	8,970
Reproductive Toxicity	7,054
Aspiration Hazard	6,960
Corrosive to Metal	6,443
Explosive	6,088
Health - Hazard Not Otherwise Classified	4,645
Physical - Hazard Not Otherwise Classified	4,517
Simple Asphyxiant	3,957
Germ cell Mutagenicity	2,885
Oxidizer	2,247
Combustible Dust	1,354
Poisonous Material	1,026
Poisonous Gas	639
In contact with water emits flammable gas	260
Radioactive	238
Fire Hazard	197
Immediate Hazard	164
Delayed Hazard	123
Sudden Release of Pressure	102
Pyrophoric (Liquid or Solid)	84
Infectious or Etiologic (Biological Hazard)	75
Self-reactive	70
Organic Peroxide	68
Pyrophoric Gas	67
Reactive	53
Self-heating	53
<b>Total</b>	<b>164,739</b>

The following table shows the number of facilities in each county that are reporting an extremely hazardous substance (EHS) at or above the Threshold Planning Quantity.

County	Count Of Facility ID
Multnomah	771
Washington	379
Clackamas	242
Marion	239
Lane	180
Linn	139
Jackson	115
Deschutes	107
Umatilla	107
Douglas	60
Morrow	53
Yamhill	53
Clatsop	50
Klamath	44
Benton	44
Polk	40
Lincoln	40
Hood River	34
Wasco	28
Columbia	28
Coos	27
Malheur	27
Crook	27
Josephine	24
Jefferson	23
Tillamook	22
Union	19
Baker	19
Gilliam	16
Lake	13
Curry	11
Wallowa	10
Sherman	10
Grant	6
Harney	6
Wheeler	3
Total	3,016

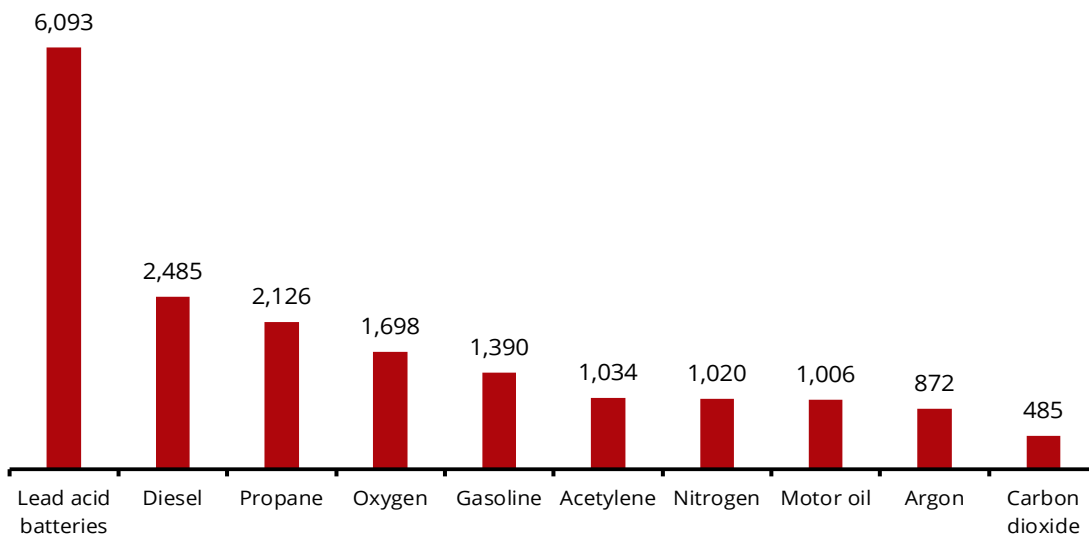
The charts below show the top ten counties and cities with the most facilities reporting.





## SUBSTANCES REPORTED

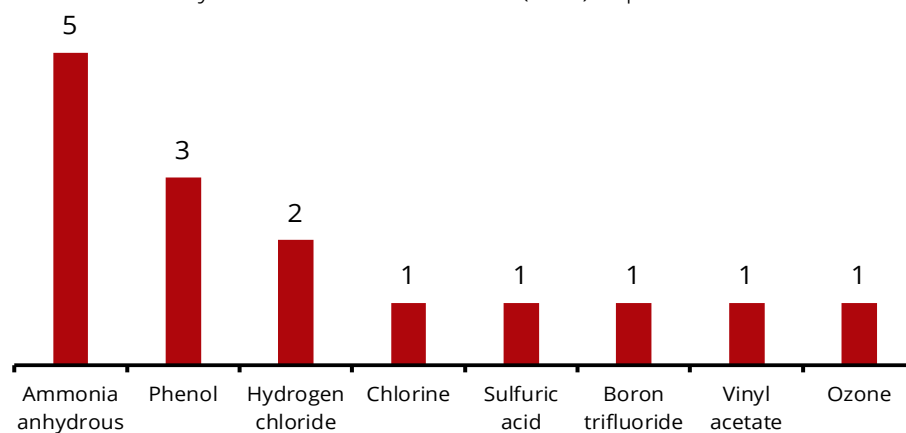
The ten most frequently reported substances in 2022 based upon the number of times reported.



The five most frequently reported pure extremely hazardous substances (EHS)



Pure extremely hazardous substances (EHS) reported over 100k units





The table below shows the substances that were reported in quantities exceeding one million pounds, gallons, or cubic feet along with the number of times each was reported. Facility counts are based upon the chemical name as reported by the facility. The chart may contain duplicates because of the use of a different name for the same substance.

Chemical Name	Count of Facility ID
LEAD ACID BATTERIES	14
FERTILIZER 46-0-0	11
GASOLINE	11
FERTILIZER UREA	9
WOOD DUST	8
FERTILIZER 21-0-0 AMMONIUM SULFATE	7
DIESEL	6
PORTLAND CEMENT	5
FERTILIZER MURIATE OF POTASH	5
DIESEL FUEL	4
DENATURED ETHANOL	4
PENTACHLOROPHENOL PRESSURE TREATED WOOD STELLA-JONES CORPORATION	4
PEAT MOSS	3
FERTILIZER 11-52-0	3
FERTILIZER UREA 46-0-0	3
ALCOHOL DENATURED FUEL GRADE (NCP)	3
KMG-B PENTA OL TECHNICAL PENTA WOOD PRESERVATIVE PESTICIDE KMG-BERNUTH INC	3
FERTILIZER 0-0-60 POTASH	3
LIMESTONE	2
JET A FUEL	2
LITHIUM ION BATTERIES	2
LEAD ACID BATTERIES-DRY	2
DIESEL FUEL 2 LOW SULFUR	2
GROUND LIMESTONE	2
FERTILIZER 0-0-60 MURIATE OF POTASH	2
MICROTHENE MP635962X01, 1000BOX; POLYETHYLENE; PE; ETHYLENE/HEXENE COPOLYMER / EQUISTAR CHEMICALS LP	2
GRANULAR TRIO	2
FERTILIZER 11-52-0 MONO-AMMONIUM PHOSPHATE WILCO-WINFIELD LLC	2
FERTILIZER 16-20-0 MONO-AMMONIUM PHOSPHATE SULFATE JR SIMPLOT	2
FERTILIZER 16-20-0 WITH 13% SULFUR AGROPELL BY SIMPLOT AMMONIUM PHOSPHATE	2
FERTILIZER 20.5-0-0 SULFATE PLUS, GRANULAR AMMONIUM SULFATE AGRIUM CANADA	2
FERTILIZER MURIATE OF POTASH MOSAIC	2
FERTILIZER 21-0-0 +(S) AMMONIUM SULFATE JR SIMPLOT	2
FERTILIZER K-MAG, ALL GRADES THE MOSAIC COMPANY	2
FERTILIZER AMMONIUM SULFATE	2
FERTILIZER 0-0-62 MURIATE OF POTASH	2
BIODIESEL B5	2
WHITE LIQUOR	2
AMMONIA 5%/NITROGEN 95%	2
ASPHALT	2
ASPHALT LIQUID	2
TITANIUM BASE ALLOYS (SOLIDS)	2
SUGAR	2
STEEL ALLOYS	2

DIESEL FUEL #2 LOW SULFUR ON-ROAD	2
BIODIESEL B100	2
SAND	2
PVC SUSPENSION RESIN	2
NATURAL GAS	2
PAPER PRODUCTS FOR CORRUGATED PACKAGING, FOLDING CARTONS GEORGIA-PACIFIC LLC	2
COMPRESSED NATURAL GAS	1
FERTILIZER 12-40-0 FORTY ROCK	1
BARLEY PRODUCTS (WHOLE, CRIMPED, ROLLED, EARLED, GROUND) HANSEN MUELLER CO	1
FERTILIZER 16-16-16 WILCO-WINFIELD LLC	1
BAKKEN CRUDE OIL FEEDSTOCK TESORO REFINING & MARKETING CO	1
DIATOMACEOUS EARTH	1
FERTILIZER 16-20-0 AMMONIUM PHOSPHATE SULFATE	1
AVIATION GASOLINE	1
CHERRY BRINE OREGON CHERRY GROWERS	1
FERTILIZER 0-0-60 OR 0-0-62 MURIATE OF POTASH AGRIUM NORTH AMERICAN WHOLESALE	1
ASPHALT CEMENT	1
DIESEL 2	1
FERTILIZER 20.5-0-0-24 WITH 24% SULPHUR TECK METALS LTD	1
FERTILIZER 20-0-0-24 AMMONIUM SULFATE, GRANULAR GRADES AGRIUM NORTH AMERICAN WHOLESALE	1
DENATURED ALCOHOL	1
ALUMINUM ALLOY	1
AGED BARK MULCH	1
6-4 TI WELDING WIRE AND ROD UNITED STATES WELDING CORP	1
FERTILIZER 21-0-0-24	1
ASPHALT CRACK FILLER	1
FERTILIZER 0-0-21 K-MAG WILCO-WINFIELD LLC	1
CASCOPHEN RF-350 GENERAL PURPOSE PHENOLIC RESIN APPLICATIONS HEXION INC	1
FERTILIZER 32-0-0 SIMPLOT UAN-32 UREA AMMONIUM NITRATE SOLUTION	1
BROWN SUGAR (LIGHT AND DARK)	1
DIESEL FUEL 2 ULTRA LOW SULFUR	1
DIESEL FUEL WITH 5% BIODIESEL	1
BNZ AGGREGATES 2337, 2648, 2653, 2855, 2861, 3065, 3275 / BNZ MATERIALS INC	1
DIESEL OIL	1
DOLOMITE	1
FERTILIZER 11-52-0 SSP MONOAMMONIUM PHOSPHATE COATED WITH AVAIL SIMPLOT GROWER SOLUTIONS	1
FERTILIZER 0-0-21 K-MAG PREMIUM CROP NUTRIENT NUTRIEN AG SOLUTIONS INC	1
CEMENT	1
BLACK LIQUOR GEORGIA-PACIFIC	1
BLACK LIQUOR (KRAFT) INTERNATIONAL PAPER	1
CRUDE OIL	1
FERTILIZER URAN 32-0-0	1
DIESEL BIO BLEND NO 2	1
FERTILIZER 0-45-0 TRIPLE SUPERPHOSPHATE JR SIMPLOT	1
BIODIESEL	1
BASE OILS	1
DIESEL FUEL 2	1
ETHANOL	1
SOY SAUCE YAMASA CORPORATION U.S.A.	1
LIQUOR BLACK WEAK	1
LIQUOR WHITE	1
MAGNESIUM CHLORIDE	1
MEDIUM DENSITY FIBERBOARD	1
MOTOR OIL	1
NIOBIUM BASE ALLOYS	1
NITROUS OXIDE	1
ORGANIC BASE BLEND	1
PRO-PELL-IT! PELLETIZED LIME (STANDARD & MINI) CROP NUTRIENT MARION AG SERVICE	1
QUICKLIME	1

SCRAP METAL - RECYCLE	1
SCRAP METAL STEEL FOR RECYCLING ALCOA CORPORATION	1
SCRAP METAL-RECYCLE TITANIUM-PCC	1
FERTILIZER SULFATE OF POTASH	1
TRANSMIX	1
WEAKWASH (INTERNATIONAL PAPER)	1
WASTEWATER TMT SLUDGE	1
WASTE SULFURIC ACID	1
WASTE CALCIUM FLUORIDE FILTER CAKE	1
USED OIL	1
SILICA SAND	1
UFALA HARBISONWALKER INTERNATIONAL	1
SODIUM CHLORATE CRYSTAL, CHLORATE OF SODA, TECHNICAL SODIUM CHLORATE, ERCOCIDE CP, ERCOCIDE C	1
TITANIUM SPONGE (WROUGHT PRODUCTS) OSAKA TITANIUM TECHNOLOGIES CO	1
TITANIUM INGOTS	1
TITANIUM ALLOY ATI	1
TESORO DIESEL LOW SULFUR (LSD) AND ULTRA LOW SULFUR DIESEL (ULSD)	1
SOYBEAN MEAL BUNGE NORTH AMERICA	1
LIME; CALCIUM OXIDE; UNSLAKED LIME; BURNT LIME; QUICK LIME; REBURNT LIME / INTERNATIONAL PAPER	1
UREA SOLID	1
FERTILIZER SEQUENTIAL POTASSIUM SULFATE (POTASSIUM SULFATE, DIPOTASSIUM SULFATE, DIPOTASSIUM SALT)	1
LIMESTONE PELLETIZED	1
GARDEN COMPOST	1
FOUL CONDENSATE INDUSTRIAL PROCESS BY-PRODUCT OF KRAFT PULPING GEORGIA-PACIFIC LLC	1
FLY ASH CLASS C	1
FERTILIZER UREA - AMMONIUM NITRATE SOLUTION DYNOL NOBEL INC	1
GRAPHITE	1
3M BRAND ROOFING GRANULES - 5100L, 5300L & 5500L	1
GREEN LIQUOR	1
FERTILIZER SCU (ALL GRADES) KOCH AGRONOMIC	1
FERTILIZER MONOAMMONIUM PHOSPHATE	1
FERTILIZER MICROESSENTIALS SZ	1
FERTILIZER LANDSCAPE PRODUCTS GARDEN BLEND AND GROWERS BLENDGARDEN BLEND	1
FERTILIZER AMMONIUM PHOSPHATE	1
FERTILIZER 46-0-0 PERFECTION UREA WILBUR ELLIS COMPANY LLC	1
FERTILIZER UN-32/NS-1	1
HYDROGEN PEROXIDE 31%	1
FERTILIZER 43-0-0, 44-0-0, 39-0-0, 40-0-0, 41-0-0 DURATION CR UREA KOCH AGRONOMIC SERVICES	1
LILLY MILLER MOSS OUT! LAWN GRANULES / LILLY MILLER BRANDS	1
LEAD ALLOYS AND SCRAP	1
KINGSFORD ORIGINAL CHARCOAL BRIQUETS / THE CLOROX COMPANY	1
KINGSFORD MATCH LIGHT INSTANT CHARCOAL BRIQUETS / THE CLOROX COMPANY	1
GRAIN DUST	1
ICEKICKER HIGH PERFORMANCE ROAD SALT SALTWORX LLC	1
LIMESTONE AGGREGATE, AG LIME; CALCIUM CARBONATE / ACG MATERIALS	1
HV 13	1
HIGH IRON (FE) IRON SAND OREGON RESOURCES CORPORATION	1
HIGH DENSITY POLYETHYLENE - GRADES DESIGNED BY HD OR HDP PREFIX / EXXONMOBIL CHEMICAL COMPANY	1
GREEN WASTE	1
GREEN LIQUOR GEORGIA-PACIFIC LLC	1
GREEN LIQUOR CASCADE PACIFIC PULP	1
JET A MODIFIED	1
TOTAL	275



## HAZARDOUS MATERIALS INCIDENTS

### INCIDENT TYPE COUNTS

Under the Oregon Community Right to Know and Protection Act, those who responded to an incident involving hazardous conditions must report information about the incident to OSFM. OSFM currently provides responders with an online incident reporting system.

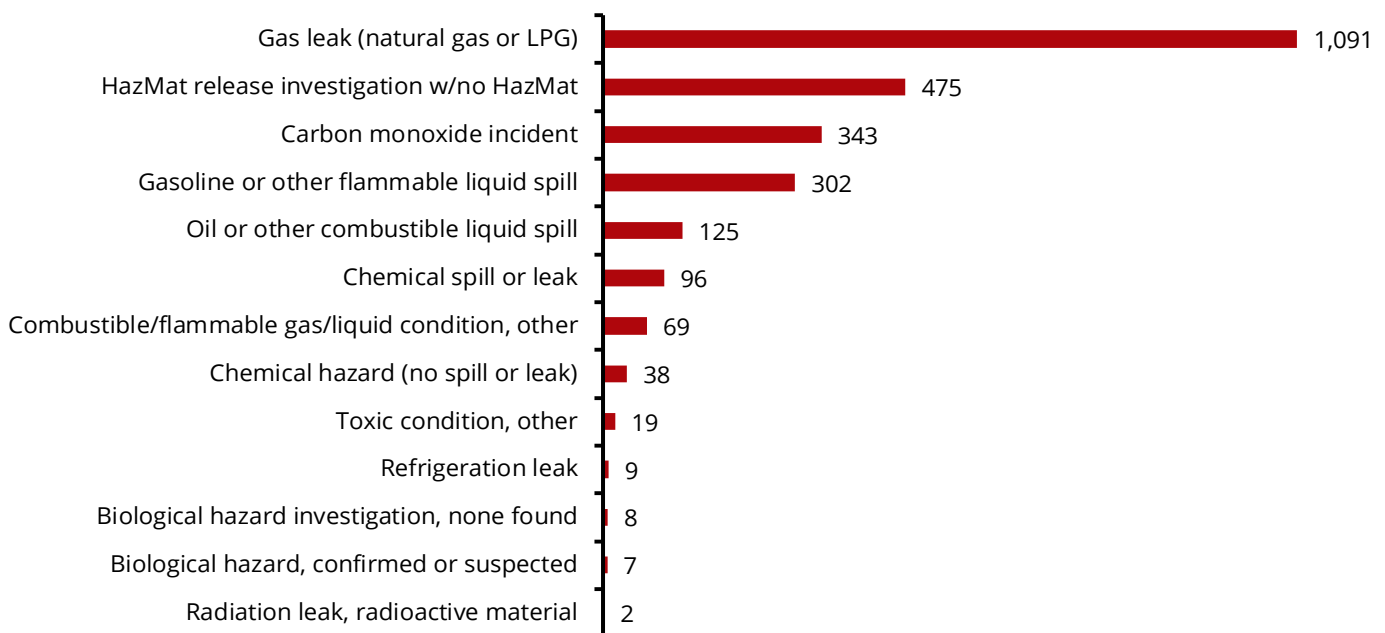
Fire agencies and state hazmat teams reported **2,584** hazardous materials incidents in 2022. These incidents resulted in **no deaths** and **132** injuries to civilians or fire service personnel.

This section represents several snapshot views of hazardous materials incidents in Oregon. More information can be requested from our website at:

<https://www.oregon.gov/osfm/industry/Pages/hazmat-incident-search.aspx>

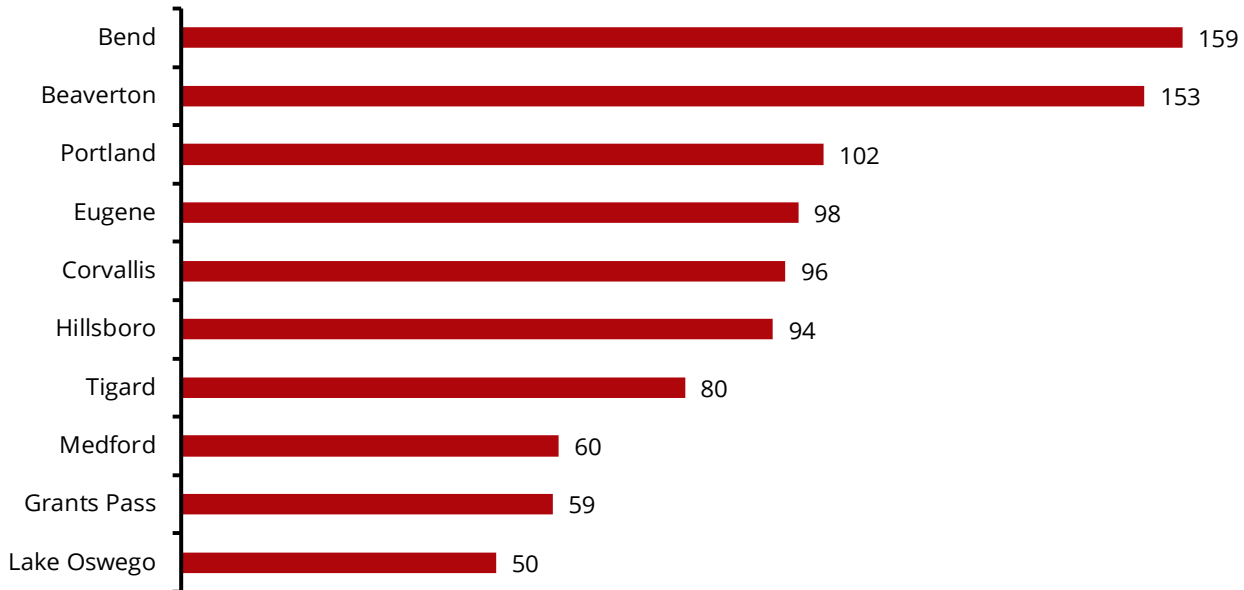
Incident reporters categorize hazardous materials incidents into one of several categories. These categories describe general types of responses to incidents. The graph below is based upon data provided for the Hazardous Materials Incidents types, per response.

**2022 Hazardous Materials Incident Types**

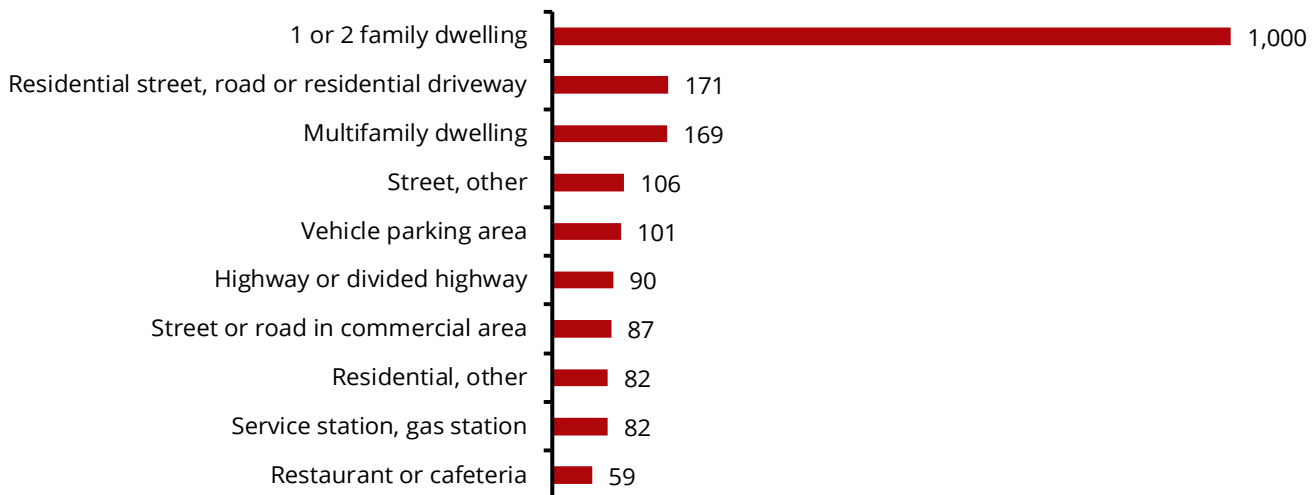


The cities listed on the graph below are based upon the zip code of the address at which the incident occurred and may not necessarily be within the corporate limits.

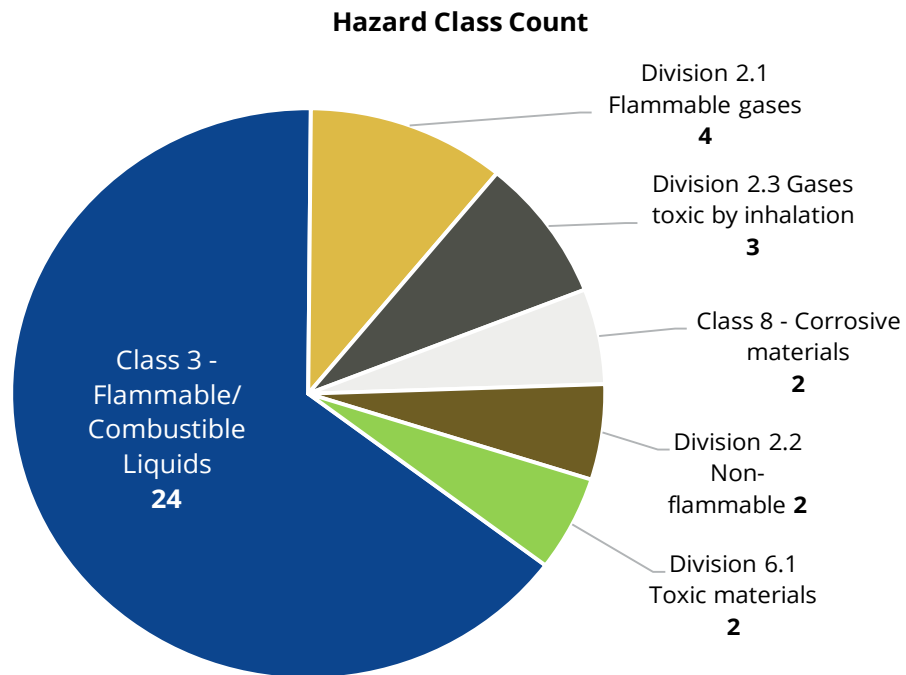
#### Top Ten Cities with the Most Reported Hazardous Materials Incidents



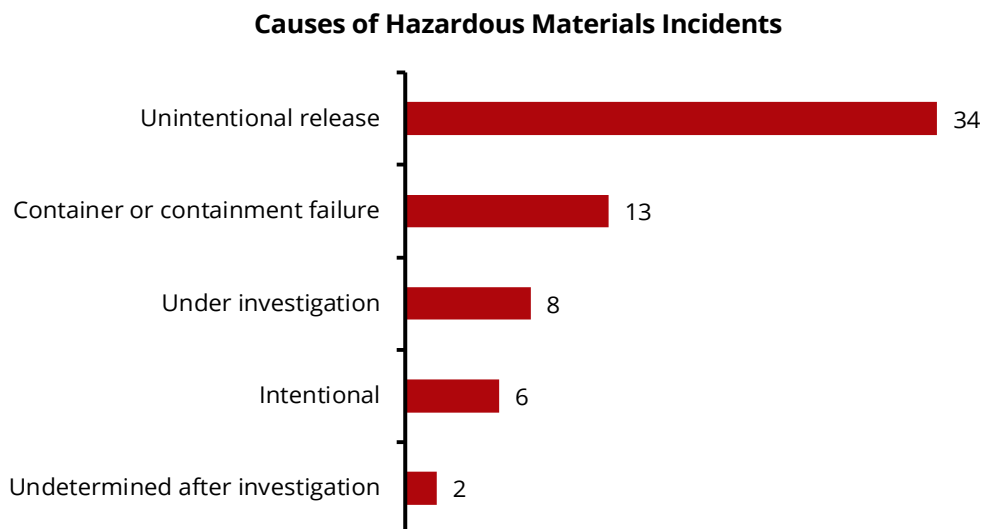
#### Top Ten Property Uses with the Most Reported Hazardous Materials Incidents



The hazard class of substances involved was not always recorded in responder reports. Of the **2,584** incidents, only **37** were identifiable by hazard class.

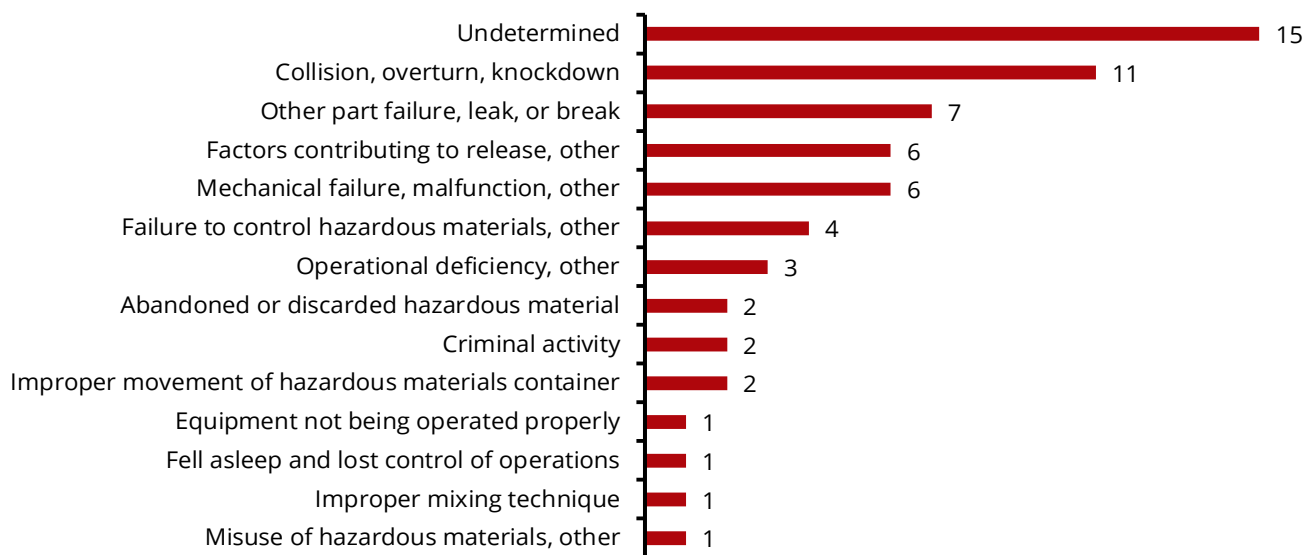


Several options are given for causes of a hazardous materials incident. Not all reports list the cause of an incident. The following chart represents the **63** incidents for which a definitive cause was determined.



There were **62** hazardous materials incidents that included contributing factors.

### Factors Contributing to Hazardous Materials Incidents



### Hazardous Materials Incident Evacuation Summary



Number of Evacuation  
Incidents

**20**



Number of Buildings  
Evacuated

**133**



Number of People  
Evacuated

**751**