

**LU-24-027 IN-PERSON TESTIMONY
SUBMITTAL COVER SHEET**

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October 22, 2025

To: Benton County Board of Commissioners

Re: LU-24-027, Coffin Butte Landfill Expansion Conditional Use Permit
Application

I am writing to urge you to uphold the Benton County Planning Commission's denial of Republic Services request to expand Coffin Butte Landfill.

I write to express my opposition to the ill-conceived plan to expand a landfill that is creating an undue burden on residents of Soap Creek Valley and on properties adjacent to and in close proximity to the current dump.

As a registered nurse with expertise in the health impacts of endocrine-disrupting synthetic chemicals, I urge each of you to consider the numerous health impacts from PFAS, or perfluoroalkyl substances, also known as "forever chemicals". As an environmental journalist who specializes in plastics pollution and health, I bring specialized expertise to this hearing.

PFAS accompany gases emitted by Coffin Butte Landfill. Considering the EPA's findings of dangerously high levels of methane gas emitted by Coffin Butte Landfill, it is safe to deduce that the levels of PFAS emitted as air pollutants is also at a dangerously high level.

Landfills emit higher concentrations of PFAS than levels of PFAS found in leachate, the toxics-contaminated liquid formed within dumps as organic matter degrades.

PFAS are called "forever" because these chemical compounds do not break down. They accumulate in the body creating what is known as "body burden".

Scientific concensus is: there is no safe level of exposure to PFAS.

A growing body of peer-reviewed scientific studies link exposure to PFAS to obesity, diabetes, reduced fertility, premature births, neurological deficits, liver disease, low birth weight, immunity disorders and hypertension, among other conditions. PFAS are also known carcinogens.

PFAS are a class of synthetic chemicals used in clothing, food packaging, hygiene products, textiles, furniture, clothing, and cookware to prevent stains, create non-stick surfaces and repel water. Things like gortex jackets, carpeting, chip bags, cosmetics, and teflon pans.

Household items that get discarded in trash bins or dumpsters Republic Services collects and deposits by the ton in Coffin Butte landfill.

Within the darkness of all that buried stuff we throw "away" a toxic stew forms and festers, releasing well over 16,000 synthetic chemicals (most of which are NOT tested for safety) that DO NOT STAY PUT. Those chemical either leave the landfill as they arrived, or in new, unknown chemical combinations formed within

the toxic stew, along with the extremely high levels of methane, into the air as UNREGULATED, harmful pollutants known to cause numerous health problems.

The existing landfill will continue to leak gases and air toxicants that create an undue burden on residents within a 5 mileas radius of the dump past its current life span.

Benton County residents who inhale PFAS emitted by the landfill will endure the health impacts from long term exposure to these harmful synthetic chemicals. Developing fetuses will experience disruption in well-orchestrated development from exposure to PFAS in utero, causing serious health conditions including low IQ and behavioral problems as the child ages.

Benton County residents are at high risk of carrying an undue burden from exposure to PFAS emitted by the dump owned by Republic Services, a private company that has consistently disregarded EPA and DEQ regulations cited in the public testimony of community experts who also oppose the expansion.

Expanding this municipal dump (in name only, as it is an industrial wasteland due to the concentration of heavy metals, radiation, flame retardants, macro- micro- and nano plastics, and tens of thousands of synthetic chemicals it only partially contains within its property lines) will expand the volume of trash coming into Benton County, against the interests and desire of its residents.

Expanding the volume of trash will expand the volume of air pollution, creating an increased risk of exposure to "forever chemicals", which will cause harm, an undue burden, to the health of Benton County residents.

I urge you to deny Republic Services' dogged attempt to expand the landfill, a plan that clearly puts profit over the people who carry the undue burden of the dump's toxicity.

Thank you.

Cordially,

Eliza Murphy

Studies cited:

<https://pubs.acs.org/doi/abs/10.1021/acs.estlett.4c00364>

<https://www.endocrine.org/topics/edc/what-edcs-are/common-edcs/pfas>

<https://www.endocrine.org/news-and-advocacy/news-room/2024/latest-science-shows-endocrine-disrupting-chemicals-in-pose-health-threats-globally>

<https://www.unep.org/topics/chemicals-and-pollution-action/pollution-and-health/persistent-organic-pollutants-pops/and>

PFAS Chemicals: EDCs Contaminating Our Water and Food Supply

PFAS Chemicals: EDCs Contaminating Our Water and Food Supply

Per- and polyfluoroalkyl substances (PFAS) are manmade chemicals used as oil and water repellents and coatings for common products including cookware, carpets, and textiles. These endocrine-disrupting chemicals do not break down when they are released into the environment, and they continue to accumulate over time.

PFAS chemicals can contaminate drinking water supplies near facilities where the chemicals are used. PFAS contamination has been detected in water near manufacturing facilities as well as military bases and firefighting training facilities where foam containing PFAS is used. PFAS chemicals also enter the food supply through food packaging materials and contaminated soil. New research also indicates that PFAS are dispersed through the air over long distances. The Centers for Disease Control and Prevention have found widespread exposure to PFAS in the U.S. population. Learn more about sources of exposure, including textiles and clothing, in our **Introduction to Endocrine-**

Disrupting Chemicals.

PFAS chemicals can affect our biology by mimicking fatty acids—the building blocks of fat in our bodies as well as the foods we eat. They also act as endocrine-disrupting chemicals (EDCs) due to their ability to interfere with hormone systems. Exposure to PFAS chemicals can cause adverse health effects. **Studies** conducted near Parkersburg, West Virginia found a probable link between perfluorooctanoic acid (PFOA) exposure and six disease categories: diagnosed high cholesterol, thyroid disease, ulcerative colitis, testicular cancer, kidney cancer, and pregnancy-induced hypertension.

Research indicates PFAS can:

- › Alter cholesterol levels
- › Disrupt thyroid function
- › Harm liver and kidney function
- › Alter immune response
- › Raise risk of ulcerative colitis
- › Harm reproductive health
- › Increase the risk of birth defects
- › Decrease infant birth weights
- › Cause tumors and cancer

Our **second Scientific Statement on Endocrine-Disrupting Chemicals** examines how PFAS chemicals affect pregnancy outcomes, the timing of puberty, and other aspects of reproductive health.

Source: Scott Belcher, PhD

PRESS RELEASE

Latest Science Shows Endocrine Disrupting Chemicals in Plastics, Pesticides, and Other Sources Pose Health Threats Globally

Washington, DC February 26, 2024

Everyday exposures to EDCs in the environment may be linked to increasing rates of infertility, diabetes, immune deficiencies, and other serious conditions. Highly Hazardous Pesticides pose ongoing threats, especially in the Global South.

A report from the world's leading scientific and medical experts on hormone-related health conditions raises new concerns about the profound threats to human health from endocrine disrupting chemicals (EDCs) that are ubiquitous

in our surroundings and everyday lives.

The report, **“Endocrine Disrupting Chemicals: Threats to Human Health”** provides a comprehensive update on the state of the science around EDCs, with increasing evidence that this large group of toxic substances may be implicated in rising global health concerns.

The report from the Endocrine Society, co-produced with the International Pollutants Elimination Network (IPEN), includes detailed analyses on exposure to EDCs from four sources: plastics, pesticides, consumer products (including children’s products), and per-and polyfluoroalkyl substances (PFAS), a class of thousands of chemicals known or suspected to be EDCs.

The Endocrine Society-IPEN report is being released during the U.N. Environment Assembly (UNEA-6) meeting in Nairobi. At UNEA key agenda items include welcoming the newly adopted Global Framework on Chemicals, advancing global action on highly hazardous pesticides, and threats to the circular economy from plastics and toxic chemicals. The groups’ report anticipates an update from UNEP and the WHO expected later this year on their 2012 Report on State of the Science of Endocrine Disrupting Chemicals.

“A well-established body of scientific research indicates that endocrine-disrupting chemicals that are part of our daily lives are making us more susceptible to reproductive disorders, cancer, diabetes, obesity, heart disease, and other serious health conditions,” said the report’s lead author, Andrea C. Gore, PhD, of the University of Texas at Austin. Gore is also a member of the Endocrine Society’s Board of Directors. “These chemicals pose particularly serious risks to pregnant women and children. Now is the time for the UN Environment Assembly and other global policymakers to take action to address this threat to public health.”

Hormones are natural chemicals that contribute to normal development, adaptation, and maintenance of bodily processes and health. By interfering with hormones and their actions, EDC exposure can impact many health-related functions, with consequences for increased risks of many serious conditions. Evidence suggests that EDCs in the environment contribute to disorders such as diabetes, neurological disorders, reproductive disorders, inflammation, and compromised immune functioning.

Two of the four analyses in the report look at EDCs used in plastics and as pesticides. Global production of plastics and pesticides is increasing even as scientists warn that chemical and plastic pollution is an escalating crisis. Glyphosate is the world's most widely used herbicide, and a recent study found that glyphosate has eight of ten key characteristics of an EDC. Other studies have found links between glyphosate and adverse reproductive health outcomes. Plastics are made with thousands of known toxic substances, some of which are known or suspected EDCs. The report examines bisphenols and phthalates, two toxic chemical groups found in many plastics. Exposures to EDCs from plastics occur at all phases of plastics production, use, disposal, and even from recycled plastics.

The Endocrine Society-IPEN report notes that, while evidence of health threats from EDCs is mounting, current regulations have not kept pace. "EDCs are different than other toxic chemicals, but most regulations fail to address these differences," said IPEN Science Advisor Sara Brosché, Ph.D. "For example, we know that even very low doses of endocrine disrupting chemicals can cause health problems and there may be no safe dose for exposure to EDCs. However, regulations typically do not protect against low-dose effects. We need a global approach to controlling EDCs based on the latest science with a goal of protecting the human right to a healthy environment."

At the UNEA-6 meeting, IPEN is also releasing a new report on “The Global Threat from Highly Hazardous Pesticides,” highlighting ongoing health and environmental risks from HHPs, especially in low- and middle-income countries. DDT, glyphosate, and chlorpyrifos, three HHPs reviewed in the Endocrine Society report, are also highlighted in the new IPEN report as they continue to pose health threats especially in the Global South.

In addition to plastics and pesticides, the report looks at EDC exposures from arsenic and lead, and from widely used per- and polyfluoroalkyl substances (PFAS), manmade “forever chemicals” used as oil and water repellents and coatings. Lead remains in use in paint in many countries, as documented in recent IPEN reports. Endocrine-related conditions from lead exposure may include delayed onset of puberty and early menopause. Arsenic is a common metal that has long been linked to cancer and other health conditions, and more recent evidence shows that arsenic can disrupt multiple endocrine systems. PFAS are used in hundreds of products including clothing and food packaging, but recent studies show that some PFAS can disrupt hormones such as estrogen and testosterone and impair thyroid hormone functions.

Representatives of IPEN will participate in the UNEA-6 meeting and IPEN will host a briefing at UNEA to review the findings of the new reports.

About the Endocrine Society

Endocrinologists are at the core of solving the most pressing health problems of our time, including diabetes, obesity, infertility, bone health, and hormone-related cancers. The Endocrine Society is the largest global organization of scientists devoted to hormone research and physicians who care for people with hormone-related conditions.

With more than 18,000 members in 133 countries, the Society serves as the voice of the endocrine field. Through its renowned journals and ENDO, the world's largest endocrine meeting, the Society accelerates hormone research, advances clinical excellence in endocrinology, and advocates for evidence-based policies on behalf of the global endocrine community. To learn more, visit our **online newsroom**.

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PRESS RELEASE

Strong grip strength may protect against obesity-related complications

October 15, 2025

People with excess body fat who build and keep muscle may be less likely to develop obesity-induced heart, liver, or kidney damage or die early, according to a new study published in *The Journal of Clinical Endocrinology & Metabolism*.



PRESS RELEASE

GLP-1s show promise in treating alcohol and drug addiction

October 09, 2025

A popular class of therapies for treating diabetes and obesity may also have the potential to treat alcohol and drug addiction, according to a new paper published in the Journal of the Endocrine Society.



PRESS RELEASE

People who skip breakfast and eat late dinners may have a higher risk of osteoporosis

August 28, 2025

People who skip breakfast and eat late dinners may have an increased risk of developing osteoporosis, according to a new study published in the Journal of the Endocrine Society.



PRESS RELEASE Meetings & Events

Endocrine Society guideline calls for increased screening for common cause of high blood pressure

July 14, 2025

Endocrine Society experts encouraged more widespread screening for a common hormonal cause of high blood pressure known as primary aldosteronism in a new Clinical Practice Guideline released today.



PRESS RELEASE

Experts suggest screening women with diabetes for intent to conceive at every doctor visit

July 13, 2025

A joint guideline released today from the Endocrine Society and the European Society of Endocrinology (ESE) recommends women with diabetes receive proper preconception care and access to emerging diabetes technology and therapeutics to manage their blood sugar before, during and after pregnancy.

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Per- and Polyfluoroalkyl Substances (PFASs)

In Chemicals & pollution action

Per- and Polyfluoroalkyl Substances (PFASs) are **toxic, man-made, hazardous chemicals** that have dangerous effects on the environment and our health. They are a large family of fluorinated chemicals that have partially or completely fluorinated carbon chains of varied lengths. **PFHxS, PFOA and PFOS** are the three subgroups of PFASs currently listed in the Stockholm Convention as **industrial POPs**.

Definition and uses of PFASs

The PFAS family is composed of thousands of synthetic organic chemicals. PFASs were developed from the 1940s by the chemical industry. To date, more than 4,700 Chemical Abstracts Service (CAS) numbers have been identified. They can be associated with a large variety of PFASs that may have been on the global market and in the environment (OECD 2018). Their common point is they are composed of a very stable structure which gives them **properties highly sought after in industry**: they resist very high heat, protect surfaces from water, grease or friction, and have **fire-retardant** and stain-resistant properties.

They are used in the **chemical industry** including in Polytetrafluoroethylene (PTFE) production, in the **metal plating industry**, in the **photo imaging industry**, and in the **semi-conductor industry**.



Chemical industry
including PTFE production



Metal plating industry

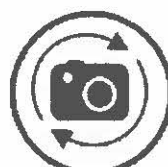
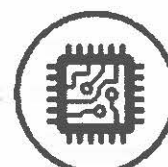


Photo imaging industry



Semi-conductor industry



Biocides, household agents such as cleaning agents and impregnation sprays



Non-stick cook and bake-ware



Fire-fighting foams



Water- and oil-proof apparel



Stain resistant upholstery, carpet, etc.



Food packaging

A wide variety of **everyday consumer goods** are produced with PFASs: **stain resistant carpets and upholstery, water-repellent clothing, fire-fighting foam, papermaking, printing inks, sealants**, the interior coating of **non-stick cookware**, **greaseproof food packaging**, biocides household agents such as **cleaning agents** and impregnation sprays. Recent studies have found PFAS in personal hygiene and care products such as **cosmetics, dental floss, toilet paper**. [Plastic](#)

may contain PFAS.

Among the thousands of PFASs being produced and used, there are many overlooked ones that are structurally similar to PFOS, PFOA, or their precursors, and are produced in high volumes (Wang et al. 2017).

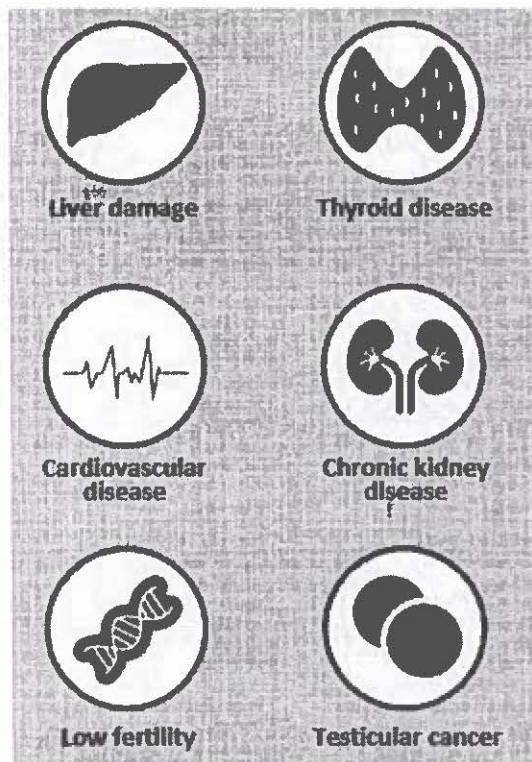
Exposure to PFASs

People can be exposed to PFAS by:

- Working in firefighting or in chemicals manufacturing and processing
- Drinking or eating liquids or food contaminated with PFAS
- Swallowing dust contaminated with PFAS
- Breathing air containing PFAS
- Using products made with or packaged in materials containing PFAS

Hazardous effects of PFASs

Due to PFASs long-term persistent accumulation, humans, wildlife and the environment continues to be exposed long after these compounds are released into the air, water and soil. PFAS are highly mobile in air, water and soil and are mostly persistent. They do not degrade - or only partially. Their lifespan is up to several thousand years, hence their nickname "forever pollutants". The health risks from PFAS have been known since the 1990s, long-chain PFASs have been widely recognized as contaminants of high global concern by the OECD in 2013. They have been linked to **cancer, reproductive harm, immune system damage** and other serious health problems, **even at low levels**.



PFOS affects the liver, kidney, thyroid, fecundity, leading to cancer formation

Major health issues such as kidney cancer, testicular cancer, thyroid disease, pregnancy-induced hypertension, high cholesterol have been linked to **PFOA**

Effects of **PFHxS** in humans are found to influence on the nervous system, brain development, endocrine system, and thyroid hormone.

PFOS, PFOA and PFHxS are transferred to foetus through cord blood and to infant through breast milk (UNEP 2016b, 2018). Exposure to PFOA and PFOS over certain levels may result in developmental effects to foetuses or breastfed infants (UNEP 2016b; US EPA 2016a, 2016b).

PFASs and the Stockholm Convention

Perfluorooctane sulfonic acid (PFOS) listed in **Annex B (restriction)** since 2009 is both intentionally produced and an unintended degradation product of related anthropogenic chemicals. The current intentional use of PFOS is widespread and includes in electric and electronic parts, as **fire-fighting foam, photo imaging, hydraulic fluids, and textiles**. PFOS is still produced in several countries. Its acceptable uses include as an active ingredient in insect bait to control leaf-cutting ants, in closed-loops systems in metal

plating and as fire-fighting foam.

Perfluorooctanoic acid (PFOA) is listed in **Annex A (elimination)** since 2019. PFOA are used widely to produce non-stick kitchen ware, and food processing equipment. Unintentional formation of PFOA is created from inadequate incineration at moderate temperatures of municipal solid waste within inappropriate or open burning facilities.

In 2019, at the Second session of the International Conference on Chemicals Management (ICCM2), SAICM stakeholders identified **managing PFASs and the transition to safer alternatives** as an issue of concern.

The 10th meeting of the Conference of the Parties in 2022 listed perfluorohexane sulfonic acid (PFHxS) widely used fire-fighting foam, carpets, and non-stick cookware.

Perfluorocarboxylic acids (PFCAs) used in a range of applications, including in coating products, fabric/carpet protectors, textile impregnation agents and firefighting foams is a **candidate POPs** proposed for listing under the Stockholm Convention.

See the [Interactive timeline of POPs listed under the Stockholm Convention](#).

GMP Dashboard



The [UNEP/GEF Global Monitoring project](#) measures concentrations of POPs.

The matrix "water" is included for the first time, **22 countries** measure PFAS (PFOS, PFOA and PFHxS) concentration in water. See the results in the [interactive dashboard](#)



Global acceleration of action

NGOs have measured 'forever chemicals' in the blood of a dozen European politicians. Among them is former European Commission vice president Frans Timmermans, who is calling for a ban on these substances. [Le Monde, 1 February 2024](#).

In **France**, the metropolis of Lyon announced in March 2023, the [launch of a major survey](#) to study the presence of PFAS, around the Arkema and Daikin Chemical factories, just downstream of Lyon, in the commune of Pierre Bénite where traces of the POPs [have been found](#) in **fish, breast milk and eggs**.

In March 2023, The **United States** administration [announced](#) the upcoming introduction of standards to limit the level in running water, a first at the federal level. "What started as a so-called miracle, a technological breakthrough though for its practicality, quickly degenerated into one of the most pressing public and environmental health problems of the modern world". Michael Regan, head of the US Environmental Protection Agency.

At the initiative of **Germany, the Netherlands, Denmark, Norway and Sweden**, the European Chemicals Agency is opening a consultation in March 2023 with a view to [a virtual ban](#) on the production, import, sale and use of PFAS in the territory of the European Union, in the name of the precautionary principle.

At the beginning of 2023, a survey carried out by [eighteen European media, including Le Monde](#), identified 17,000 contaminated sites in **Europe** and the **United Kingdom**, including 2,100 at levels dangerous to health. Often near old factories.

More PFAS in the news

Further resources

[Stockholm Convention website section on PFAS](#)

[SAICM Knowledge Platform: About Perfluorinated Chemicals](#)

[A review of PFAS as a Chemical Class in the Textiles Sector - SAICM Policy Brief, 2021](#)

Europe map of eternal pollution: La « [carte de la pollution éternelle](#) » Le Monde, 2023

UNEP Factsheets, December 2022

[Chemicals in products](#)

Per- and polyfluoroalkyl substances

In Chemicals & pollution action

Related Publications



An Assessment Report on Issues of Concern:
Chemicals and Waste Issues Posing Risks to
Human Health and the Environment

September 2020



An Assessment Report on Issues of Concern: Chemicals and Waste Issues Posing Risks to Human Health and the Environment

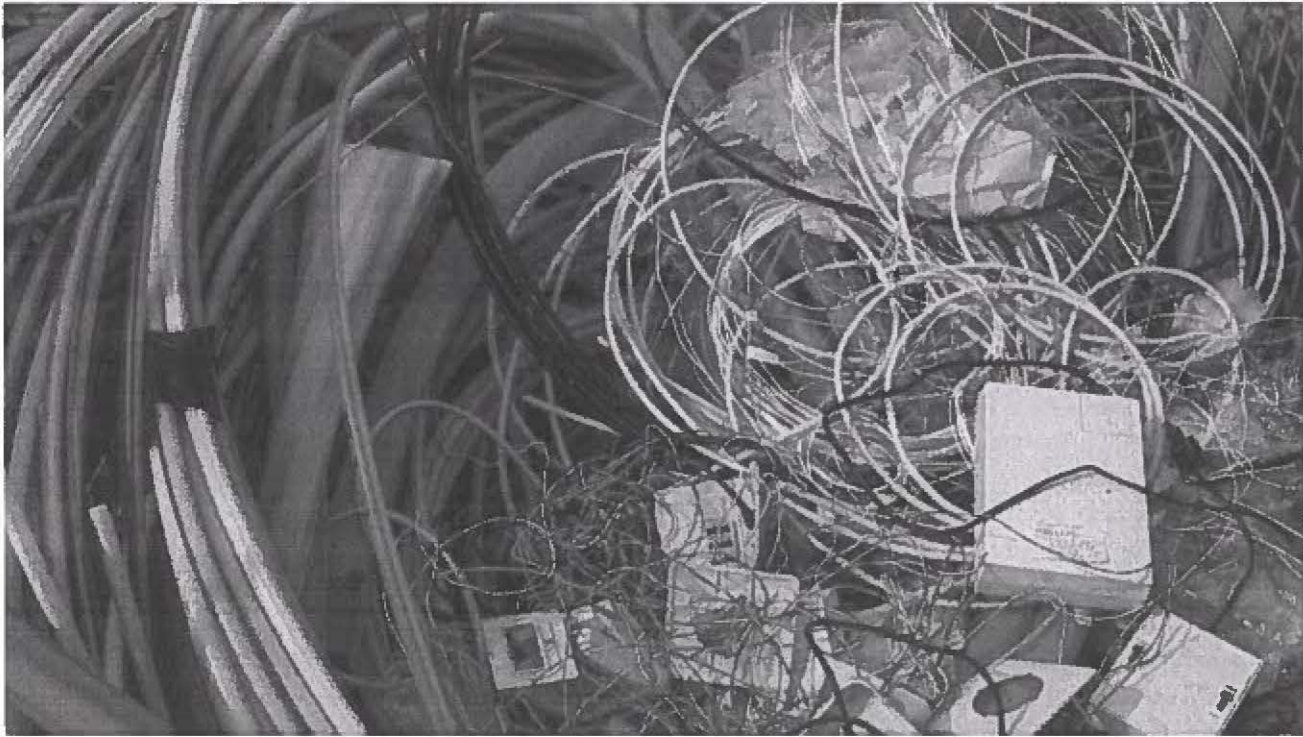
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Press release

BRS COPs conclude with major decisions on e-waste movement and ban of harmful chemicals affecting firefighters

Last updated: 13 Feb 2024, 15:43