

# COMMUNITIES AND PLACE OSC

## REPORT TO CABINET

11 JULY 2023

### Firefighters Decontamination

At the meeting of the Communities and Place OSC, at the request of the Committee, Jim McNeil, Assistant Chief Fire Officer, supported by Robin Clow, Area Manager gave a presentation to members on the risk of contaminants from fires and the measures that could be put in place to reduce the risk of these impacting on the health and safety of firefighters.

Also in attendance:

Nick Oliver (Chairman), Mark Mather (Vice Chairman), Anne Dale, Brian Gallacher, Jim Lang, Nick Morphet and Jeff Reid.

Colin Horncastle: Portfolio Holder: Looking After Our Environment

Gordon Stewart: Looking After Our Communities

The following is an extract from the draft minutes of the meeting:

*The Assistant Chief Fire Officer (ACFO) stated that firefighters were 7 times more likely to have cancer than the general public and were also diagnosed earlier in their 40s and 50s.*

*Robin Clow explained that fires produced a cocktail of chemicals including carcinogenic materials. Personal protective equipment (PPE) protected firefighters' skin and respiratory systems but wind conditions could also mean that those outside were also impacted by smoke and air borne fibres which may or may not be visible or easily wiped off. They caused both acute toxicity and / or chronic toxicity which impacted on the body's internal organs.*

*They hoped to work with Professor Anna Stec at the University of Central Lancashire (UCLAN) who was researching the assessment of toxic irritant hazards of fires and the source of much of the information and recommendations.*

*Examples of the PPE were demonstrated including new breathing apparatus, helmet and coat and comparison made with a dirty helmet enclosed in a protective bag. The latter in the past had been seen as a badge of honour by experienced firefighters.*

*He described how firefighters previously would sit in fire appliances after a fire covered in the products of combustion which would be inhaled, ingested or absorbed through the skin. In the past, fire stations may have smelled of smoke but, following the introduction of new procedures, this was no longer the case. If there was a smell*

*of smoke, this could lead to cross-contamination by visitors including members of the public and children.*

*Steps being introduced to reduce contamination included:*

- *Wearing of respiratory protective equipment during firefighting, salvage and venting of buildings, including fire investigation, and for this to be the last piece of PPE to be removed.*
- *Equipment suspected of contamination should be removed and placed in airtight containers with a 'clean cab' policy and on-scene use of hero wipes to remove contaminants from any exposed skin.*
- *Avoiding eating and drinking, changing clothes, showering within an hour, regular health screening.*
- *A rigorous cleaning and inspection regime for PPE.*
- *Creation of designated zones:*
  - *Red / dirty - operational areas such as appliance bays, equipment storage, briefing rooms.*
  - *Amber – transitional areas for the removal and cleaning of PPE.*
  - *Green / clean areas including public entrances, offices, recreational and meeting rooms.*
- *A new contract with a company in Durham provided a much faster turnaround for the cleaning of asbestos contaminated PPE.*
- *Working with Occupational Health, inspection of shower facilities and testing for contaminants by external companies.*

*The ACFO thanked his colleagues for the work that they had undertaken recently on policies and procedures to mitigate the risk of firefighter contamination. He also expressed his gratitude to the current and former portfolio holders for their support.*

*Members held the fire and rescue service in high regard and were saddened to learn of the additional hazards faced by firefighters and supported the work that was taking place to protect them.*

*Councillor Stewart, Portfolio Holder for Looking After Our Communities commented that the fire and rescue services most important resource was its people and that the Council needed to do everything it could to ensure their safety.*

*In answer to questions, it was explained that:*

- *The watch manager assessed conditions on site and dependent on wind direction and other factors, created a safe zone with a cordon between members of the public and an incident. If the wind speed or direction changed, the distance would be increased to reduce the potential risk of contamination for members of the public. Generally, bigger and better burning fires were less of a risk than those which smoldered.*

- *Fire damaged buildings were not handed back to owners or landlords until they had been properly ventilated and were clear of smoke.*
- *Forensic investigation teams were now provided with breathing apparatus.*
- *The work on contaminants was in the early stages including identification of contaminants and exposure, the prevalence, and types of cancers and differences between male and female firefighters. The work would in due course involve retired firefighters as well as the current workforce. Decontamination had not existed for former firefighters.*
- *It was not yet known how application of the measures recommended in the UCLAN report would impact on the likelihood of illness. Some measures were relatively easy to implement such as the removal of dirty PPE and prompt showering. The next stage of the research involved taking blood samples which Northumberland Fire and Rescue Service (NFRS) hoped to be involved in.*
- *Individuals were responsible for cleaning and inspecting their own PPE to ensure that it was in an adequate condition. It was also inspected by a shift supervisor on a set frequency following a 30-point checklist provided by equipment manufacturer. A further inspection was undertaken annually by a third party who also cleaned and reapplied water repellent properties.*
- *A decontamination and de-robing process for asbestos and other chemicals had been in place for many years and was now utilised for other contaminants. The last stage involved the removal of gloves and the breathing apparatus mask with equipment bagged and placed in lockers on the fire engine.*
- *Hero wipes were used to clean any exposed skin on wrists and necks and were effective. Bags with dissolvable seams enabled dirty clothing to be placed in washing machines without needing to be handled.*
- *The procedure for decontamination had been implemented at the end of 2022.*
- *Ordinarily, fire personnel would be issued with 2 sets of fire kit, and this was sufficient unless there was a particularly busy shift with back to back fires.*
- *The turnaround time for heavily contaminated kit had been reduced from 2 weeks to 48 hours by changing to a nearer company in Durham. The majority of kit was cleaned at the fire station and would be properly dry in 24 hours. Rural fire stations had smaller industrial washing machines.*
- *Individuals did not currently record potential exposures from incidents. Arrangements were being put in place with Northumbria Healthcare NHS Foundation Trust for enhanced health surveillance as well as self-assessment of urine samples before and after an exposure to fire to establish base line data and monitor levels.*
- *Medical examinations of firefighters were undertaken every three years which increased to an annual basis for personnel aged 50 and over.*

*Councillor Horncastle, as former Chair of the Fire and Rescue Authority, thanked the senior officers NFRS for their prompt action progressing the issue of decontamination following the publication of the UCLAN report, to protect not only front-line staff, but also other staff, visitors and families.*

*It was proposed that the committee make the following recommendation to Cabinet that financial support for the recommendations made by the fire and rescue service be provided to ensure that Northumberland was leading reduce the risk of contamination and supporting fire and rescue personnel.*

*The Chair agreed with a suggestion that there should be surplus kit to ensure that it could be rotated adequately. He thanked officers for their informative presentation.*

**RESOLVED** *that Cabinet be requested to agree that financial support for the recommendations made by the fire and rescue service be provided to ensure that Northumberland was leading to reduce the risk of contamination and supporting fire and rescue personnel.*

**Cabinet is therefore requested to approve the recommendation of the Communities and Place Overview and Scrutiny Committee.**

**COUNCILLOR NICK OLIVER**

**CHAIRMAN**