Ballast Dust Working Group

The Ballast Dust Working Group (BDWG) was formed in 2012 with the common interest of identifying, mitigating and managing the risks associated with ballast handling and the dusts created through the process of attrition. The National Supply Chain has representatives on the group and has been instrumental in driving through improvements to help protect the health, safety and welfare of all employees and other people who might be affected by ballast handling activities within the rail industry and to fulfil our legal duties.

PPE (including RPE)

- Staff required to wear a tight fitting facepiece are required to received face fit testing. The results of those already tested have been recorded and will be uploaded to Sentinel as soon as the system is ready to accommodate them.
- High Output staff are trialling an alternative air-fed headpiece

Risk Assessment

- COSHH risk assessments have been reviewed for suitability, using results from exposure monitoring for High Output and aggregate handling depot (AHD) ballast handling operations. The risk assessments are more detailed than those produced by Sypol. The Office of Rail and Road (ORR) is encouraging Network Rail colleagues to produce risk assessments to a similar standard.

National Supply Chain

When we’re supplying ballast to our customers around the country we recognise the responsibility of continually delivering product that’s in specification so we’ve worked hard with each of our quarries and aggregate handling depots (AHD’s) to implement improvements to existing processes, resulting in significant investment being made at each facility. The NSC has a Ballast Dust Review Group that meets bi-monthly to review progress being made against the improvement action plan, quality data and customer satisfaction feedback.

Ballast Specification

- We’re currently reviewing the specification/content of BSEN 13450 (aggregates for railway ballast) to see if there’s an opportunity to tighten the specification.

Education and awareness

- To support previous briefings/communications, we’re working with other Network Rail communications teams on a campaign to highlight the risks and control measures associated with ballast dust. The priority is to provide a higher level of understanding for line managers and ground staff/operators.
- The NSC is talking to IOSH about their No Time To Lose campaign, which will be targeting silica March 2016.
- NSC staff required to wear respiratory protective equipment (RPE) have received face fit testing, and it’s hoped that the results will be uploaded to Sentinel early 2016.

AHD's douse ballast NSC review quarry quality data weekly Ballast quality is independently checked each period NSC audit quarry quality management systems each quarter
Supply from quarries
• NSC is feeding back independent test results (from each quarry) and discussing variances to specification as they arise to establish opportunities for improvement.
• Close calls raised are reviewed to consider potential issues from source material by NSC’s Quality team. We’ve noted that the process for providing feedback to the originator needs to be improved.

Aggregate Handling Depots
• Each AHD has water suppression which enables site staff to douse the stockpiles and wagons loaded with ballast prior to their exit from the depot.
• Periodic sampling of the ballast takes place to help determine if ballast in the stockpile is within specification.
• A process has been introduced to enable operators to visually inspect and if appropriate reject deliveries of ballast to the AHD.
• A process is in place relating to the daily cleaning of plant.
• The maintenance regime was changed early 2015 so that plant high-efficiency particulate arrestance (HEPA) filters are changed every 250hrs.

High Output Operating Bases (HOOBs)
• Staff have been re-briefed and have received face fit testing.
• A process has been introduced relating to the cleaning of operator cab surfaces once the systems have returned from the worksite.
• Wagons loaded with ballast are doused prior to their exit to the worksite.
• An action plan is in place detailing short/medium/long term improvements

Dust Monitoring
• Air sampling has been undertaken at a number of NSC AHD’s and we are currently working with colleagues in IP Track to arrange sampling due to take place in 2016.
• The results of the monitoring will be shared with BDWG members and used to consider future changes to COSHH risk assessments and existing control measures.

Health Surveillance
• A process chart and supporting guidance in line with HSE guidelines has been drafted and circulated to BDWG members for review. We’re communicating with HRSS regarding triggers for health surveillance and requirements for medicals.
• Questionnaires from insured High Output staff and supporting medical information will help HRSS/our medical provider to identify staff who require health surveillance and/or additional support.

Cleaning of Wagons
• We’ve trialled a number of potential solutions, including suction excavators, but to-date we’ve not found anything that has been deemed to be cost effective when compared to AHD staff cleaning the wagons. The NSC is in the process of investing in new plant for our AHD’s which should help with this process.
• Members of the BDWG representing the principal contractor community via TSA have been asked to communicate the importance of avoiding cross contamination (mixing spoil and new ballast/filling wagons dedicated for the transportation of new ballast with spoil).

What should you do?
‘We all understand that we have both a moral and legal obligation to protect our people from occupational ill-health - taking good care of our colleagues and supply chain partners is not only the right thing to do, it also makes great business sense. It is essential that we all play our part in helping to reduce the risk of our colleagues developing occupational health conditions associated with ballast dust, that we each facilitate improvements and actively encourage good practice.

To improve awareness I would like you to consider the following questions, perhaps using your next Team Meeting as a forum to explore each point in greater detail:
• Are we aware of the risks of ballast dust to you/your colleagues/your staff?
• Are we effectively managing these risks?
If the answer to either question is no, then please do contact your Ballast Dust Working Group representative

Brian Mayo, Director, NSC Technical Services

For more information please contact:
STE: David Burgess | TRACK IP: Mark Wright
RMT: John Pencott | NO: Sarah Mitchell
NSC: Neil Roberts or Paul Jarvis