



# Interagency Aviation TECH BULLETIN



IA TB 25-02

7/30/2025

Page 1 of 3

**Subject:** Contaminants found in LC E20 bulk deliveries

**Distribution:** All Users

**Discussion:**

La Grande Airtanker Base (ATB) recently transitioned from LC-95A-Fx to LCE20-Fx on the National Long-Term Fire-Retardant Contract as a Bulk base. La Grande's retardant tanks were recently cleaned, with all old (residual) product waste removed. A full inspection of the manifold and recirculation system was completed the week prior to receiving LCE20-Fx. Additionally, a filter basket was installed between the offload/recirculation pump and the manifold system leading to the storage tanks. During off-loading, retardant from trucks enters through the base's offload/recirculation pump, passes through the filter basket and is then directed into either Storage Tank 1 or 2. The ATB received two truckloads of LCE20 that were deemed unacceptable due to the amount and size of FOD found in the strainer basket and inside the tanks, as well as the pump performance issues the FOD caused. The first truckload of unacceptable product was received during the initial restocking of LCE20 (truckload 2 of 4), and the second truckload of unacceptable product (truckload 5) was received seven days later while supporting an incident.

Truck 2 of 4 experienced difficulties while off-loading into Holding Tank 2. Near completion, the pressure gauge on the backside of the filter basket dropped 10 PSI below the usual operating level of 30 PSI for the ATB offload/recirculation pump. Filter baskets use two gauges—one at the front, one at the back—to monitor flow. If an obstruction disrupts the filter basket, incoming pressure will spike while outgoing pressure declines. Inspection revealed the basket was clogged with debris, including thin plastic ribbons, crystals, and solid phosphate rocks approximately dime sized.

Off-loading Truck 5 experienced similar results to Truck 2 with a spike and drop to both pressure gauges and revealed a clogged filter basket, consisting of thin plastic ribbons, crystals, and solid "Phos rocks" approximately dime sized.

**\* The term "off-loading" is commonly used in ATB operations referring to removing retardant from an aircraft, however, in the context of this Tech Bulletin, off-loading refers to removing retardant from a delivery truck to storage tanks.**



Figure 1: Filter Basket



Figure 2: Pressure Gauge



Figure 3: Truck 2 of 4



Figure 4: Truck 5

### Recommendations:

- Before off-loading the delivery truck, check and ensure the screen on the filter box is clear of any debris.
- While off-loading, base personnel should closely monitor the pressure gauge on the filter box. Establishing a baseline PSI for your pump during off-loading and recirculation is essential. The manufacturer recommends 40 PSI for proper flow through the filter basket. In the event of a pressure differential of less than 30 PSI between the intake and output sides of the filter box, off-loading must stop, and an inspection of the filter box must be performed to detect any debris.



- The USFS LAQA and established best practices are that base staff are taking part of truckload sample from each third of the delivery. This sample is then sent to NTDP for quality control testing. Therefore, ATB personnel should stop off-loading and inspect the filter box after each one-third of the truckload, in alignment with LAQA and established best practices for product sampling.
- If the Bulk base does not have a filter box installed, ATB personnel should contact their Regional Agency POC. Until the filter box is installed, base personnel should monitor pumps for any signs of clogging or abnormally poor performance. They should also monitor samples for any signs of debris. Base personnel should pay extra attention when monitoring Micro-Motion meters, pumps, mixing equipment and samples during operations for any signs of abnormal performance and debris in sampling. These could be indications of incompatible retardant.
- If, at any time, contaminants or debris are found during the off-loading process, the off-loading must stop immediately. ATB personnel must complete the Retardant Issues Notification Form.
- ATBMs are empowered to reject a truckload of retardant for failing to meet standards outlined in the Lot Acceptance & Quality Assurance Procedures (e.g., debris in the product, or system).
- If ATBMs are uncertain about rejecting a load of retardant, please contact NATPM Leslie Casavan at 909-289-4195 or the ANATPM Justin Bohannon at 541-613-6112.



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