GUIDANCE FOR RETURNING BITUMEN STORAGE TANKS TO SERVICE

The information and recommendations in this 'guidance for returning bitumen storage tanks to service' are given in good faith but are not represented as comprehensive or exhaustive. It is the responsibility of the site owner to carry out all necessary health, safety, environmental and other assessments before commencing any works. The guidance is issued without any legal liability on the part of the Refined Bitumen Association. To the extent permitted by law the Refined Bitumen Association hereby disclaims any and all liability relating to the guidance.

A bitumen storage tank may be taken out of service for a number of reasons, which could include;

- Tank cleaning
- Internal inspection/maintenance
- External inspection/maintenance
- Addition/removal of pipelines and equipment
- Grade change
- Etc

Before returning a bitumen storage tank to service it is important to carry out checks, to ensure the integrity and safety of the tank and associated systems. Although the following list is not necessarily comprehensive, the checks should include the following;

- Has the work (Work Permit) been signed off as completed? And any associated isolation certificates signed off/completed?
- Have all tools/equipment been removed from inside the tank (if applicable)?
- Has the tank heating system been checked for general condition, leaks etc?
- Are all manhole covers in place and secure? And, where necessary, gaskets in place?
- Are all pipelines connected and flange joints secure?
- Have all spades/blanks been removed from pipeline flanges and flange connections secured?
- Is vent pipe free from any obstruction?
- Is the tank level gauge operational, and re-calibrated where necessary?
- Is the High Level Alarm operational, and re-calibrated where necessary?
- Are all other safety devices re-instated, and tested where necessary?
- If tank is to receive a different grade of bitumen;
- Have tank product labels been changed?
- Does flange security system reflect new grade?
- Have gauges been re-programmed?
- Have any tank stock systems (manual or electronic) been suitably amended?
- Is the tank and connecting pipeline free of water and certified as such?

For a new tank or a tank being returned to service after cleaning etc, the bitumen supplier is recommended to adopt the following procedure, as a minimum, for the first delivery of bitumen;

- Receive assurance from customer that tank is clean and dry.
- Receive further assurance from customer, the tank has been checked again on the day of delivery.
- Ensure the customer's representative is in attendance for the whole of the delivery.
- Discharge approximately 5 tonnes, or sufficient to ensure heating coils or elements are below the bitumen level within the tank. Then stop the delivery and purge line clear. At this point the tank heating system can be turned on.
- Wait fifteen minutes for the tank shell/components to increase in temperature.
- Any condensation or remaining water residue will boil off. Be alert for signs of significant amount of water in tank. (steam/bitumen from vent, bubbling of product, tank vibration/movement etc).
- Check all tank connections for leaks (pumps, valves, lagging etc).
- Providing there are no problems, continue with the discharge cautiously, maintaining safety awareness throughout.