

Tanker decanting operations – Flammable Liquids

This Operations Bulletin should be read in conjunction with the following SOGs:

- SOG 1, Incident Control System
- SOG 9, Breathing Apparatus
- SOG 10, Hazardous Materials
- SOG 18, Incident/Emergency Support

Issue

NSWFB Incident Controllers are warned that private contractors who respond to tanker decanting operations must be closely supervised and their work methods and training standards must meet the NSWFB requirements for safely decanting the tanker.

Background

A review of an incident in 2007 involving a bulk road tanker carrying ethanol demonstrated that the private contractors assigned to decant the tanker did not have sufficient resources or training to work safely in the combat area. The NSWFB Incident Controller had to supply the tanker rollover team with personal protective equipment (PPE) and firefighters had to closely supervise the team to ensure the tanker decanting was conducted safely.

The NSWFB is liaising with the dangerous goods transport industry and the Canberra and Regional Oil Industry Emergency Response Group to develop an industry standard and national training package for tanker rollover teams decanting bulk dangerous goods, specifically flammable liquids, at emergency incidents.

As with all NSW Fire Brigades activities, a risk management approach should be applied prior to any action. The safe working practices listed below are aligned to the eight Hazmat guidelines in SOG 10.5.

Safe working practices for decanting dangerous goods tankers

1. Safe Approach

In accordance with In Orders 2001/19, *Use of non-operational personnel at emergency incidents*, the Incident Controller must ensure all non operational personnel including members of the tanker rollover teams are wearing appropriate PPE and are supervised.



Tanker decanting operations – Flammable Liquids

Ensure everyone is protected from toxic exposure to any hazardous materials and dress people to the greatest danger, eg if a flammable atmosphere is possible, everyone must wear full structural firefighting PPE in the combat area.

If there is any possibility of the presence of an unbreathable or explosive atmosphere, SCBA must be worn by everyone entering the combat area.

2. Incident Command

Ensure an Incident Action Plan (IAP) has been drawn up by the Incident Management Team and that it includes the tasks required of industry tanker rollover teams.

Request the transport emergency response plan (TERP) from the transport operator. A TERP is a document carried on the vehicle that outlines response mechanisms in case of a crisis and outlines the necessary resources, personnel and logistics required to resolve it.

Request that the team leader of the tanker roll over team provide a work method statement for decanting the tanker and ensure it aligns with the IAP developed by the Incident Controller. This work method statement should follow the NSWFB's approach for managing incidents and include a risk assessment before any activities.

IMT activities should include: a safe approach; close liaison with incident control; compliance with NSWFB scene security, including Incident Crew Management System and BA controls; identification and assessment of all hazards; hazards have been assessed and mitigation strategies put in place, all resources required by the tanker rollover team are in place before activities are undertaken; efficient and effective communication is set up between tanker rollover team and the Incident Controller; and all personnel are appropriately decontaminated on leaving the hot zone.

3. Scene security

Ensure that warm and hot zones are established with clearly identified access and egress points.

Record and include all private contractors in the ICMS and maintain strict SCBA control procedures for everyone working in the Hot Zone, including back up teams.

Tanker decanting operations – Flammable Liquids

Identify hazards

Identify hazards using the following resources;

- Emergency Information Panel (EIP)
- Material Safety Data Sheet (MSDS)
- Chemdata
- HAG form
- Industry experts as identified on the EIP
- Intermediate or primary Hazmat personnel / equipment
- Databases carried on appliances or available through your Communication Centre (Com Cen)
- Hazmat Management/Scientific Advisor through the Com Cen.
- Dynamic risk assessment must be conducted before any personnel enter the combat area.

5. **Assess Potential Harm and Environmental Contamination**

Remove or manage ignition sources.

Monitor the status of the atmosphere surrounding the tanker through use of the Orion gas detector.

Ensure fire protection is in place during the operation.

Ensure measures are in place to manage possible environmental contamination.



⚠ NOTE

Splash filling is prohibited during tanker decanting operations

Splash filling is when the liquid is allowed to fall uncontrolled from the entry spout of the container to the bottom of the container. This creates static electricity which is a source of ignition in a flammable environment. The petroleum industry recommends that no container larger than 20 litres be splash filled. In all other situations a spear must be used to funnel the fuel to the bottom of the tank, minimising the build up of static.

6. Call in resources

If specialist resources are required, request them through the relevant Com Cen.



Tanker decanting operations – Flammable Liquids

7. Monitor and record information

Monitor and record all information relevant to the incident. Ensure that information on the activities of the tanker rollover team is included in your Com Cen messages.

8. Render safe and decontaminate

Once decanting is complete, ensure the site is rendered safe by the removal of the disabled tanker by appropriately trained and resourced personnel. Any residual material from the incident and decanting must also be contained and handed over to the owners of the hazardous material.

All personnel are to be appropriately decontaminated upon leaving the hot zone.

Noted, Station Commander	A	В	С	D	Other

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Previous Operations Bulletin: 2007/02 – Acetylene cylinders exposed to fire or mechanical shock.