16th February 2005

PMC Limited Marle Place Brenchley Tonbridge Kent TN12 7HS

## For the attention of



## RE: MAJOR INCIDENT - PMC STORAGE TANK T2 - 15.02.05

being stored in your T2 tank in order to receive the OP1.

Following our brief telephone conversation p.m. yesterday re the above, we are now able to provide you with a full report of the incident which is as follows:-

- 1. At 11 a.m. a road tanker made a delivery of 21.2 tonnes of OP1 (ORTHO-CRESOL/PHENOL MIXTURE (OP1)) to our works.

  From this delivery, 17.15 tonnes was discharged into your storage tank T2 as referenced your letter dated the 23.9.03. OP1 when delivered is at a temperature in excess of 40 C in order to keep it a mobile solution. As this material has a crystallisation point of approximately 17 C, it is important to add this to a dilutant in order to prevent the OP1 crystallising into a solid "mass" at ambient temperature.

  In view of the above, 16,000 litres of mixed cresols (the dilutant) was already
- Immediately following the discharge of the OP1 into your T2 tank, our two employees namely and who were dealing with the process heard a loud cracking noise and it was observed that the tank was leaning. Upon further investigation it was discovered that two of the four legs holding the tank on a fixed platform attached to the tank had failed due to the bottom of the tank becoming distorted.

- 3. A major risk assessment was undertaken immediately, and it was concluded that there were two major areas of concern i.e.
  - a) Possible rupture of the bottom of the tank.
  - b) That the uneven weight distribution on the two remaining legs could result in the tank toppling over, thus causing a major incident.
- In view of the seriousness of the situation, a quick discussion took place with the Works Manager and (MAP Engineering Limited) who looks after our maintenance and happened to be on site at the time to agree a course of immediate action. It was agreed that the best course of action was ultimately to remove the entire contents from the tank. However, before this was possible the following action was necessary.
  - a) To inform the Fire Brigade of the situation, and to ask for their assistance.
  - b) To cease production in all departments and instruct employees to make their way to the time office where they could be counted.
  - c) To stabilise the tank:
  - d) Reduce the weight on the bottom of the tank by removing some of the contents from inside. (This would also help to stabilise it).
  - To mix the remaining contents in order for the material to remain in a liquid state.
    - f) To transfer the mixed contents of tank T2 into an adjacent tank.
- 5. When the Fire Brigade arrived, a meeting was held with the officer in charge, who was informed of our plan of action, which would be implemented in stages having firstly cleared our proposed action with them.

  As a result of this the brigade remained on stand-by on site throughout the operation, which took several hours to complete.
- 6. a) In order to stabilise the tank, Jacks were placed beneath the bottom of the tank to compensate for any further movement.
  - b) In order to reduce the weight on the bottom of the tank 8000 litres of material from the T2 tank was transferred to the road tanker, which had delivered the OP1.
  - c) The material remaining in the T2 tank was then circulated in order to prevent the OP1 Crystallising.
  - d) In order to provide sufficient space in the adjacent storage tank to accommodate the remaining contents of tank it was necessary to empty this tank of 8000 litres of Mixed Cresols into the road tanker.
  - e) The 24000 litres remaining in tank T2 was then transferred to the adjacent tank. 16000 litres late p.m. 15.02.05 and 8000 litres on the 16.02.05.

## **FURTHER ACTION REQUIRED**

Although the tank is now empty, we are very concerned as to the stability of the tank in "high winds" due to the fact that only two of the four legs remain welded to the platform, and that the only course of action is to remove the tank from the area without further delay in order to ensure a safe working area.

On your behalf, we will be getting two quotations from local companies who are competent to carryout this work.

We await your comments.

Yours sincerely

Manager Director