SUBJECT: Tolerance for Prowl N-(lethylpropyl)-3, 4-dimethyl-2, 6-dinitrobenzeneamine on Sunflowers (0.1 ppm)  

DATE: February 18, 1977

FROM: Toxicology Branch

TO: Special Registration Section  
Ms. Libby Zink

Pesticide Petition 7G1896  
Petitioner: American Cyanamid Company

Conclusion:
1. Establish temporary tolerance.
2. Inform petitioner that a cataract study is needed for this compound.
3. Grant EUP.

Substance identification - See title, CL 92553, AC 92553.

Referenced Petition:
4G1451, 5F1556

Review:

No new toxicology studies were submitted, prior reviews, see above petitions and memo of February 22, 1975. The toxicity studies submitted on this chemical and the 4E Formulation are summarized as follows:

### Acute tests (technical)

<table>
<thead>
<tr>
<th>Oral LD$_{50}$</th>
<th>1.05 g/kg female</th>
<th>1.25 g/kg male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mouse</td>
<td>1.34 g/kg female</td>
<td>1.62 g/kg male</td>
</tr>
<tr>
<td>Dermal LD$_{50}$</td>
<td>&gt;5 g/kg</td>
<td>not irritating</td>
</tr>
<tr>
<td>Rabbit</td>
<td>not irritating</td>
<td>not irritating</td>
</tr>
</tbody>
</table>

### Acute tests 4E formulation

<table>
<thead>
<tr>
<th>Oral LD$_{50}$</th>
<th>3.38 g/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dermal LD$_{50}$</td>
<td>&gt;2 ml/kg (judged from subacute study)</td>
</tr>
<tr>
<td>Rabbit</td>
<td>moderate to severe irritant</td>
</tr>
<tr>
<td>Rabbit</td>
<td>very slight and reversible irritation</td>
</tr>
</tbody>
</table>

Krol & Brown signed (6/15/77 - Spencer)
Subacute and long-term tests

21 day dermal (rabbit)  
No effect for 1g/kg/day technical, slight to moderate erythema and edema for 2 ml/kg/day of 4E formulation  
NEL 500 ppm  
NEL 62.5 mg/kg (2500 ppm).

90-day rat feeding study  
90-day dog feeding study  
2-year rat feeding study  
18 months mouse study  
3 generation study rats  
Teratology (rat)  
Dominant lethal study  
Effects on male mammary glands  
No effect at 1g/kg/day  
No effect at 2500 ppm (highest dose)  
No effect at 5000 ppm (highest dose)

The ADI for man can be calculated based on long-term studies and is 15 mg/day for a 60 kg man. All tolerances which are established under 180.361 and all pending tolerances are at the 0.1 ppm level, the ADI thus is not exceeded.

Reto Engler, Ph.D.

2/24/77