UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

Chem File 111801

OFFICE OF
PESTICIDES AND TOXIC
SUBSTANCES

December 12, 1991

MEMORANDUM

SUBJECT: Amendment of EFED List C Review for Poly (hexamthylenebiguanide) (case number 3122)

FROM: Bernice Slutsky
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TO: Linda Deluise
Generic Chemical Support Branch
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THRU: Amy Rispin, Chief
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Because the use pattern for this chemical includes oil recovery drilling muds the following revisions in EFED data requirements have been made:

EEB DATA REQUIREMENTS

Because oil well use can result in discharge to the aquatic environment, the following data are required:

72-1(b) acute fish tox. ((bluegill)
72-1(c) acute fish tox. (trout)
72-1(d) Acute fish tox. (trout)
72-2(a) acute aquatic invert. tox. (this study has been reviewed and the requirement is satisfied)
72-2(b) Acute aquatic Invert. Tox.

Because oil wells can be associated with coastal wetland, estuarines or marine environment the following data are required:
72-3(a) Acute estu/mari tox fish
72-3(b) acute estu/mari tox. mollusk
72-3(c) acute estu/mari tox shrimp

72-3(d) acute estu/mari tox fish (TEP)
72-3(e) acute estu/mari tox mollusk (TEP)
72-3(f) acute estu/mari tox shrimp (TEP)

Because oil well use can use can result in discharge to the aquatic environments (both freshwater and estuarine) on a recurrent basis, the following studies are required:

72-4(a) early life-stage fish
72-4(b) life-cycle aquatic invertebrate

EFGWB DATA REQUIREMENTS

Given the potential for discharge to aquatic environments, the Fate chapter has been amended to currently require the following studies:

161-1 Hydrolysis
161-2 Photodegradation in water
161-3 photodegradation in soil
162-1 Aerobic soil metabolism
162-3 Anaerobic soil Metabolism[1]
163-1 Leaching, adsorption/desorption[2]
165-4 Fish bioaccumulation

If the registrant's explanation leads us to believe that significant environmental exposure may result from the "closed" uses of this chemical, then the following additional field studies should be imposed immediately:

164-1 Terrestrial field dissipation
164-2 Aquatic sediments
165-3 Accumulation in irrigated crops
165-5 Accumulation in aquatic non-target organisms

cc:
Anne Barton
Hank Jacoby
Doug Urban
Cover Memo File

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[1]The Anaerobic (soil) Metabolism data requirement normally applies, but in light of possible aquatic exposure, the Anaerobic Aquatic (sediment) Metabolism data requirement is preferred.

[2]The batch equilibrium protocol is preferred for the mobility studies.