CENTER FOR DRUG EVALUATION AND RESEARCH

APPLICATION NUMBER: 020607

ENVIRONMENTAL ASSESSMENT AND/OR FONSI

ENVIRONMENTAL ASSESSMENT

AND

FINDING OF NO SIGNIFICANT IMPACT

FOR

ARTHROTEC[R] (diclofenac sodium and misoprostol) Tablets

NDA 20-607

FOOD AND DRUG ADMINISTRATION

CENTER FOR DRUG EVALUATION AND RESEARCH

DIVISION OF GASTRO-INTESTINAL AND COAGULATION DRUG PRODUCTS (HFD-180)

FINDING OF NO SIGNIFICANT IMPACT

NDA 20-607
ARTHROTEC (diclofenac sodium/misoprostol) Tablets

The National Environmental Policy Act of 1969 (NEPA) requires all Federal agencies to assess the environmental impact of their actions. FDA is required under NEPA to consider the environmental impact of approving certain drug product applications as an integral part of its regulatory process.

The Food and Drug Administration, Center for Drug Evaluation and Research has carefully considered the potential environmental impact of this action and has concluded that this action will not have a significant effect on the quality of the human environment and that an environmental impact statement therefore will not be prepared.

In support of their new drug application for **ARTHROTEC (diclofenac sodium and misoprostol) G.D. Searle & Co.** has prepared an environmental assessment in accordance with 21 CFR 25.31a (attached) which evaluates the potential environmental impacts of the manufacture, use and disposal of the product.

Diclofenac sodium and misoprostol are synthetic drugs that will be administered orally in a combination tablet. The inner core of the tablet containing diclofenac sodium is for the treatment of rheumatoid arthritis, osteoarthritis, ankylosing spondylitis and musculoskeletal disorders while the misoprostol outer core is a prophylactic treatment for preventing stomach ulcers associated with the diclofenac sodium drug substance. The drug substances are currently marketed in the United States in other products. The drug substances will be manufactured at facilities identified in the environmental assessment. The drug product will be manufactured by the applicant . The finished drug product will be used in hospitals, clinics and homes throughout the United States.

Arthrotec may enter the environment from excretion by patients, from disposal of pharmaceutical waste or from emissions from manufacturing sites. The projected environmental introduction concentration from use is ppb. CDER has routinely found that concentrations ppb have no effect on relevant standard test organism, therefore the applicant has submitted a Tier 0 EA without format items 7, 8, 9, 10 and 11.

Disposal may result from waste generated during production, returned, recalled or expired goods and user disposal of empty or partly used product and packaging. Pharmaceutical waste will be

sent to licensed disposal facilities. At U.S. hospitals and clinics, empty or partially empty packages will be disposed according to hospital/clinic procedures. From home use, empty or partially empty containers will typically be disposed of by a community's solid waste management system which may include landfills, incineration and recycling, although minimal quantities of unused drug may be disposed of in the sewer system.

Precautions taken at the sites of manufacture of the bulk product and its final formulation are expected to minimize occupational exposures and environmental release.

The Center for Drug Evaluation and Research has concluded that the product can be manufactured, used and disposed of without any expected adverse environmental effects. Adverse effects are not anticipated upon endangered or threatened species or upon property listed in or eligible for listing in the National Register of Historic Places.

/S/

3/5/97
DATE

George T. Chen, Ph.D.
Review Chemist, HFD-180
Division of Gastrointestinal and
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/S/

3/5/97
DATE

Eric P. Duffy, Ph.D.
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/S/

3/7/97
DATE

Nancy Sager
Environmental Assessment Team Leader
Center for Drug Evaluation and Research

Attachment:
Freedom of Information Copy (FOIA) of the Environmental Assessment for NDA 20-607.

cc:
NDA 20-607
HFD-180/Division File
HFD-180/EDuffy
HFD-820/JGibbs
HFD-357/NSager
HFD-181/BStrongin
HFD-180/GChen
R/D init: EDuffy/2-28-97
GC\dob **F/T** 3-4-97/WP: c:\wpfiles\chem\N\

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