

ORNL/Sub--83-13817/2-01

DE86 006733

SOURCE TERM ESTIMATES FOR SYNTHETIC FUELS TECHNOLOGIES:  
INDIRECT COAL LIQUEFACTION TECHNOLOGIES

Technical Representative  
L. W. Barnhouse  
ENVIRONMENTAL SCIENCES DIVISION

Report Prepared by  
TRW Energy Technology Division  
One Space Park  
Redondo Beach, California 90278  
under  
Subcontract No. 13817

Date Published - January 1986

Prepared for the  
OAK RIDGE NATIONAL LABORATORY  
Oak Ridge, Tennessee 37831  
operated by  
MARTIN MARIETTA ENERGY SYSTEMS, INC.  
for the  
U.S. DEPARTMENT OF ENERGY  
under Contract No. DE-AC05-84OR21400

## CONTENTS

1. INTRODUCTION	1-1
2. INDIRECT LIQUEFACTION WITH LURGI GASIFICATION AND FISCHER-TROPSCH TECHNOLOGIES	2-1
2.1 Base Plant Description	2-4
2.2 Pollution Control	2-16
2.3 Source Term Estimates for Waste Streams	2-19
2.4 Data Uncertainty and Limitations	2-38
2.5 References	2-44
3. INDIRECT LIQUEFACTION WITH KOPPERS-TOTZEK GASIFICATION AND FISCHER-TROPSCH TECHNOLOGIES	3-1
3.1 Base Plant Description	3-3
3.2 Pollution Control	3-15
3.3 Source Term Estimates for Waste Streams	3-18
3.4 Data Uncertainty and Limitations	3-36
3.5 References	3-45