DECOMMISSIONING PLAN

TOBICO MARSH SGA SITE

Kawkawlin, Michigan

PREPARED FOR:

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

MERA NO. 090015
MACTEC ENGINEERING & CONSULTING OF MICHIGAN, INC.
PROJECT NO. 3293035114

REVISION 1
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DECOMMISSIONING PLAN

TOBICO MARSH SGA SITE
Kawkawlin Township, Michigan

US NRC License Number SUC-1581

Docket Number 40-9015

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–Deterministic Module Summary Report (summary.rep)
–Detailed Pathway Calculations Report (detailed.rep)
–Intake Quantities and Health Risks Report (intrisk.rep)
–Detailed Concentrations and Radionuclides Report (concent.rep)
–Daughter Dose Contributions Report (daudose.rep)
–Probabilistic (Uncertainty) Assessment Report (mcsummar.rpt)

APPENDIX B RESRAD COMPUTER DOSE MODELING OUTPUT FILES/REPORTS—NATURALIST SCENARIO, SUBSURFACE SOIL SOURCE TERM
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APPENDIX D RESRAD COMPUTER DOSE MODELING OUTPUT FILES/REPORTS—COMPOSITE RECREATIONAL USER SCENARIO, SUBSURFACE SOIL SOURCE TERM
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APPENDIX F RESRAD COMPUTER DOSE MODELING OUTPUT FILES/REPORTS—NATURALIST SCENARIO, SURFACE SOIL SOURCE TERM
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APPENDIX G RESRAD COMPUTER DOSE MODELING OUTPUT FILES/REPORTS—RECREATIONAL FISHER SCENARIO, SURFACE SOIL SOURCE TERM
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APPENDIX I LEACHATE DATA, TECHNICAL MEMO #5

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APPENDIX K MDNR/NRC CORRESPONDENCE RELATIVE TO THE DECOMMISSIONING PLAN

APPENDIX L CROSSWALK RELATING LOCATION OF INFORMATION FOUND IN THE DP WITH THE CHECKLIST FROM NUREG 1727, APP. A

APPENDIX M LARGE FORMAT TOPOGRAPHIC SITE MAP

APPENDIX N MDNR FINANCIAL ASSURANCE VEHICLE, "STATEMENT OF INTENT"

ACRONYMS

ABB-ES .....ABB Environmental Services, Inc.

Ac .....Actinium

AEC.....Atomic Energy Commission

AEDE.....Annual Effective Dose Equivalent

ALARA.....As Low As Reasonable Achievable

ALI.....Annual Limit on Intake

ASTM .....American Standards for Technology Manual

bgs.....Below Ground Surface

Bi.....Bismuth

BOC .....Bureau of Census

CAR .....Corrective Action Request

CFR.....Code of Federal Regulations

CoC .....Chain of Custody

COPC .....Contaminant of Potential Concern

CPM .....Contractor Project Manager

CRDL.....Contract Required Detection Limit

CT .....Central Tendency

CV .....Coefficient of Variation

DAC .....Derived Air Concentration

DCG .....Derived Concentration Guideline

DCGL.....Derived Concentration Guideline Level

$DCGL_W$ .....Derived Concentration Guideline Level for the average (or median) concentration in the survey unit

$DCGL_{EMC}$ .....Derived Concentration Guideline Level—Elevated Measurement Comparison Concentration

DFP .....Decommissioning Funding Plan

DOT .....U.S. Department of Transportation

DP .....Decommissioning Plan

DQA.....Data Quality Assessment

DQO.....Data Quality Objective

EMC.....Elevated Measurement Comparison

FC.....Fuel Cycle
FSS.....Final Status Survey
GM.....Geiger-Mueller
GPS.....Global Positioning System
HDPE.....High Density Polyethylene
HLA.....Harding Lawson Associates
K.....Potassium
K2O.....Potash
Kd.....Distribution Coefficient
LCTS.....Leachate Collection and Treatment System
LLW.....Low-Level (Radioactive) Waste
LWD.....Low Water Datum
M&TE.....Maintenance and Test Equipment
MARSSIM.....Multi Agency Radiation Survey and Site Investigation Manual
MBS.....Midland/Bay City/Saginaw
MDA.....Minimum Detectable Activity
MDC.....Minimum Detectable Concentration
MDEQ.....Michigan Department of Environmental Quality
MDNR.....Michigan Department of Natural Resources
MDPH.....Michigan Department of Public Health
msl.....Mean Sea Level
MSU.....Michigan State University
MTC.....Materials Testing Consultants, Inc.
N.....nitrogen
NAAQS.....National Ambient Air Quality Standard
NAD.....North American Datum
NaI.....Sodium Iodide
NVLAP.....National Voluntary Laboratory Accreditation Program
NIST.....National Institute for Standards and Technology
NORM.....Naturally Occurring Radioactive Material
NRC.....Nuclear Regulatory Commission
ODC.....Other Direct Costs
OMB.....Office of Management and Budget

ORAU .....Oak Ridge Associated Universities
P2O5 .....Phosphate
Pa.....Protactinium
Pb .....Lead
pCi/g.....Pico Curies per Gram
PDF .....Probability Distribution Function
PGD.....Policy and Guidance Directive
PM.....Project Manager
PPE.....Personal Protective Equipment
PRA.....Probabilistic Risk Assessment
QA.....Quality Assurance
QC .....Quality Control
Ra .....Radium
RCOPC .....Radiological Constituents of Potential Concern
RMA .....Radioactive Materials Area
RME.....Reasonable Maximum Exposure
RP.....Radiation Protection
RPP .....Radiation Protection Program
RSC .....Radiation Safety Committee
RSO.....Radiation Safety Officer
RSS .....Radiological Scoping Survey
SCBA .....Self-Contained Breathing Apparatus
SDMP.....Site Decommissioning Management Plan
SGA.....State Game Area
SHO.....Safety & Health Officer
TDS .....Total Dissolved Solids
TEDE .....Total Effective Dose Equivalent
TLD.....Thermoluminescent Dosimeter
Th .....Thorium
Tl .....Thallium
U.....Uranium
USEPA.....United States Environmental Protection Agency
VOC .....Volatile Organic Compound

WMI.....Waste Management, Inc.

WMS.....Waste Management Specialist

WRS.....Wilcoxian Rank Sum