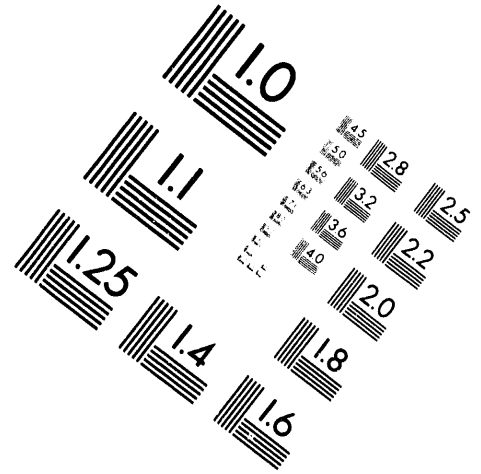
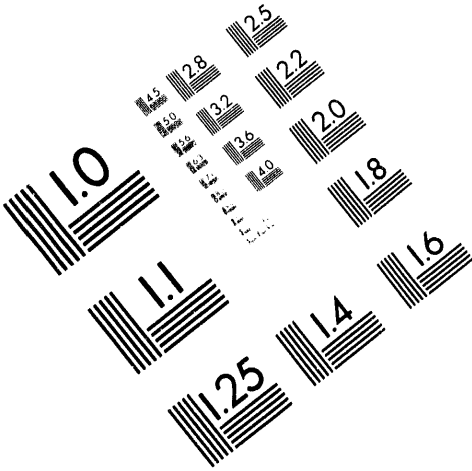




AIM

Association for Information and Image Management

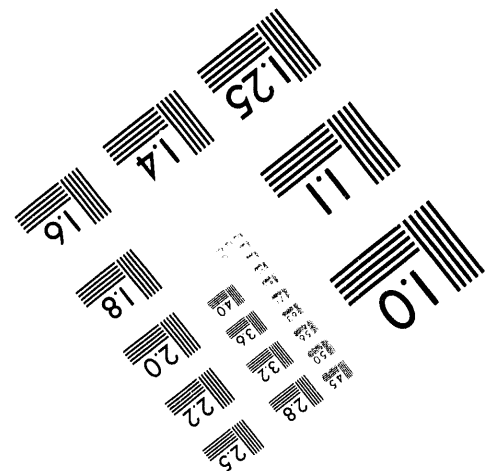
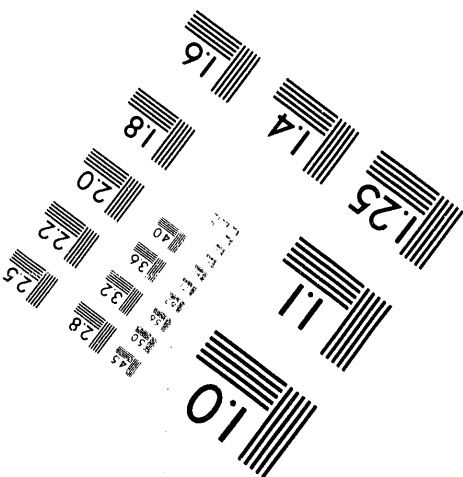
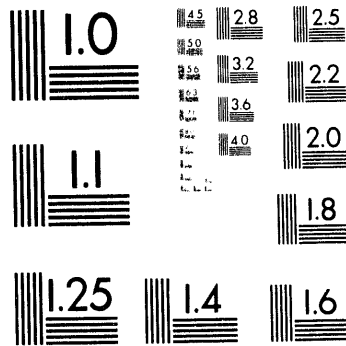
1100 Wayne Avenue, Suite 1100
Silver Spring, Maryland 20910
301/587-8202



Centimeter



Inches



MANUFACTURED TO AIM STANDARDS
BY APPLIED IMAGE, INC.

1 of 2

**TRANSURANIC RADIONUCLIDES DISPERSED INTO THE
AQUATIC ENVIRONMENT, A BIBLIOGRAPHY**

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April 1994

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Livermore National Laboratory under contract W-7405-Eng-48.



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ABSTRACT:

The purpose of this project was to compile a bibliography of references containing environmental transuranic radionuclide data. Our intent was to identify those parameters affecting transuranic radionuclide transport that may be generic and those that may be dependent on chemical form and/or environmental conditions (i.e., site specific) in terrestrial, aquatic and atmospheric environments. An understanding of the unique characteristics and similarities between source terms and environmental conditions relative to transuranic radionuclide transport and cycling will provide the ability to assess and predict the long term impact on man and the environment. An additional goal of our literature review, was to extract the ranges of environmental transuranic radionuclide data from the identified references for inclusion in a data base. Related to source term, these ranges of data can be used to calculate the dose to man from the radionuclides, and to perform uncertainty analyses on these dose assessments.

In an attempt to gather relevant information about the transuranic radionuclides in a variety of environments, we conducted an extensive literature search. In our literature search we identified over 5700 potential written sources of information for review. In addition, we have identified many references that were not found through the literature searches, but which were known to contain useful data. Approximately 2600 documents were determined to contain information that would be useful for an in depth study of radionuclides in different environments. The journal articles, books, reports and other documents were reviewed to obtain the source term of the radionuclides studied.

On the basis of our reviews, we have arbitrarily outlined five general source terms. These are fallout, fuel cycle waste, accidents (not involving atmospheric fallout), disposal sites and resuspension. Resuspension of the transuranic radionuclides is a unique source term, in that the radionuclides can originate from any of the other source terms. If these transuranic radionuclides become resuspended into the air, they then become important as a source of inhaled radionuclides.

INTRODUCTION

The issue of transuranic radionuclides in the environment has been the subject of extensive research. For approximately five decades, plutonium and americium have been dispersed into the environment, resulting in widespread low level contamination of soil, water, plants and animals. To compare the transport, uptake, cycling and resuspension of plutonium and americium from various source terms around the world, it was necessary to summarize information from studies of these radionuclides in different environments. Some logical method of categorizing the source of the

transuranic radionuclides had to be devised to use the data from the studies in a predictive manner. Our first task was to identify the source terms that we considered to be of primary importance.

This report is intended to cover the global reports dealing with inputs from the different source terms to aquatic (fresh and marine) environments as well as pertinent laboratory studies, other reviews, and dose assessments. This is Section I of a three part study. Terrestrial and atmospheric environments will be covered in Sections II and III. The global aquatic environment has received inputs of transuranic radionuclides from many sources. Included among the sources are the detonations of nuclear devices in the atmosphere, on the earth's surface and underwater; the localized inputs of low-level liquid wastes from many different nuclear facilities; the disposal of packaged wastes in the sea; lost military hardware; accidents involving nuclear power reactors; and malfunctioning satellite power sources.

The literature is sorted with respect to source term in order eventually to compare and assess different literature values on short and long term bioavailability and on the behavior and fate of the transuranic radionuclides.

METHODS AND RESULTS:

We began by searching several large on-line databases using keywords that we had identified as relevant to transuranic radionuclide transport, uptake and cycling in the environment. These searches were performed from June through September 1992.

The Energy Data Base was the first on-line database we searched. Using our original keyword strategy, the original number of identified items was only 869. On the basis of each abstract provided with the search, only 516 seemed to contain the kind of information relevant to our goals. We adjusted our keyword list by both expanding some areas, and narrowing the focus in others. A second search of the Energy Data Base produced an additional 4258 titles. About 1700 of these items were determined to be of interest.

Next, we expanded our search to the Chem. Abstracts Data Base. This search yielded 969 items. Some of these had already been identified through the Energy Data Base searches. In addition to the references identified in our on-line searches, we were already in possession of several references known to contain useful data. A final search was performed with the intent of yielding these known references. This assured us that our keyword list was producing the intended result.

After the final search was completed, we began to obtain all of the identified references. As these were obtained, the reference list at the end of each document was checked for additional references that had not been previously

identified. This resulted in further titles being added to our bibliographic database.

To produce our bibliography and environmental source term databases, we have used two commercially available software packages. ProCite version. 2.0 for the Macintosh was used to produce the bibliography. The source term database was produced using dBase IV, version. 1.5 on an IBM PS/2. The two different software packages were cross referenced to each other using a common field. The dBase IV database was used to keep track of the information extracted from the references. This allowed us to sort the references using a variety of criteria.

Table 1 contains a compilation of reference accession numbers related to specific studies of transuranic radionuclides originating from fallout and accidents in aquatic environments. This table also includes references dealing with radiological dose originating from these sources.

Table 2 is a comparable compilation of references concerning transuranic radionuclides from fuel cycle wastes and disposal sites. The fuel cycle wastes result from direct discharges or releases from different nuclear related facilities and waste disposal sites. Also provided is a list of related dose assessment reports dealing with material released from these sources.

Table 3 lists references to laboratory studies and some reviews of the transuranium elements. Laboratory studies are divided into biological accumulation/loss studies involving different fresh water and marine organisms; distribution coefficient/sorption-desorption studies with different fresh water and marine sediments; oxidation state and speciation work; investigations of transuranic radionuclides and different organic complexing agents; and other efforts.

Each table identifies an accession number under a specific source term and the aquatic medium studied; either fresh or marine. The footnotes at the end of Tables 1 and 2 identify specific sources listed in the tables and the medium studied.

Table 4 is an alphabetical listing of all accession numbers. This table identifies where the applicable accession number is found in Tables 1, 2, or 3. Any reference dealing with more than one source or medium is identified under all applicable categories.

Following the tables is the list of references associated with each accession number.

DISCUSSION:

This bibliography is an attempt to provide a resource for information on the behavior of transuranic radionuclides in the aquatic environment from fallout, fuel cycle waste, accidents, and disposal sites. Our final on-line database search was in September 1992. There may be additional references of interest in these on-line databases added since that time. References identified by other methods are included through July 1993.

TABLE 1. Accession numbers: Transuranic data base—global aquatic environments.

General source terms—atmospheric fallout (nuclear testing, nuclear weapons, safety tests), accidents and references to dose from ingestion of aquatic foods contaminated with sources.

Global Deposition ¹		Intermediate Range Deposition ¹¹		Close-In Deposition ¹¹¹		Dose/Diet
Column a Marine ²	Column b Fresh ³	Column c Marine ²	Column d Fresh ³	Column e Marine ²	Column f Fresh ³	Column g All Aquatic
aara770011	albj751330	bowv800741	nosv811917	aara710576	aara810009	agnp781328
aara781313	albj751331	buek871428		aara711312	faud851557	anon861329
aara791314	albj751332	buek901220		aara770002	gond890784	ben762640
aara810009	albj770020	coup840747		aara800003	irae890974	benb760068
aara822425	albj771333	felw892651		aara800010	kuda910274	coup840747
aara822498	albj772782	hiss780217		aara810009	mahy881171	eurr901240
aara832277	albj791335	hole911252		aara822425	nosv760351	gond890784
aara841316	albj810625	ilue871719		aara842260	nosv811917	hiss860795
aara880005	albj811334	ilue871720		aara850593	robw800403	hiss870218
agnp781328	albj890659	livh821164		aara880005	sakm870413	larr831151
allb832317	allb832317	livh852668		aara880600	sakm911290	mula761188
andr822386	andr822396	livh870297		aara891208		nosv811917
ands901209	bals800058	livh882670		angl811350		nosv870867
anon602635	bals841369	nagy841051		babj910056		nrcr832284
anon861329	barg770541	nelv770339		bowv750756		okas771926
bacm850823	beat861380	nosv800350		bowv752642		okas781927
bals762636	beat871381	nosv810347		cohn851488		pasa781930
bals782637	beat871382	nosv810646		coup840747		penr882753
bals800058	berk860719	nosv860348		gasc921086		robw800403
bals811368	bojr791407	nosv870349		gren771629		robw810660
bals822510	bonp911217	nosv870867		hanw751106		summ812087
bals832337	bopr822393	okas781927		irae890974		wild752166
bals841369	bowv722783	ribj902919		jacd832750		
bals860059	bowv731415	robw810660		komk840815		
beat801378	bowv741416	sakm752003		levy781799		

TABLE 1 (continued). Accession numbers: Transuranic data base—global aquatic environments.

General source terms—atmospheric fallout (nuclear testing, nuclear weapons, accidents, safety tests), and references to dose from ingestion of aquatic foods contaminated with sources.

Global Deposition ¹		Intermediate Range Deposition ¹¹		Close-In Deposition ¹¹¹		Dose/Diet
Column a Marine ²	Column b Fresh ³	Column c Marine ²	Column d Fresh ³	Column e Marine ²	Column f Fresh ³	Column g All Aquatic
beat822378	bowv752791	shis870439		evy781800		
beat822383	bowv760552	thoc582686		marj901263		
bely822499	bowv772784			marr741822		
ben1791391	buek850761			mcmg851844		
ben1802641	corr871491			nelv732673		
ben1832332	delr861503			nelv770339		
ben1860660	eakj840754			neva751902		
berk860719	eakj850131			neva751903		
beta860534	edgd750135			nosv721059		
beta880720	edgd760133			nosv741915		
bojr791407	edgd760137			nosv751061		
bopr822393	edgd770136			nosv760346		
bowv710739	edgd812550			nosv760351		
bowv750756	eyml771550			nosv800350		
bowv760076	eyml801551			nosv802516		
bowv760553	felw830154			nosv802677		
bowv761417	fosg840762			nosv810347		
bowv800741	fukr810768			nosv812551		
bowv802643	gole791090			nosv852752		
bowv811068	habk870191			nosv860348		
buek851426	hare800204			nosv861201		
buek862644	harf751668			nosv870349		
buek871427	heim860567			nosv870867		
buek871428	hirk810216			nosv880869		
cald851439	hirk900792			penr811036		

TABLE 1 (continued). Accession numbers: Transuranic data base—global aquatic environments.

General source terms—atmospheric fallout (nuclear testing, nuclear weapons, accidents, safety tests), and references to dose from ingestion of aquatic foods contaminated with sources.

Global Deposition ¹		Intermediate Range Deposition ¹¹		Close-In Deposition ¹¹¹		Dose/Diet
Column a Marine ²	Column b Fresh ³	Column c Marine ²	Column d Fresh ³	Column e Marine ²	Column f Fresh ³	Column g All Aquatic
cald870094	jeac810805			penr841938		
cara781445	joss881739			penr882754		
carr801456	joss891738			robw800403		
carr812645	karj751740			robw81402		
carr871193	koim771142			sakm900843		
caug801465	koim791141			schw731007		
chel770902	koim811144			schw742012		
cher801471	koim820269			schw751003		
cocj832269	koim831199			schw760421		
cocj850115	koim851146			schw782013		
cocj870114	kris741769			schw802515		
coup840747	kris801770			schw872685		
dans822354	lamm751781			watr802757		
dela791504	larr781152			wela692156		
dela802646	larr831151			wild752166		
dela841505	linr921260			wonk792171		
delm862647	lizh880831					
delr861503	manj891820					
delr862648	marj751175					
delr882650	metm811846					
drue830877	morj911271					
duns841521	mula761188					
dyer762694	neld850338					
edgd812550	neld871899					
eurr901240	neld891900					
farj830975	nrcr832284					

TABLE 1 (continued). Accession numbers: Transuranic data base—global aquatic environments.
 General source terms—atmospheric fallout (nuclear testing, nuclear weapons, accidents, safety tests), and references to dose from ingestion of aquatic foods contaminated with sources.

Global Deposition ¹		Intermediate Range Deposition ¹¹		Close-In Deposition ¹¹¹		Dose/Diet
Column a Marine ²	Column b Fresh ³	Column c Marine ²	Column d Fresh ³	Column e Marine ²	Column f Fresh ³	Column g All Aquatic
felw852696	plap761960					
felw892651	robj851981					
felw892697	robj851982					
fisn881073	robj911287					
folt731078	sana832272					
folt790161	sana861002					
folt792652	scom780430					
fows831192	scom802785					
fows852653	scom850431					
fows871196	scom872029					
fows892654	shoe821016					
fows902655	shoe832755					
fows922656	simh800683					
fukr762657	simh801017					
fukr791586	simh820451					
fukr792658	simh842052					
fukr801587	simh852053					
fukr811588	sprd780467					
fukr811590	sugy762083					
fukr832330	vano810979					
fukr871591	volh832298					
gasc921086	wahm732786					
gole751621	wahm740983					
gole771622	wahm742138					
gole781089	wahm742787					

TABLE 1 (continued). Accession numbers: Transuranic data base—global aquatic environments.

General source terms—atmospheric fallout (nuclear testing, nuclear weapons, accidents, safety tests), and references to dose from ingestion of aquatic foods contaminated with sources.

Global Deposition ¹		Intermediate Range Deposition ¹¹		Close-In Deposition ¹¹¹		Dose/Diet
Column a Marine ²	Column b Fresh ³	Column c Marine ²	Column d Fresh ³	Column e Marine ²	Column f Fresh ³	Column g All Aquatic
gole781624	wahm750493					
gole801625	wahm750982					
gole802660	wahm760491					
gole832334	wahm772788					
grov741634	wahm772789					
guaj771636	wahm780784					
guaj812661	wahm781205					
guaj821096	wahm781206					
hall860198	wahm802139					
harj790206	wahm820494					
hayd761116	watr802757					
hayd801673	watr832315					
higj771118	yage740995					
higj781682	yamm901304					
higj801683	yamm911305					
hiss860795						
hiss870218						
hodv731122						
hodv741121						
hodv741690						
hodv781692						
hodv791120						
hole772662						
hole800230						
hole801125						

TABLE 1 (continued). Accession numbers: Transuranic data base—global aquatic environments.

General source terms—atmospheric fallout (nuclear testing, nuclear weapons, accidents, safety tests), and references to dose from ingestion of aquatic foods contaminated with sources.

Global Deposition ¹		Intermediate Range Deposition ¹¹		Close-In Deposition ¹¹¹		Dose/Diet
Column a Marine ²	Column b Fresh ³	Column c Marine ²	Column d Fresh ³	Column e Marine ²	Column f Fresh ³	Column g All Aquatic
hole801702						
hole810225						
hole832311						
hole862663						
hole862664						
hole882747						
igas822423						
ilue870703						
imat731132						
imay750237						
irae890974						
ishj880246						
jacd832750						
jeac811729						
jenc850251						
johj811736						
kauh810260						
kauh822500						
kauh850259						
kauh880258						
kerp892717						
koim751198						
koim790270						
koim800616						
koim800617						

TABLE 1 (continued). Accession numbers: Transuranic data base—global aquatic environments.

General source terms—atmospheric fallout (nuclear testing, nuclear weapons, accidents, safety tests), and references to dose from ingestion of aquatic foods contaminated with sources.

Global Deposition ¹		Intermediate Range Deposition ¹¹		Close-In Deposition ¹¹¹		Dose/Diet
Column a Marine ²	Column b Fresh ³	Column c Marine ²	Column d Fresh ³	Column e Marine ²	Column f Fresh ³	Column g All Aquatic
koim802665						
koim811200						
koim821143						
koim821145						
kris741769						
kris801770						
kris841771						
krom851774						
kurm760621						
kurm801776						
kuzy822416						
labl760277						
labl771778						
lald771780						
lapg871782						
lazl880281						
ledp861786						
less862666						
linp801157						
linp851804						
livh751165						
livh760294						
livh760295						
livh771163						
livh771808						
livh790296						

TABLE 1 (continued). Accession numbers: Transuranic data base—global aquatic environments.
 General source terms—atmospheric fallout: (nuclear testing, nuclear weapons, accidents, safety tests), and references to dose from ingestion of aquatic foods contaminated with sources.

Global Deposition ¹		Intermediate Range Deposition ¹¹		Close-In Deposition ¹¹¹		Dose/Diet
Column a Marine ²	Column b Fresh ³	Column c Marine ²	Column d Fresh ³	Column e Marine ²	Column f Fresh ³	Column g All Aquatic
livh791811						
livh802667						
livh821162						
livh821164						
livh830293						
livh852668						
livh862669						
livh870297						
liwe871801						
mand842671						
matv832333						
miej751851						
miej760322						
miej820323						
miyt862672						
miyy681183						
miyy761181						
monm861868						
mula761188						
murc771189						
murc781881						
nagy841051						
nagy851887						
nagy861888						
nagy870858						
nagy872792						

TABLE 1 (continued). Accession numbers: Transuranic data base—global aquatic environments.

General source terms—atmospheric fallout (nuclear testing, nuclear weapons, accidents, safety tests), and references to dose from ingestion of aquatic foods contaminated with sources.

Global Deposition ¹		Intermediate Range Deposition ¹¹		Close-In Deposition ¹¹¹		Dose/Diet
Column a Marine ²	Column b Fresh ³	Column c Marine ²	Column d Fresh ³	Column e Marine ²	Column f Fresh ³	Column g All Aquatic
nagy900859						
nagy922781						
nakk851052						
nakk901273						
nakt841053						
nakt881891						
neld841057						
neld871899						
nelv760639						
nelv770638						
nelv790636						
nieh882675						
nier822344						
nilk812676						
nosv721059						
nosv731060						
nosv731914						
nosv741062						
nosv760346						
nosv780353						
nosv790647						
nosv800350						
nosv801916						
nosv810345						
nosv830352						
nosv832680						

TABLE 1 (continued). Accession numbers: Transuranic data base—global aquatic environments.

General source terms—atmospheric fallout (nuclear testing, nuclear weapons, accidents, safety tests), and references to dose from ingestion of aquatic foods contaminated with sources.

Global Deposition ¹		Intermediate Range Deposition ¹¹		Close-In Deposition ¹¹¹		Dose/Diet
Column a Marine ²	Column b Fresh ³	Column c Marine ²	Column d Fresh ³	Column e Marine ²	Column f Fresh ³	Column g All Aquatic
nosv852752						
nosv860348						
nosv861201						
nosv862726						
nosv870349						
nrcr832284						
okas771926						
olsc801065						
olsc810364						
olsc810365						
ostp910359						
ostp911276						
palj841203						
papc882728						
papc892729						
penr811036						
penr841938						
penr882754						
pilk641042						
pors861963						
purc891968						
risn781980						
rotr851998						
sakm870413						
sakm900843						
sala800416						

TABLE 1 (continued). Accession numbers: Transuranic data base—global aquatic environments.

General source terms—atmospheric fallout (nuclear testing, nuclear weapons, accidents, safety tests), and references to dose from ingestion of aquatic foods contaminated with sources.

Global Deposition ¹		Intermediate Range Deposition ¹¹		Close-In Deposition ¹¹¹		Dose/Diet
Column a Marine ²	Column b Fresh ³	Column c Marine ²	Column d Fresh ³	Column e Marine ²	Column f Fresh ³	Column g All Aquatic
sala842681						
sala862007						
sana832272						
sana861002						
sana880418						
sana911291						
sanp802011						
sanp822394						
saxr891292						
sayf872683						
schw782740						
schw800424						
schw830903						
scom832324						
scom852027						
scom862028						
shoe832755						
shoe842043						
shoe872044						
simh760445						
simh870444						
simk770443						
simk792049						
skwb900978						
smij820461						
smij861019						

TABLE 1 (continued). Accession numbers: Transuranic data base—global aquatic environments.

General source terms—atmospheric fallout (nuclear testing, nuclear weapons, accidents, safety tests), and references to dose from ingestion of aquatic foods contaminated with sources.

Global Deposition ¹		Intermediate Range Deposition ¹¹		Close-In Deposition ¹¹¹		Dose/Diet
Column a Marine ²	Column b Fresh ³	Column c Marine ²	Column d Fresh ³	Column e Marine ²	Column f Fresh ³	Column g All Aquatic
smij872069						
smij892741						
stom851024						
sugy762083						
summ812087						
them800477						
torl790480						
tric822419						
tric822503						
tuok862119						
vano810979						
watr802757						
weid832288						
wonk700993						
wonk710994						
wonk722170						
wonk792171						
wonk922688						
yama770515						
yama842257						
yama911306						
yama921307						
yamm790510						
yamm840996						

TABLE 1 (continued). Accession numbers: Transuranic data base—global aquatic environments.

General source terms—atmospheric fallout (nuclear testing, nuclear weapons, accidents, safety tests), and references to dose from ingestion of aquatic foods contaminated with sources.

Global Deposition ¹		Intermediate Range Deposition ¹¹		Close-In Deposition ¹¹¹		Dose/Diet
Column a Marine ²	Column b Fresh ³	Column c Marine ²	Column d Fresh ³	Column e Marine ²	Column f Fresh ³	Column g All Aquatic
yamm901304						
yamm911305						
yanh862178						
yank822689						

¹ Includes reports on the following sources: World Wide Fallout from Atmospheric Testing, SNAP 9A Accident.

¹¹ Includes reports on following sources: Intermediate Range Fallout from U.S. Pacific Proving Grounds, Intermediate Range Fallout from Chernobyl Accident, Intermediate Range Fallout from Lop Nor Test Site.

¹¹¹ Includes reports on following sources: Close in Testing fallout - Enewetak Atoll, Close in Testing Fallout - Bikini Atoll, Close in Testing Fallout - Mururoa Atoll, Close in Fallout - Thule Accident Site, Close in Fallout - Palomares Accident Site, Close in Weapons Fallout - Nagasaki, Japan, Close in Weapons Fallout - Hiroshima, Japan.

² Includes reports of transuranics in seawater, sediment, biota and particulates in oceans, seas, bays, fjords and estuaries.

³ Includes reports of transuranics in water (liquid & ice), sediment, biota and particulates in rivers, lakes, ponds, catchment basins, glaciers, groundwater and reservoirs.

Table 2. Accession numbers: Transuranic data base—global aquatic environments.

General source terms—fuel cycle waste (reprocessing, reactor, and fabrication facilities), disposal sites, and references to dose from ingestion of aquatic foods contaminated with sources.

Reprocessing Facility ¹		Reactor Facility ¹¹		Fabrication Facility ¹¹¹		Disposal Research Site ¹¹¹¹		Radiological Dose/Diet
Column a Marine ²	Column b Fresh ³	Column c Marine ²	Column d Fresh ³	Column e Marine ²	Column f Fresh ³	Column g Marine ²	Column h Fresh ³	Column i All Aquatic
aara841316	andb781347	beat810065	beat791377	camw922714	albj760017	aara862790	bogd881405	baxm832326
aara880005	eakj850131	beat822379	beat810065	camw932775	albj860656	andj702745	bonr871411	camw891194
aara882690	emer741532	beat840715	beat810714	hayd761116	albj860700	baxm832326	camw922714	camw922714
allb832317	emer741533	bowv810074	beat811379	hayd801673	albj871336	beta880720	camw932775	camw932775
ancj801344	emer751534	camw922714	beat822379	hayd871674	barg751375	bonr871411	garc820579	cluh521485
angl811350	emer762796	camw932775	beat822383	hung792704	barg770541	bowv760076	garc810772	coup840747
assd832691	emer762797	fol731078	beat840715	hung802705	barg780540	bowv811068	goln900188	crom901231
assd842261	emer770141	hung792704	beat871381	hung812706	bokd811408	camw922714	hakt800587	cure911232
assd850841	emer772793	hung802705	beat871382	hung822707	bone770704	camw932775	kirl822360	dahr760124
assd900842	emer780860	hung812706	camw922714	hung832708	bone790549	crad740944	kirl830265	emer800143
asts810054	emer800143	hung822707	camw932775	hung842709	bone800699	dye762694	metm820852	eurr901240
asts810055	emer801536	hung832708	clej822397	hung852710	card871454	felw852696	metm800853	gram850785
asts810832	emer802795	hung842709	hung792704	hung852711	card881455	felw892697	myed750336	grip822415
asts811360	foul842241	hung852710	hung802705	hung861716	corj760927	jacd832750	nyhj820357	harj881670
asts822430	fukr810768	hung852711	hung812706	hung872712	coup840747	kerp892717	penw901041	hetj762703
asts851361	galr881594	hung861716	hung822707	hung881127	dahr760124	kubd681775	purw901283	hung792704
bely822499	graa861626	hung872712	hung832708	hung891128	edgd750134	kubd691149	purw901284	hung802705
bowv750756	hole882747	hung881127	hung842709	hung901129	eyml771550	nosv780353	schk742015	hung812706
bulr850729	jeac810805	hung891128	hung2710	olsc891066	eyml801551	nosv810345	sedj742030	hung822707
bulr921221	joss881739	hung901129	hung852711		farb771552	nosv830352	sedj782032	hung832708
burp881434	marj901262	ilue870703	hung861716		farb780152	nosv860348	sinh770684	hung842709
cald870094	nosv721059	iyer901133	hung872712		farb780572	nosv861201		hung852710
camw891194	oniy820875	kits761755	hung881127		farb790150	nosv862726		hung852711
camw922714	pimm791953	koim790270	hung891128		farb801553	oecd852727		hung861715
camw932775	pimm822353	koim800616	hung901129		farb811555	papc882728		hung861716
carr910097	schh820428	koim800617	ibr890236		farb822368	papc892729		hung872712
clir822693		linp801157	knol880268		farb910151	penr882754		hung881127
clir830112		mors801870	kona911258		gole791090	robw810402		hung891128
cocj832269		nair851889	kuzg780276		hare760591	schw782740		g892778
coup840747		sakm792004	kuzg871777		hare800204	schw800424		hung901129

Table 2 (continued). Accession numbers: Transuranic data base—global aquatic environments.

General source terms—industrial, government and research facilities, disposal sites, and references to dose from ingestion of aquatic foods contaminated with sources.

Reprocessing Facility ¹		Reactor Facility ¹¹		Fabrication Facility ¹¹¹		Disposal Research Site ¹¹¹¹		Radiological Dose/Diet
Column a Marine ²	Column b Fresh ³	Column c Marine ²	Column d Fresh ³	Column e Marine ²	Column f Fresh ³	Column g Marine ²	Column h Fresh ³	Column i All Aquatic
croj810947		sakr870570	lasg830279		hayd761116	schw830903		hung902713
crom901231		sala830417	marj861827		hayd801673	scop842262		iaea882749
cure911232			ork901275		johj742794	smij861019		kerp922751
dayj817876			pinj921281		kenc780611	smij892741		kurm801776
duns841521			poep800653		lamm751781	weih860972		malj751819
dutj771522			robd731987		mulr770635			mckw911266
eakj882695			robd771988		oakt822347			mckw911267
eakj901236			wahm742138		olsc891066			mitn752719
eich811529			watr802757		paid771926			mitn772720
eur901240					paid801929			nics881904
farj832341					poes721043			penr790651
fows771080					reet781976			penr811036
fraa751573					rodd760661			penr842733
fraa761574					rogd751992			penr882737
garj892698					thom752110			penr882780
garj902586					traj832290			penr891037
gerp841602					traj832290			post881965
gerp871603					volh752131			scop842262
gerp881600					volh762133			shik920973
guaj751638					watr802757			summ802086
guaj761639					wayc752151			wood862172
guaj771097					wayc772152			
guaj771636					whif900989			
guaj821096					zilj742183			
gsep812536								
gurp892776								
hall860198								
hame801103								
hame811104								
hame832700								

Table 2 (continued). Accession numbers: Transuranic data base—global aquatic environments.

General source terms—industrial, government and research facilities, disposal sites, and references to dose from ingestion of aquatic foods contaminated with sources.

Reprocessing Facility ¹		Reactor Facility ¹¹		Fabrication Facility ¹¹¹		Disposal Research Site ¹¹¹¹		Radiological Dose/Diet
Column a Marine ²	Column b Fresh ³	Column c Marine ²	Column d Fresh ³	Column e Marine ²	Column f Fresh ³	Column g Marine ²	Column h Fresh ³	Column i All Aquatic
hame841102								
hame852701								
hame871654								
hame891655								
hame912702								
harb842777								
hetj750212								
hetj760210								
hetj761680								
hetj762703								
hetj781117								
hole810225								
hole862663								
howj881712								
howj891254								
hung792704								
hung802705								
hung812706								
hung822707								
hung832708								
hung842709								
hung851130								
hung852710								
hung852711								
hung861716								
hung872712								
hung881127								
hung891128								
hung901129								
imay750237								

Table 2 (continued). Accession numbers: Transuranic data base—global aquatic environments.

General source terms—industrial, government and research facilities, disposal sites, and references to dose from ingestion of aquatic foods contaminated with sources.

Reprocessing Facility ¹		Reactor Facility ¹¹		Fabrication Facility ¹¹¹		Disposal Research Site ¹¹¹¹		Radiological Dose/Diet
Column a Marine ²	Column b Fresh ³	Column c Marine ²	Column d Fresh ³	Column e Marine ²	Column f Fresh ³	Column g Marine ²	Column h Fresh ³	Column i All Aquatic
jacd832750								
jama782779								
jeac811729								
kauh801743								
kauh810260								
kauh822500								
kauh850259								
kauh880258								
kelm881135								
kelm911134								
kerp832306								
kerp841136								
kerp861749								
kerp862716								
kerp901137								
kerp922751								
kirr831139								
kurm760621								
kurm801776								
livh771163								
livh821162								
livh841810								
lovm811161								
maca821166								
mals901172								
mals901261								
matv832333								
matv900308								
matv921264								
mcdp901168								

Table 2 (continued). Accession numbers: Transuranic data base—global aquatic environments.

General source terms—industrial, government and research facilities, disposal sites, and references to dose from ingestion of aquatic foods contaminated with sources.

Reprocessing Facility ¹		Reactor Facility ¹¹		Fabrication Facility ¹¹¹		Disposal Research Site ¹¹¹¹		Radiological Dose/Diet
Column a Marine ²	Column b Fresh ³	Column c Marine ²	Column d Fresh ³	Column e Marine ²	Column f Fresh ³	Column g Marine ²	Column h Fresh ³	Column i All Aquatic
mckw880314								
mckw891841								
mckw901268								
mckw911266								
mckw911267								
mirp841856								
mitn752719								
mitn772720								
mitn772721								
mitp872722								
mitp872723								
mitp882724								
mitp912725								
morj911271								
murc771189								
murc781882								
murc790334								
murc791883								
murc791884								
neld781055								
neld811056								
nic881904								
nieh901274								
nieh932920								
nosv852752								
nosv861201								
okas791928								
path792730								
penr761038								
penr770373								

Table 2 (continued). Accession numbers: Transuranic data base—global aquatic environments.

General source terms—industrial, government and research facilities, disposal sites, and references to dose from ingestion of aquatic foods contaminated with sources.

Reprocessing Facility ¹		Reactor Facility ¹¹		Fabrication Facility ¹¹¹		Disposal Research Site ¹¹¹¹		Radiological Dose/Diet
Column a Marine ²	Column b Fresh ³	Column c Marine ²	Column d Fresh ³	Column e Marine ²	Column f Fresh ³	Column g Marine ²	Column h Fresh ³	Column i All Aquatic
penr771936								
penr780374								
penr790651								
penr802731								
penr811034								
penr811036								
penr811937								
penr822732								
penr841040								
penr841938								
penr842733								
penr852734								
penr861939								
penr862735								
penr862770								
penr872736								
penr882737								
penr882754								
penr882780								
penr891037								
pilk751948								
pilk752738								
pilk760377								
pilk822502								
shik920973								
smit801018								
temw662742								
thon822429								
tooj900934								
turd911032								

Table 2 (continued). Accession numbers: Transuranic data base—global aquatic environments.

General source terms—industrial, government and research facilities, disposal sites, and references to dose from ingestion of aquatic foods contaminated with sources.

Reprocessing Facility ¹		Reactor Facility ¹¹		Fabrication Facility ¹¹¹		Disposal Research Site ¹¹¹¹		Radiological Dose/Diet
Column a Marine ²	Column b Fresh ³	Column c Marine ²	Column d Fresh ³	Column e Marine ²	Column f Fresh ³	Column g Marine ²	Column h Fresh ³	Column i All Aquatic
vano810979								
walm911300								
watr802757								
wilt882743								
wood840508								
wood862172								
wood882744								
yama842257								

- ¹ Includes the following specific sources: Dounreay, United Kingdom, Hanford, Wash., United States, LaHague, France, Karlsruhe, Germany, Marcoule, France, Sellafield (Windscale), United Kingdom, Tokai, Japan, Trombay, India, West Valley, N.Y., United States.
- ¹¹ Includes the following specific sources: AEA sites, United Kingdom, All commercial reactor sites, Hanford, Wash., United States, INEL, Idaho, United States.
- ¹¹¹ Includes the following specific sources: Capenhurst Lab, United Kingdom, Mound Lab, Ohio, United States, Oak Ridge Lab, Tenn., United States, Rocky Flats Lab, Colo., United States, Savannah River Lab, S.C., United States, Springfields Lab, United Kingdom.
- ¹¹¹¹ Includes the following specific sources: Disposal Sites, Argonne Lab, Ill., United States, AWE Lab, Aldermaston, United Kingdom, CEN Lab, Belgium, LLNL, Calif., United States, Los Alamos Lab, N. Mex., United States, San Clemente Is., Calif., United States, Winfrith Centre, United Kingdom, Disposal Sites, Cactus Crater, Enewetak, M.I., European North East Atlantic Site, Farallon Is., Calif., United States, Maxey Flats, Ky., United States, U.S. Western Atlantic Site
- ² Includes data for seawater, sediment, biota and particulates in oceans, seas, and estuaries.
- ³ Includes data for water, sediment, biota and particulates in rivers, lakes, and reservoirs.

Table 3. Accession numbers: Transuranic data base—aquatic laboratory studies/miscellaneous reviews.

Biological Accumulation/Loss Studies		Distribution Coefficient/Sorption Desorption Studies		Oxidation State/Speciation Studies		Organic Complexation		Others	
Column a Marine	Column b Fresh	Column c Marine	Column d Fresh	Column e Marine	Column f Fresh	Column g Marine	Column h Fresh	Column i Marine	Column j Fresh
asts840835	adaw701322	asts840835	allb791338	asts800824	bone770704	chog841472	giej771604	bely841385	
asts861362	beat801378	asts870836	dosr781515	asts811359	chog851473	chog861474	morj911271	frej790165	
asts870836	biej811395	ball861366	morj911271	asts832329	chog911227	chog871475	mouv881872		
beat760790	cusca880749	burp861433	muds881187	asts840835	hear841676	chog890912	muds881187		
beat760811	galj841593	chog871475	murc751878	asts861362	hear892758	fisn830977	neld851058		
beat801378	giej771604	chog890912	murc821202	bone770704	hylj851718	mate801832	scom002025		
bjep850694	giej781605	duue761523	nair880337	burp861433	larr781783	morj861871	sheg831009		
cara791446	giej811606	fisn911243	neld851058	carf851460	morj911271	morj911271	swaj840930		
carf832335	gneg711615	grov731197	ork861063	chog841472	muds881187	robr851985	swaj860929		
carf841459	gneg711617	hamj871101	sana822410	chog851473	murc751878	scom002025			
carf851460	mard871821	harb811115	sana851001	chog861474	murc821202	sheg831009			
clir891483	meyh791848	higj832331	schw792014	chog871475	nask881894	shoe831015			
dahh841496	thig792100	higj861684	schw822373	chog890912	neld851058				
dahh861497	thig802101	iaea852769	seya792036	chog901228	neld871899				
fisn830977	thig832266	morj861871	shoe831015	chog911227	ork861063				
fisn831070	thig842102	morj911271	sibt822345	clej830922	patj761035				
fisn832320	tilj762112	muds881187	sibt822351	duue761523	patj832297				
fisn851563	tkam772113	murc751878	vano842123	fisn830977	penw871935				
fisn861564	traj762116	sana822410		hamj871101	raid801047				
fisn871072	traj782117	schf862018		hear841676	sana851001				
fisn911242	vanj870937	schw792014		hear892758	silg892090				
fisn911243	myed750336	schw822373		lov811161	tkam772113				
fol791589		seya792036		morj861871					
fows751570		shap821008		morj911271					
fows851571		shej762037		muds881187					
frej790165		sibt822345		murc751878					
frej801577		sibt842045		patj761035					
galj841593		stad822389		patj801934					
galj862771		stad862073		patj832297					
gerp841601		vana862122		robr841984					
gorg842264		vano842123		robr851985					
gouf911246				sibt862046					

Table 3 (continued). Accession numbers: Transuranic data base—aquatic laboratory studies/miscellaneous reviews.

Biological Accumulation/Loss Studies		Distribution Coefficient/Sorption Desorption Studies		Oxidation State/Speciation Studies		Organic Complexation		Others	
Column a Marine	Column b Fresh	Column c Marine	Column d Fresh	Column e Marine	Column f Fresh	Column g Marine	Column h Fresh	Column i Marine	Column j Fresh
				silg892090					
grov741633									
grov741635									
guaj791637									
guaj811093									
guaj811094									
guaj822400									
guaj901095									
hamt910200									
harb861663									
hopm791703									
iaea852769									
koyt861762									
leod811156									
matv830307									
mirp821179									
mirp851180									
mirp862772									
mirp871857									
mirp891858									
moti751184									
murc761879									
murc781880									
penr780650									
penr781039									
reij911285									
robd711986									
sibt901295									
swid882773									
thor812103									
vanj832323									
zlov700999									
zlov732185									

Table 4. Location(s) of accession number listed in Tables 1-3 .

Accession Number	Table	Column(s)	Type of Study and Region (when applicable)
aara710576	1	e	Field; Greenland; Thule
aara711312	1	e	Field; Greenland; Thule
aara770002	1	e	Field; Greenland; Thule
aara770011	1	a	Field; Denmark coastal sites
aara781313	1	a	Field; Denmark coastal sites
aara791314	1	a	Field; Denmark coastal sites
aara800003	1	e	Field; Greenland; Thule
aara800010	1	e	Field; Greenland; Thule
aara810009	1	a,e,f	Field; Greenland; Thule
aara822425	1	a,e	Field; Greenland; Thule
aara822498	1	a	Field; Baltic & North Sea
aara832277	1	a	Field; Greenland
aara841316	1;2	a;a	Field; Atlantic
aara842260	1	e	Field; Greenland; Thule
aara850593	1	e	Field; Greenland; Thule
aara862790	2	g	Review
aara880005	1;2	a,e;a	Review
aara880600	1	e	Field; Greenland; Thule
aara882690	2	a	Field; North Sea
aara891208	1	e	Field; Greenland; Thule
adaw701322	3	b	Lab Study
agnp781328	1	a,g	Review; Dose
albj751330	1	b	Field; U.S.A., Lake Michigan
albj751331	1	b	Field; U.S.A., Lake Michigan
albj751332	1	b	Field; U.S.A., Lake Michigan
albj760017	2	f	Field; U.S.A., Miamisburg, OH
albj770020	1	b	Field; U.S.A., Lake Michigan
albj771333	1	b	Field; U.S.A., Illinois
albj772782	1	b	Field; U.S.A., Great Lakes
albj791335	1	b	Field; U.S.A., Lake Michigan
albj810625	1	b	Field; U.S.A., Lake Michigan
albj811334	1	2	Field; U.S.A., Great Lakes
albj860656	2	f	Field; U.S.A., Savannah River Plant
albj860700	2	f	Field; U.S.A., Savannah River Plant
albj871336	2	f	Field; U.S.A., Savannah River Plant
albj890659	1	b	Field; U.S.A., Lake Michigan
allb791338	3	d	Lab Study
allb832317	1;2	a,b;a	Review
ancj801344	2	a	Field;France coastal sites

Table 4 (continued). Location(s) of accession number listed in Tables 1-3 .

Accession Number	Table	Column(s)	Type of Study and Region (when applicable)
andb781347	2	a	Field; Europe
andj702745	2	g	Review
andr822386	1	a	Field; Atlantic
andr822396	1	b	Field; U.S.A. Mono Lake, CA.
ands901209	1	a	Field; Atlantic
angl811350	2	a,e	Review
anon602635	1	a	Field; U .S. A.,NY
anon861329	1	a,f	Field; Japan; Dose
assd832691	2	a	Field; U.K., Irish Sea
assd842261	2	a	Field; U.K., Esk Estuary
assd850841	2	a	Field; U.K., Esk Estuary
assd900842	2	a	Field; U.K., Esk Estuary
asts800824	3	e	Review
asts810054	2	a	Field; U.K., Wyre Estuary.
asts810055	2	a	Field; U.K., coastal sites
asts810832	2	a	Field; U.K., Esk Estuary
asts811359	3	e	Review
asts811360	2	a	Field; U.K., Esk Estuary
asts822430	2	a	Field; U.K., Esk Estuary
asts832329	3	e	Review
asts840835	3	a,c,e	Review
asts851361	2	a	Field; U.K., Irish Sea
asts861362	3	a,e	Review
asts870836	3	a,c	Review
babj910056	1	e	Field; Pacific Mururoa
bacm850823	1	a	Field; Atlantic
ball861366	3	c	Lab Study
bals762636	1	a	Field; Mediterranean
bals782637	1	a	Field; Mediterranean
bals800058	1	a,b	Field; Mediterranean
bals811368	1	a	Field; Mediterranean
bals822510	1	a	Field; Mediterranean
bals832337	1	a	Field; Mediterranean
bals841369	1	a,b	Field; Mediterranean
bals860059	1	a	Field; Mediterranean
barg751375	2	f	Field; U.S.A., Miami River, OH
barg770541	2	f	Field; U.S.A., Miami River, OH
barg780540	2	f	Field; U.S.A., Miami River, OH
baxm832326	2	g,i	Review
beat760790	3	a	Lab Study
beat760811	3	a	Lab Study

Table 4 (continued). Location(s) of accession number listed in Tables 1-3 .

Accession Number	Table	Column(s)	Type of Study and Region (when applicable)
beat791377	2	d	Field; U.S.A., Columbia River, WA
beat801378	1;3	a;a,b	Review
beat810065	2	c,d	Field; U.S.A., Columbia River, WA
beat810714	2	d	Field;U.S.A., Columbia River, WA
beat811379	2	d	Field; U.S.A., Columbia River, WA
beat822378	1	a	Field; Pacific
beat822379	2	c,d	Field; U.S.A., Hanford, Pacific
beat822383	1;2	a;d	Field; Pacific
beat840715	2	c,d	Field;U.S.A., Columbia River, WA
beat861380	1	b	Field;U.S.A., Columbia River, WA
beat871381	1;2	b;d	Review
beat871382	1;2	b;d	Field;U.S.A., Columbia River, WA
bely822499	1,2	a;a	Field; France, coastal sites.
bely841385	3	i	Lab Study
benb760068	1	g	diet; dose
benb762640	1	g	diet, dose
benl791391	1	a	Field; Atlantic
benl802641	1	a	Field; Atlantic
benl832332	1	a	Field; Atlantic
benl860660	1	a	Field;Atlantic
berk860719	1	a,b	Field; Pacific
beta860534	1	a	Field; Atlantic
beta880720	1;2	a;g	Field; Atlantic Ocean
biej811395	3	b	Lab Study
bjep850694	3	a	Lab Study
bogd881405	2	h	Field; U.S.A., NY drinking water
bojr791407	1	a,b	Field; Baltic
bokd811408	2	f	Field; U.S.A. Reservoirs, CO.
bone770704	2,3	f;e,f	Field; U.S.A., Lab Study
bone790549	2	f	Field; U.S.A. Oak Ridge, TN. pond
bone800699	2	f	Field; U.S.A. Oak Ridge, TN pond
bonp911217	1	b	Field; U.K., Cumbria
bonr871411	2	g,h	Review
bopr822393	1	a,b	Field; U.S.A., coastal, river
bowv710739	1	a	Field; Atlantic
bowv722783	1	b	Field; U.S.A., Great Lakes
bowv731415	1	b	Field; U.S.A., Great Lakes
bowv741416	1	b	Field;U.S.A., Great Lakes
bowv750756	1;2	a,e;a	Review
bowv752642	1	e	Field; Pacific
bowv752791	1	b	Field;U.S.A., Great Lakes

Table 4 (continued). Location(s) of accession number listed in Tables 1-3 .

Accession Number	Table	Column(s)	Type of Study and Region (when applicable)
bowv760076	1;2	a;g	Field; Pacific, Atlantic
bowv760552	1	b	Field; U.S.A., Great Lakes
bowv760553	1	a	Field; Atlantic
bowv761417	1	a	Review
bowv772784	1	b	Field; U.S.A., Great Lakes
bowv800741	1	a,c	Field; Pacific
bowv802643	1	a	Field; Atlantic
bowv810074	2	c	Field; U.S.A. Atlantic coast
bowv811068	1;2	a;g	Field; Atlantic, Pacific
buek850761	1	b	Field; U.S.A., Gull Pond, MA
buek851426	1	a	Field; Atlantic
buek862644	1	a	Field; Atlantic
buek871427	1	a	Field; Atlantic
buek871428	1	a,c	Field; Atlantic
buek901220	1	c	Field; Black Sea, Accident
bulr850729	2	a	Field; U.K. Esk Estuary
burl921221	2	a	Field; U.K. Coastal Site
burp861433	3	c,e	Lab Study
burp881434	2	a	Field; U.K. Esk Estuary
cald851439	1	a	Field; Mediterranean
cald870094	1;2	a;a	Field; N. French Coast
camw891194	2	a,i	Review; Europe
camw922714	2	a,c,d,e,g,h,i	Field; U.K. Sites
camw932775	2	a,c,d,e,g,h,i	Field; U.K. Sites
cara781445	1	a	Field; Atlantic
cara791446	3	a	Lab Study
card871454	2	f	Field; U.S.A. Miami River OH
card881455	2	f	Field; U.S.A. Miami River OH
carf832335	3	a	Lab Study
carf841459	3	a	Lab Study
carf851460	3	a,e	Lab Study
carr801456	1	a	Field; Pacific
carr812645	1	a	Field; Pacific
carr871193	1	a	Field; Pacific
carr910097	2	a	Field; U.K. Coastal Sites
caug801465	1	a	Field; Atlantic
chel770902	1	a	Field; Pacific
cher801471	1	a	Field; Mediterranean
chog841472	3	e,g	Lab Study
chog851473	3	e,f	Lab Study
chog861474	3	e,g	Lab Study

Table 4 (continued). Location(s) of accession number listed in Tables 1-3 .

Accession Number	Table	Column(s)	Type of Study and Region (when applicable)
chog871475	3	c,e,g	Lab Study
chog890912	3	c,e,g	Lab Study
chog901228	3	e	Lab Study
chog911227	3	e,f	Lab Study
clej822397	2	d	Field; U.S.A. gndwater ID
clej830922	3	e	Lab Study
clir822693	2	a	Field; U.K. Esk Estuary
clir830112	2	a	Field; U.K. Esk Estuary
clir891483	3	a	Lab Study
cluh521485	2	i	Field; Dose; U.S.A. Hanford WA
cocj832269	1;2	a;a	Field; Atlantic
cocj850115	1	a	Field; Pacific
cocj870114	1	a	Field; Atlantic
cohn851488	1	e	Field; Marshall Islands
corj760927	2	f	Field; U.S.A. SRL Drinking water
corr871491	1	b	Field; Canada, Lakes
coup840747	1;2	a,c,e,g;a,f,i	Review
crad740944	2	g	Field; U.S.A. California coast
croj810947	2	a	Field; U.K., Channel Islands
crom901231	2	a,i	Field; U.K. Coastal Site, Dose
cure911232	2	a,i	Field; U.K. Coastal Sites
cusc880749	3	b	Lab Study
dahh841496	3	a	Lab Study
dahh861497	3	a	Lab Study
dahr760124	2	f,i	Review
dans822354	1	a	Field; Mediterranean
dayj810876	2	a	Field; U.K. Irish Sea
dela791504	1	a	Field; Mediterranean
dela802646	1	a	Field; Mediterranean
dela841505	1	a	Field; Mediterranean
delm862647	1	a	Field; Spain coastal sites
delr861503	1	a,b	Field; Mediterranean, Rivers
delr862648	1	a	Field; Mediterranean
delr882650	1	a	Field; Mediterranean
dosr781515	3	d	Lab Study
drue830877	1	a	Field; Pacific
duns841521	1;2	a;a	Field; Baltic
dutj771522	2	a	Field; U.K. Irish Sea
duue761523	3	c,e	Lab Study
dyer762694	1;2	a,g	Field; Pacific
eakj840754	1	a	Field; U.K. Lake

Table 4 (continued). Location(s) of accession number listed in Tables 1-3.

Accession Number	Table	Column(s)	Type of Study and Region (when applicable)
eakj850131	1;2	b;b	Field; U.K. Lakes
eakj882695	2	a	Field; U.K. Coastal Sites
eakj901236	2	a	Field; U.K. Coastal Sites
edgd750134	2	f	Field; U.S.A. Miami River, OH
edgd750135	1	b	Field; U.S.A., Lake Michigan
edgd760133	1	b	Field; U.S.A., Lake Michigan
edgd760137	1	b	Field; U.S.A., Lake Michigan
edgd770136	1	b	Field; U.S.A., Great Lakes
edgd812550	1	a,b	Review
eich811529	2	a	Field; North Sea
emer741532	2	b	Field; U.S.A., pond Hanford, WA
emer741533	2	b	Field; U.S.A., pond Hanford, WA
emer751534	2	b	Field; U.S.A., pond Hanford, WA
emer762796	2	b	Field; U.S.A. pond Hanford WA.
emer762797	2	b	Field; U.S.A. pond Hanford WA
emer770141	2	b	Field; U.S.A., pond Hanford, WA
emer772793	2	b	Field; U.S.A. pond Hanford, WA
emer780860	2	b	Field; U.S.A., pond Hanford, WA
emer800143	2	b,i	Field; U.S.A. Hanford, WA. dose
emer801536	2	b	Field; U.S.A., pond Hanford, WA
emer802795	2	b	Field; U.S.A. pond Hanford, WA
eurr901240	1;2	a,g;a,i	Review; dose
eyml771550	1;2	b;f	Review
eyml801551	1;2	b;f	Review
farb771552	2	f	Field; U.S.A. Miami River, OH.
farb780152	2	f	Field; U.S.A. Miami River, OH
farb780572	2	f	Field; U.S.A. Miami River, OH
farb790150	2	f	Field; U.S.A. Miami River, OH
farb801553	2	f	Field; U.S.A. Miami River, OH
farb811555	2	f	Field; U.S.A. Miami River, OH
farb822368	2	f	Field; U.S.A. Miami River, OH
farb910151	2	f	Field; U.S.A. Miami River, OH
farj830975	1	a	Field; U.S.A. coastal
farj832341	2	a	Field; Scotland Coastal Sites
faud851557	1	f	Field; U.S.A. Fresh Water, NTS
felw830154	1	b	Field; Germany River
felw852696	1;2	a,g	Field; Atlantic
felw892651	1	a,c	Field; Baltic, Accident
felw892697	1;2	a,g	Field; Atlantic
fisn830977	3	a,e,g	Lab Study
fisn831070	3	a	Lab Study

Table 4 (continued). Location(s) of accession number listed in Tables 1-3.

Accession Number	Table	Column(s)	Type of Study and Region (when applicable)
fisn832320	3	a	Lab Study
fisn851563	3	a	Lab Study
fisn861564	3	a	Lab Study
fisn871072	3	a	Lab Study
fisn881073	1	a	Field; Atlantic
fisn911242	3	a	Lab Study
fisn911243	3	a,c	Lab Study
folt731078	1;2	a;c	Field; Pacific
folt790161	1	a	Field; Pacific
folt791589	3	a	Lab Study
folt792652	1	a	Field; Pacific
fosg840762	1	b	Review, Erosion
foul842241	2	b	Field; France river
fows751570	3	a	Lab Study
fows771080	2	a	Field; Irish Sea
fows831192	1	a	Field; Pacific
fows851571	3	a	Lab Study
fows852653	1	a	Field; Pacific
fows871196	1	a	Field; Pacific
fows892654	1	a	Field; Mediterranean
fows902655	1	a	Field; Mediterranean
fows922656	1	a	Field; Mediterranean
fraa751573	2	a	Field; France Coastal Sites
fraa761574	2	a	Field; France Coastal Sites
frej790165	3	a,i	Lab Study
frej801577	3	a	Lab Study
fukr762657	1	a	Field; Mediterranean
fukr791586	1	a	Field; Mediterranean
fukr792658	1	a	Field; Mediterranean
fukr801587	1	a	Field; Mediterranean
fukr810768	1;2	b;b	Field; France Rivers
fukr811588	1	a	Field; Mediterranean
fukr811590	1	a	Field; Mediterranean
fukr832330	1	a	Field; Mediterranean
fukr871591	1	a	Field; Mediterranean
galj841593	3	a,b	Lab Study
galj862771	3	a	Lab Study
galr881594	2	b	Field; U.K. river
garc810772	2	h	Field; U.S.A. pond TN
garc820579	2	h	Field; U.S.A. pond TN
garj892698	2	a	Field; U.K. Coastal Sites

Table 4 (continued). Location(s) of accession number listed in Tables 1-3 .

Accession Number	Table	Column(s)	Type of Study and Region (when applicable)
garj902586	2	a	Field; Ireland coastal sites
gasc921086	1	a,e	Field; Mediterranean, Accident
gerp841601	3	a	Lab Study
gerp841602	2	a	Field; France Coastal Sites
gerp871603	2	a	Field; France Coastal Sites
gerp881600	2	a	Review
giej771604	3	b,h	Lab Study
giej781605	3	b	Lab Study
giej811606	3	b	Lab Study
gneg711615	3	b	Lab Study
gneg711617	3	b	Lab Study
gole751621	1	a	Field; Pacific
gole771622	1	a	Field; Atlantic
gole781089	1	a	Field; U.S.A. Coast
gole781624	1	a	Field; Atlantic
gole791090	1;2	b;f	Field; U.S.A. River
gole801625	1	a	Field; U.S.A. Coast
gole802660	1	a	Field; U.S.A. Coast
gole832334	1	a	Field. U.S.A. Coast
goln900188	2	h	Field; U.S.A. Argonne IL
gond890784	1	f,g	Field; U.S.A. Fresh water, NTS
gorg842264	3	a	Lab Study
gouf911246	3	a	Lab Study
graa861626	2	b	Review
gram850785	2	i	Dose; Russia
gren771629	1	e	Field; Marshall Islands
grip822415	2	i	Field; UK Dose
grov731197	3	c	Lab Study
grov741633	3	a	Lab Study
grov741634	1	a	Field; Pacific
grov741635	3	a	Lab Study
guaj751638	2	a	Field; France Coastal Sites
guaj761639	2	a	Field; France Coastal Sites
guaj771097	2	a	Field; France Coastal Sites
guaj771636	1;2	a;a	Field; France Coast
guaj791637	3	a	Lab Study
guaj811093	3	a	Lab Study
guaj811094	3	a	Lab Study
guaj812661	1	a	Field; Mediterranean
guaj821096	1;2	a;a	Field; France Coast
guaj822400	3	a	Lab Study

Table 4 (continued). Location(s) of accession number listed in Tables 1-3 .

Accession Number	Table	Column(s)	Type of Study and Region (when applicable)
guaj901095	3	a	Lab Study
gued812536	2	a	Field; France Coastal Sites
gurd892776	2	a	Model; Irish Sea
habk870191	1	b	Field; Germany Drinking Water
hakt800587	2	h	Field; U.S.A. Los Alamos NM
hall860198	1;2	a;a	Field; Arctic
hame801103	2	a	Field; U.K. Esk Estuary
hame811104	2	a	Field; U.K. Esk Estuary
hame832700	2	a	Field; U.K. Irish Sea
hame841102	2	a	Field; U.K. Esk Estuary
hame852701	2	a	Field; U.K. Irish Sea
hame871654	2	a	Field; U.K. Esk Estuary
hame891655	2	a	Field; U.K. Esk Estuary
hame912702	2	a	Field; U.K. Irish Sea
hamj871101	3	c,e	Lab Study
hamt910200	3	a	Lab Study
hanw751106	1	e	Review
harb811115	3	c	Lab Study
harb842777	2	a	Field; U.K. Irish Sea
harb861663	3	a	Lab Study
hare760591	2	f	Field; U.S.A. Miami River OH
hare800204	1;2	b;f	Field; U.S.A., lake
harf751668	1	b	Review
harj790206	1	a	Review
harj881670	2	i	Dose UK
hayd761116	1;2	a;e,f	Field; U.S.A. Atlantic
hayd801673	1;2	a;e,f	Field; U.S.A. Atlantic Estuary
hayd871674	2	e	Field; U.S.A. Atlantic Estuary
hear841676	3	e,f	Lab Study
hear892758	3	e,f	Lab Study
heim860567	1	b	Field; U.S.A. lake NY
hetj750212	2	a	Field; U.K. Irish Sea
hetj760210	2	a,i	Field; U.K. Irish Sea
hetj761680	2	a	Field; U.K. Irish Sea
hetj762703	2	a	Field; U.K. Coastal Sites
hetj781117	2	a	Field; U.K. Irish Sea
higj771118	1	a	Field; Atlantic
higj781682	1	a	Field; Atlantic
higj801683	1	a	Field; Mediterranean
higj832331	3	c	Lab Study
higj861684	3	c	Lab Study

Table 4 (continued). Location(s) of accession number listed in Tables 1-3 .

Accession Number	Table	Column(s)	Type of Study and Region (when applicable)
hirk810216	1	b	Field; Japan River
hirk900792	1	b	Field; Japan Rivers
hiss780217	1	c	Field; Pacific
hiss860795	1	a,g	Field; Pacific; Diet
hiss870218	1	a,g	Field; Pacific; Dose
hodv731122	1	a	Field; Pacific
hodv741121	1	a	Field; Pacific
hodv741690	1	a	Field; Pacific
hodv781692	1	a	Field; Pacific
hodv791120	1	a	Field; Pacific
hole772662	1	a	Field; Atlantic
hole800230	1	a	Field; Sweden Coast
hole801125	1	a	Field; Sweden Coast
hole801702	1	a	Field; Mediterranean
hole810225	1;2	a;a	Review
hole832311	1	a	Field; Arctic
hole862663	1;2	a;a	Field; Greenland Sea
hole862664	1	a	Field; Mediterranean
hole882747	1;2	a;b	Review; Mediterranean
hole911252	1	c	Field; Mediterranean, Accident
hopm791703	3	a	Lab Study
howj881712	2	a	Model U.K. Irish Sea
howj891254	2	a	Model U.K. Irish Sea
hung792704	2	a,c,d,e,i	Field; U.K. Sites
hung802705	2	a,c,d,e,i	Field; U.K. Sites
hung812706	2	a,c,d,e,i	Field; U.K. Sites
hung822707	2	a,c,d,e,i	Field; U.K. Sites
hung832708	2	a,c,d,e,i	Field; U.K. Sites
hung842709	2	a,c,d,e,i	Field; U.K. Sites
hung851130	2	a	Field; U.K. Irish Sea
hung852710	2	a,c,d,e,i	Field; U.K. Sites
hung852711	2	a,c,d,e,i	Field; U.K. Sites
hung861715	2	i	U.K. Dose
hung861716	2	a,c,d,e,i	Field; U.K. Sites
hung872712	2	a,c,d,e,i	Field; U.K. Sites
hung881127	2	a,c,d,e,i	Field; U.K. Sites
hung891128	2	a,c,d,e,i	Field; U.K. Sites
hung892778	2	i	U.K. Dose
hung901129	2	a,c,d,e,i	Field; U.K. Sites
hung902713	2	i	U.K. Dose
hylj851718	3	f	Lab Study

Table 4 (continued). Location(s) of accession number listed in Tables 1-3 .

Accession Number	Table	Column(s)	Type of Study and Region (when applicable)
iaea852769	3	a,c	Review
iaea882749	2	i	Review Dose Organisms
ibrs890236	2	d	Field; U.S.A. Idaho pond
igas822423	1	a	Field; Japan Bay
ilue870703	1;2	a;c	Field; Finland
ilue871719	1	c	Field; Baltic, Accident
ilue871720	1	c	Field; Baltic, Accident
imat731132	1	a	Field; Pacific
imay750237	1;2	a;a	Field; Japan Coast
irae890974	1	a,e,f	Field; Spain Coast, Accident
ishj880246	1	a	Field; Japan
iyer901133	2	c	Field; India coastal
jacd832750	1;2	a,e;a,g	Review
jama782779	2	a	Field; U.K. Esk Estuary
jeac810805	1;2	b;b	Field; France Rivers
jeac811729	1;2	a;a	Field; France Coast
jenc850251	1	a	Field; Mediterranean
johj742794	2	f	Field; U.S.A. Rocky Flats CO
johj811736	1	a	Field; Atlantic
joss881739	1;2	b;b	Field; U.S.A., Lake Ontario
joss891738	1	b	Field; U.S.A., Lake Ontario
karj751740	1	b	Field; U.S.A., Lake Michigan
kauh801743	2	a	Field; North Sea
kauh810260	1;2	a;a	Field; North Sea
kauh822500	1;2	a;a	Field; North Sea
kauh850259	1;2	a;a	Field; North Sea
kauh880258	1;2	a;a	Field; North Sea
kelm881135	2	a	Field; U.K. Esk Estuary
kelm911134	2	a	Field; U.K. Esk Estuary
kenc780611	2	f	Field; U.S.A. canal, OH
kerp832306	2	a	Field; U.K. Irish Sea
kerp841136	2	a	Field; U.K. Irish Sea
kerp861749	2	a	Field; U.K. Irish Sea
kerp862716	2	a	Field; U.K. Irish Sea
kerp892717	1;2	a;g	Field; Atlantic
kerp901137	2	a	Field; U.K. Irish Sea
kerp922751	2	a,i	Review; Irish Sea
kirl822360	2	h	Field; U.S.A. Maxey Flats KY
kirl830265	2	h	Field; U.S.A. Maxey Flats KY
kirr831139	2	a	Field; U.K. Irish Sea
kits761755	2	c	Field; Japan coast

Table 4 (continued). Location(s) of accession number listed in Tables 1-3 .

Accession Number	Table	Column(s)	Type of Study and Region (when applicable)
knol880268	2	d	Field; U.S.A., Idaho groundwater
koim751198	1	a	Field; Pacific
koim771142	1	b	Field; Greenland Glacier
koim791141	1	b	Field; Antarctic Glacier
koim802665	1	a	Field; Pacific
koim811144	1	b	Field; Antarctic, Arctic Glaciers
koim811200	1	a	Field; Pacific
koim820269	1	b	Field; Antarctic, Arctic Glaciers
koim821143	1	a	Field; U.S.A. Coast
koim821145	1	a	Field; Pacific
koim831199	1	b	Field; Antarctic, Arctic Glaciers
koim851146	1	b	Field; Antarctic, Arctic Glaciers
koim790270	1;2	a;c	Field; Finland
koim800616	1;2	a;c	Field; Finland
koim800617	1;2	a;c	Field; Finland
komk840815	1	e	Review
kona911258	2	d	Field; Russia marsh
koyt861762	3	a	Lab Study
kris741769	1	a,b	Field; Pacific; U.S.A. Lake
kris801770	1	a,b	Field; Atlantic; U.S.A. Lake
kris841771	1	a	Field; Atlantic U.S.A. Coast
krom851774	1	a	Field; Atlantic U.S.A. Coast
kubd681775	2	g	Field; U.S.A. California coast
kubd691149	2	g	Field; U.S.A. California coast
kuda910274	1	f	Field; Japan; Fresh water, Weapon
kurm760621	1;2	a;a	Field; Japan Coast
kurm801776	1;2	a;a,i	Field; Japan Coast
kuzg780276	2	d	Field; U.S.A., ponds ID
kuzg871777	2	d	Field; U.S.A. ponds ID
kuzy822416	1	a	Review
labl760277	1	a	Field; Atlantic
labl771778	1	a	Field; Atlantic
lald771780	1	a	Field; Pacific
lamm751781	1;2	b;f	Field; U.S.A. Reservoirs, CO
lapg871782	1	a	Field; Atlantic
larr781152	1	b	Field; U.S.A. Drinking Water
larr781783	3	f	Lab Study
larr831151	1	b,g	Review
lasg830279	2	d	Field; U.S.A., pond Hanford WA
lazl880281	1	a	Field; Baltic
ledp861786	1	a	Field; Antarctic

Table 4 (continued). Location(s) of accession number listed in Tables 1-3 .

Accession Number	Table	Column(s)	Type of Study and Region (when applicable)
leod811156	3	a	Lab Study
less862666	1	a	Field; Baltic
levy781799	1	e	Field; Marshall Islands
levy781800	1	e	Field; Marshall Islands
linp801157	1;2	a;c	Field; Atlantic Coast
linp851804	1	a	Field; Atlantic Coast
linr921260	1	b	Field; China, Lake
livh751165	1	a	Field; Atlantic
livh760294	1	a	Field; Northern Hemisphere
livh760295	1	a	Field; Northern Hemisphere
livh771163	1;2	a;a	Field; North Sea
livh771808	1	a	Field; Mediterranean
livh790296	1	a	Field; Mediterranean
livh791811	1	a	Field; Atlantic
livh802667	1	a	Field; Atlantic
livh821162	1;2	a;a	Field; North Sea
livh821164	1	a,c	Field; Pacific
livh830293	1	a	Field; Atlantic, Pacific
livh841810	2	a	Field; Arctic
livh852668	1	a,c	Field; Pacific, Atlantic
livh862669	1	a	Field; Pacific
livh870297	1	a,c	Field; Pacific
livh882670	a	c	Field; Black Sea, Accident
liwe871801	1	a	Field; Pacific
lizh880831	1	b	Field; China, River
lovm811161	2;3	a;e	Field; Lab Study
maca821166	2	a	Field; Scotland Coast
mahy881171	1	f	Field; Japan, Reservoir
malj751819	2	i	Dose reactors
mals901172	2	a	Field; U.K., Irish Sea
mals901261	2	a	Field; U.K., Irish Sea
mand842671	1	a	Field; Pacific
manj891820	1	b	Field; Yugoslavia, Lake
mard871821	3	b	Lab Study
marj751175	1	b	Field; U.S.A. Great Lakes
marj861827	2	d	Field; U.S.A. Michigan
marj901262	2	b	Field; France river
marj901263	1	e	Field; Mururoa
marr741822	1	e	Field; Marshall Islands
mate801832	3	g	Lab Study
matv830307	3	a	Lab Study

Table 4 (continued). Location(s) of accession number listed in Tables 1-3 .

Accession Number	Table	Column(s)	Type of Study and Region (when applicable)
matv832333	1;2	a;a	Field; India, Bay
matv900308	2	a	Field; India, Bay
matv921264	2	a	Field; India, coast
mcdp901168	2	a	Field; Scotland, coast
mckw880314	2	a	Field; U.K. coast, Model
mckw891841	2	a	Field; U.K. Irish Sea coast
mckw901268	2	a	Field; U.K. Irish Sea coast
mckw911266	2	a,i	Field; U.K. Cumbria coast, dose
mckw911267	2	a,i	Field; U.K. Irish Sea, dose
mcmg851844	1	e	Field; Marshall Islands
metm800853	2	h	Field; Belgium river
metm811846	1	b	Review
metm820852	2	h	Field; Belgium river
meyh791848	3	b	Lab Study
miej751851	1	a	Field; Baltic
miej760322	1	a	Field; Finland
miej820323	1	a	Field; Baltic
mirp821179	3	a	Lab Study
mirp841856	2	a	Field; France coastal sites
mirp851180	3	a	Lab Study
mirp862772	3	a	Lab Study
mirp871857	3	a	Lab Study
mirp891858	3	a	Lab Study
mitn752719	2	a,i	Field; U.K. Sites
mitn772720	2	a,i	Field; U.K. Sites
mitn772721	2	a	Field; U.K. Sites
mitp872722	2	a	Field; Ireland, Bay
mitp872723	2	a	Field; Ireland coastal sites
mitp882724	2	a	Field; Ireland coastal sites
mitp912725	2	a	Field; Ireland, Irish Sea
miyt862672	1	a	Field; Pacific
miyy681183	1	a	Field; Pacific
miyy761181	1	a	Field; Pacific
monm861868	1	a	Field; Atlantic, Spain
morj861871	3	c,e,g	Lab Study
morj911271	1;2	b,c,d,e,f,g,h;a	Review
mors801870	2	c	Field; Japan coast
moti751184	3	a	Lab Study
mouv881872	3	h	Lab Study
muds881187	3	c,d,e,f,h	Lab Study
mula761188	1	a,b,g	Review

Table 4 (continued). Location(s) of accession number listed in Tables 1-3 .

Accession Number	Table	Column(s)	Type of Study and Region (when applicable)
mulr770635	2	f	Field; U.S.A. Miami river, OH
murc751878	3	c,d,e,f	Lab Study
murc761879	3	a	Lab Study
murc771189	1;2	a;a	Field; North Sea
murc781880	3	a	Lab Study
murc781881	1	a	Field; Mediterranean
murc781882	2	a	Field; North Sea
murc790334	2	a	Field; North Sea
murc791883	2	a	Review; Model assessment
murc791884	2	a	Review; Model
murc821202	3	d,f	Lab Study
myed750336	2;3	h;b	Lab Study
nagy841051	1	a,c	Field; Pacific
nagy851887	1	a	Field; Pacific
nagy861888	1	a	Review
nagy870858	1	a	Field; Pacific, Japan
nagy872792	1	a	Field; Pacific
nagy900859	1	a	Field; Pacific, Japan
nagy922781	1	a	Field; Pacific
nair851889	2	c	Field; India coast
nair880337	3	d	Review
nakk851052	1	a	Field; Pacific
nakk901273	1	a	Field; Japan
nakt841053	1	a	Field; Pacific
nakt881891	1	a	Review
nask881894	3	f	Lab Study
neld781055	2	a	Field; U.K. Irish Sea
neld811056	2	a	Field; U.K. Irish Sea
neld841057	1	a	Field; Pacific
neld850338	1	b	Field; U.S.A., Lakes
neld851058	3	d,f,h	Lab Study
neld871899	1;3	a,b,f	Review; Lab Experiment
neld891900	1	b	Field; U.S.A. Lake, CA
nelv732673	1	e	Field; Marshall Islands
nelv760639	1	a	Field; Alaska
nelv770339	a	c,e	Field; Marshall Islands
nelv770638	1	a	Field; Alaska
nelv790636	1	a	Field; Micronesia
neva751902	1	e	Field; Marshall Islands
neva751903	1	e	Field; Marshall Islands
nicos881904	2	a,i	Field; U.K. Irish Sea

Table 4 (continued). Location(s) of accession number listed in Tables 1-3.

Accession Number	Table	Column(s)	Type of Study and Region (when applicable)
nieh882675	1	a	Field; Atlantic
nieh901274	2	a	Field; North Sea
nieh932920	2	a	Field; North Sea
nier822344	1	a	Field; Pacific, U.S.A. Coast
nilk812676	1	a	Baltic
nosv721059	1;2	a,e;b	Review
nosv731060	1	a	Field; Atlantic
nosv731914	1	a	Field; Atlantic, U.S.A. Coast
nosv741062	1	a	Field; Atlantic
nosv741915	1	e	Field; Marshall Islands
nosv751061	1	e	Field; Marshall Islands
nosv760346	1	a,e	Field; Marshall Islands
nosv760351	1	e,f	Field; Marshall Islands
nosv780353	1;2	a,g	Field; Pacific
nosv790647	1	a	Field; Marshall Islands
nosv800350	1	a,c,e	Field; Marshall Islands
nosv801916	1	a	Field; Pacific
nosv802516	1	e	Field; Marshall Islands
nosv802677	1	e	Field; Marshall Islands
nosv810345	1;2	a,g	Field; Pacific
nosv810347	1	c,e	Field; Marshall Islands
nosv810646	1	c	Field; Marshall Islands
nosv811917	1	d,f,g	Field; Marshall Islands
nosv812551	1	e	Field; Marshall Islands
nosv830352	1;2	a,g	Field; Atlantic
nosv832680	1	a	Field; Atlantic
nosv852752	1;2	a,e;a	Review
nosv860348	1;2	a,c,e;g	Field; Atlantic & Marshall Islands
nosv861201	1;2	a,e;a,g	Review
nosv862726	1;2	a,g	Field; Atlantic
nosv870349	1	a,c,e	Field; Marshall Islands
nosv870867	1	c,e,g	Field; Marshall Islands, Dose
nosv880869	1	e	Field; Marshall Islands
nrcr832284	1	a,b,g	Review
nyhj820357	2	h	Field; U.S.A. Los Alamos NM
oakt822347	2	f	Field; U.S.A. Clinch river, TN
oecd852727	2	g	Review; NEA Disposal Site
okas771926	1	a,g	Field; Japan, Dose
okas781927	1	c,g	Field; Japan, Dose
okas791928	2	a	Field; Japan coast, dose
olsc801065	1	a	Field; Atlantic, U.S.A. Coast

Table 4 (continued). Location(s) of accession number listed in Tables 1-3 .

Accession Number	Table	Column(s)	Type of Study and Region (when applicable)
olsc810364	1	a	Field; Atlantic, U.S.A. Coast
olsc810365	1	a	Field, Atlantic, U.S.A. Coast
olsc891066	2	e,f	Field; U.S.A. Atlantic estuary
oniy820875	2	b	Field; U.S.A. creeks NY
ork861063	3	d,f	Lab Study
ork901275	2	d	Field; U.K. Wales lake
ostp910359	1	a	Field; Baltic
ostp911276	1	a	Field; Baltic
paid771926	2	f	Field; U.S.A. Savannah river SC
paid801929	2	f	Field; U.S.A. Rocky Flats CO
palj841203	1	a	Field; U.S.A. Coast
papc882728	1;2	a;g	Field; Atlantic; Disposal Site
papc892729	1;2	a;g	Field; Atlantic; Disposal Site
pasa781930	1	g	Review organisms
patb792730	2	a	Field; India, Bay
patj761035	3	e,f	Lab Study
patj801934	3	e	Lab Study
patj832297	3	e,f	Lab Study
penr761038	2	a	Field; U.K. Irish Sea
penr770373	2	a	Review
penr771936	2	a	Field; U.K. Irish Sea
penr780374	2	a	Field; U.K. Irish Sea
penr780650	3	a	Lab Study
penr781039	3	a	Lab Study
penr790651	2	a,i	Field; U.K. Irish Sea
penr802731	2	a	Field; U.K. Irish Sea
penr811034	2	a	Field; U.K. Irish Sea
penr811036	1;2	a,e;a,i	Review
penr811937	2	a	Field; U.K. Irish Sea
penr822732	2	a	Field; U.K. Irish Sea
penr841040	2	a	Review
penr841938	1;2	a,e;a	Review
penr842733	2	a,i	Field; U.K. dose
penr852734	2	a	Field; U.K. Irish Sea
penr861939	2	a	Field; U.K. Irish Sea
penr862735	2	a	Field; U.K. Irish Sea
penr862770	2	a	Field; U.K. Sites
penr872736	2	a	Field; U.K. Irish Sea
penr882737	2	a,i	Field; U.K. dose
penr882753	1	g	Review organisms
penr882754	1;2	a,e;a,g	Review

Table 4 (continued). Location(s) of accession number listed in Tables 1-3 .

Accession Number	Table	Column(s)	Type of Study and Region (when applicable)
penr882780	2	a,i	Field; U.K. Irish Sea dose
penr891037	2	a,i	Field; U.K. Irish Sea dose
penw871935	3	f	Lab Study
penw901041	2	h	Field; U.S.A. Los Alamos NM
pilk641042	1	a	Field; Pacific
pilk751948	2	a	Field; India Bay
pilk752738	2	a	Field; India Bay
pilk760377	2	a	Field; India Bay
pilk822502	2	a	Field; India Bay
pimm791953	2	b	Field; Germany river
pimm822353	2	b	Field; Germany river
pinj921281	2	d	Field; U.S.A. pond SC
plap761960	1	b	Field; U.S.A. Lake Michigan
poep800653	2	d	Field; Germany river
poes721043	2	f	Field; U.S.A. Reservoirs, CO
pors861963	1	a	Field; Mediterranean
post881965	2	i	Review; Dose
purc891968	1	a	Field; Atlantic
purw901283	2	h	Field; U.S.A. river CO & NM
purw901284	2	h	Field; U.S.A. Los Alamos NM
raid801047	3	f	Lab Study
reet781976	2	f	Field; U.S.A. pond CO
reij911285	3	a	Lab Study
ribj902919	1	c	Model; Baltic
risn781980	1	a	Field; Pacific
robd711986	3	a	Lab Study
robd731987	2	d	Field; U.S.A. Columbia River, WA
robd771988	2	d	Field; U.S.A. Columbia River, WA
robj851981	1	b	Field; U.S.A. Great Lakes
robj851982	1	b	Field; U.S.A. Great Lakes
robj911287	1	b	Field; U.S.A. Great Lakes
robr841984	3	e	Lab Study
robr851985	3	e,g	Lab Study
robw800403	1	e,f,g	Field; Marshall Islands, Dose
robw810402	1;2	e,g	Field; Marshall Islands
robw810660	1	c,g	Field; Marshall Islands, Dose
rodd760661	2	f	Field; U.S.A. Mound Lab OH
rogd751992	2	f	Field; U.S.A. Mound Lab OH
rotr851998	1	a	Field; Gulf of Mexico
sakm752003	1	c	Field; Pacific
sakm792004	2	c	Field; Japan coast

Table 4 (continued). Location(s) of accession number listed in Tables 1-3 .

Accession Number	Table	Column(s)	Type of Study and Region (when applicable)
sakm870413	1	a,f	Review
sakm900843	1	a,e	Review
sakm911290	1	f	Field; Japan
sakr870570	2	c	Field; Baltic
sala800416	1	a	Field; Baltic
sala830417	2	c	Field; Baltic
sala842681	1	a	Field; Baltic
sala862007	1	a	Field; Baltic
sana822410	3	c,d	Lab Study
sana832272	1	a,b	Field; Pacific, Fresh water
sana851001	3	d,f	Lab Study
sana861002	1	a,b	Field; Pacific; Canada Lake
sana880418	1	a	Field; Baltic
sana911291	1	a	Field; Black Sea
sanp802011	1	a	Field; Atlantic, U.S.A. Coast
sanp822394	1	a	Field; Atlantic, U.S.A. Coast
saxr891292	1	a	Field; Baltic, Accident
sayf872683	1	a	Field; Atlantic
schf862018	3	c	Lab Study
schh820428	2	b	Field; Germany river
schk742015	2	h	Field; U.S.A. Los Alamos NM
schw731007	1	e	Field; Marshall Islands
schw742012	1	e	Field; Marshall Islands
schw751003	1	e	Field; Marshall Islands
schw760421	1	e	Field; Marshall Islands
schw782013	1	e	Field; Marshall Islands
schw782740	1;2	a,g	Field; Pacific Disposal Site
schw792014	3	c	Lab Study
schw800424	1;2	a,d,g	Field; Pacific Disposal Site
schw802515	1	e	Field; Marshall Islands
schw822373	3	c,d	Lab Study
schw830903	1;2	a,g	Field; Atlantic Disposal Site
schw872685	1	e	Field; Marshall Islands
scom002025	3	g,h	Lab Study
scom780430	1	b	Field; U.S.A. River
scom802785	1	b	Field; U.S.A. Rivers
scom832324	1	a	Field; Gulf of Mexico
scom850431	1	b	Field; U.S.A. River
scom852027	1	a	Field; Gulf of Mexico
scom862028	1	a	Field; Gulf of Mexico
scom872029	1	b	Field; U.S.A. River

Table 4 (continued). Location(s) of accession number listed in Tables 1-3.

Accession Number	Table	Column(s)	Type of Study and Region (when applicable)
scop842262	2	g,i	Review
sedj742030	2	h	Field; U.S.A. Argonne IL
sedj782032	2	h	Field; U.S.A. Argonne IL
seya792036	3	c,d	Lab Study
shap821008	3	c	Lab Study
sheg831009	3	g,h	Lab Study
shej762037	3	c	Lab Study
shik920973	2	a,i	Field; Japan coast Dose
shis870439	1	c	Field; Pacific
shoe821016	1	b	Field; U.S.A. Lake, Ma.
shoe831015	3	d,g	Lab Study
shoe832755	1	a,b	Review
shoe842043	1	a	Field; Atlantic U.S.A. Coast
shoe872044	1	a	Field; Atlantic U.S.A. Coast
sibt822345	3	c,d	Lab Study
sibt822351	3	d	Lab Study
sibt842045	3	c	Lab Study
sibt862046	3	e	Lab Study
sibt901295	3	a	Lab Study
silg892090	3	e,f	Lab Study
simh760445	1	a	Field; Atlantic U.S.A. Coast
simh800683	1	b	Field; U.S.A. River, NY
simh801017	1	b	Field; U.S.A. Lake, CA
simh820451	1	b	Field; U.S.A. Lake, CA
simh842052	1	b	Field; U.S.A. Lakes
simh852053	1	b	Field; U.S.A. Lakes
simh870444	1	a	Field; Atlantic U.S.A. Coast
simk770443	1	a	Field; Baltic
simk792049	1	a	Field; Baltic
sinh770684	2	h	Field; U.S.A. Argonne IL
skwb900978	1	a	Field; Baltic, Accident
smij820461	1	a	Field; Atlantic Canada Coast
smij861019	1;2	a;g	Field; Atlantic Disposal Site
smij872069	1	a	Field; Atlantic Canada Coast
smij892741	1;2	a;g	Field; Atlantic Disposal Site
smit801018	2	a	Field; U.K. Irish Sea
sprd780467	1	b	Field; U.S.A. River
stad822389	3	c	Lab Study
stad862073	3	c	Lab Study
stom851024	1	a	Field; Atlantic
sugy762083	1	a,b	Review

Table 4 (continued). Location(s) of accession number listed in Tables 1-3.

Accession Number	Table	Column(s)	Type of Study and Region (when applicable)
summ802086	2	i	Dose Japan
summ812087	1	a,g	Field; Japan Dose
swaj840930	3	h	Lab Study
swaj860929	3	h	Lab Study
swid882773	3	a	Lab Study
temw662742	2	a	Field; U.K. Irish Sea
them800477	1	a	Field; Mediterranean
thig792100	3	b	Lab Study
thig802101	3	b	Lab Study
thig832266	3	b	Lab Study
thig842102	3	b	Lab Study
thoc582686	1	c	Field; Pacific
thom75110	2	f	Field; U.S.A. Rocky Flats CO
thon822429	2	a	Field; U.K. Irish Sea
thor812103	3	a	Review
tilj762112	3	b	Lab Study
tkam772113	3	b,f	Lab Study
tooj900934	2	a	Field; Scotland coast
torl790480	1	a	Field; Pacific Alaska Coast
traj762116	3	b	Lab Study
traj782117	3	b	Lab Study
traj832290	2	f	Field; U.S.A. pond TN
tric822419	1	a	Field; Mediterranean
tric822503	1	a	Field; Mediterranean
tuok862119	1	a	Field; Baltic
turd911032	2	a	Field; U.K. Esk Estuary
vana862122	3	c	Lab Study
vanj832323	3	a	Lab Study
vanj870937	3	b	Lab Study
vano810979	1;2	a,b;a	Review
vano842123	3	c,d	Lab Study
volh752131	2	f	Field; U.S.A. Mound Lab OH
volh762133	2	f	Field; U.S.A. Mound Lab OH
volh832298	1	b	Field; U.S.A. Lake, OR
wahm732786	1	b	Field; U.S.A. Great Lakes
wahm740983	1	b	Field; U.S.A. Lake Michigan
wahm742138	1;2	b;d	Field; U.S.A. Lake Michigan
wahm742787	1	b	Field; U.S.A. Lake Michigan
wahm750493	1	b	Field; U.S.A. Lake Michigan
wahm750982	1	b	Field; U.S.A. Great Lakes

Table 4 (continued). Location(s) of accession number listed in Tables 1-3.

Accession Number	Table	Column(s)	Type of Study and Region (when applicable)
wahm760491	1	b	Field; U.S.A. Lake Michigan
wahm772788	1	b	Field; U.S.A. Great Lakes
wahm772789	1	b	Field; U.S.A. Great Lakes
wahm780784	1	b	Field; U.S.A. Lake Michigan
wahm781205	1	b	Field; U.S.A. & Canada Lakes
wahm781206	1	b	Field; U.S.A. & Canada Lakes
wahm802139	1	b	Field; U.S.A. Great Lakes
wahm820494	1	b	Field; U.S.A. & Canada Lakes
walm911300	2	a	Field; U.K. Irish Sea
watr802757	1;2	a,b,e;a,d,f	Review
watr832315	1	b	Review
wayc752151	2	f	Field; U.S.A. Miami river OH
wayc772152	2	f	Field; U.S.A. Miami river OH
weid832288	1	a	Field; Baltic
weih860972	2	g	Field; U.S.A. California coast
wela692156	1	e	Field; Marshall Islands
whif900989	2	f	Field; U.S.A. SRL pond SC
wild752166	1	e,g	Field; Marshall Islands
wilt882743	2	a	Field; Scotland Lock Etive
wonk700993	1	a	Field; Atlantic U.S.A. Coast
wonk710994	1	a	Field; Pacific U.S.A. Coast
wonk722170	1	a	Field; Pacific U.S.A. Coast
wonk792171	1	a,e	Field; Pacific
wonk922688	1	a	Field; Pacific U.S.A. Coast
wood840508	2	a	Review
wood862172	2	a,i	Field; U.K. Esk Estuary
wood882744	2	a	Field; U.K. Irish Sea
yage740995	1	b	Field; U.S.A. Lake Michigan
yama770515	1	a	Field; Pacific Japan Coast
yama842257	1;2	a;a	Field; Pacific Japan Coast
yama911306	1	a	Field; Pacific Japan Coast
yama921307	1	a	Field; Pacific Japan Coast
yamm790510	1	a	Field; Pacific Japan Coast
yamm840996	1	a	Field; Pacific Japan Coast
yamm901304	1	a,b	Field; Pacific Japan Coast, Lakes
yamm911305	1	a,b	Field; Pacific Japan Coast, Lakes
yanh862178	1	a	Field; Pacific
yank822689	1	a	Field; Korea Coast
zilj742183	2	f	Field; U.S.A. Rocky Flats CO
zlov700999	3	a	Lab Study
zlov732185	3	a	Lab Study

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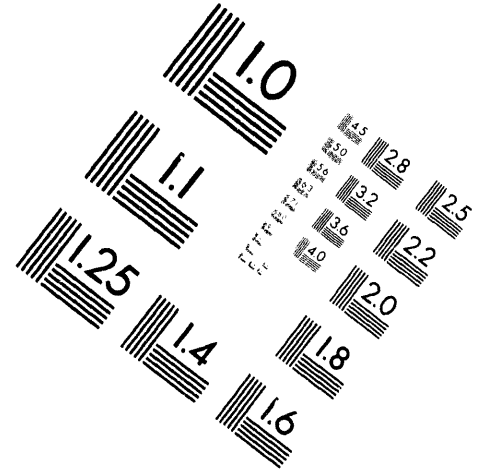
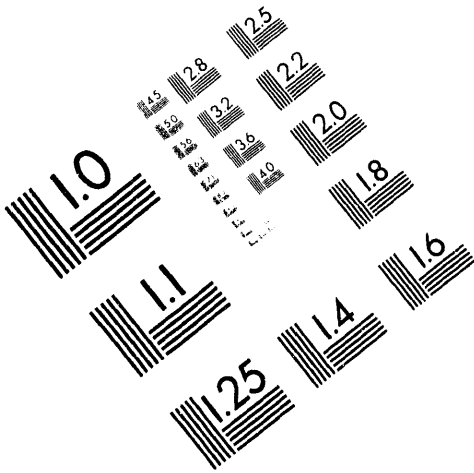
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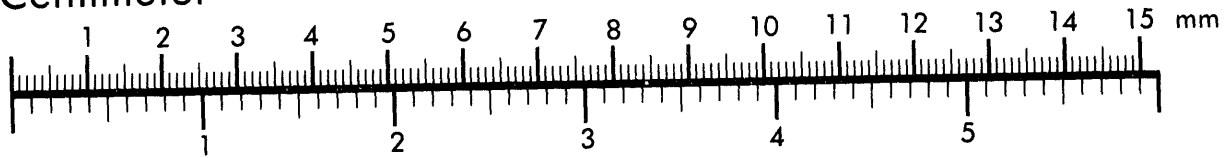
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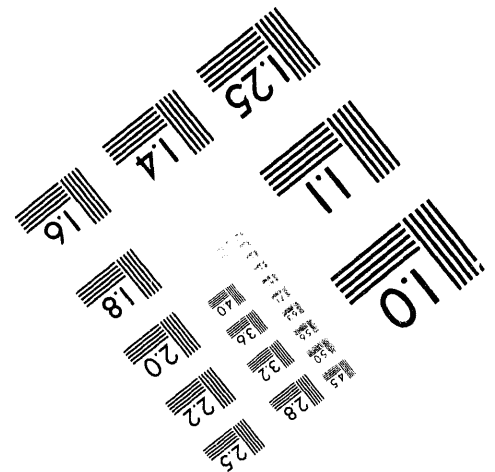
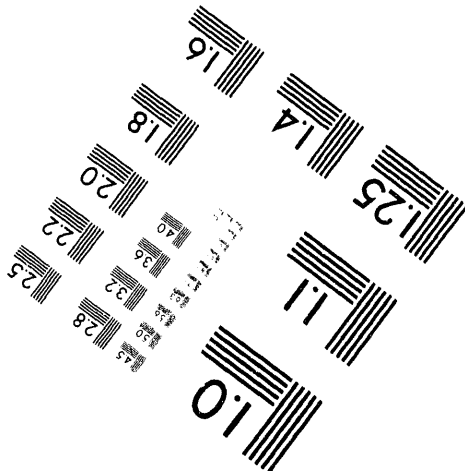
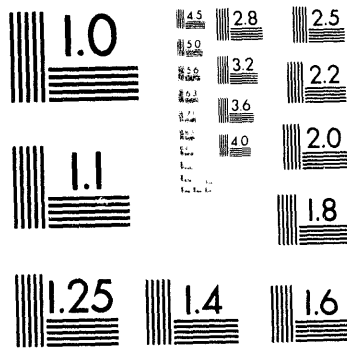
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