

LOS ALAMOS

LOS ALAMOS NATIONAL LABORATORY

ER Record I.D.# 0005905

ENVIRONMENTAL RESTORATION
Records Processing Facility
ER Record Index Form
(Side 1 of 2)

DATE RECEIVED: 07-17-92 PROCESSOR: LIO

Part I: Complete all fields; indicate if not applicable or appropriate; please write legibly.

DOCUMENT TO: Harry S. Gordon DOCUMENT DATE: 08/03/71
ORIGINATOR NAME: P. W. Orsak ORGANIZATION: GMX
SYMBOL: — PAGE COUNT: 1
SUBJECT/TITLE: Your Memo of 26 May 1971, "GMX-Environmental Surveillance"

RECORD TYPE (Circle relevant type for primary record; type of attachments should be selected on *Keywords List*):

- | | | | | |
|-------------------------|-----------|----------------|------------------------|------------------|
| Analytical Data | FAX | Map | Plan | Study |
| Chain-of-Custody | Figure | Memo | Procedure | Telephone Record |
| Computer Output | Form | Microform | Purchase Request | Transcription |
| Contract | Interview | Notebook | Receipt Acknowledgment | Video |
| Controlled Distribution | Letter | Personal Notes | Report | Work Plan |
| Drawing | Logbook | Photo | Review | Other |

RECORD CATEGORY: P
(P for Programmatic or R for Reference)

RECORD PACKAGE #: —

RECORD FILMED (Y/N): Y

RECORD LOCATION: —
(Indicate location of record if not filmed.)

Part II: Complete all fields; indicate if not applicable or appropriate; please write legibly. Use *ER Record Index Form Attachment Sheet* if needed.

ATTACHMENTS FILMED (Y/N): Y
(Were attachments to this record filmed?)

LOCATION: —
(Indicate location of attachments.)

TECH AREA(S)
LIST RELEVANT TECH AREA(S)

—

PRS NO(S)
LIST RELEVANT PRS(S)

—

ADS NO(S)
LIST RELEVANT TOC/ADS NO(S)

—

STRUCTURE NO(S)/MDA
LIST RELEVANT STRUCTURE NO(S)/MDA

—

Part III: Complete all fields; indicate if not applicable or appropriate; please write legibly. Use *ER Record Index Form Attachment Sheet* if needed.

WBS NO(S)

LIST RELEVANT WBS NO(S)

DOCUMENT TO

LIST MULTIPLE REFERENCES

ORIGINATOR NAMES

LIST MULTIPLE ORIGINATORS

CORRECTION (Y/N): _____

(Is this a correction to a record previously processed?)

CORRECTED #: _____

(If answer is Yes, please give ER Record # for corrected record.)

CORRECTION DESCRIPTION (Optional): _____

SUPERCEDE: _____ **REPLACE:** _____ **DELETE:** _____ **ADD:** _____ **REVISE:** _____

ATTACHMENT LIST

A) MEMO Panowski Salgado — Ebbwert Scope Committee 06/01/71

KEYWORDS: Circle relevant KEYWORDS from the list below for ER Record #: 0005905

MISCELLANEOUS (List other indexing criteria as necessary; please write legibly): Tech Area,

Abandon	.....	Controlled Distribution	Evacuation	HSWA (Hazardous and
Aboveground Tank	Cadmium	Core	<u>Evaluation</u>	Solid Waste
Absorption	Calsson	Corrective Action	Evaporator	Amendments)
Abstract	Caibration	Correspondence	Excavation	Hydrology
Accelerator	Canyon	Criteria	Exclusion	Hygiene
Access	Capacitor	.....	Exhaust	.....
Accident	Caustic	Data	<u>Experiment</u>	Implementation
Accumulation	<u>CEARP (Comprehensive</u>	Deadline	Explosive	Implosion
<u>Acid</u>	<u>Environmental Assessment</u>	Debris	Exposure	Impoundment
Active	<u>and Response Program)</u>	Decision Analysis	Extension	Inactive
Administrative	Comment	Decommission	Extraction	Incinerator
ADS (Activity Data Sheet)	CERCLA	Decontamination	.....	Industrial
Adsorption	(Comprehensive	Deficiency	Facility	Injection Well
AEC (Atomic Energy	Environmental Response,	Deliverables	Farm	Inorganic
Commission)	Compensation, and	Demolition	FAX	Inspection
Aerial	Liability Act)	Description	Fence	Installation
Agenda	Certification	Detection	Field	Interim
Agreement	Cesium	Detonation	Figure	Interim Action
Air	Chain-of-Custody	Development	Filter	Internal
Alpha	Chamber	Discharge	FIMAD (Facility for	Interview
Americium	Change Control	Disposal	Information Management,	Inventory
Analysis	Change Order	Documentation	Analysis, and Display)	Investigation
Analytical	Charge	DOE (Department of	Finding	IRM (Interim Remedial
AOC (Area of Concern)	Chart	Energy)	Fire	Measure)
Approval	Checklist	DOQ (Data Quality	Firing Site	Isotope
Aquifer	Chemical	Objectives)	Fiscal	IWP (Installation Work Plan)
ARAR (Applicable,	Chromium	.....	Five Year Plan	.....
Relevant, or Appropriate	Cleanup	Draft	Flowchart	Lab Job
Requirements)	Clearance	Drainage	Fluid	Laboratory
Archeology	Clothing	Drainline	Form	Lagoon
Archive	Closure	Drawing	Framework	Land
Area	<u>CMI/RA (Corrective</u>	Drilling	Free	Landfill
Arsonic	<u>Measures</u>	Drop Tower	Fuel	Laundry
Asbestos	Implementation/Remedial	Drum	.....	Leach
Asphalt	Action)	Dry Well	Gamma	Lead
Assessment	<u>CMS/FS (Corrective</u>	Dump	<u>Gas</u>	Laak
Audit	<u>Measures Study/</u>	Duplicates	Generation	Legal
.....	<u>Feasibility Study)</u>	.....	Generic	Letter
Bacteria	Comment	<u>Ecology</u>	Geochemistry	Limit
Barium	<u>Committee</u>	<u>Effluent</u>	Geology	Lines
Baseline	Community Relations	EIS (Environmental Impact	Geophysics	Liquid
BCP (Baseline Change	Compliance	Statement)	Glass Breaker	List
Proposal)	Compressed Gas	Emission	Glove Box	Log
Beds	Computer Modeling	Engineering	Graph	Logbook
Burmed Area	Computer Output	<u>Environmental</u>	Guidance	.....
Beryllium	Concern	EPA (Environmental	Gun	Magazine
Beta	Concrete	Protection Agency)	.....	Management
Biology	Concurrence	Equipment	Handling	Manhole
Blank	Configuration	ERDA (Energy Research	Hazardous	Map
Boiler	Construction	and Development	Health	<u>Material</u>
Boneyard	Container	Administration)	<u>HE (High Explosive)</u>	MDA (Material Disposal
Buried	Containment	Erosion	History	Area)
<u>Burn</u>	Contaminant	Error	Hole	<u>Media</u>
Burn Site	Contract	ES&H (Environment,	Home Owner	<u>Meeting</u>
	Control	Safety, and Health)		
		Estimate		

Memo	OSHA (Occupational Safety & Health Administration)	Radionuclide	Seminar	Testing
Mercury	OU (Operable Unit)	Rationale	Semivolatile	TLD (Thermoluminescent Dosimeter)
Metal	Outfall	RCRA (Resource, Conservation, and Recovery Act)	Septic	TOC (Table of Contents)
Microform	Outline	Reactor	Sewer	TOC (Table of Contents)
Minimization	-----	Receipt	Shaft	Townsite
Minutes	PA/RFA (Preliminary Assessment /RCRA Facility Assessment)	Acknowledgment	Shell	Toxic
MIS (Management Information System)	PCB (Polychlorinated Biphenyl)	Recommendation	Shot	Tracking
Mixed Waste	Permit	Reconnaissance	Silver	Training
MOA (Memo of Agreement)	Personal Notes	Records	Site	Transcription
Model	Personnel Qualification	Recovery	Sludge	Transfer
Modification	Photo	Recycle	Soil	Transformer
Money (Allocation, Appropriation, Budget, Cost, Funding, etc.)	Pilot Study	Reduction	Solid	Transport
Monitoring	Pipe	Reference	Solvent	Treatment
Monthly Report	Pit	Regulation	SOP (Standard Operating Procedure)	Trench
Mortar Impact Area	Plan	Release	SOW (Statement of Scope of Work)	Trip Report
MOU (Memo of Understanding)	Plant	Remediation	Specific	Tritium
MSA (Major System Acquisition)	Plutonium	Removal	Spill	TRU (Transuranic)
-----	Pollution	Report	Stack	TSCA (Toxic Substances Control Act)
NEPA (National Environmental Policy Act)	Polonium	Request	Standard	Tuballoy
NFA (No Further Action)	Polaroid	Requirements	Statistics	Tuff
Nitrate	Potential	Research	Steamline	-----
NMED (New Mexico Environmental Division)	Presentation	Resin Bed	Steel	Underground
NMEID (New Mexico Environmental Improvement Division)	Prevention	Resolution	Storage	Uranium
NOD (Notice of Deficiency)	Priority	Resource	Strontium	Urine
Non-explosive	Procedure	Response	Structure	USGS (United States Geological Survey)
Notebook	Program	Restoration	Study	UST (Underground Storage Tanks)
Notification	Programmatic	Restriction	Subcontractor	Utility
NPDES (National Pollutant Discharge Elimination System)	Project	Results	Subsurface	-----
NRC (Nuclear Regulatory Commission)	Project Leader	Review	Summary	Validation
Nuclear	Propellant	Revision	Sump	Variance
-----	Property	RFI/RI (RCRA Facility Investigation/Remedial Investigation)	Support	VE (Value Engineering)
Observation	Proposal	Risk	Surface	Ventilation
Off-gas	Protection	RPF (Records Processing Facility)	Surveillance	Ventilation
Oil	Protocol	-----	Survey	Verification
Open	PHS (Potential Release Site)	Safety	Swipe	Video
Open Burning	Public	Salamander	SWMU (Solid Waste Management Unit)	Volatile
Operation	Pump	Salvage	System	Volume
Order	Purchase Request	Sample	-----	Warehouse
Organic	-----	Sampling Plan	Tank	Waste
Organization	Quality	Sanitary	Task	Water
-----	QA (Quality Assurance)	Satellite	TCLP (Toxicity Characteristic Leaching Procedure)	WBS (Work Breakdown Structure)
Observation	QP (Quality Procedure)	Schedule	TDD (Technical Document Description)	Weapon
Off-gas	Quarterly Report	Scope	Technical	Well
Oil	-----	Scrap Detonation Site	Technical Team	Work
Open	Radioactive	Screening	Technology	Working Group
Open Burning	Radiochemistry	Scrubber	Telephone Record	-----
Operation	-----	Security	Test Area	Zinc
Order	-----	Seep	-----	-----
Organic	-----	-----	-----	-----
Organization	-----	-----	-----	-----

OFFICE MEMORANDUM

TO : Harry S. Jordan

DATE: 3 August 1971

8:00 AM

FROM : R. W. Drake

SUBJECT: YOUR MEMO OF 26 MAY 1971, "GMX - ENVIRONMENT SURVEILLANCE"

SYMBOL : GMX



As I have indicated to you orally, I had little more than received your memo (whose very writing was, of course, encouraged by me) than I detected traffic between GMX-3 and H-5 on (partly) the same subject (Reference: Unclassified memo from P. G. Salgado to J. B. Panowski, June 1, 1971, subject: "Effluent Scope Committee"; copy attached). It disclosed that GMX-3 had just put on a dog-and-pony show for H-5, dealing largely with the same sorts of questions you had. You can understand my reluctance to ask for a second performance so soon, for the benefit of another H Division Group.

Meanwhile I have been brooding about how to honor your request with minimum impact on GMX-3.

Recently, Jack Panowski came up with what seems to me to be a dandy solution, or at least a major step in that direction: they would share with you all the relevant information they provide now to H-5 (including a handbook on their monitoring methods, sources, etc.). I encouraged that; I notice examples of things being sent to you in accordance with this plan (e.g. Panowski and Salgado to H. F. Schulte via Jesse Aragon, July 28, 1971, "Group GMX-3 Effluents"). I trust that you concur that this satisfies your objective.


R. W. Drake

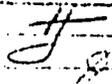
RWD:vw

Attach: Memo from Salgado to Panowski, dtd 6/1/71, "Effluent Scope Committee"

cc: GMX-3 w/ cy subject ref memo: from Jordan to Drake, dtd 5/26/71, subj: "GMX - Environment Surveillance" w/o attach

File

Received by ER-RPF
JUL 17 1971


SEARCHED	
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AUG 3 1971	
LOS ALAMOS	

0-5-3090

3

OFFICE MEMORANDUM

TO J. B. Panowski

DATE June 1, 1971

PA
7/2/71

FROM P. G. Salgado

SUBJECT EFFLUENT SCOPE COMMITTEE

SYMBOL GMX-3

On May 20, 1971, a meeting was held to discuss the Group GMX-3 approach to an effluent inquiry. Those participating were:

H. F. Schulte - Group H-5	C. R. West
F. W. DuBois	M. Schwartz
J. B. Panowski	P. G. Salgado

J. B. Panowski explained our mechanism for obtaining the amounts of HE destroyed in burns and carried away in effluent streams and the amounts of solvents drained from the Site. The solvents drained from the Site will be reported as that quantity of LASL stock and special order solvents delivered from the warehouse to S-Site users (except for the solvents expended by the two largest users, Buildings TA-16-306 and 340; these will be reported individually according to actual use). The HE burned will be reported by weight from records kept by Burning Grounds personnel. The HE in effluent streams will be estimated from approximate building discharge stream flow rates and the average concentrations of HE in streams as determined from chemical analyses. In addition to the effluent HE and solvents, a list will be provided of the S-Site buildings from which there is no or negligible effluent.

The question was asked as to the composition of the HE combustion gas. Panowski replied that we have inquired of our local experts and the answer is not known. The carbonaceous materials probably go to CO₂ and the hydrogen goes to water but the composition of nitrogen gases is not known. A suggestion was made by Schwartz that a small experiment could be conducted at the Burning Ground to recover free burn off gas and analyze it for a qualitative evaluation of composition.

The use of the form provided by Schulte was reviewed. It was generally agreed that the forms could be used freely to describe S-Site situations and rigid conformance to the form outline would not be necessary.

A description of downstream soil and effluent sampling in the canyons adjacent to S-Site was presented. Schulte approved of our downstream soil sampling procedure, and he suggested that we sample and analyze for boron to determine the persistence of boric acid, which was used extensively at S-Site many years ago.

It was agreed that it would be appropriate to publish several papers associated with environmental protection based on work already completed and work underway at S-Site as follows.

<u>Authors</u>	<u>Subject</u>
F. W. DuBois and J. F. Baytos	"HE Deterioration in the Soil Through Weathering and Bacteriological Effects"
J. F. Baytos	"Sump Drain Pocket Analyses"
M. Schwartz	"HE Solubility and Analysis"

H. F. Schulte felt that once we have listed all our effluents, we will find that most discharged components will be small and of no concern. However, he felt that we may find a few of our discharge materials to be worrisome and we may be required to consider our handling of these wastes more critically. He felt that we may have to consider the triple question, "How far away can we tolerate what concentrations of what materials?" He felt that our discharges to the soil are not getting very far away. Clay is a good absorber and material is bound strongly to clay. Transfer of our waste then becomes related to the physical washing away of clay.

J. B. Panowski closed the meeting by presenting an "in-perspective" view of the magnitude of the S-Site's waste disposal problem in the form of the following table.

June 1, 1971

EFFLUENT COMPARISONS
(No "trash" included)

<u>A. S-Site</u>	<u>Disposal (6 months)</u>	<u>Rate (lbs/hr)</u>
Solvents	3,284 gal	5.25
HE	49,400 lbs	11.40
Total		16.7
Composition	Hydrocarbons, CO ₂ , N ₂ , H ₂ O, NO _x	
<u>B. One Automobile (15 miles/gal Octane at 0.703 g/cm³ or 5.9 lbs/gal)</u>	<u>Disposal (one hour)</u>	<u>Rate (lbs/hr)</u>
Gasoline	4 gal	23.6
Composition	Hydrocarbons, CO, CO ₂ , N ₂ , NO _x , SO ₂	
<u>C. Summary</u>		
S-Site	16.7 lbs/hr	
One automobile	23.6 lbs/hr	

PGS/sf

P. G. Salgado

P. G. Salgado

cc: Jesso Aragon
H. E. Ballance
J. B. Bourne
C. Boggs
W. C. Courtright
C. R. DePoorter
F. W. DuBois
H. B. Fletcher
J. J. Garcia

R. S. Gauler
F. A. Hauser
D. D. McCormick
A. Popolato
M. Schwartz
W. A. Spencer
C. R. West
GMX-3 Reading File
File