

2/7/84

MINUTES OF THE House COMMITTEE ON Energy and Natural ResourcesThe meeting was called to order by Representative David J. Heinemann at  
Chairperson3:30 ~~am~~/p.m. on January 26th, 1984 in room 519-S of the Capitol.

All members were present except:

Representative Keith Roe (Excused)

Committee staff present:

Ramon Powers, Legislative Research  
Theresa Kiernan, Revisor of Statutes' Office  
Raney Gilliland, Legislative Research  
Pam Somerville, Committee Secretary

Conferees appearing before the committee:

Pete McGill, Waste Management, Inc.  
Charles Johnson, National Solid Wastes Management Association  
Donald A Wallgren, Waste Management, Inc.

Pete McGill introduced Dr. Johnson and Mr. Wallgren to present testimony in opposition to the proposed prohibition of land burial of hazardous wastes in Kansas.

Dr. Charles Johnson, Director, National Solid Wastes Management Association, appeared before the committee in opposition to the proposed prohibition of land burial (HB 2725). Dr. Johnson said there were several ways to deal with hazardous wastes such as recycling, incineration, treatment and above and below the ground disposal. He said the best way to treat the wastes is to recycle the wastes and the least attractive way is above the ground storage. He went on to say that above the ground storage requires the great treatment requirement of land use, labor, and expense and that it had the greatest impact on property values. Dr. Johnson said he felt some form of disposal was necessary and that regardless of how the waste is disposed (treated, recycle, reclaimed, or incinerated) there would still be residuals.

In closing, Dr. Johnson said he felt landfills are the best form of disposal and opposed proposed legislation to prohibit the land burial of hazardous waste. A brief question and answer period followed the presentation.

Mr. Donald A. Wallgren, Vice President, Waste Management, Inc. appeared before the committee in opposition to proposed legislation to prohibit land burial of hazardous wastes. He said that as the largest operator of hazardous waste treatment/storage/disposal facilities in the country (a total of 20), that their company has had extensive experience with the siting, engineering development and operation of a wide variety of waste treatment, storage, and disposal facilities. Mr. Wallgren said it was a myth that all hazardous wastes can practically be recycled, incinerated, or treated to the point where no land disposal facilities are needed.

Mr. Wallgren gave a brief history of Waste Management, Inc. and the precautions taken in acquiring the site at Furley from prior owners in 1980. He said that the basic facilities and processes employed at the site then and which continued until the site was closed in January 1982 consisted of two evaporation ponds, four treatment ponds, and two disposal trench areas. As a result of environmental investigations, very low concentrations of volatile organics were found in a spring discharging into Prairie Creek one-half mile north of the site. Upon further investigation, higher concentrations of chemicals were found in borings on the

CONTINUATION SHEET

MINUTES OF THE House COMMITTEE ON Energy and Natural Resources,  
room 519-S, Statehouse, at 3:30 ~~xxx~~ p.m. on January 26th, 1984

site's northern property boundary early in 1982. As a result, the facility was ordered closed by the Governor on January 18, 1982. Subsequently, an extensive investigation ensued including the installation of over 85 monitoring wells and the development of geologic and hydrologic model of subsurface conditions and identification of possible fluid transport paths and mechanisms from the disposal facilities. Conclusions reached from the investigation included: residential wells surrounding the site were not affected by the site disposal activities; chemical migration at the site was primarily confined to a discontinuous zone in the weathered soil profile (referred to as "A-Zone") located above, and separated from the zone that constitutes the uppermost aquifer in the vicinity of the site (referred to as the "B-Zone"). (See attachment 1).

Mr. Wallgren went on to say that based on the site investigation, site improvements were implemented to minimize and essentially eliminate the potential for chemical migration from the site including containment and cleanup/removal of fluids in the A-Zone by installation of gravel-filled drainage trenches, removal and/or treatment of sources of chemical wastes which contribute to leachate production and subsequent migration.

In closing, Mr. Wallgren stated that their company had expended over \$3 million for investigative work since January 18, 1982. They are confident, provided the opportunity through the receipt of a permit, that they can operate an environmentally and financially sound hazardous waste facility that will serve the existing and prospective industry in Kansas.

A short question and answer period followed Mr. Wallgren's presentation.

There being no further business before the committee, the meeting was adjourned at 4:45 p.m.

The next meeting of the House Energy and Natural Resources Committee will be held on Monday, January 30, 1984 at 3:30 p.m. in the Old Supreme Court Chambers, Room 313-S.

  
Rep. David J. Heinemann, Chairman

Date January 26, 1984

GUESTS

HOUSE ENERGY AND NATURAL RESOURCES COMMITTEE

NAME	ADDRESS	ORGANIZATION
John Paul Goetz	Topeka	KDHE
Bell McAdam	MORAN KANS	Kansas Lumbermen
Howard Nelson	Topeka Kan	Nelson Quarries
Ed Reinert	Topeka	KS LWU's
Nelen Stephano	Prairie Village	LWU of J. Co.
ROBIN SOMERVILLE	TOPEKA KANSAS	Grains & PIC
Allen Abramson	Topeka - Topeka	KDHE
Dennis Murphy	Topeka	KDHE
Del Miller	Topeka	Gov's office
Cliff McDaniel	Wichita	N.T.E.S.
Don Walker	Oak Grove, Mo.	Waste Management, Inc.
Jerry Leonard	Topeka	KGE
D. WAYNE ZIMMERMAN	TOPEKA	THE ENVIRONMENTAL COMMISSION OF K.S.
Sharon Bhatn	Topeka	KPL
Chip Wheelen	Topeka	Waste Mgmt Inc.
Walter Edman	Topeka	KURE
Bob Hamig	Topeka	A.B.'s office
Jane Ratcliffe	KC Mo.	U.S. EPA Region VII
M.L. Jenkins	Topeka	Speakers Office

STATEMENT PRESENTED TO THE  
KANSAS HOUSE ENERGY AND NATURAL RESOURCES COMMITTEE

by

Donald A. Wallgren  
Staff Vice President  
Environmental Management

January 26, 1984

Good afternoon. Thank you for giving me the opportunity to meet with you and to provide you with information on our N.I.E.S. hazardous waste facility, which is better known locally as the Furley site. Much has been said about problems at the N.I.E.S. facility and land disposal of hazardous wastes in general. I think we have a very positive story to tell about both the N.I.E.S. facility and the continuing role of land disposal in the overall management of hazardous wastes. Unfortunately, the positive side of our company's actions at this facility and the future need for land disposal have received very little, if any, attention in the media.

As the largest operator of hazardous waste treatment/storage/disposal facilities in this country (a total of 20 facilities), our company has had extensive experience with the siting, engineering development and operation of a wide variety of waste treatment, storage, and disposal facilities. I would like to share with you some of our general views on the genesis of the problem at N.I.E.S. and on disposal technology relating to the overall management of chemical wastes.

It is a myth that all hazardous wastes can practically be recycled, incinerated, or treated to the point where no land disposal facilities are needed. This illusion has been further perpetuated by a few

Attachment 1 1-26-84

"single process" vendors and disposal/treatment companies that are not interested in dealing with the universe of wastes but only in promoting their process or disposal techniques for a particular waste stream or even some portion of a waste stream.

There have been numerous statements made that Kansas and Kansas' industries have not been impacted by the closure of the Furley site. I do not know how this can be said without a full accounting for the deposition of all hazardous wastes generated in the State. I have never seen such accounting, and I doubt that it exists. How are the wastes currently being handled in Kansas? Are they:

- stored on the generators' sites waiting for future disposal?
- flushed down the drain where they end up being discharged to a river because the municipal treatment plant was not designed to treat them, and furthermore the discharge is not even monitored for these chemicals?
- disposed of properly or improperly on the generators' sites?
- hauled to some unknown destination?
- transported out of state at a significant financial burden to the generator?

Before describing how wastes can be handled and what facilities we propose for our Furley facility, I will provide a very brief background and history of the N.I.E.S. facility. The site is located on 80 acres in a rural area about 10 miles northeast of Wichita. The former owners and operators of the site obtained a permit from the Kansas Department of Health and Environment (KDHE) in 1977, and went into operation that same year. Chemical Waste Management, Inc., a wholly-owned subsidiary

of Waste Management, Inc., acquired the site from prior owners in November 1980. The basic facilities and processes employed at the site then and which continued until the site was closed in January 1982 consisted of the following: Two evaporation ponds, four treatment ponds, and two disposal trench areas.

As a result of expanded environmental investigations in conjunction with the proposed site expansion, very low concentrations of volatile organics were found in a spring discharging into Prairie Creek one-half mile north of the site. Upon further investigation, higher concentrations of chemicals were found in borings on the site's northern property boundary early in 1982. The facility was ordered closed by the Governor on January 18, 1982.

We then initiated an extensive investigation of the site and surrounding area.

The site investigation included installation of over 85 monitoring wells and resulted in the development of a geologic and hydrologic model of subsurface conditions and identification of possible fluid transport paths and mechanisms from the disposal facilities. Conclusions reached on the basis of the geologic and hydrologic model included the following:

- Residential wells surrounding the site were not affected by the site disposal activities.
- The chemical migration at the site is primarily confined to a discontinuous zone in the weathered soil profile (referred to as the "A-Zone") located above, and separated from the zone that constitutes the uppermost aquifer in the vicinity of the site (referred to as the "B-Zone").

- Chemical migration from the site's facilities into the "A-Zone" was possible primarily as a result of the following factors:
  - The original design prepared by the prior owner did not consider minor, but very important, details of site geology and their effect on contaminant transport potential within the soils overlying the regional ground water at the site.
  - The original design prepared by the prior owner did not consider the potential interaction between certain wastes and the soil materials surrounding the disposal trenches (e.g., the incompatibility of the residual carbonate soils with acid waste fluids).
  - The original design provided for treatment of fluids in unlined ponds resulting in maximum driving heads for fluid migration from the site.
  - The original design did not provide for adequate control of infiltration of surface water through the final cover over completed disposal trenches.

Based on the comprehensive site investigation, it was judged prudent to implement site improvements which would minimize and essentially eliminate the potential for chemical migration from the site. The site improvements included the following:

- Containment and cleanup/removal of fluids in the A-Zone by installation of gravel-filled drainage trenches.
- Removal and/or treatment of sources of chemical wastes which contribute to leachate production and subsequent migration (i.e., acid removal from treatment ponds, and solidification and neutralization of sludges in the treatment ponds).



- Construction of a new cover over completed waste disposal trenches, properly sloped to promote run-off and minimize leachate production and movement.
- Construction of a new lined disposal cell meeting current Resource and Conservation and Recovery Act (RCRA) standards and designed to accommodate the features identified by the comprehensive site investigation.

As a result of a cooperative working arrangement with the KDHE, we were able to promptly undertake the first steps in the corrective program during the summer of 1982 and to complete much of the program late in 1982. We recently completed decommissioning of the treatment ponds. The only remaining remedial work is the decommissioning of the evaporation ponds. Even though we have convincing technical evidence that there is no significant leakage from the evaporation ponds, we have agreed to decommission them. In fact, this work would have been well underway or completed if the KDHE had agreed to our construction and operation of a deep well for this purpose.

The responsible position and actions taken by our Company are reinforced by the level of expenditures for the investigation and improvements at the site to date. We have expended over \$3 million for investigative work and construction at the site since January 18, 1982. This was all done on an extremely accelerated basis and in the absence of any legal order. We also proceeded with this work without the explicit promise that the site would be re-opened.

Now I will turn from past actions and present facilities at the site to our proposed activities and facilities. We have filed a Part B, which is the U.S.E.P.A. terminology for a hazardous waste



permit application under RCRA. In that application, we have a detailed description of our proposed waste handling practices and facilities for continued operation of the site. The following general criteria governed the design we submitted:

- A. We would not land dispose wastes that
  - (1) Can practically be recycled or incinerated.
  - (2) Are in a liquid or semi-liquid (sludge) state.
  - (3) Are highly mobile, toxic or have a propensity to bioaccumulate.
  
- B. We would land dispose only wastes that
  - (1) Do not exhibit characteristics listed under A.3.
  - (2) Are treated residues or bulk solids requiring no further treatment.
  - (3) Are compatible with the disposal cell liner system and other wastes.
  
- C. Landfill design must
  - (1) Prevent migration of any liquids out of the disposal cell.
  - (2) Prevent infiltration into the cell both during site operation and following closure.

An obvious question is, "How will we accomplish the above?"

Wastes will be received at the facility as bulk solids, bulk liquids, and as solids, sludges or liquids in drums or other containers. The proposed facility is designed to handle wastes in all of these forms.

A flow sheet showing the criteria for managing various wastes and how the management techniques will be implemented is attached. Also attached is a plan showing the proposed facilities. The selection of determining the most effective waste management technique would depend on:

- Chemical waste characteristics
- Physical waste characteristics
- Waste state, such as solid, liquid or in container

The following is a brief description of proposed typical waste handling schemes or procedures.

Wastes received at the facility will be sampled and weighed at the Scale/Sampling Station. Waste materials will be analyzed in accordance with the Waste Analysis Plan. Unacceptable wastes will be returned to the generator. Acceptable wastes which cannot be effectively treated at the facility will be stored and transferred to other authorized facilities for treatment or disposal. Wastes which can be treated will be assigned to the appropriate storage, treatment or disposal unit.

Containerized wastes will be temporarily held at the Drum Storage Facility pending decanting and treatment, landfill disposal or transfer off site. Full drums of solids are placed in the active landfill cell for disposal. Drums containing liquids or pumpable sludges are marshalled to the Drum Decant Facility where liquids are removed. Empty drums and those containing nonpumpable solids or residues are then crushed prior to landfill disposal.

Bulk liquids and liquids decanted from containers will be stored in tanks. Storage tanks are furnished to provide segregation of organic materials from inorganic liquids. Organic liquids will primarily be transferred off-site for treatment or disposal until waste quantities and economics warrant installation of the Solvent Recovery/Supplemental Fuels Facility. This facility, through thin film evaporation and distillation, will produce clean distilled solvents for sale or reuse

and blended liquids for use as a supplemental fuel for cement kilns or similar combustors. Inorganic aqueous wastes will be treated prior to disposal. The multi-purpose Aqueous Waste Treatment Facility will be used to chemically oxidize, reduce, or neutralize various wastes after sampling and analysis.

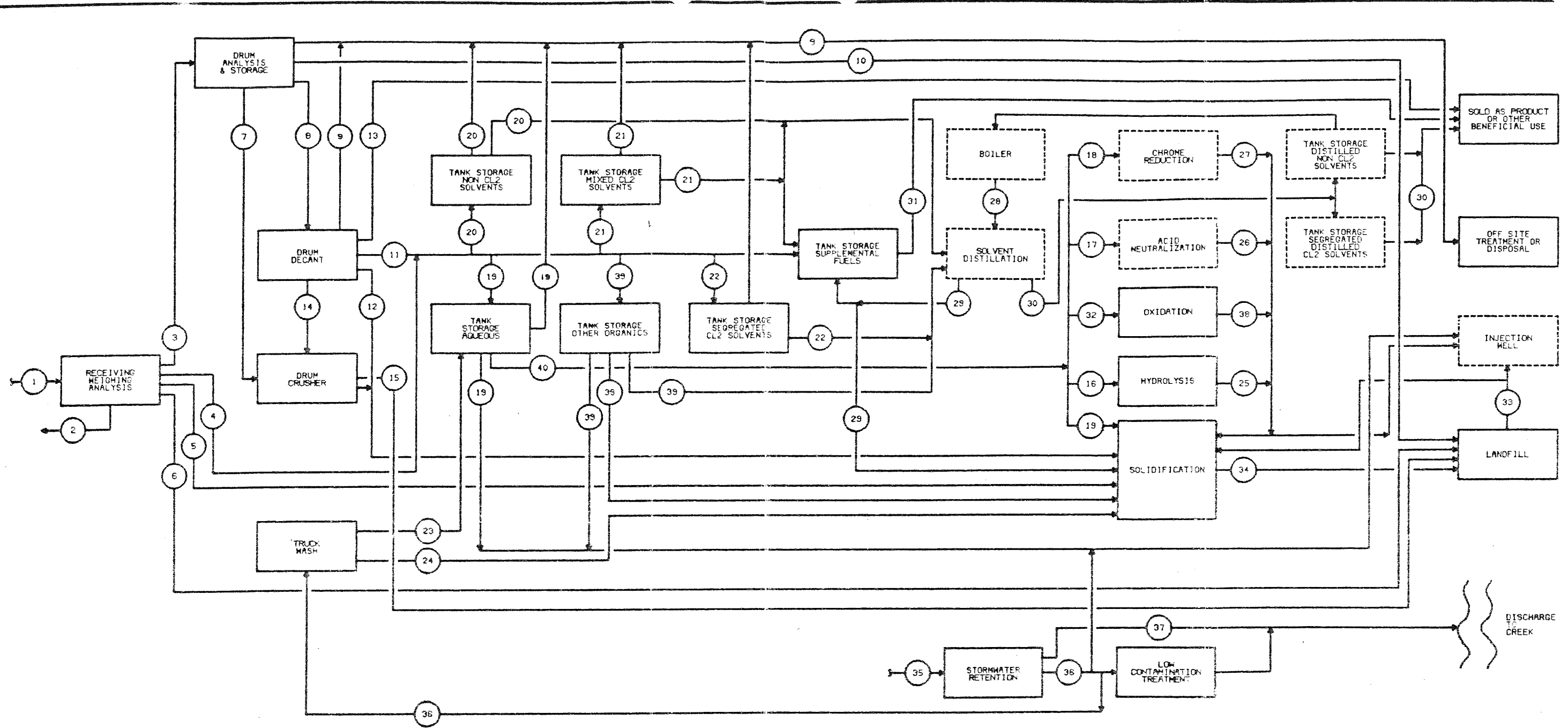
Sludges or semi-solids received at the site will be taken to the Solidification Facility. Liquids or residuals may also be transferred from the various storage or treatment facilities for solidification. Cement, fly ash, or similar reagent will be used to fix any free liquids in the waste material. Solidified wastes will then be placed in the landfill cells for disposal.

Solids, containing no free liquids, received at the site, will be routed to the active landfill cell for disposal. Other materials to be placed in the landfill, such as full drums of solids, crushed empty drums, and solidified wastes, as described above, will contain no free liquids. This exclusion of liquid-bearing wastes from the landfill cells will minimize the generation of leachate. It is also contemplated that air-supported structures will be placed over the active landfill cell to: provide a controlled working environment; shed precipitation, and control wind dispersal of particulate materials. The exclusion of precipitation from the cells will further minimize leachate generation. Any leachate which is produced will be collected and removed for treatment and disposal.

As stated earlier, an injection well has been proposed to facilitate decommissioning the evaporation ponds, and it would continue in service for disposal of aqueous wastes.

Stormwater run-off from the site will be collected and routed to one of the two stormwater retention ponds. Retained water will be sampled and discharged in accordance with the procedures defined in the NPDES permit application attached to this RCRA permit application or in the deep well.

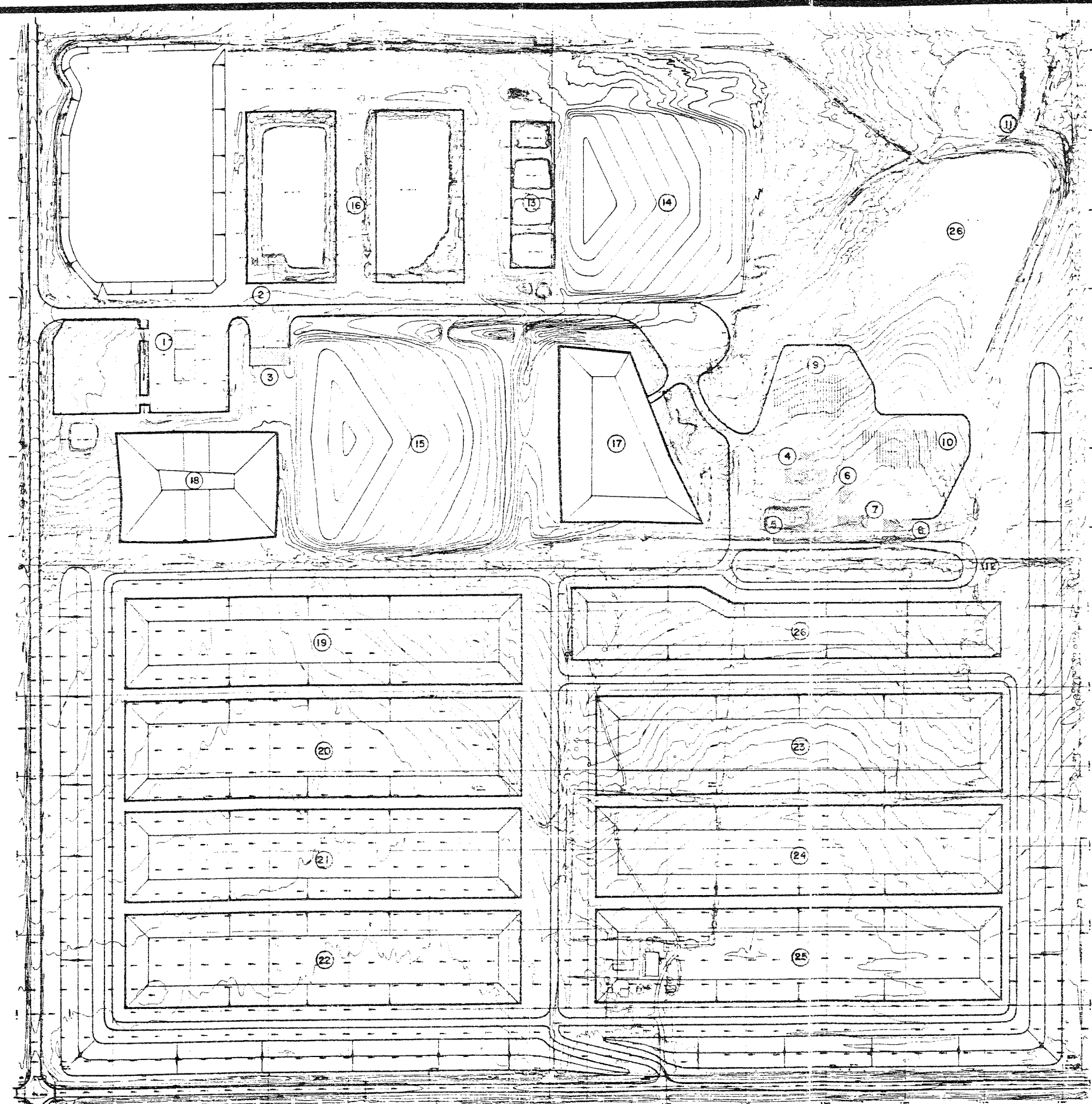
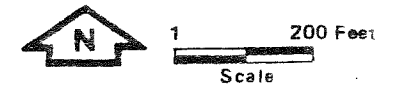
In conclusion, we are confident that, provided the opportunity through the receipt of a permit, we can operate an environmentally and financially sound hazardous waste facility that will serve not only the existing and prospective industry in Kansas, but all the citizens of Kansas as well. A critical issue you must consider is whether you want your waste handled properly using the best available technology, or whether you are willing to assume the environmental and financial risks attendant to the failure to provide within Kansas a state-of-the-art waste treatment/disposal facility, thereby forcing these wastes either into improper in-state sites or cause them to be transported out of state. We feel strongly that the problems of managing the wastes generated in this state cannot be wished or legislated away, using the crutch of non-existent technologies. The problems are real; practical and cost-effective solutions are available, and we, as a responsible and the largest chemical waste management company in the world, are willing and prepared to commit our talent and resources to get the job done.



STREAM	1	2	3	4	5	6	7	8	9	10	11	12	13	14	WASTE CONSTITUENT CATEGORIES
NAME	ALL WASTES	REJECTED WASTE RETURN TO GENERATOR	FULL CONTAINERIZED WASTE	BULK LIQUIDS PUMPABLE SLUDGES	BULK SEMI-SOLIDS NON-PUMPABLE SLUDGES	BULK SOLIDS	NON-FULL CONTAINERS SOLIDS	CONTAINERS LIQUIDS	TRANSFERRED WASTES	FULL CONTAINERS SOLIDS	DECANTED LIQUIDS & PUMPABLE SLUDGES	SLUDGES & SEMI-SOLIDS	RECLAIMABLE EMPTY CONTAINERS	DECANTED CONTAINERS	
WASTE CONSTITUENTS	1 THRU 11	---	1 THRU 11	1 THRU 11	2,3,6,7,8,9,10,11	2,3,6,7,8,9,10,11	2,3,6,7,8,9,10,11	1 THRU 11	1 THRU 11	2,3,6,7,8,9,10,11	1 THRU 11	1 THRU 11	---	1 THRU 11	
STREAM	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
NAME	FILLED OR CRUSHED CONTAINERS	WATER REACTIVE WASTES	ACID WASTES	HEXAVALENT CHROME	AQUEOUS	NON-HALOGENATED SOLVENTS	MIXED SOLVENTS	HALOGENATED SOLVENTS	TRUCK WASH WATER	TRUCK WASHINGS SLUDGE	HYDROLYZED EFFLUENT	NEUTRALIZED WASTES	REDUCED WASTES	STEAM	
WASTE CONSTITUENTS	1 THRU 11	2,3,6,9,11	2,3,6,7,8,9,11	2,3,6,9,11	2,3,6,9,10,11	1,5,7,8,10,11	1,4,5,7,8,10,11	1,4,7,8,10,11	1 THRU 11	1 THRU 11	2,3,6,9,11	2,3,6,7,8,9,11	2,3,6,9,11	---	
STREAM	29	30	31	32	33	34	35	36	37	38	39	40			
NAME	STILL BOTTOMS	RECOVERED SOLVENTS	SUPPLEMENTAL FUEL	OXIDIZABLE WASTES	LEACHATE	SOLIDIFIED WASTES	COLLECTED STORMWATER	CONTAMINATED STORM WATER	CLEAN STORMWATER	OXIDIZED EFFLUENT	OTHER ORGANIC LIQUIDS	TREATABLE AQUEOUS LIQUIDS			
WASTE CONSTITUENTS	1,4,5,7,8,10,11	---	---	2,3,6,7,8,9,10,11	2,4,3	2 THRU 11	---	---	---	2,3,5,7,8,9,10,11	1,7,8,10,11	2,3,6,9,10,11			

**NATIONAL INDUSTRIAL ENVIRONMENTAL SERVICES HAZARDOUS WASTE MANAGEMENT FACILITY**  
 SEDGWICK COUNTY, KANSAS  
**OPERATIONS FLOW SHEET**

A-9 NO. 000002



- |                                   |                                |
|-----------------------------------|--------------------------------|
| 1. Office Complex                 | 14. Closed Landfill Cells      |
| 2. Scale/Sampling Station         | 15. Closed Landfill Cells      |
| 3. Laboratory/Employee Facilities | 16. Closed Evaporation Ponds   |
| 4. Liquid Storage                 | 17. Landfill Cell No. 1        |
| 5. Drum Storage                   | 18. Landfill Cell No. 2        |
| 6. Aqueous Waste Treatment        | 19. Landfill Cell No. 3        |
| 7. Drum Decant/Crusher            | 20. Landfill Cell No. 4        |
| 8. Solidification                 | 21. Landfill Cell No. 5        |
| 9. Solvent/Fuel Recovery          | 22. Landfill Cell No. 6        |
| 10. Injection Well                | 23. Landfill Cell No. 7        |
| 11. Stormwater Pumping Station    | 24. Landfill Cell No. 8        |
| 12. Stormwater Pumping Station    | 25. Landfill Cell No. 9        |
| 13. Closed Treatment Ponds        | 26. Stormwater Retention Ponds |

Proposed Facilities

Contemplated Facilities

NATIONAL INDUSTRIAL ENVIRONMENTAL SERVICES

HAZARDOUS  
WASTE MANAGEMENT FACILITY  
Sedgwick County, Kansas

**PROPOSED FACILITIES**